

MAGIC THipPro / MAGIC THipPro Pure

- Configuration Guide
- Version: 4.020 (16. May 2024)

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Additional Documents

- Get further information in the following documents which are available in the Download section of our website at www.avt-nbg.de.
- Quick Guides:
 - Audio over IP (AES67-DANTE-RAVENNA-LIVEWIRE)
 - Signalling and Control with DHD SetLogic
 - Signalling and Control with Ember+
 - Ember+ Consumer Extension
 - MAGIC PhonerSet Provisioning Guide
 - SQL Server 2012 Installation
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 - MAGIC PhonerSet
 - MAGIC THipPro Hardware
 - GSM VoIP Gateway (Yeastar TG100)
 - POTS (FXO) VoIP Gateway (Yeastar TA810)
 - RAVENNA RAV2 Module

MAGIC THipPro

MAGIC THipPro Pure

Overview

- Hardware THipPro
- Hardware THipPro Pure
- Hardware module slots
- Line Protocols
- Basic Features
- Optional Features
- Accessories

MAGIC THipPro

MAGIC THipPro Hardware

- Full-featured telephone hybrid.

MAGIC THipPro Hardware - Front



- Five Status LEDs
 - POWER
 - SYNC (On while booting)
 - ALARM (Indicating hardware problems)
 - INFO 1, INFO 2 (Not in use)
 - Two RJ10 Handset/Headset interfaces for
- PRETALK.
- Illuminated graphic display with 160 x 32 pixels & front keypad.
 - For basic settings and status display only.

MAGIC THipPro Hardware – Rear



- Two independent LAN interfaces to separate control and VoIP
 - Up to three VLANs per LAN interface
- Word clock input/output
- Optional Redundant Power Supply
 - Additional socket for an external power adapter.
- 2 x analogue mono audio in-/outputs
 - 2 x XLR male/female each
- 4 x AES3/EBU stereo audio in-/outputs
 - 8 digital audio lines (2 x Sub-D 15-pole with adaptors to XLR male/female)
- Programmable GPIO interface
 - 8 TTL in-/output
 - 8 relays (8 x NO)
- 2 x slots for extension modules

MAGIC THipPro Pure

MAGIC THipPro Pure Hardware

- Telephone hybrid without physical audio interfaces. Audio connection only via AES67, Dante or Ravenna.
(Everything else is identical to MAGIC THipPro.)

MAGIC THipPro Pure Hardware - Front



- Five Status LEDs
 - POWER
 - SYNC (On while booting)
 - ALARM (Indicating hardware problems)
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MAGIC THipPro Pure Hardware – Rear



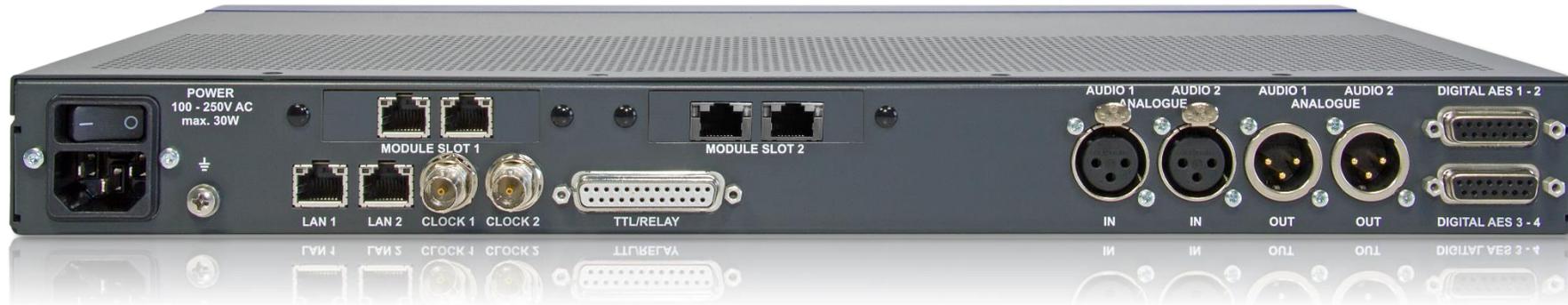
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MAGIC THipPro MAGIC THipPro Pure

Module Slots

Module slots 1 and 2 (1)



- ISDN

- 1 x ISDN module for 8 caller lines
or
2 x ISDN modules for 16 caller lines

- POTS

- 2 x POTS modules for 8 caller lines
- Notice: A 16 channel POTS system is not available
- Available until 2023, Replaced by POTS Gateway.

- LAN 3/4 Module

- Two additional 10/100 Mbit/s Ethernet interfaces

Module slots 1 and 2 (2)



■ DANTE

- 32 channels in/out
- 2 Ethernet interfaces
- Only for VoIP systems
- The standard Audio interfaces can still be used

- 32 channels in/out
- 2 Ethernet interfaces
- Only for VoIP systems
- The standard Audio interfaces can still be used

■ RAVENNA

Line Protocols

ISDN

Euro ISDN

- Supporting Multiple Subscriber Numbers (MSN)

US ISDN (NI-1)

- Supporting Service Provider Identifications (SPID)

- Supporting Directory Numbers (DN)

Japanese ISDN

- Supporting Multiple Subscriber Numbers (MSN)

POTS

- Supporting worldwide country types, configurable via software (regarding impedances, levels and ringing signals).

- Separate country type settings for Main Exchange or PBX lines

- Busy tone measurement for automatic hang-up

- Caller ID (via DTMF, FSK SDMF, FSK MDMF)

VoIP

- SIP - Session Initiation Protocol RFC 3261

- Support of STUN (Session Traversal Utilities for NAT) for systems behind firewalls

- Configurable SIP server per line

Line Interface Upgrades

- **MAGIC THipPro 8 VoIP**
 - 16 x VoIP (Hardware Upgrade)
 - **MAGIC THipPro 8 POTS**
 - 8 x VoIP (Software Upgrade only)
 - 16 x VoIP (Hardware Upgrade)
 - 16 x POTS is not available
 - **MAGIC THipPro 8 ISDN**
 - 8 x VoIP (Software Upgrade only)
 - 16 x VoIP (Hardware Upgrade)
 - 16 x ISDN (Hardware Upgrade)
 - **MAGIC THipPro 16 VoIP**
 - currently no upgrade available
 - **MAGIC THipPro 16 ISDN**
 - 16 x VoIP (Software Upgrade only)
- **Mixed Mode**
 - It is possible to specify for each line whether it should be used for VoIP or ISDN/POTS.
 - The precondition is that the same number of lines is licensed for both operating modes.
 - Licensed VoIP and ISDN/POTS lines don't add up.

Mixed Mode of the Line Interfaces

- The system allows for a simultaneous operation of
 - ISDN and VoIP lines
or
 - POTS and VoIP lines
- It can be configured freely which line is to be routed via ISDN/POTS or IP
 - 8-channels ISDN/POTS System + VoIP8 Upgrade
 - → In total 8 lines can be used in the Mixed Mode
 - 8-channels ISDN System + VoIP16 Upgrade
 - → In total 8 lines can be used in the Mixed Mode
 - 8-channels POTS System + VoIP16 Upgrade
 - → In total 16 lines can be used in the Mixed Mode
 - 16-channels ISDN System + VoIP8 Upgrade
 - → In total 8 lines can be used in the Mixed Mode
 - 16-channels ISDN System + VoIP16/32 Upgrade
 - → In total 16 lines can be used in the Mixed Mode

Basic Features (1)

- Housing 19" x 1 U
 - Leave 1U space above the unit for cooling.
- No fan for noiseless operation
- Low power consumption of typically 15W
- Two basic system variants
 - 8 caller lines, upgradeable to 16 caller lines
 - 16 caller lines
- 12 Audio lines
 - 2 x analogue in-/outputs
 - 8 x digital in-/outputs (4 x AES)
 - 2 x handsets/headsets
 - (Not available on MAGIC THipPro Pure.)
- Digital signal processing for each channel
 - Echo Canceller with up to 120 ms echo tail time
 - AGC Automatic Gain Control
 - Expander for noise reduction
 - Voice Disguise (VD) function
- Multiple simultaneous conferencing possibilities for PRETALK and ON AIR

Basic Features (2)

- Up to 6 internal HOLD signals with up to 32 seconds.
- Up to 6 audio channels for external HOLD inputs
- DTMF generator for transmission of DTMF tones
- Programmable GPIOs for controlling the THipPro and for external signalling
 - 8x TTL
 - 8x Relay
- DHD SetLogic
 - Connect up to 16 DHD Cores
 - 96 GPIOs, each configurable as input or output
 - Predefined GPIOs for a dialling keypad
- Ember+ Provider
 - Connect up to 16 Ember+ Consumers
 - 96 inputs
 - 96 outputs
 - Predefined GPIOs for a dialling keypad
 - Caller number, caller name, Functions
- Ember+ Consumer
 - Connect to up to 16 Ember+ Providers
 - 20 function slots per Ember+ Consumer
 - For screening information, Numbers to dial, ...
- Integrated SIP Monitor and Logging
- Audio test panel with signal generator

Optional Features (1)

- **MAGIC THipPro LAN Software**
 - Touch optimized Windows PC software for call control
 - Single user licence
 - Up to 20 clients (LAN Client and Screener combined) per unit
- **MAGIC THipPro Screener Software**
 - Windows PC software optimised for data entry
 - Single user licence
 - Up to 20 clients (LAN Client and Screener combined) per unit
- **News Desk Client Upgrade**
 - Operate the LAN Client software in a slimmed down version.
 - No ON AIR and no configuration of the system possible
 - Single user licence
 - Up to 30 clients (combined with LAN Client and Screener) per unit
 - Operates on a separate pool of telephone lines which can be assigned individually to each News Desk client
- **MAGIC System Manager**
 - Access the MAGIC THipPro from AVT's central management software which supports all AVT telephone hybrids and audio codecs.
 - Comfortable overview of system health, full configuration and Preset management.
 - Windows PC software
- **PhonerSet**
 - Control up to eight lines via a touchscreen-equipped Grandstream Android phone.
 - Use the phone's handset for Pretalk.
 - Connect up to 8 PhonerSets.
 - Single licence per PhonerSet.

Optional Features (2)

- THipPro Admin Upgrade

- Allows for splitting the telephone lines between up to six studios.
- Sharing lines between studios is possible.
- Without this upgrade each Client PC will see the same caller lines.
- Single licence per studio.

- VoIP Extension Upgrade

- For 8 or 16 channels

- - Voice (G.722)

HD High quality speech codec in VoIP and ISDN operating mode

- Doubling the audio bandwidth compared to the standard ISDN/VoIP codec.
- Automatic selection of the best codec for VoIP calls.

- Pretalk Streaming via IP

- Stream pretalk audio signals between up to 10 PCs and the THipPro.
- Use any audio interface of the PC (e.g. a USB headset)
- Supports convenient recording at the PC.
- Single licence per Pretalk Stream

- MAGIC THipPro ACconnect

- Seamless integration of the MAGIC ACip3 and MAGIC AC1 Go audio codecs.

Optional Features (3)

- LAN3/4 Module

- Hardware upgrade adding 2 Ethernet interfaces (2x 100 Mbit/s).
- Not available for POTS or ISDN hybrids.
- Supports all protocols except AES67.

- AES67

- Audio over IP networking software upgrade.
- Output: 8 audio channels (1 stream).
- Input: 8 audio channels (2 streams).
- Announcement and auto discovery of streams.
- SDP stream description import and export
- Limited to Ethernet interfaces 1 and 2.

- Dante Module

- Audio over IP networking hardware upgrade.
- 32x32 audio channels.
- Supports AES67 for interconnection with Ravenna, Livewire+, etc.
- 2 Ethernet interfaces to support redundancy

- Ravenna Module

- Audio over IP networking hardware upgrade.
- 32x32 audio channels.
- Supports AES67 for interconnection with Dante, Livewire+, etc.
- 2 Ethernet interfaces to support redundancy
- NMOS

- POTS Module (until 2023)

- 2 modules with 4 channels each
- 8 POTS channels per unit

- 8 x FXO Ports VoIP/POTS Gateway

- 8 POTS channels per unit
- Connects to the THipPro via predefined VoIP accounts.

- ISDN Module

- 1 or 2 modules with 8 channels each
- Up to 16 ISDN channels per unit

Optional Features (4)

- Ember+ Consumer Extension
 - Connect up to 16 DHD Cores using Ember+ and DHD SetLogic.
 - Full call control and display of caller information and audio level via DHD user interfaces.
 - Single licence per workplace.
- Ember+ Dial Pad Extension
 - Connect up to 16 Lawo Cores using Ember+.
 - Call control and display of caller information via Lawo user interfaces
- DTMF Analyser
 - Game Show and Event Mode
- Social Media Server
 - X (TWITTER) integration into LAN client and Screener
- Competition Management
 - Manage competitions from the MAGIC Screener software
 - Price contingents and handed out prices are managed automatically.
 - Create result lists for accounting or attendee lists for events.
- Redundant Power Supply
 - Additional socket for an external power adapter.
 - Power adapter included.

Optional Features (5)

- Collaboration Services

- Run on a local server using the Microsoft IIS platform
- A server can connect multiple telephone hybrids.
- Adds Microsoft Teams and WebRTC connectivity to regular telephone lines
- Integrated with the phone book
- High audio quality (outperforms HD-Voice)

- Collaboration Services BASIC Licence

- Enables WebRTC
- Additional licences for each Collaboration Services channel required.
- Channel licences for audio only or audio and video available.

- Collaboration Services PROFESSIONAL Licence

- Enables WebRTC and Microsoft Teams
- Additional licences for each Collaboration Services channel required.
- Channel licences for audio only or audio and video available.

- MAGIC Server Legacy

- Runs on a local server using the Microsoft IIS platform
- Provides Web clients similar to the THipPro LAN Client and the THipPro Screener to operate MAGIC THipPro devices.

-

Accessories

- MAGIC PhonerSet
- MAGIC THipPro Handset
- MAGIC THipPro Headset
- USB Headsets
 - For Pretalk Audio Streaming
- USB Handset
 - For Pretalk Audio Streaming
- GSM Gateway
- POTS Gateway



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Software Clients

- MAGIC THipPro LAN
- MAGIC THipPro SCREENER
- MAGIC THipPro News Desk Client

Software Clients

- **MAGIC THipPro LAN**
 - Touch optimised Windows PC software
 - Single-user licence
 - Supporting window sizes between 400x400px and 7680x4068px.
 - Automatic scaling for high-DPI screens.
 - Special variant: Newsdesk-Client
 - Restricted MAGIC THipPro LAN user interface
 - No ON AIR buttons
 - No system configuration
 - Incl. PRETALK Streaming Licence
 - **MAGIC THipPro SCREENER**
 - Single-user licence (Basic and Extension)
 - Automatic scaling for high-DPI screens.
 - Optional: Social Media Server (currently supported: X (Twitter))
- Up to 20 LAN and Screener clients combined can access the system simultaneously.
 - With News Desk Clients the total number of clients is 30. LAN clients and Screener clients are still limited to a total of 20.
 - MS SQL Server database backend
 - MS SQL Server 2014 (Express) or higher
 - For phonebook, Screener data, ...
 - Each client has direct access to the MAGIC THipPro unit.

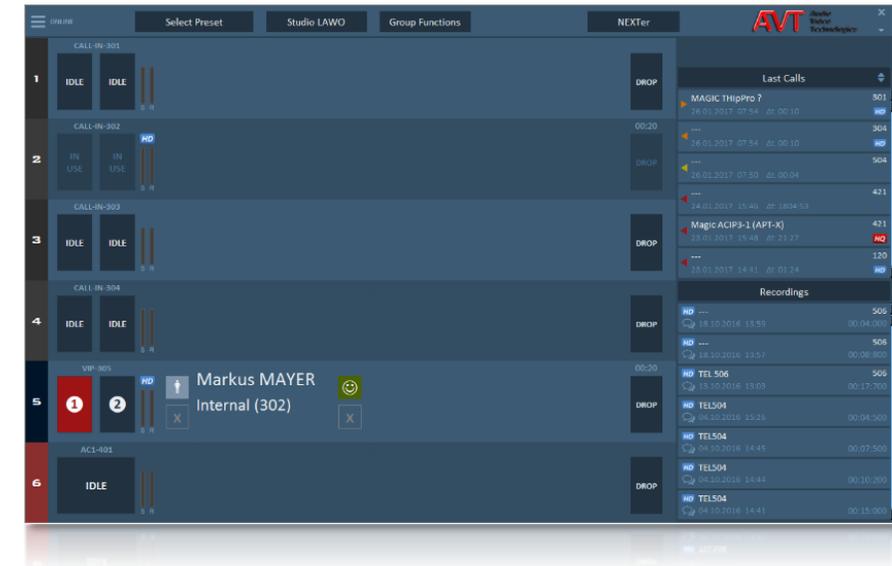
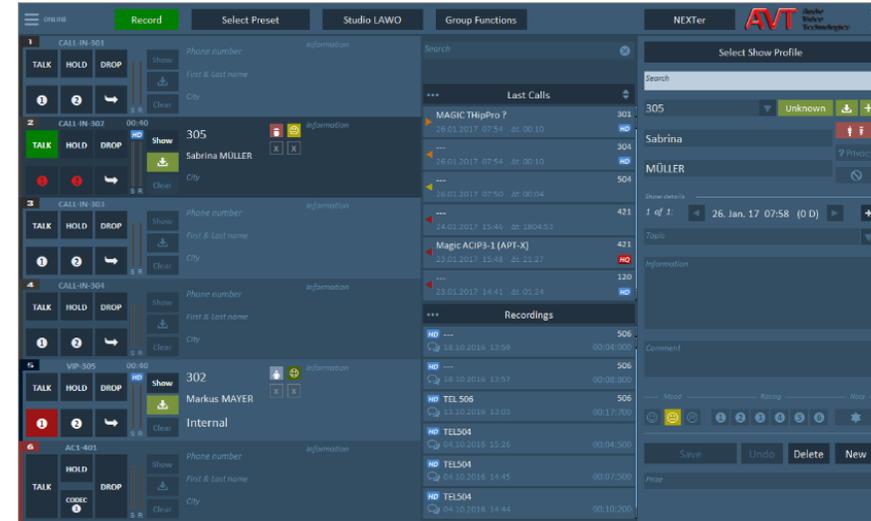
MAGIC THipPro LAN Client

- Supporting Windows 10/11 (32/64 Bit)
- 16:10/16:9 touch monitor is recommended
- All channels can be displayed on one screen
- Up to four ON AIR buttons per line
- Level Meter with gain control and AGC
- Two Call Forwarding modes
 - Standard, occupying a reserved channel of the system
 - ECT – Explicit Call Transfer
- Free choice of background colours
- Program logo
- Slide-in sidebar for call history, recordings, chat and answering machine.



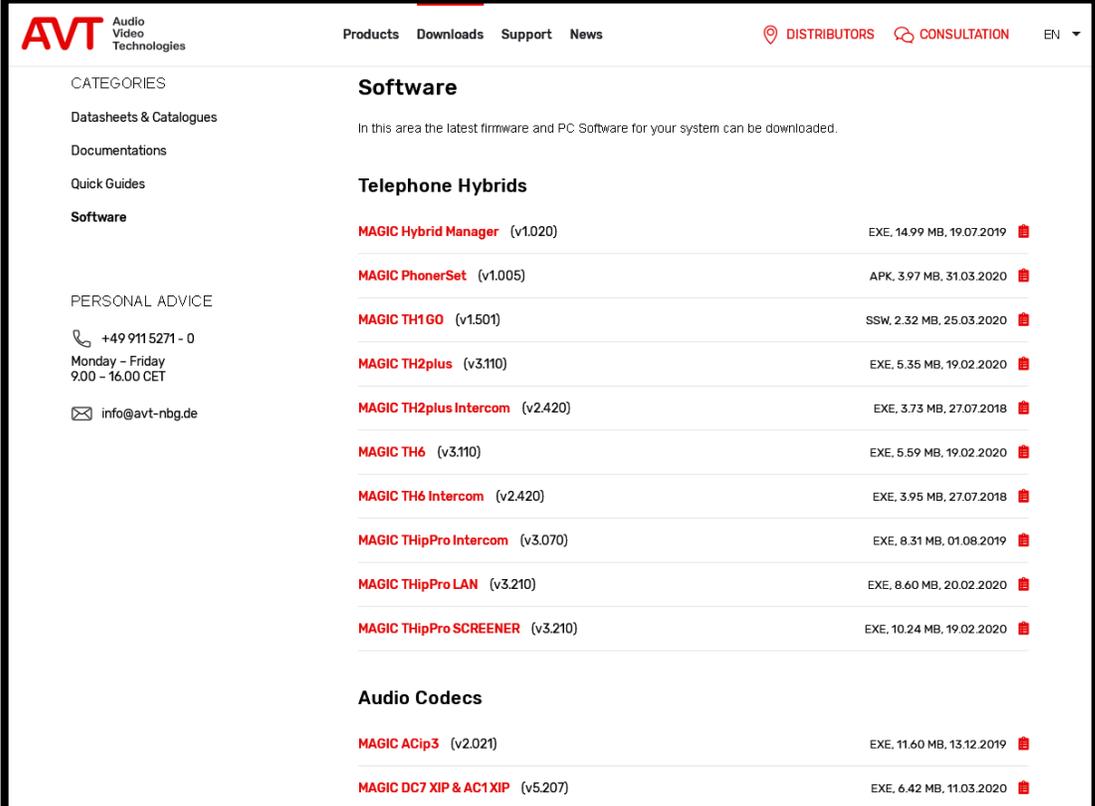
MAGIC THipPro SCREENER Client

- Supporting Windows 10/11 (32 Bit)
- 16:10/16:9 touch monitor is recommended
- Multiple operation modes
 - Screener, Presenter, (Presenter ON AIR), Data Editing only, Call Out
- Level Meter
- Full control of the hybrid system
- MS ACCESS based Front End
- Colours of the design can be adjusted
- Program logo



Resources

- AVT MAGIC THipPro devices come with a USB Flash Drive which contains:
 - MAGIC THipPro LAN PC software
 - MAGIC THipPro Screener PC software
 - Microsoft SQL Server 2019 Express
 - Microsoft SQL Tools
- The latest versions of MAGIC THipPro LAN and MAGIC THipPro Screener are freely available in the download section of our website <http://www.avt-nbg.de>.
- Also check the DOCUMENTS and QUICK GUIDES sections for further information.



The screenshot shows the AVT website's 'Software' download section. The page features a navigation bar with 'AVT Audio Video Technologies' logo, 'Products', 'Downloads', 'Support', and 'News' menus. On the right side of the navigation bar, there are links for 'DISTRIBUTORS' and 'CONSULTATION', along with a language dropdown set to 'EN'. The main content area is titled 'Software' and includes a sub-header 'Telephone Hybrids'. Below this, a list of software products is displayed, each with its name, version, file format, size, and date. The products listed are:

Product Name	Version	File Format	Size	Date
MAGIC Hybrid Manager	(v1.020)	EXE	14.99 MB	19.07.2019
MAGIC PhonerSet	(v1.005)	APK	3.97 MB	31.03.2020
MAGIC TH1GO	(v1.501)	SSW	2.32 MB	25.03.2020
MAGIC TH2plus	(v3.110)	EXE	5.35 MB	19.02.2020
MAGIC TH2plus Intercom	(v2.420)	EXE	3.73 MB	27.07.2018
MAGIC TH6	(v3.110)	EXE	5.59 MB	19.02.2020
MAGIC TH6 Intercom	(v2.420)	EXE	3.95 MB	27.07.2018
MAGIC THipPro Intercom	(v3.070)	EXE	8.31 MB	01.08.2019
MAGIC THipPro LAN	(v3.210)	EXE	8.60 MB	20.02.2020
MAGIC THipPro SCREENER	(v3.210)	EXE	10.24 MB	19.02.2020
MAGIC ACip3	(v2.021)	EXE	11.60 MB	13.12.2019
MAGIC DC7 XIP & AC1 XIP	(v5.207)	EXE	6.42 MB	11.03.2020

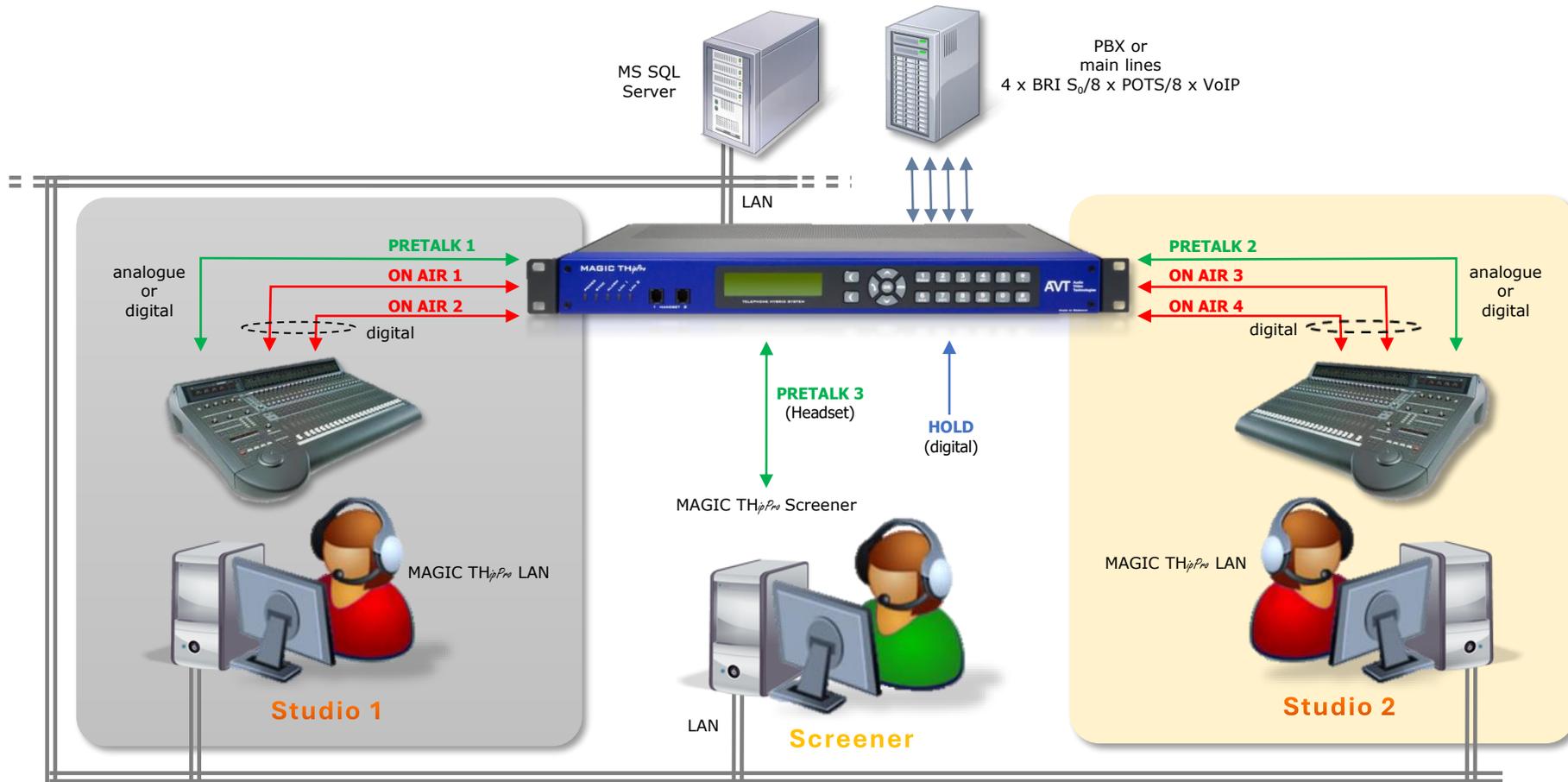
MAGIC THipPro

MAGIC THipPro Pure

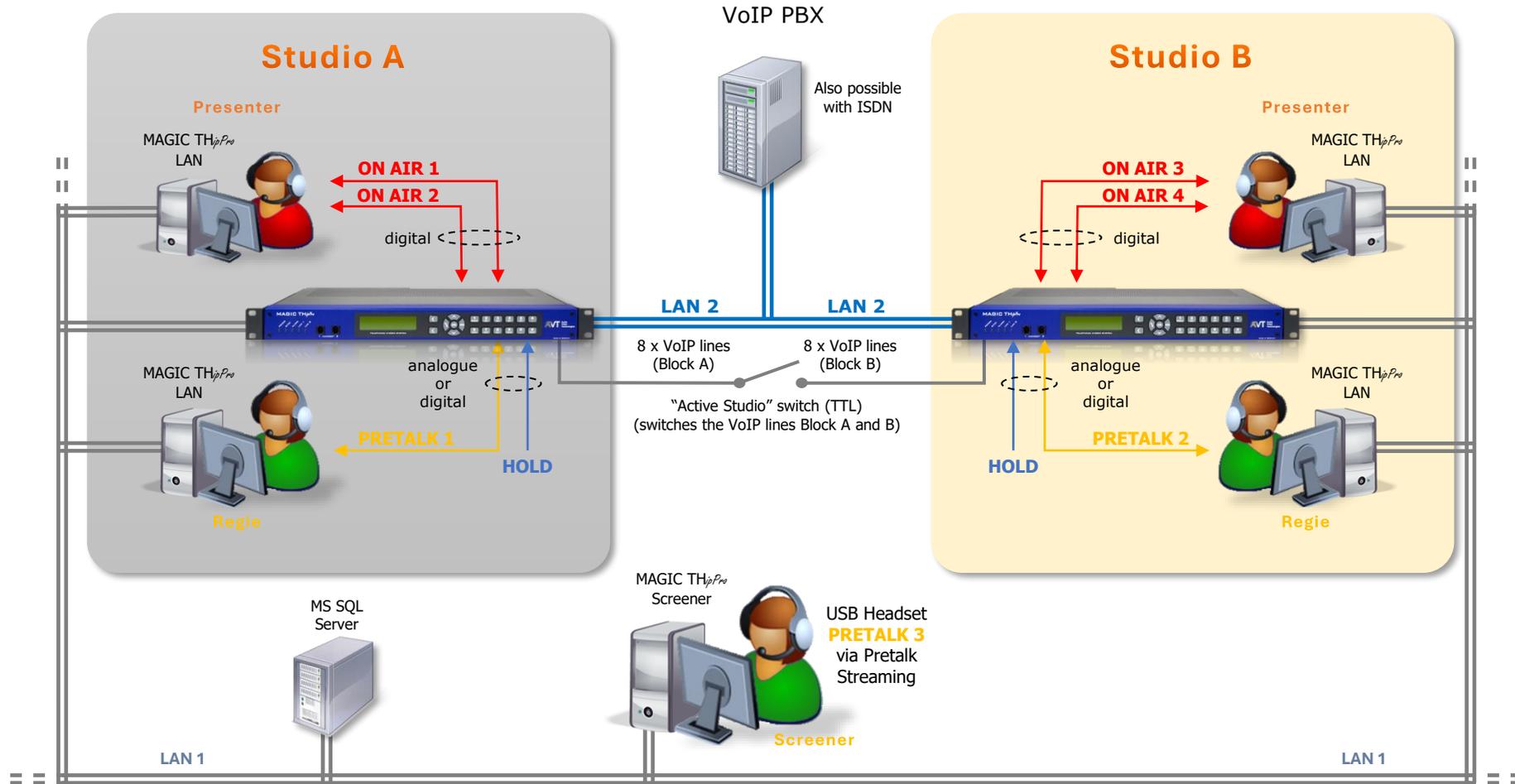
Typical applications

- Basic application
- Application with two studios
- Application with ADMIN Upgrade
- Application with redundancy

Application with two studios



Application with redundancy



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Quality of Service & VoIP

- VLAN
- DiffServ / DSCP
- Tipps & Tricks

Prioritising VoIP packets

- There are three ways of prioritising the “VIPs“ = “Very important packets“:
 - Use of a separate network for VoIP
 - Prioritisation on Ethernet level (Layer 2)
 - VLAN (Virtual LAN)
 - Standard IEEE 802.1Q
 - Priority levels
 - Prioritisation on IP level (Layer 3)
 - QoS (Quality of Service)
 - Different service classes
 - Standard RFC3168
- Important: the prioritisation can only be guaranteed in the local network

VLAN – Virtual Networks

- Virtual LANs can only exist in a VLAN-aware network environment (Switches, etc).
- Splitting of physical networks into logical subnetworks.
- Switches that support VLAN ensure that packets of one VLAN are not forwarded to another VLAN.
 - More efficient use of bandwidth.
- 4 Byte of information is inserted into each Ethernet packet allowing the switch to assign a packet to a VLAN.

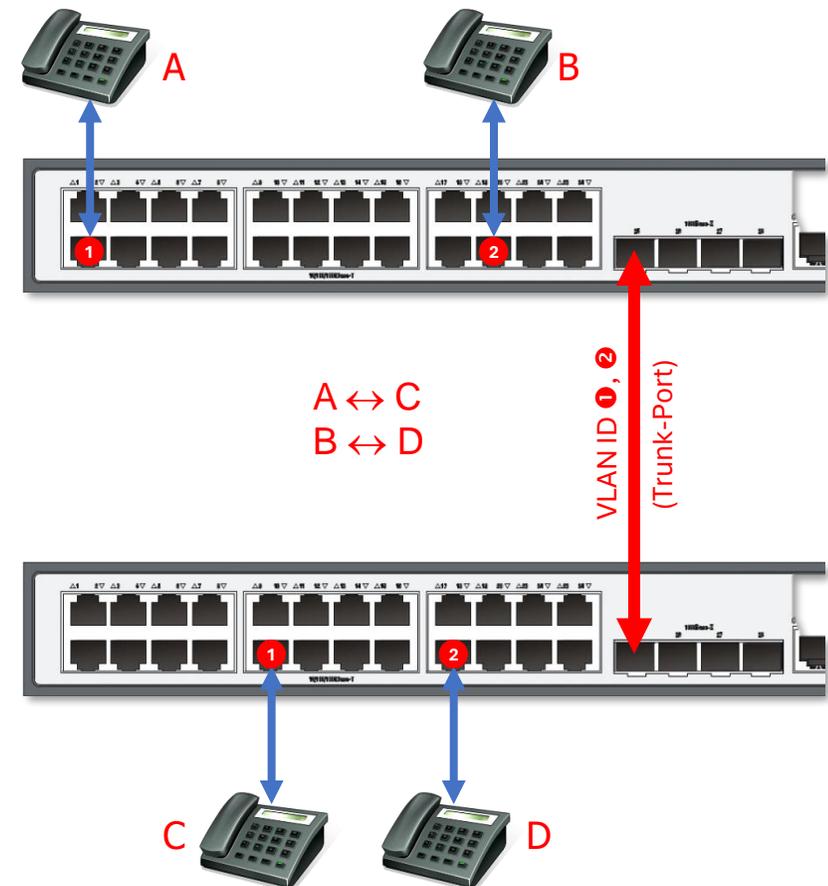
- Signalling of a priority class in a 3-bit field:

Priority	Bit pattern	Class of Service
0	000	No prioritization
1	001	Background services
2	010	Reserved
3	011	General data services
4	100	Control services
5	101	Video
6	110	Voice
7	111	Network control

- VL
 - Static VLANs – Port-based, Untagged
 - Tagged VLANs

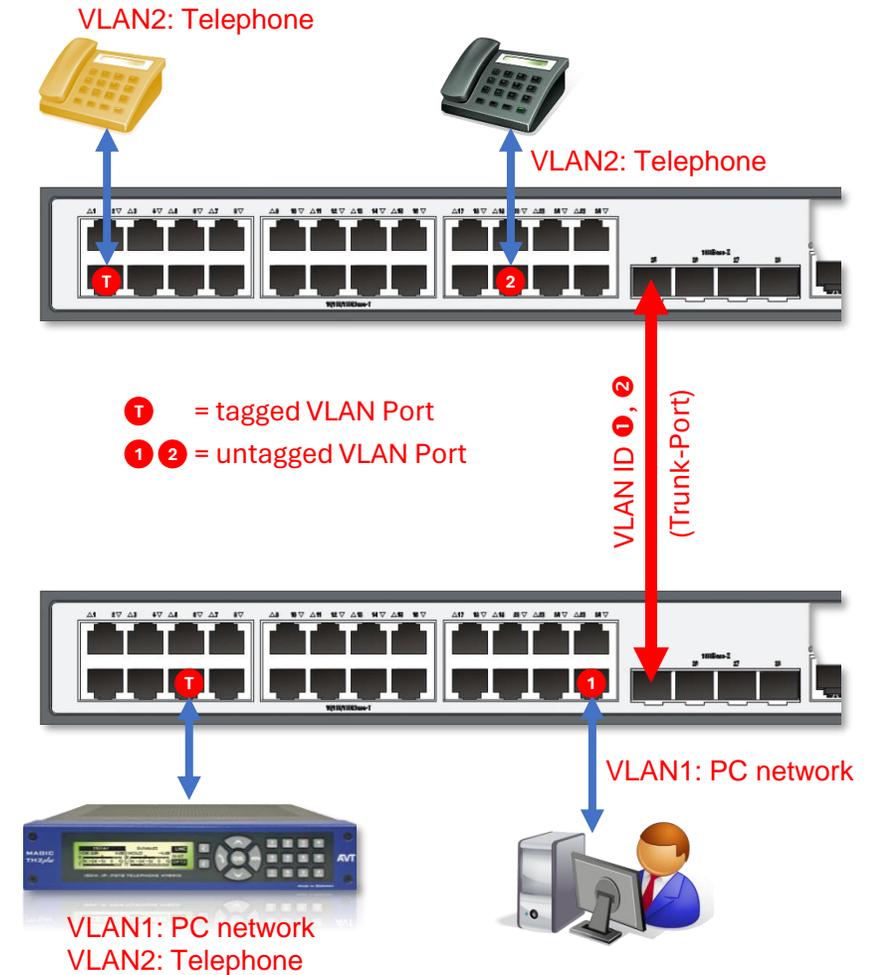
Port-based VLANs

- Dedicating a switch port to a single VLAN.
 - Only one VLAN can be assigned to a Switch Port
 - Exception: trunk ports
 - Only devices connected to switch ports that are serving the same VLAN can communicate with each other.
 - The switch adds the VLAN identifier to each received packet.
 - The switch removes the VLAN identifier from each packet to be sent.
 - The VLAN is completely transparent.
 - Connected devices don't need to support VLANs.
 - No payload restrictions.



Tagged VLANs

- Several VLANs can be assigned to one Switch Port.
- Connected devices must support VLAN:
 - Adding the VLAN identifier
 - Decoding the VLAN identifier
- Switches do not add or remove VLAN identifiers.
- Advantage of this solution: Systems with only one LAN interface can be connected to several virtual networks.
 - E.g. helpful when separating VoIP and PC zones.



QoS - Quality of Service on IP level

- End-to-end QoS is only possible when it is supported by all network elements.
- RFC2474 defines Differentiated Services (DiffServ), a mechanism to classify network traffic.
- The 8-bit Differentiated Services Field (DS-Field) is part of the IPv4 header. It contains:
 - DSCP: The 6-bit Differentiated Services Code Point is used to classify the payload of the IPv4 packet.
 - ECN: The remaining 2 Bits are reserved for flow control which is not supported by MAGIC THipPro. (default value = 0)

- Typical values used for VoIP are:

- | DS field | | | | | | | |
|----------|---|---|---|---|---|-----|---|
| DSCP | | | | | | ECN | |
| 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

- SIP
 - DiffServ = 104dec
 - Corresponds to: DSCP = 26dec

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Integration of an IP Telephone Hybrid System into the studio environment

- Guidelines for migrating from ISDN to VoIP
- Basic requirements
- External VoIP Provider?
- Concepts

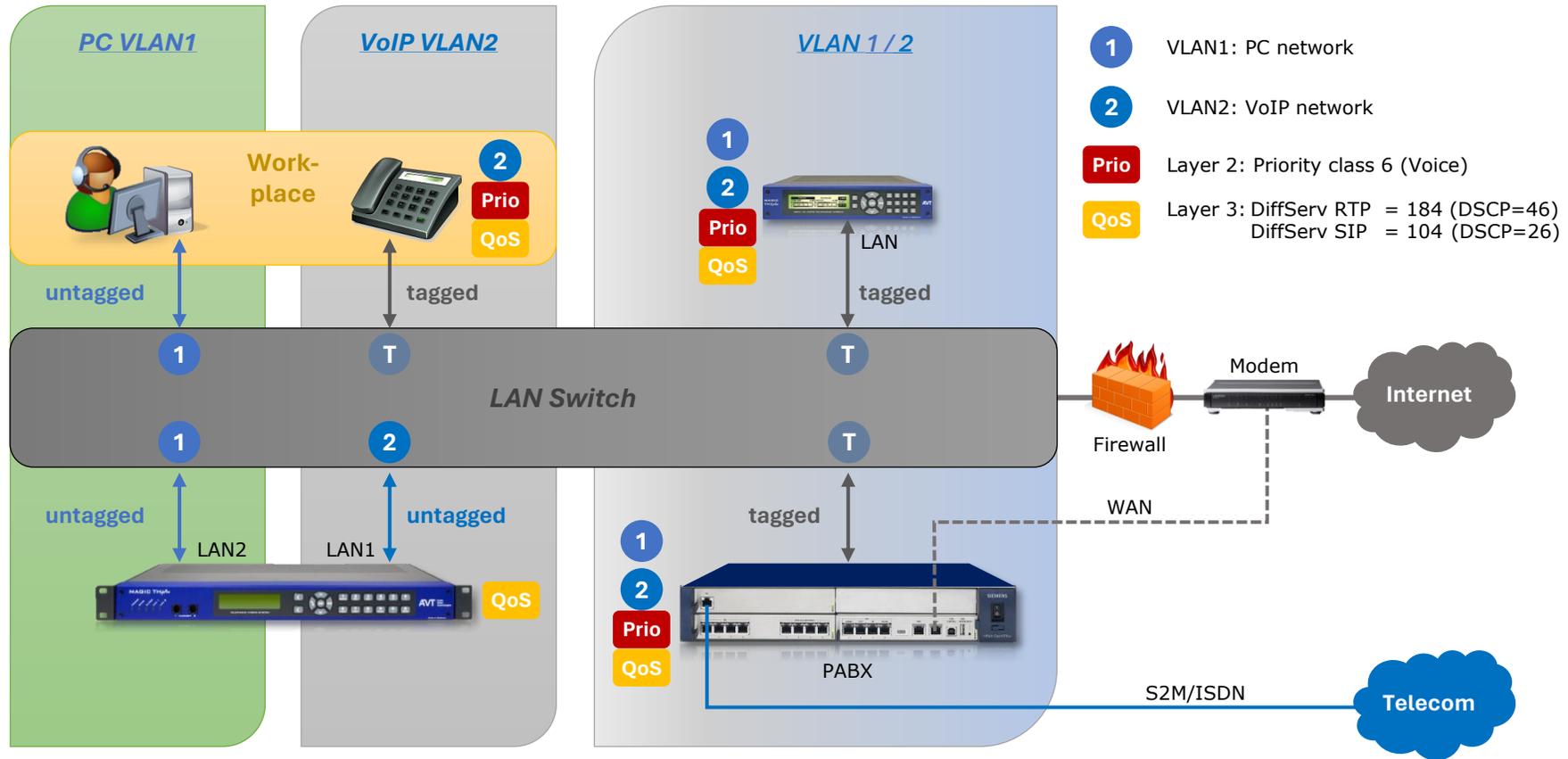
Basic requirements

- Separation of “PC” network and VoIP telephone network
 - Use separate network interfaces.
 - Use VLAN with prioritization.
 - Many Switches already offer an integrated Voice VLAN configuration (Cisco, HP, Netgear etc.)
- Use QoS in the LAN.
- Avoid firewalls between PBX and VoIP systems/telephones.
- Minimize the number of Switches between the PBX and VoIP systems/telephones.
- Avoid VPN tunnels since they cause a higher latency and increase bandwidth requirements.
- Provide sufficient bandwidth for telephony in each part of the network.

VoIP-Provider vs. ISDN PRI

- ISDN primary rate interfaces (PRIs) become rare. Often, they are just adaptors to the providers VoIP network.
- Only native VoIP services support HD-Voice.
- Note: Deutsche Telekom transcodes mobile HD-Voice (AMR-WB) to landline HD-Voice (G.722) and vice versa in their network.
- Make sure to have call filtering in place either on the provider's side or on a local PBX to handle high call volumes.

Network concept

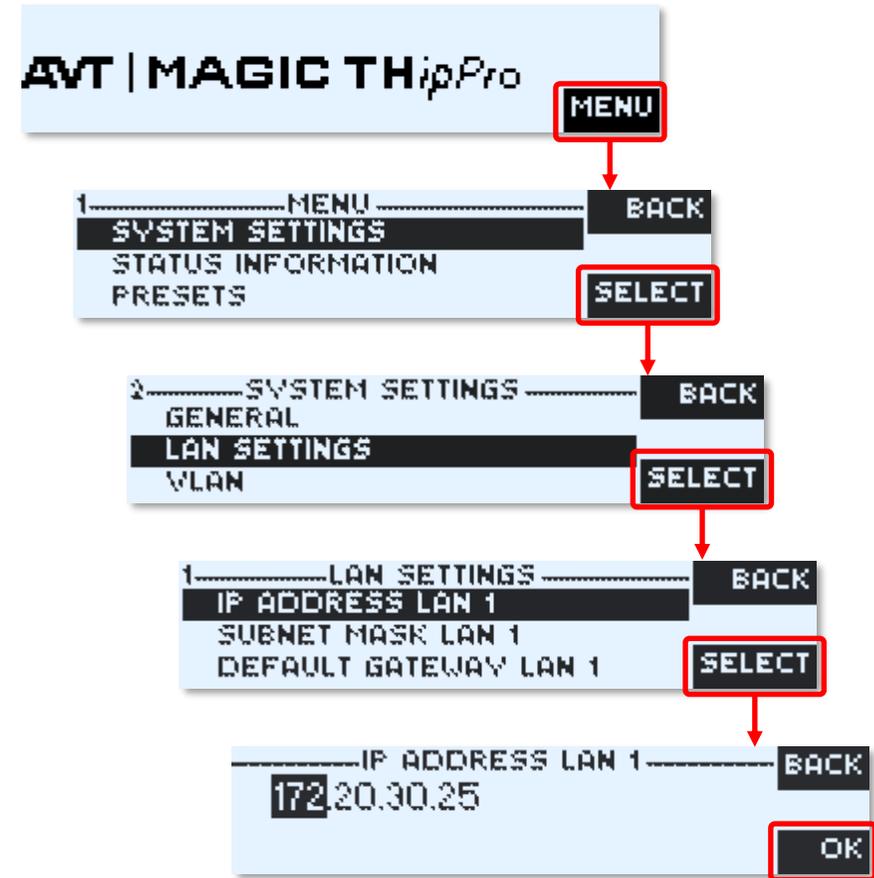


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Initial Setup

Initial Setup

- Connect the MAGIC THipPro to the mains.
- Configure the IP address of the LAN interface via the front display as shown on the right.
 - The MAGIC THipPro can be configured to use DHCP later via the PC software on the LAN INTERFACE configuration page.
- Subsequently also configure SUBNET MASK and DEFAULT GATEWAY of LAN interface 1.
- Connect the socket LAN 1 of the device with the Ethernet network and connect the PC software.
- All further configurations should be done using the PC software.

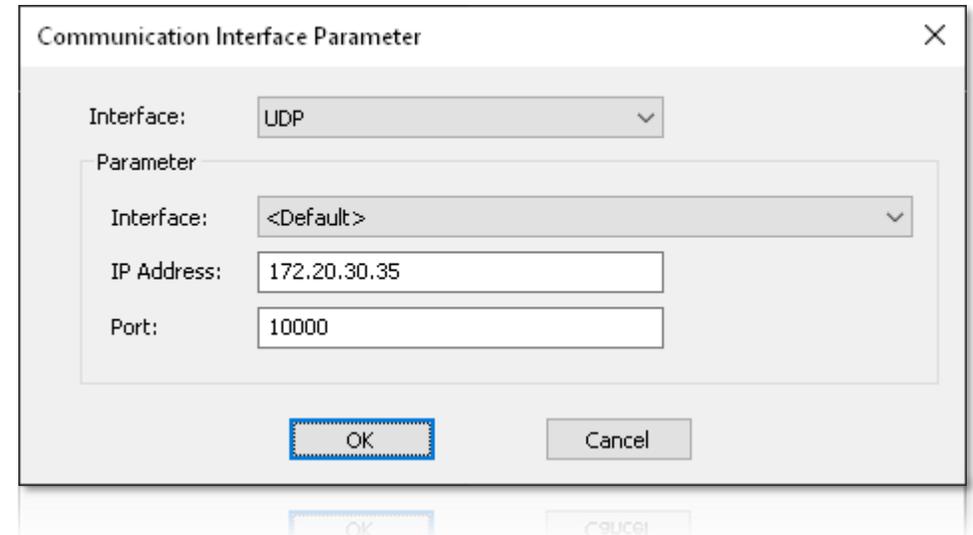


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Connecting the software

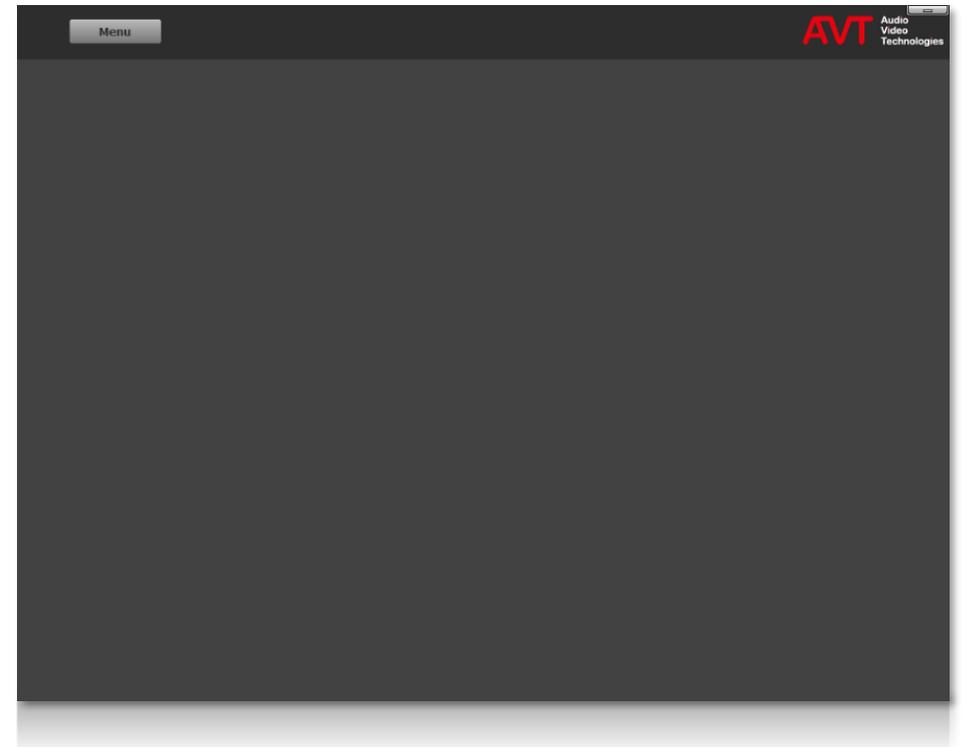
MAGIC THipPro LAN Client (1)

- Run the MAGIC THipPro LAN setup.exe to install the software.
- Run the software as administrator.
 - Right click the MAGIC THipPro LAN Client icon on the desktop and select Run as administrator.
- Connect the MAGIC THipPro to the local network.
- In the MAGIC THipPro LAN Client software open MENU – CONFIGURATION – CONTROL INTERFACE.
 - INTERFACE: Select UDP.
 - PARAMETER – INTERFACE: Select the network interface of the PC which has access to the unit.
 - PARAMETER – IP-ADDRESS: Enter the IP address of the MAGIC THipPro (default: 192.168.96.102). Get the current IP address from the MAGIC THipPro's front display by pressing the HANG UP button (to the right of the OK button) repeatedly.
 - PARAMETER – PORT: Enter the control port of the MAGIC THipPro (default: 10000).



MAGIC THipPro LAN Client (2)

- If the LAN Client software doesn't get an answer from the MAGIC THipPro, it will show NO CONNECTION in the upper right corner.
- When the LAN Client software connects to a MAGIC THipPro with factory settings the main panel is empty.
- Click MENU – CONFIGURATION – SYSTEM to start configuring the MAGIC THipPro.

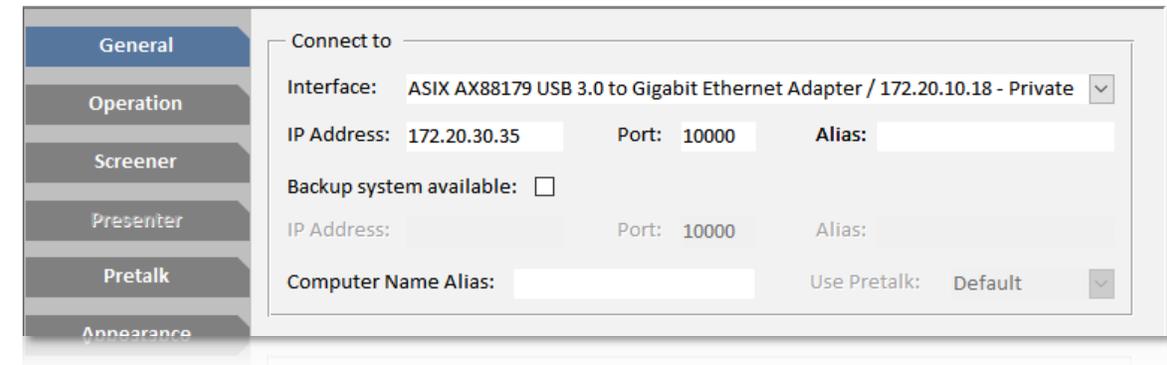


MAGIC THipPro News Desk Client

- Install the MAGIC THipPro LAN Client software on all PCs which act as News Desk Clients.
- Whether the LAN Client software acts as LAN Client or News Desk Client is distinguished by the settings made on the CLIENT / SECURITY configuration page of the MAGIC THipPro system configuration.
- The LAN Client software adopts the role of the News Desk Client, if required, when it connects to the system.

MAGIC THipPro Screener Software (1)

- Run the MAGIC THipPro Screener setup.exe to install the software.
- Run the software as administrator.
 - Right click the Screener Login icon on the desktop and select Run as administrator.
- Connect the MAGIC THipPro to the local network.
- Click the Menu icon () in the top left corner and open LOCAL CONFIGURATION – GENERAL.
 - INTERFACE: Select the network interface of the PC which has access to the unit.
 - IP-ADDRESS: Enter the IP address of the MAGIC THipPro (default: 192.168.96.102). Get the current IP address from the MAGIC THipPro's front display by pressing the HANG UP button (to the right of the OK button) repeatedly.
 - PORT: Enter the control port of the MAGIC THipPro (default: 10000).
 - ALIAS: Optionally enter a name for the THipPro.

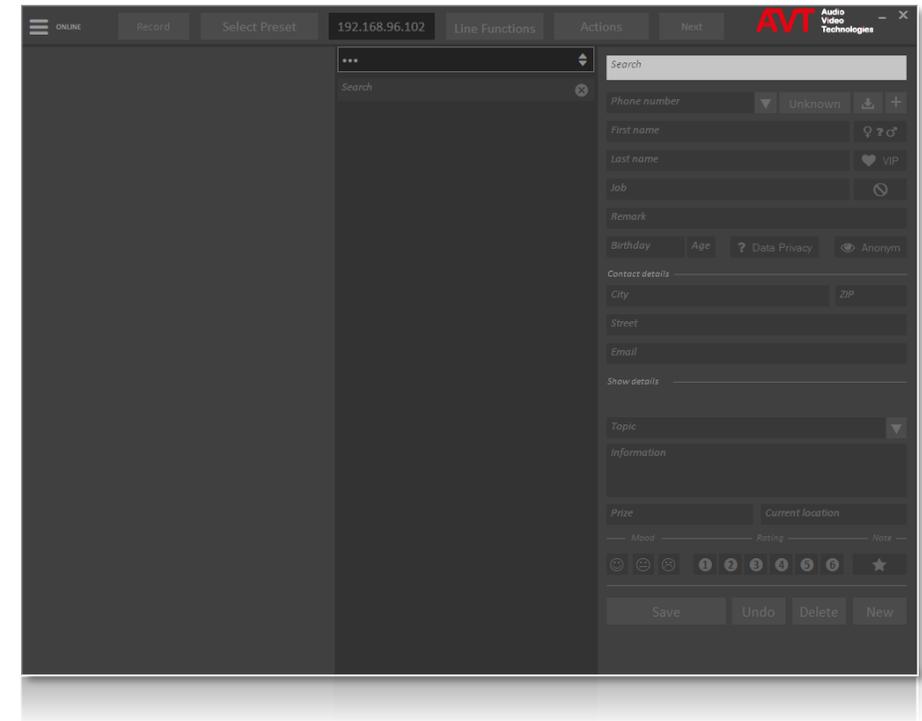
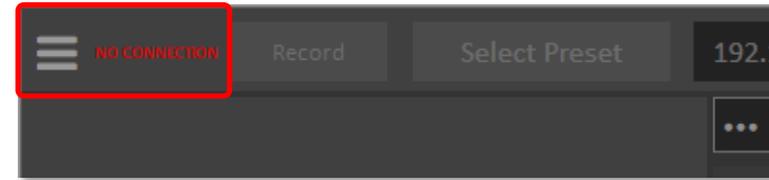


The screenshot shows the 'General' configuration tab of the MAGIC THipPro Screener software. The window has a sidebar with tabs: General (selected), Operation, Screener, Presenter, Pretalk, and Appearance. The main area is titled 'Connect to' and contains the following fields:

- Interface: ASIX AX88179 USB 3.0 to Gigabit Ethernet Adapter / 172.20.10.18 - Private (dropdown menu)
- IP Address: 172.20.30.35
- Port: 10000
- Alias: (empty text field)
- Backup system available:
- IP Address: (empty text field)
- Port: 10000
- Alias: (empty text field)
- Computer Name Alias: (empty text field)
- Use Pretalk: Default (dropdown menu)

MAGIC THipPro Screener Software (2)

- If the Screener software doesn't get an answer from the MAGIC THipPro, it will show NO CONNECTION in the upper left corner.
- When the Screener software connects to a MAGIC THipPro with factory settings the main panel is empty.
- Click MENU – SYSTEM CONFIGURATION to start configuring the MAGIC THipPro.



MAGIC THipPro MAGIC THipPro Pure

System Settings

- These settings can be stored in Super Presets.

General (1)

The screenshot shows a 'Configuration' window with a tree view on the left and a 'General' settings panel on the right. The tree view includes categories like 'Operation Settings', 'GPIO', and 'System Settings', with 'General' selected under 'System Settings'. The 'General' panel contains the following settings:

- Display Language:** English (dropdown)
- Front Keypad:** Key Tone
- Display:** Backlight: On (dropdown), Contrast: 8 (slider)
- System:** Name: MAGICTHipPro (text field), Index: 0 = Standard (dropdown)

At the bottom of the window, there are buttons for 'OK', 'Abbrechen', and 'Apply Now'. The status bar at the bottom left shows 'Client ID: 1' and 'Studio: 1'.

General (2)

- Configure the basic system parameters on the GENERAL page.
- DISPLAY LANGUAGE: The front display of the MAGIC THipPro supports two languages:
 - ENGLISH
 - GERMAN
- FRONT KEYPAD – KEY TONE: Enable the key click.
- DISPLAY: Set the parameters of the front display:
 - BACKLIGHT:
 - AUTO: Turns on when a key is pressed and turns off after a few seconds.
 - ON: Permanently on.
 - CONTRAST: Adjust the contrast to improve the clarity of the front display.

SYSTEM

- NAME: Enter a system name which is used:
 - to identify the device in the optional MAGIC SYSTEM MANAGER.
 - to address the device in the CONTROL INTERFACE configuration.
 - as the SIP display name.
 - request an IP address via DHCP.
 - to identify the system via the front display.
- INDEX: The system index is only used if multiple MAGIC THipPro systems use the same phonebook. All systems connected to a common phonebook database will show the same phonebook entries. But call history entries are stored with the system index.
 - MAGIC THipPro systems with different indexes will not show each other's call history.
 - MAGIC THipPro systems using the same index will show the same call history.

Line Interface (1)

Configuration

Local
MAGIC THipPro ACip3 1

Line Interface

General
Line Mode: VoIP (LAN/SIP)
 Drop not answered incoming/outgoing calls after 90 seconds

	Channels															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
E.164 Lines	<input type="checkbox"/>															
In-house Lines	<input checked="" type="checkbox"/>															
Collaboration Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Call Forwarding Lines	<input type="checkbox"/>															
Anonymous Calling sip:anonymous@anonymous.inv...	<input type="checkbox"/>															
Anonymous Calling sip:anonymous@<registrar>	<input type="checkbox"/>															
Point Anonymous	<input type="checkbox"/>															

PBX/Exchange line configuration
International prefix: 00 (Default value: 00) Local Country Code: +49
National prefix: 0 (Default value: 0) Local Area Code: 0911
Anonymous Call signalling: (Separate strings by .)
 Ignore SIP Display Name of caller

Inhouse Lines
VoIP
Length of extension: 4
Outgoing line prefix: 0
PBX number: 5271
Skip outgoing line prefix on incoming calls:
 User enters outgoing line prefix on manual calls

Client ID: 1 Studio: 1

OK Abbrechen Apply Now

Line Interface (2)

- Configure the basic parameters for connecting to the telephone network on the LINE INTERFACE page.
- LINE MODE: Specifies the type of telephone network the MAGIC THipPro is connected to.
 - VOIP (LAN/SIP): Voice over IP provides digital audio transmission over IP networks. The audio quality is automatically negotiated at call setup. MAGIC THipPro supports two algorithms:
 - G.711 (3.4 kHz audio bandwidth)
 - G.722 (HD-Voice, 7 kHz audio bandwidth with HD-Voice software upgrade).
 - For incoming calls, the MAGIC THipPro always uses the best algorithm which is supported by the calling station.
 - ISDN: Integrated Services Digital Network provides digital audio transmission. Requires the ISDN hardware upgrade. THipPro supports up to two ISDN modules with eight channels each.
- POTS: Plain Old Telephone Service provides analogue audio transmission with 3.1 kHz audio bandwidth. Requires the POTS hardware upgrade which consists of two modules providing four channels each.
- ISDN & VOIP (LAN/SIP): Mix ISDN and VoIP channels. The line mode can be specified for each channel separately. The number of ISDN and VoIP channels does not add up.
- POTS & VOIP (LAN/SIP): Mix POTS and VoIP channels. The line mode can be specified for each channel separately. The number of POTS and VoIP channels does not add up.
- POTS GATEWAY 4/8 LINES: Allows for connecting the THipPro via predefined VoIP accounts to a POTS gateway with up to 8 analogue telephone lines. The POTS gateway must be purchased from AVT.

Line Interface (3)

- **PERMANENT ACTIVATION OF ISDN LAYER 2:** Activate this option if the first in a series of calls cannot be established or incoming calls are not detected. Only available in line modes ISDN and ISDN & VOIP (LAN/SIP).
- **ENABLE ISDN HD CALL:** Shows extra buttons for making ISDN calls using the HD-Voice (G.722) algorithm. ISDN HD is not compatible with standard ISDN telephones since it establishes an ISDN data connection. A call set up as data connection cannot automatically switch to voice transmission. Only available in line modes ISDN and ISDN & VOIP (LAN/SIP) with activated HD-Voice license.
- **ISDN PROTOCOL:** Select the ISDN protocol supported by the PBX or ISDN provider. Only available in line modes ISDN and ISDN & VOIP (LAN/SIP).
 - EURO ISDN
 - USA ISDN (NI-1)
 - JAPANESE ISDN
- **DROP NOT ANSWERED INCOMING/OUTGOING CALLS AFTER 90 SECONDS:** The THipPro automatically ends unanswered calls after 90 seconds.

Line Interface (4)

- Specify parameters for each telephone line in the CHANNELS matrix:
 - E.164 LINES: Activate this option if the PBX requires the THipPro to dial numbers in an internationally unique format according to ITU-T recommendation E.164. (E.g., +49 911 5271 110)
 - IN-HOUSE LINES: Specify lines connected to a PBX. Required to distinguish between internal and external calls. Prefix digits for dialling external telephone numbers are automatically inserted when configured in the PBX / EXCHANGE LINE CONFIGURATION .
 - COLLABORATION SERVICES: Activate this option if the line should also register with the MAGIC Collaboration Server. The lines become available via Microsoft Teams. VoIP can be used in parallel on these lines.
 - CALL FORWARDING LINES: Required for network independent call forwarding. These lines don't appear on the main panel and are reserved for

establishing connections to a forwarding destination. The line is blocked until all participants have hung up. The number of call forwarding lines determines the number of simultaneous calls that can be forwarded.

- VOIP LINES: In a mixed mode with POTS or ISDN, check channels which should use the VoIP mode.

Line Interface (5)

- **ANONYMOUS CALLING:** Checked channels signal “Anonymous” instead of the phone number or Display Name to keep the number secret. Whenever possible, this should rather be configured in the PBX or on the provider's side.
 - NOTE: Some VoIP providers / SIP servers block devices that hide their identity.
- Two formats for anonymous calling can be used by the THipPro. They define how the own number is transmitted to the SIP server. The format to be used is determined by the VoIP provider.
 - sip:anonymous@anonymous.invalid
 - sip:anonymous@<registrar>
(where <registrar> is the SIP server entered for that line on the VoIP (LAN/SIP) configuration page)
- **REJECT ANONYMOUS INCOMING CALLS:** Check a line so that THipPro Lite rejects calls that do not contain the caller's phone number.

Line Interface (6)

- The PBX / EXCHANGE LINE CONFIGURATION section specifies the basic local telephone number format.
 - INTERNATIONAL PREFIX: Prefix digits for dialling international telephone number. (default: “00”, don’t set to “+”)
 - NATIONAL PREFIX: Prefix digits for dialling long distance telephone numbers. (default: “0”)
 - LOCAL COUNTRY CODE: Required for E.164 mode. The THipPro adds the country code automatically to telephone numbers on outgoing calls if it is not provided by the user.
 - LOCAL AREA CODE: Required for E.164 mode. The THipPro adds the area code automatically to telephone numbers on outgoing calls if it is not provided by the user.
 - ANONYMOUS CALL SIGNALLING: If callers don’t want to disclose their phone number, the number is in most cases replaced by “Anonymous”. Other replacement texts are possible. Enter these other

keywords here, so the THipPro displays these callers as anonymous.

- IGNORE SIP DISPLAY NAME OF CALLER: VoIP calls signal not only the phone number but also the SIP DISPLAY NAME, which can be entered by users. The MAGIC THipPro interprets the SIP display name as the caller’s name. However, often the SIP display name carries useless information. The SIP display name is ignored by the THipPro when this setting is enabled.

Line Interface (7)

- The INHOUSE LINES section specifies the format of internal numbers and the numbers to connect to the outside world. These settings apply to channels marked as IN-HOUSE LINES.
 - LENGTH OF EXTENSION: Number of digits of internal phone numbers.
 - OUTGOING LINE PREFIX: Prefix digit inserted before the number to dial external phone numbers.
 - PBX NUMBER: The office / trunk number. Required in mixed line mode (ISDN/POTS & VoIP) or if some but not all channels are in-house lines.
 - SKIP OUTGOING LINE PREFIX ON INCOMING CALLS: Some PBXs signal the calling party's number including the prefix digits, some don't. Set this option so, that the number of incoming calls is displayed without the prefix digits in the PC software.
 - USER ENTERS OUTGOING LINE PREFIX ON MANUAL CALLS: Enable if the users should enter the prefix digits when dialling a number using the number pad. If unchecked the MAGIC THipPro adds the prefix digits automatically.

MSN (1)

Configuration

Local MAGIC THipPro **MSN**

- Operation Settings
 - ... Clients / Security
 - ... Studio Definition
 - ... Database
 - ... Mode & Audio Line
 - ... Internal HOLD Signals
 - ... Studio Audio Assignment
 - ... **Clients Audio Assignment**
 - ... PhonerSet Audio Assignment
 - ... Clients Restrictions
 - ... Signal Processing
 - ... Line Labels
 - ... Studio Settings
 - ... Auto Answer
 - ... Intro / Data Privacy Query
 - ... Answering Machine
 - ... Night Service
 - ... DTMF
 - ... Actions
 - ... GPIO
 - ... Ember+ Consumer Extension
- System Settings
 - ... General
 - ... Line Interface
 - ... Caller Line Grouping
 - ... **MSN**
 - ... VoIP (LAN/SIP)
 - ... Audio Interface
 - ... PRETALK Streaming
 - ... LAN Interface
 - ... VLAN
 - ... DHD Audio Matrix
 - ... Ember+
 - ... PhonerSet / Remote Light

Client ID: 9 Studio: 2

Line	MSN
1	
2	
3	
4	
5	305
6	306
7	307
8	308
9	
10	
11	
12	
13	
14	
15	
16	316

OK Cancel Apply Now

MSN (2)

- The MSN page is displayed only if there are ISDN channels configured on the LINE INTERFACE page.
- Enter an MSN (Multiple Subscriber Number) for each ISDN channel connected to the MAGIC THipPro.
 - The MSN sometimes is the internal telephone number (extension). For more information, refer to the PBX manual or the provider's documentation

- .

POTS Phone Numbers (2)

- The POTS PHONE NUMBERS page is displayed only if there are POTS channels configured on the LINE INTERFACE page.
- There is no technical necessity to specify the POTS phone numbers.
- Enter the POTS phone numbers if you like to display them in the line labels. On the LINE LABELS page you may use the {lineid} wildcard to display the POTS phone number.

POTS Interface: PBX / Outside Line (1)

Configuration

Local MAGIC THipPro

POTS Interface : PBX

POTS : PABX

Country Setting:

Wait for received phone number (CLIP) before call in signalling

Drop when busy tone detected

Loop-Break Timeout: 300 msec

Hook Flash Duration: 200 msec

BUSY/DROP Tone:

Tone Duration: 400 msec

Pause Duration: 400 msec

Enable Expert Settings

High pass filter cut off frequency

Receive: 300 Hz

POTS line level adjustment

Receive: 0 dB

Transmit: 0 dB

Client ID: 9 Studio: 2

POTS Interface: PBX / Outside Line (2)

- The POTS INTERFACE pages are displayed only if there are POTS channels configured on the LINE INTERFACE page.
- The POTS interface parameters for channels connected to a PBX are configured on the POTS INTERFACE: PBX page.
- The POTS interface parameters for channels connected directly to the public telephone network are configured on the POTS INTERFACE: OUTSIDE LINES page.
- The parameters are the same for both variants:
 - **COUNTRY SETTING:** Defines the POTS interface's impedance. Finding the correct setting is crucial to minimize echo. Set the country of your location or use the country of manufacture of the PBX as a guideline.
 - **WAIT FOR RECEIVED PHONE NUMBER (CLIP) BEFORE CALL IN SIGNALLING:** The calling party's phone number is signalled between the first and the second ringing. Enable this setting the incoming call should be ignored until the second ringing. The call will be visible from the second ringing even if no phone number is detected.
- **DROP WHEN BUSY TONE DETECTED:** Enable if the system should drop the call automatically when the disconnected tone (busy tone) is heard on the telephone line. You may define a custom tone or the measure the tone in the BUSY / DROP TONE section.
- **LOOP-BREAK TIMEOUT:** Defines the minimum time the loop current of the telephone line must be interrupted for the MAGIC THipPro to drop the call. Short interrupts are used to signal events in the network (e.g. initiate call forwarding). Longer interrupts indicate a problem in the network. When the timeout is set too low, accidental disconnects may happen. (default: 300ms)
- **HOOK FLASH DURATION:** A hook flash signals the network that a device wants to forward a call. Adjust the hook flash duration if there are problems forwarding calls.

POTS Interface: PBX / Outside Line (3)

- **BUSY / DROP TONE:** The MAGIC THipPro can detect if the remote station has hung up. It is monitoring the audio signal for a sequence of tones and pauses with defined duration. The sequence might be different for every PBX or provider.
 - **TONE DURATION:** Specify a custom tone duration.
 - **PAUSE DURATION:** Specify a custom pause duration.
 - **MEASURE VALUES:** Click the button to measure the actual sequence and set it as custom tone and pause duration. To measure the values correctly make sure the drop tone can be heard on the first telephone line connected to the PBX or to the public network, respectively.
- **ENABLE EXPERT SETTINGS:** Help to improve the audio signal on telephone lines with difficult line characteristics.
- **HIGH PASS FILTER CUT-OFF FREQUENCY – RECEIVE:** Sounds below this frequency are filtered out (e.g. low frequency hum).
- **POTS LINE LEVEL ADJUSTMENT**
 - **RECEIVE:** Increase the value to amplify the audio signal coming in from the telephone line. Decrease the value if the audio is distorted.
 - **TRANSMIT:** Increase the value to send a louder signal. Decrease the value if the audio signal sounds distorted at the remote station.
- **DEFAULT SETTINGS:** Resets all values on the page to factory settings.

Caller Line Grouping (1)

Configuration

Local MAGIC THipPro

Caller Line Grouping

Operation Settings

- Clients / Security
- Studio Definition
- Database
- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- PhonerSet Audio Assignmen
- Clients Restrictions
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions
- GPIO
- Ember+ Consumer Extensior
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping**
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light

Client ID: 9 Studio: 2

Name	Colour	Channels															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	CF	CF
CALL IN	Text	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												-	-
VIP	Text			<input checked="" type="checkbox"/>												-	-
CALL IN	Text				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									-	-
VIP	Text						<input checked="" type="checkbox"/>									-	-
PROD	Text							<input checked="" type="checkbox"/>								-	-
PROD	Text								<input checked="" type="checkbox"/>							-	-
NEWSDESKS	Text									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			-	-
Line Group 8	Text															-	-
Line Group 9	Text															-	-
Line Group 10	Text															-	-
Unassigned																-	-

CF: Call Forwarding Line

Background colour: Text

Luminance difference: 13

Text colour: Black White

SET DEFAULT

OK Cancel

OK Cancel Apply Now

Caller Line Grouping (2)

- Bundle telephone lines into groups on the CALLER LINE GROUPING page.
- Telephone lines of a group have:
 - the same configurable background colour.
 - a common button on the main panel for:
 - dropping calls.
 - locking lines.
 - enabling Voice Disguise.
 - enabling Night Mode.
 - enabling the Answering Machine.
 - a common audio line for Auto Answer.
 - common Intro / Data Privacy Query parameters.
 - additional GPIO functions.
- NAME: Enter a name for the line group.
- COLOUR: Define the colours for each line group. Click the coloured rectangle to open the colour configurator:
 - BACKGROUND COLOUR: Click the coloured rectangle to select a background colour for the channels.
 - LUMINANCE DIFFERENCE: Side by side channels are easier to identify if they have slightly different colors. This setting changes the brightness of the selected background color for every second channel.
 - TEXT COLOUR: Set the colour of all text displayed on the selected background colour to BLACK or WHITE.
 - SET DEFAULT: Set all colours to default values.

Caller Line Grouping (3)

- CHANNELS: Assign channels to line groups:
 - Each channel can only be assigned to one line group.
 - Channels of a line group need not to be continuous.
 - Channels not assigned to a specific line group remain in the UNASSIGNED line group.
 - The line group UNASSIGNED has all the characteristics of the other line groups except the color choices.
 - Call forwarding lines (CF) cannot be assigned to a line group.

VoIP (LAN/SIP) (1)

Configuration

Local
MAGIC THipPro ACip3 1

- ... Signal Processing
- ... Line Labels
- ... Studio Settings
- ... Auto Answer
- ... Intro / Data Privacy Query
- ... Answering Machine
- ... Night Service
- ... DTMF
- ... Actions
- ... Telephone Client Application
- GPIO
 - ... Ember+ Consumer Extension
 - ... Ember+ Dial Pad Extension
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)**
 - Collaboration Server
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - NTP
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light
 - ACconnect
 - Stream Quality Measurement
 - SNMP
- ... System Login

VoIP (LAN/SIP)

Line	LAN	SIP Server	LAN	Backup Server	TCP	STUN	User Name	User Authen...	Password	Audio...	Displayed ...	DTMF Tx
Line 1	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	301		****	5004		Inband
Line 2	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	302		****	5006		Inband
Line 3	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	303		****	5008		Inband
Line 4	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	304		****	5010		Inband
Line 5	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	305		****	5012		Inband
Line 6	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	306		****	5014		Inband
Line 7	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	307		****	5016		Inband
Line 8	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	308		****	5018		Inband
Line 9	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	309		****	5020		Inband
Line 10	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	310		****	5022		Inband
Line 11	1	172.20.20.2	1		<input type="checkbox"/>	<input type="checkbox"/>	311		****	5024		Inband
Line 12	1	172.20.1.2	1		<input type="checkbox"/>	<input type="checkbox"/>	312		****	5026		RFC 2833
Line 13	1	172.20.1.2	1		<input type="checkbox"/>	<input type="checkbox"/>	313		****	5028		RFC 2833
Line 14	1	172.20.1.2	1		<input type="checkbox"/>	<input type="checkbox"/>	314		****	5030		RFC 2833
Line 15	1	172.20.1.2	1		<input type="checkbox"/>	<input type="checkbox"/>	315		****	5032		RFC 2833
Line 16	1	172.20.1.2	1		<input type="checkbox"/>	<input type="checkbox"/>	316		****	5034		RFC 2833

VoIP Parameter

Payload Time: 20 msec

A-Law/ μ -Law Signalling on incoming G.722 calls

Use first codec of SDP audio codec list as default

Use individual local SIP port numbers Start port:

Registration

Delay between SIP lines: msec (0..4000)

Timeout: sec (60..500)

Client ID: 5 Studio: 4

VoIP (LAN/SIP) (2)

- Enter the SIP credentials for each telephone line as well as SIP protocol parameters on the VOIP (LAN/SIP) page.
- The MAGIC THipPro provides up to 16 VoIP channels which are completely independent from each other. The parameters must be defined for each VoIP line:
 - LINE: Shows the number of the telephone line.
 - LAN: LAN interface of the MAGIC THipPro which connects to the primary SIP server.
 - SIP SERVER: Primary SIP server. May consist of three parts. Only SIP-Server is mandatory:
proxy@SIP-Server:port
 - PROXY: IP address or host name of the proxy server.
 - SIP-SERVER: Also referred to as REALM or REGISTRAR. IP address or host name.
 - PORT: Server port of the SIP protocol. May be omitted if the default port 5060 is used.
- LAN: LAN interface of the MAGIC THipPro which connects to the backup SIP server.
- BACKUP SERVER: The MAGIC THipPro monitors constantly if the primary SIP server is available. If not it switches to the backup SIP server. When the primary SIP server becomes available again, the MAGIC THipPro switches back to the primary SIP server. See SIP SERVER for more information.
- TCP: Enable to use TCP to connect to the SIP server. Otherwise UDP is used.
- STUN: Enable if STUN is required by the SIP server. Specify the STUN server for the LAN interfaces of primary and backup SIP server on the LAN INTERFACE page.

VoIP (LAN/SIP) (3)

- **USER NAME:** Identifies the SIP account. Usually, the user name is the phone number of the extension or the public phone number.
 - **USER AUTHENTICATION:** Identifies the user account if a password is needed to access a SIP server. When the user authentication field is left blank, the device will use the user name for authentication.
 - **PASSWORD:** The password for the SIP account.
 - **AUDIO PORT (UDP):** Local UDP port for the audio transmission of this VoIP channel. It is recommended to use only straight numbers. (default: 5004,5006, 5008, ...)
 - **SET DEFAULT AUDIO PORTS:** Sets the audio ports (UDP) to their default values)
 - **DISPLAYED NAME:** Text entered here will be displayed on the telephones of the callers. Note that PBXs or providers may override the displayed name.
 - **DTMF TX:** DTMF tones are used if you want to transmit digits such as pin codes via a telephone system. With VoIP, there are several ways to transmit DTMF tones. The THipPro supports the transmission via an INBAND audio signal or via RFC2833. Change this setting if receivers such as conference systems do not accept the code.
- **VOIP PARAMETER:**
 - **PAYLOAD TIME:** Set the size of transmitted audio packets. Fixed at 20 ms for best compatibility with public telecommunication providers.
 - **A-LAW/ μ -LAW SIGNALLING ON INCOMING G.722 CALLS:** Enable this settings if audio is missing or broken when forwarding calls or when receiving forwarded calls. This problem might occur when one of the participants is not capable of HD-Voice (G.722) and the PBX is not aware of that.
 - **USE FIRST CODEC OF THE SDP AUDIO CODEC LIST AS DEFAULT:** Enable this settings if phones call which announce a list of supported audio codecs but only work when the MAGIC THipPro selects the first algorithm from the list.

VoIP (LAN/SIP) (4)

- **USE INDIVIDUAL LOCAL SIP PORT NUMBERS:** Enable this setting if a SIP server requires the MAGIC THipPro to use a different local SIP port for each VoIP line.
 - **START PORT:** SIP port used for the first VoIP channel. Further VoIP channels get straight SIP ports in ascending order. Try to avoid having port 5060 assigned to one of the lines.
 - **SHOW / HIDE SIP PORTS ①:** Click to show the automatically assigned SIP ports in the table above ②. Click again to change the view of the table again. The view also changes back again after 20 seconds with no user input.
- **TABLE IN PORT VIEW**
 - **LINE:** Shows the number of the telephone line.
 - **SIP SERVER:** Primary SIP Server. The remote SIP port can be changed here by appending “:<port>”
 - **USE LOCAL PORT 5060:** Enable for lines which must not use individual SIP port numbers.
 - **LOCAL SIP PORT:** Shows the local SIP port assigned to the VoIP line. Ports are derived from the START PORT or local port 5060 is used if enabled.
 - **REMOTE SIP PORT:** Shows the remote SIP port assigned to the VoIP line. Change the port in the SIP SERVER column.

Configuration

Local

MAGIC THipPro ACip31

VoIP (LAN/SIP)

Line	SIP Server	Use local port 5060	Local SIP Port	Remote SIP Port
Line 1	172.20.20.2	<input type="checkbox"/>	6060	5060
Line 2	172.20.20.2	<input type="checkbox"/>	6062	5060
Line 3	172.20.20.2	<input type="checkbox"/>	6064	5060
Line 4	172.20.20.2	<input type="checkbox"/>	6066	5060
Line 5	172.20.20.2	<input type="checkbox"/>	6068	5060
Line 6	172.20.20.2	<input type="checkbox"/>	6070	5060
Line 7	172.20.20.2	<input type="checkbox"/>	6072	5060
Line 8	172.20.20.2	<input type="checkbox"/>	6074	5060
Line 9	172.20.20.2	<input type="checkbox"/>	6076	5060
Line 10	172.20.20.2	<input type="checkbox"/>	6078	5060
Line 11	172.20.20.2	<input type="checkbox"/>	6080	5060
Line 12	172.20.1.2	<input checked="" type="checkbox"/>	5060	5060
Line 13	172.20.1.2	<input checked="" type="checkbox"/>	5060	5060
Line 14	172.20.1.2	<input checked="" type="checkbox"/>	5060	5060
Line 15	172.20.1.2	<input checked="" type="checkbox"/>	5060	5060
Line 16	172.20.1.2	<input checked="" type="checkbox"/>	5060	5060

VoIP Parameter

Payload Time: 20 msec

A-Law/μ-Law Signaling on incoming G.722 calls

Use first codec of SDP audio codec list as default

Use individual local SIP port numbers Start port: 6060 **Hide SIP Ports**

Client ID: 5 Studio: 1

VoIP (LAN/SIP) (5)

- **REGISTRATION:** These settings control the SIP registration process at the SIP server.
 - **DELAY BETWEEN SIP LINES:** During start-up MAGIC THipPro simultaneously sends a SIP registration telegram for each VoIP channel to the SIP server. If this is overwhelming the SIP server this setting introduces a delay between the VoIP channels.
 - **TIMEOUT:** The MAGIC THipPro renews the SIP registration every 60 seconds by default to check if the SIP server is still available. Increase the interval if the SIP server rejects the registration telegrams as too soon.

Collaboration Services (1)

The screenshot shows a software configuration window titled "Configuration" with a close button (X) in the top right corner. The window is divided into two main sections: a left-hand navigation tree and a right-hand configuration area.

Left-hand navigation tree:

- Local
 - MAGIC THipPro
 - ACip3 1
 - Internal HOLD Signals
 - Studio Audio Assignment
 - Clients Audio Assignment
 - Clients Restrictions
 - Signal Processing
 - Line Labels
 - Studio Settings
 - Auto Answer
 - Intro / Data Privacy Query
 - Answering Machine
 - DTMF
 - Actions
 - GPIO
 - Ember+ Consumer Extension
 - Ember+ Dial Pad Extension
 - System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Collaboration Services**
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - NTP
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light
 - ACconnect
 - Stream Quality Measuremen
 - SNMP

Right-hand configuration area (Collaboration Services):

MAGIC Collaboration Services

- LAN Interface: LAN 1 : 172.20.225.25
- MCS PBX Address: 172.20.1.2
- MCS API Address: http://172.20.1.2
- Device Name: MAGICTHipPro
- Port: 5062
- Port: 19000
- Disable PCM16 RTP Audio

At the bottom of the window, there are three buttons: "OK", "Abbrechen", and "Apply Now". The status bar at the bottom left shows "Client ID: 1" and "Studio: 1".

Collaboration Services (2)

- The MAGIC Collaboration Services (MCS) are a server application developed by AVT. They enable the MAGIC THipPro to make audio and video calls via WebRTC and Microsoft Teams.
 - On the COLLABORATION SERVICES configuration page, the connection between the THipPro and the server application is configured.
 - Define the telephone lines which should operate as WebRTC or MS Teams lines in parallel to VoIP on the LINE INTERFACE configuration page.
 - The connection to the collaboration services consists of two parts:
 - PBX: The audio transmission and call control between the server and the THipPro
 - API: The management of MS Teams contacts and meetings for the THipPro clients.
 - LAN INTERFACE: Select the LAN interface of the MAGIC THipPro which should be used to connect to the collaboration services.
- MCS PBX ADDRESS and PORT: Enter the IP address and port of the PBX channel of the collaboration services.
 - MCS API ADDRESS and PORT: Enter IP address and port of the API channel of the collaboration services.
 - DEVICE NAME: Account name for the THipPro at the collaboration services management application.
 - DISABLE PCM16 RTP AUDIO: The audio data of WebRTC and Microsoft Teams calls is routed via the MCS server. By default, the stream is in uncompressed PCM / 16-bit format. Check this option to use audio compression. The audio quality is lower in this mode.

Audio Interface (1)

The screenshot shows a configuration window titled "Configuration" with a sidebar on the left and a main content area on the right. The sidebar lists various configuration categories, with "Audio Interface" highlighted in blue. The main content area is titled "Audio Interface" and contains the following settings:

- AES/EBU Interface**
 - Clock Source of Digital Output: Recovered / AES/EBU clock (dropdown menu). A note states: "If any DANTE audio channel is configured then DANTE audio clock will be used!"
- Main Nominal Level of Analogue (XLR)**
 - Input Left: 6 dBu
 - Output Left: 6 dBu
 - Right: 6 dBu
 - Headroom: 9 dB
- Handset 1**
 - Gain In: 30 dB
 - Gain Out: 23 dB
- Handset 2**
 - In: 30 dB
 - Out: 23 dB

At the bottom right of the main content area is a "Default Settings" button. At the bottom of the window are three buttons: "OK", "Cancel", and "Apply Now". The status bar at the bottom left shows "Client ID: 9" and "Studio: 2".

Audio Interface (2)

- Set the parameters of the analogue and digital audio interfaces on the AUDIO INTERFACE page.
- **AES/EBU INTERFACE - CLOCK SOURCE OF DIGITAL OUTPUT:** The MAGIC THipPro has sample rate converters only on the AES/EBU inputs. The AES/EBU outputs run on the system's audio clock. Systems connected to the MAGIC THipPro via AES/EBU may be required to have sample rate converters on their inputs. This setting specifies the clock to which the system's audio clock is synchronized. Some of the options may be unavailable depending on modules equipped, line mode or audio over IP settings.
 - **INTERNAL:** Synchronize to the clean internal clock .
 - **INTERNAL / DANTE CLOCK:** Synchronize to Dante clock if a Dante module is equipped and configured, otherwise the internal clock is used.
 - **INTERNAL / RAVENNA CLOCK:** Synchronize to Ravenna clock if a Ravenna module is equipped and configured, otherwise the internal clock is used.
 - **INTERNAL / PTP CLOCK:** Synchronize to the AES67 clock if AES67 is enabled, otherwise the internal clock is used.
 - **INTERNAL / ISDN CLOCK:** Synchronize to ISDN clock if an ISDN module is equipped and configured, otherwise the internal clock is used.
 - **EXTERNAL / CLOCK 1:** Synchronize to the external clock supplied through the CLOCK 1 socket on the rear panel of MAGIC THipPro.
 - **RECOVERED / AES/EBU CLOCK:** Synchronize to the clock of the audio signal supplied through the first AES/EBU input where a signal is detected.

Audio Interface (3)

- **MAIN NOMINAL LEVEL OF ANALOG (XLR):** Use these parameters to adjust the level of analogue audio signals to match the level of the digital audio inputs and outputs.
 - **INPUT LEFT / RIGHT:** Set the sensitivity of the audio inputs. Decreasing the value increases the audio level and vice versa. (default: 6dBu)
 - **OUTPUT LEFT / RIGHT:** Set the gain of the audio outputs. Decreasing the value decreases the audio level and vice versa. (default: 6dBu)
 - **HEADROOM:** Increase the headroom to decrease the analogue audio levels of the inputs to create a safety zone for internal audio mixing. Prevents the audio signal from clipping in the internal mixer. The analog output signal is amplified by the headroom. (default: 9 dBr)
- **HANDSET 1/2:** Set the audio levels of the handset interfaces on the front panel of the MAGIC THipPro.
 - **GAIN IN:** Set the input gain for the microphone.
 - **GAIN OUT:** Set the output gain for the loudspeaker.
- **DEFAULT SETTINGS:** Sets all levels to the default values.

Pretalk Streaming (1)

Configuration

Local MAGIC THipPro

Database
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignmen
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
Intro / Data Privacy Query
Answering Machine
Night Service
DTMF
Actions
GPIO
Ember+ Consumer Extensior
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Audio Interface
PRETALK Streaming
AES67
LAN Interface
VLAN
DHD Audio Matrix
Ember+
PhonerSet / Remote Light
ACconnect
SNMP
Login

Client ID: 9 Studio: 2

PRETALK Streaming

IP Stream	UDP Port
1	5200
2	5202
3	5204
4	5206
5	5208
6	5210
7	5212
8	5214
9	5216
10	5218

Set Default Audio Ports

OK Cancel Apply Now

Pretalk Streaming (2)

- Configure the technical parameters of pretalk audio streaming on the PRETALK STREAMING page.
 - IP STREAM: Up to 10 streams are available.
 - UDP PORT: Local UDP port for the audio stream. (default: 5200, 5202, 5204, ...)
 - SET DEFAULT AUDIO PORTS: Reset all UDP ports back to default settings.

AES67 (1)

The screenshot shows a configuration window titled "Configuration" with a sub-tab "AES67". The window is divided into a left sidebar and a main configuration area. The sidebar contains a tree view of settings, with "AES67" selected under "System Settings". The main area contains the following configuration options:

- Activate AES67 streaming
- LAN Interface: LAN 1 : 172.20.225.25
- PTP Domain: 0 0.127
- Disable SAP
- Quality of Service (DSCP):
 - PTP: 56 (CS 7) (0..63) DiffServ: 224dec
 - RTP: 46 (EF) (0..63) DiffServ: 184dec
- Transmission:
 - Channels: 8
 - SAP Stream Name: THIPPRO
 - RTP UDP Port: 5300
 - Audio Mode: L24
 - Sampling Rate: 48 kHz
 - Address Mode: Auto IP Address: 239 1 225 25
- Reception:
 - Stream 1: TF-USB-Music-1 : 2; 2 channels
 - Stream 2: TF-USB-Music-2 : 1; 2 channels

Buttons for "Set Default QoS values", "Export SDP File", "Update Rx Streams", and "Import SDP File" are present. At the bottom, there are "OK", "Abbrechen", and "Apply Now" buttons. The status bar at the bottom left shows "Client ID: 1" and "Studio: 1".

AES67 (2)

- Configure the technical parameters of AES67 audio over IP on the AES67 page.
 - Find the details in the Audio over IP (AES67-DANTE-RAVENNA-LIVEWIRE) document available in the download section of our website.

LAN Interface (1)

The screenshot shows a configuration window titled "Configuration" with a sidebar on the left and a main configuration area on the right. The sidebar lists various settings, with "LAN interface" highlighted in blue. The main area is titled "LAN Interface" and contains several sections for configuring network parameters.

LAN Interface Configuration:

- LAN 1 | LAN 2 | LAN 3 | LAN 4**
- Primary IP Address:**
 - DHCP
 - IP Address: 172.20.30.35
 - Sub Net Mask: 255.255.0.0
 - Default Gateway: 172.20.1.1
 - DNS Server: 172.16.1.2
- Second IP Address:**
 - IP Address: 172.18.124.47
 - Sub Net Mask: 255.255.255.0
 - Default Gateway: 172.18.124.1
- Third IP Address:**
 - IP Address: 172.21.2.12
 - Sub Net Mask: 255.255.255.0
 - Default Gateway: 172.21.2.1
- STUN Server Parameters:**
 - STUN Server: stun.provider.com
 - NAT Keep Alive Interval: 20 sec (5..60)
- Quality of Service (DiffServ):**
 - Voice: 46 (EF) (0..63) DiffServ: 184dec
 - SIP: 26 (AF 31) (0..63) DiffServ: 104dec
 - Default Settings
- Link Type:** Auto
- Disable Insufficient LAN Alarm
- Control:**
 - UDP Control Port: 10000 (Set Default Port)
 - Accessible from: LAN 1 : 172.20.30.35

Client ID: 9 Studio: 2

Buttons: OK, Cancel, Apply Now

LAN Interface (2)

- Configure the basic parameters for connecting to IP networks on the LAN INTERFACE page.
- The MAGIC THipPro Base Board has two Ethernet interfaces.
- The LAN 3/4 module adds two additional Ethernet interfaces.
- There are three IP addresses available for each LAN interface.
 - You must use the PRIMARY IP ADDRESS to connect to a SIP server when using the VoIP (LAN/SIP) line mode.
 - The second and third IP addresses may be used if VLANs (virtual networks) are enabled.
 - PCs may connect to each Ethernet interface and each IP address of the MAGIC THipPro.
- When using VLANs:
 - Assign a service (Ember+, DHD, SNMP, PC control, ...) to a VLAN on the VLAN configuration page.
 - Assign a service (Ember+, DHD, SNMP, PC control, ...) to an IP address on the corresponding configuration page of the service.
- LAN X: Set IP addresses, STUN parameters and Quality of Service classification for each LAN interface.
 - DHCP: Retrieve an IP address automatically from a DHCP server.
 - IP ADDRESS: Enter a unique IP address. The default settings for the primary IP addresses are:
 - LAN1: 192.168.96.102
 - LAN2: 192.168.96.103
 - LAN3: 192.168.96.104
 - LAN4: 192.168.96.105
 - SUBNET MASK: Enter the bitmask describing the subnet. The default settings for the primary IP addresses are:
 - LAN1-LAN4: 255.255.255.0
 - DEFAULT GATEWAY: Enter the IP address of the router in the local network. The default settings for the primary IP addresses are:
 - LAN1-LAN4: 192.168.96.1
 - DNS SERVER: Enter the IP address of a DNS server. Required to resolve host names of SIP servers and STUN servers.

LAN Interface (3)

- **STUN SERVER PARAMETERS:** Using a STUN server may be mandatory by the VoIP (SIP) provider. Only one STUN server is required per LAN interface even if the LAN interface is used to connect to multiple providers. Enable STUN for each VoIP account individually on the VOIP (LAN/SIP) configuration page.
 - **STUN SERVER:** Enter the IP address or the host name of the STUN server specified by the VoIP provider.
 - **NAT KEEP ALIVE INTERVAL:** Set the time interval at which the MAGIC THipPro sends periodic Keep-Alive packets to the SIP Server. Thus, routers and firewalls keep the SIP communication ports open. This allows the SIP server to notify the device about incoming calls. Keep-Alive packets are only sent if STUN is enabled for the respective SIP account. (default: 20 seconds)
- **QUALITY OF SERVICE:**
 - See [QoS - Quality of Service on IP level](#) in this document.
- **LINK TYPE:** Sets the mode for crossover cable detection. (default: auto)
- **DISABLE INSUFFICIENT LAN ALARM:** Disables the application alarm that occurs when the Ethernet connection does not provide 100 Mbit/s and full duplex operation.
 - 100 Mbit/s / full duplex is required for audio transmission.
- **CONTROL:** Configure the parameters of PC control connections.
 - **UDP CONTROL PORT:** Sets the UDP port all PC software instances connect to. (default: 10000)
 - **SET DEFAULT PORT:** Resets the UDP control port to the default setting.
 - **ACCESSIBLE FROM:** Select the Ethernet interface and the IP address of the MAGIC THipPro, to which the PCs should be allowed to connect.
 - In factory settings PC software clients can access all LAN interfaces.
 - It is recommended to select a specific interface to prevent unauthorized access.

NTP (1)

The screenshot shows a 'Configuration' window with a tree view on the left and a main configuration area on the right. The tree view is expanded to 'System Settings' > 'NTP'. The main area shows the following settings:

- Enable NTP
- Primary Server (LAN/IP Adr./Port): LAN 1 : 172.20.30.25 (dropdown) | 172.20.1.5 (text) | 123 (text)
- Alternative Server (LAN/IP Adr./Port): LAN 1 : 172.20.30.25 (dropdown) | (empty text) | 123 (text)
- System Time: 2022-02-08 14:23:18+01:00

At the bottom of the window, there are three buttons: 'OK', 'Abbrechen', and 'Apply Now'. The status bar at the bottom left shows 'Client ID: 5' and 'Studio: 4'.

NTP (2)

- Configure the parameters for Network Time Protocol on the NTP configuration page.
- The THipPro can synchronise its system time to coordinated universal time (UTC) via NTP.
- The THipPro always tries to connect to the PRIMARY SERVER. If that server is not available, it will try to retrieve the time information from the ALTERNATIVE SERVER.
 - LAN: Select the LAN interface of the THipPro which has access to the NTP server.
 - IP ADDR: Enter the IP address of the NTP server. The THipPro does not resolve host names of NTP servers.
 - PORT: Enter the server port. NTP normally uses the UDP protocol on port 123.
 - SYSTEM TIME: Here the current time of the THipPro is displayed.

VLAN (1)

Configuration

Local MAGIC THipPro

VLAN

VLAN

Service	TPID	Priority	VID (12-Bit)	
PC Control & PRETALK Streaming	802.1QTag	6 (Voice)	21	
VoIP	802.1QTag	6 (Voice)	22	
NTP	802.1QTag	0 (Default, Best Effort)	21	
SNMP	802.1QTag	0 (Default, Best Effort)	21	
DHD	802.1QTag	0 (Default, Best Effort)	40	
Ember+	802.1QTag	0 (Default, Best Effort)	40	
Remote Light Protocol	802.1QTag	0 (Default, Best Effort)	40	
AES67	802.1QTag	6 (Voice)	40	
PhonerSet	802.1QTag	6 (Voice)	21	

Modification of the VLAN parameters may interrupt the connection to the PC!

Client ID: 1 Studio: 1

OK Abbrechen Apply Now

VLAN (2)

- Configure the basic parameters for virtual local area networks on the VLAN page.
 - VLAN: Enable or disable virtual networks globally.
 - SERVICE: All services provided by the MAGIC THipPro which support VLANs are listed here.
 - TPID: Enable or disable VLAN for the specific service:
 - NONE: The service will not carry a VLAN ID and therefor is not part of a VLAN.
 - 802.1QTag: The service will carry a VLAN ID specified in VID and therefore becomes part of that virtual local area network.
 - PRIORITY: Sets a quality of service classification for the service ranging from 0 = lowest priority to 7 = highest priority. It is recommended to set the priority to 6 for services transmitting audio (Pretalk Streaming, VoIP, AES67 and PhonerSet).
 - VID (12-Bit): Sets the VLAN identifier specifying to which VLAN the service belongs. The range is 1-4094.
- Note: Changing the VLAN configuration requires to reconfigure the network switches and routers accordingly. If not done correctly the PC software

will lose connection to the THipPro.

- VLANs may be enabled or disabled globally on the front display of the THipPro under Menu > System Settings > VLAN.
- Find further information on VLANs under [VLAN – Virtual Networks](#) in this document.

DHD AUDIO MATRIX (1)

The screenshot shows a configuration window titled 'Configuration' with a sidebar on the left and a main content area on the right. The sidebar contains a tree view of configuration categories, with 'DHD Audio Matrix' selected and highlighted in blue. The main content area is titled 'DHD Audio Matrix' and contains the following settings:

- Activate DHD Audio Matrix Control
- Audio Matrix Connection Parameters:
 - LAN Interface: LAN 3 : 172.20.32.25
 - Redundancy LAN Interface: LAN 2 : 172.20.31.25
 - TCP/IP Reconnect Time: 10 seconds (1..255)

Below the settings is a table with 16 rows, representing DHD Cores. Each row has columns for DHD Core, IP Address, Redundancy IP Address, and TCP/IP Port. The first two rows have IP addresses and port 2008, while the remaining 14 rows have a port of 0. Each cell in the table has a pencil icon for editing and a trash icon for deletion.

DHD Core	IP Address	Redundancy IP Address	TCP/IP Port
1	172.20.10.18		2008
2	172.20.10.19		2008
3			0
4			0
5			0
6			0
7			0
8			0
9			0
10			0
11			0
12			0
13			0
14			0
15			0
16			0

At the bottom of the window, there are three buttons: 'OK', 'Abbrechen', and 'Apply Now'. The status bar at the bottom left shows 'Client ID: 5' and 'Studio: 2'.

DHD AUDIO MATRIX (2)

- Configure the parameters for connecting the MAGIC THipPro to a DHD core on the DHD AUDIO MATRIX page.
- The MAGIC THipPro supports DHD-ECP (External Control Protocol) to interact with DHD mixing consoles by sending and receiving commands and status information via DHD SetLogic.
- The MAGIC THipPro can connect to up to 16 DHD cores.
- The MAGIC THipPro always tries to connect to the primary IP address of the DHD core. If that is not available, it will try to connect to the redundancy IP address of the DHD core.
- **ACTIVATE DHD AUDIO MATRIX CONTROL:** Enable the DHD communication protocol.
- **LAN INTERFACE:** Select the LAN interface of the MAGIC THipPro which connects to the DHD cores.
- **REDUNDANCY LAN INTERFACE:** Select the LAN interface of the MAGIC THipPro Lite which connects to the Redundancy IP Address of the DHD cores.
- **TCP/IP RECONNECT TIME:** Specifies the time interval between TCP connection requests to a DHD core in seconds. The range is 1 – 255 seconds. (default: 10 seconds)
- **DHD CORE:** Enter up to 16 DHD cores in the table.
- **IP ADDRESS:** Enter the IP address of the DHD core.
- **REDUNDANCY IP ADDRESS:** Enter the redundancy IP address of the DHD core.
- **TCP/IP PORT:** Enter the port of the DHD-ECP (External Control Protocol) of the DHD core.
- Find more details about controlling the MAGIC THipPro via DHD SetLogic in the Signalling and Control with DHD SetLogic document available in the download section of our website.

Ember+ (1)

The screenshot shows the 'Configuration' window for a system, with the 'Ember+' section selected in the left-hand navigation pane. The 'Ember+' section is divided into two main areas: 'Ember+ Provider' and 'Ember+ Consumer'.

Ember+ Provider Configuration:

- Activate Ember+ Provider
- Ember+ Connection Parameters:
 - LAN Interface: LAN 1 : 172.20.225.25
 - Port 1 (Consumer 1): 9000
 - Port 2 (Consumer 2): 9001
 - Port 3 (Consumer 3): 9002
 - Port 4 (Consumer 4): 9003
 - Port 5 (Consumer 5): 9004
 - Port 6 (Consumer 6): 9005
 - Port 7 (Consumer 7): 9006
 - Port 8 (Consumer 8): 9007
 - Port 9 (Consumer 9): 9008
 - Port 10 (Consumer 10): 9009
 - Port 11 (Consumer 11): 9010
 - Port 12 (Consumer 12): 9011
 - Port 13 (Consumer 13): 9012
 - Port 14 (Consumer 14): 9013
 - Port 15 (Consumer 15): 9014
 - Port 16 (Consumer 16): 9015

Ember+ Consumer Configuration:

- Activate Ember+ Consumer
- Connection Parameters:
 - LAN Interface: LAN 1 : 172.20.225.25
 - Provider 1: TCP/IP Address: 172.20.75.6, Port: 9000
 - Provider 2: TCP/IP Address: [empty], Port: 0
 - Provider 3: TCP/IP Address: [empty], Port: 0
 - Provider 4: TCP/IP Address: [empty], Port: 0
 - Provider 5: TCP/IP Address: [empty], Port: 0
 - Provider 6: TCP/IP Address: [empty], Port: 0
 - Provider 7: TCP/IP Address: [empty], Port: 0
 - Provider 8: TCP/IP Address: [empty], Port: 0
 - Provider 9: TCP/IP Address: [empty], Port: 0
 - Provider 10: TCP/IP Address: [empty], Port: 0
 - Provider 11: TCP/IP Address: [empty], Port: 0
 - Provider 12: TCP/IP Address: [empty], Port: 0
 - Provider 13: TCP/IP Address: [empty], Port: 0
 - Provider 14: TCP/IP Address: [empty], Port: 0
 - Provider 15: TCP/IP Address: [empty], Port: 0
 - Provider 16: TCP/IP Address: [empty], Port: 0

At the bottom of the window, there are three buttons: 'OK', 'Abbrechen', and 'Apply Now'. The status bar at the bottom left shows 'Client ID: 1' and 'Studio: 1'.

Ember+ (2)

- Configure the parameters for connecting the MAGIC THipPro to studio equipment supporting Ember+ on the EMBER+ page.
- The MAGIC THipPro supports the Ember+ provider role and the Ember+ consumer role.
- The Ember+ protocol provides ways to send and receive commands and status information.
- **ACTIVATE EMBER+ PROVIDER** to let up to 16 Ember+ consumers connect to the MAGIC THipPro.
 - **LAN INTERFACE:** Select the LAN interface of the MAGIC THipPro to which the Ember+ consumers connect.
 - **PORT N (CONSUMER N):** Enter a port for each consumer. (default: 9000, 9001, 9002, ...)
- **ACTIVATE EMBER+ CONSUMER** to connect the MAGIC THipPro to up to 16 Ember+ providers.
 - Enabling the Ember+ consumer is also required for the Ember+ Consumer Extension.
 - **LAN INTERFACE:** Select the LAN interface of the MAGIC THipPro connecting to Ember+ providers.
 - **TCP/IP ADDRESS:** Enter the IP address of the provider.
 - **PORT:** Enter the port of the provider the MAGIC THipPro should connect to.
- Find more information in the Signalling and Control with EmBER+ document available in the download section of our website.

PhonerSet / Remote Light (1)

Configuration

Local
MAGIC THipPro ACip3 1

- ... Signal Processing
- ... Line Labels
- ... Studio Settings
- ... Auto Answer
- ... Intro / Data Privacy Query
- ... Answering Machine
- ... Night Service
- ... DTMF
- ... Actions
- ... Telephone Client Application
- ... GPIO
- ... Ember+ Consumer Extension
- ... Ember+ Dial Pad Extension
- System Settings
 - ... General
 - ... Line Interface
 - ... Caller Line Grouping
 - ... VoIP (LAN/SIP)
 - ... Collaboration Server
 - ... Audio Interface
 - ... PRETALK Streaming
 - ... AES67
 - ... LAN Interface
 - ... NTP
 - ... VLAN
 - ... DHD Audio Matrix
 - ... Ember+
 - PhonerSet / Remote Light**
 - ... ACconnect
 - ... Stream Quality Measurement
 - ... SNMP
 - ... System Login

PhonerSet / Remote Light

Activate PhonerSet

PhonerSet Connection Parameters:

LAN Interface: LAN 1 : 172.20.30.25

TCP/IP Port: 10300

Audio Port PhonerSet 1: 5400 Audio Port PhonerSet 5: 5408

Audio Port PhonerSet 2: 5402 Audio Port PhonerSet 6: 5410

Audio Port PhonerSet 3: 5404 Audio Port PhonerSet 7: 5412

Audio Port PhonerSet 4: 5406 Audio Port PhonerSet 8: 5414

Activate Remote Light Protocol

Command Light Protocol Connection Parameters:

LAN Interface: LAN 1 : 172.20.30.25

Port 1 (Remote Device 1): 10100 Port 4 (Remote Device 4): 0

Port 2 (Remote Device 2): 0 Port 5 (Remote Device 5): 0

Port 3 (Remote Device 3): 0 Port 6 (Remote Device 6): 0

Client ID: 5 Studio: 4

OK Abbrechen Apply Now

PhonerSet / Remote Light (2)

- Configure the parameters for connecting PhonerSet or Remote Light controllers to the MAGIC THipPro on the PHONERSET / REMOTE LIGHT page.
- **ACTIVATE PHONERSET:** Enables the PhonerSet module.
 - PhonerSet is an app for the touchscreen equipped Grandstream desk phones GXV3350, GXV3370 and GXV3380. The phones can be used for pretalk and for putting calls in HOLD or ON AIR.
 - The PhonerSet app can control up to 10 MAGIC THipPro telephone lines.
 - Up to 8 PhonerSets may be connected to MAGIC THipPro.
 - **LAN INTERFACE:** Select the LAN interface of the MAGIC THipPro to which the PhonerSet phones connect.
 - **TCP/IP PORT:** Enter the local port to which the PhonerSet phones connect. (default: 10300)
 - **AUDIO PORT:** Each PhonerSet phone establishes an audio data stream to the MAGIC THipPro Lite for pretalk. Enter a unique port for each PhonerSet phone. (default: 5400, 5402 , 5404 , 5406 , 5408 , 5410, 5412, 5414)
- Find more information in the MAGIC PhonerSet document available in the download section of our website.
- **ACTIVATE REMOTE LIGHT PROTOCOL:** Enables the Remote Light protocol module.
 - Remote Light is a very simple IP based protocol to control the telephone lines of a MAGIC THipPro. Contact us for the Remote Light Protocol specification.
 - **LAN INTERFACE:** Select the LAN interface of the MAGIC THipPro to which the Remote Light Clients connect.
 - **TCP/IP PORT:** Enter a local port for each Remote Light Client which should connect to the MAGIC THipPro. (default: 10100, 101001, 10102, ...)

ACconnect (1)

Configuration

Local

MAGIC THipPro ACip3 1

- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- PhonerSet Audio Assignmen
- Clients Restrictions
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions
- GPIO
- Ember+ Consumer Extensior
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light
 - ACconnect**
 - SNMP
- Login

Client ID: 9 Studio: 2

ACconnect

Audio Codec	LAN Interface	IP Address	UDP Audio Port	UDP Ctrl. Port	Label
1	LAN 1 : 172.20.30.35	172.20.40.35	8000	10000	
2	LAN 1 : 172.20.30.35	172.20.40.35	8001	10000	
3	LAN 1 : 172.20.30.35		8000	10000	
4	LAN 1 : 172.20.30.35		8001	10000	

MAGIC ACip3 Audio Interface Assignment:

Audio Codec	Studio 1: PR	Studio 2: PS	Studio 3: UNIFY	Studio 4	Studio 5: PhonerSet	Studio 6
1 : ACip3 1	AES 1 Ember+ GPO					
2 : ACip3 1	Analogue (XLR)	AES 2	AES67 1	AES67 2	unassigned	unassigned
3						
4						

Line Colour: Text

Transmit initial configuration to MAGIC ACip3

Background colour: Text

Luminance difference: 13

Text colour:
 Black White

SET DEFAULT

OK Cancel

OK Cancel Apply Now

ACconnect (2)

- Configure the parameters for connecting a MAGIC ACip3 Audio Codec to the MAGIC THipPro on the ACCONNECT page.
 - The ACconnect licence upgrade is required.
 - Connected ACip3 units must be configured using the THipPro PC software. The ACip3 configuration is available through a new tab in the upper left corner of the configuration windows or via MENU – MAGIC ACIP3 – CONFIGURATION in the MAGIC THipPro LAN Client software.
 - ACconnect codec channels are embedded in the main panels of MAGIC THipPro Lan Client and MAGIC THipPro Screener.
- **AUDIO CODECS:** Enter up to four audio codec channels in the upper table.
 - **LAN INTERFACE:** Select the LAN interface of the MAGIC THipPro to which the ACip3 connects.
 - **IP ADDRESS:** Enter the IP address of the ACip3 which provides the codec channel.
 - **UDP AUDIO PORT:** Sets the UDP port for streaming the audio between MAGIC THipPro and MAGIC ACip3 for Pretalk, Hold signal and Conferencing. The UDP audio port defines the source port (at the MAGIC THipPro) and the remote port (at the MAGIC ACip3.)
 - **LABEL:** Sets the label of codec line's the ON AIR button in the main panel.

ACconnect (3)

- **MAGIC ACIP3 AUDIO INTERFACE ASSIGNMENT:** Assign an audio interface of each ACip3 codec channel to the studios which should have access to the codec channels. When an ACconnect coded channel is put ON AIR via PC software, the audio signal is routed through one of the ACip3's native audio interfaces to provide the best audio quality. You may either share an audio interface between many studios or assign an individual audio interface to each studio. Up to 5 audio interfaces are available:
 - ANALOGUE (XLR): Analogue stereo interface.
 - AES1 / AES2: Digital AES/EBU stereo interfaces.
 - AES67 1 / AES67 2: Digital Audio over IP stereo interfaces. (Software licence required.)
- ACconnect also supports connecting the ACip3's audio interfaces to an audio router, which is controlled via DHD or Ember+. This feature needs to

be enabled in the ACip3. The native audio interfaces are then also available with one of the following appendices:

- + DHD ID: Activating such an audio interface also sends the specified DHD ID to the DHD core.
 - + EMBER+ GPO: Activating such an audio interface also sets an Ember+ GPO in the ACip3 provider's Ember+ tree.
 - + AUDIO MATRIX CONTROL: Activating such an audio interface sends the specified DHD ID and sets an Ember+ GPO.
- Contact us for a quick guide on connecting ACconnect to audio routers.

ACconnect (4)

- **LINE COLOUR:** Define the colour of the ACconnect channels. Click the coloured rectangle to open the colour configurator:
 - **BACKGROUND COLOUR:** Click the coloured rectangle to select the background colour of the ACconnect channels.
 - **LUMINANCE DIFFERENCE:** Side by side channels are easier to identify if they have slightly different colors. This setting changes the brightness of the selected background color of every second ACconnect channel.
 - **TEXT COLOUR:** Set the colour of all text displayed on the selected background colour to BLACK or WHITE.
 - **SET DEFAULT:** Set all colours to default values.
- **TRANSMIT INITIAL CONFIGURATION TO ACIP3:** Press this button when connecting an ACip3 for the first time to the MAGIC THipPro. The THipPro PC software will connect to all specified ACip3 units and configure their ACconnect settings

automatically. This can be done manually in the ACip3 configuration as well.

Stream Quality Measurement (1)

The screenshot shows a configuration window titled "Configuration" with a sub-tab "Stream Quality Measurement". On the left is a tree view of system settings, with "Stream Quality Measurement" selected. The main area contains the following settings:

- Measurement interval: sec (1..30)
- Quality LED status:
 - Bad: Packet Loss >
 - Acceptable: Packet Loss > or Jitter > msec
- Default Settings button

At the bottom, there are buttons for "OK", "Abbrechen", and "Apply Now". The status bar at the bottom left shows "Client ID: 5" and "Studio: 4".

Stream Quality Measurement (2)

- Configure the parameters for the stream quality indication on the PC software on the STREAM QUALITY MEASUREMENT configuration page.
 - The stream quality of a received audio stream during a telephone connection is displayed by a little LED near the level meter on the PC software.
 - ●: The stream quality is good
 - ●: The stream quality is acceptable
 - ●: The stream quality is bad
 - MEASUREMENT INTERVAL: The THipPro counts the number of lost packet and stores the maximum jitter that appeared within that time interval. The first indication of stream quality after a call is established can be displayed when the first measurement interval is over. A shorter interval leads to faster results.
- The thresholds for the status LEDs can be configured under QUALITY LED STATUS.
 - PACKET LOSS >: Define the number of packet losses within the measurement interval that will make the LED switch to the respective quality level.
 - JITTER >: Define the maximum jitter within the measurement interval that will make the LED switch to the respective quality level.

SNMP (1)

Configuration

Local

MAGIC THipPro ACip31

- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- Clients Restrictions
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions
- Telephone Client Application
- GPIO
- Ember+ Consumer Extensior
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light
 - ACconnect
 - SNMP**
 - Login

Client ID: 9 Studio: 1

SNMP

SNMP

SNMP Version: v2c

Read/Trap Community: public public

SNMP Port: 161

NMS 1 (LAN/IP Adr./Port): LAN 1 : 172.20.30.25 172.20.10.18 162

NMS 2 (LAN/IP Adr./Port): LAN 1 : 172.20.30.25 162

NMS 3 (LAN/IP Adr./Port): LAN 1 : 172.20.30.25 162

NMS 4 (LAN/IP Adr./Port): LAN 1 : 172.20.30.25 162

System Description: MAGIC THipPro

Contact: Admin

System Location: Rack 1

Send all traps at system startup

Send traps immediately after enabling

Category A Alias: Hardware

Category B Alias: Audio

Category C Alias: SIP

Category D Alias:

Alarm Traps	Category
System Alarms	
<input checked="" type="checkbox"/> LCA	Category A
<input checked="" type="checkbox"/> Time Keeper	Category A
<input checked="" type="checkbox"/> Temperature Sensor	Category A
<input checked="" type="checkbox"/> FLASH EEPROM	Category A
<input checked="" type="checkbox"/> Overheated	Category A
<input checked="" type="checkbox"/> MAIN EEPROM	Category A
<input checked="" type="checkbox"/> Display Contrast DAC	Category A
<input checked="" type="checkbox"/> VCCX0	Category A
<input checked="" type="checkbox"/> I/O Port	Category A
<input checked="" type="checkbox"/> Ethernet MAC 1	Category A
<input checked="" type="checkbox"/> Ethernet MAC 2	Category A
<input checked="" type="checkbox"/> Ethernet MAC 3	Category A
<input checked="" type="checkbox"/> Ethernet MAC 4	Category A
<input checked="" type="checkbox"/> DSP 2 Boot	Category A
<input checked="" type="checkbox"/> DSP 2 Access	Category A
<input checked="" type="checkbox"/> Slot 1 Access	Category A
<input checked="" type="checkbox"/> Slot 2 Access	Category A
<input checked="" type="checkbox"/> Slot 3 Access	Category A
<input checked="" type="checkbox"/> Module Assembly	Category A
<input checked="" type="checkbox"/> DANTE Module Access	Category A
Application Alarms	
<input checked="" type="checkbox"/> AES/EBU Framing Input 1	Category B
<input checked="" type="checkbox"/> AES/EBU Framing Input 2	Category B
<input checked="" type="checkbox"/> AES/EBU Framing Input 3	Category B
<input checked="" type="checkbox"/> AES/EBU Framing Input 4	Category B

Set All Clear All

OK Cancel Apply Now

SNMP (2)

- Configure the parameters for connecting the MAGIC THipPro to a network management system on the SNMP configuration page.
 - MAGIC THipPro parameters exposed through SNMP are read-only.
 - The MAGIC THipPro responds to Get-requests and sends traps.
 - **SNMP VERSION:** Select the SNMP version. MAGIC THipPro supports SNMPv1 and SNMPv2c.
 - **READ / TRAP COMMUNITY:** Enter a string for the READ community and a string for the TRAP community. Communities are used to authenticate the device with the network management system.
 - **SNMP PORT:** Specify the local UDP port for receiving SNMP requests and sending SNMP responses. The remote port is derived from received SNMP requests. (default: 161)
- **NMS 1-4:** Specify up to four network management stations to receive traps.
 - **LAN:**Select the LAN interface of the MAGIC THipPro which is used to send SNMP traps.
 - **IP ADDR:** Specify the IP address of the network management station.
 - **PORT:** Specify the UDP port of the Trap receiver of the network management station. (default: 162)
 - **SYSTEM DESCRIPTION:** Enter a string describing this particular MAGIC THipPro. This string is part of the standard MIB.
 - **CONTACT:** Enter a string with information about who is responsible for the MAGIC THipPro. This string is part of the standard MIB.
 - **SYSTEM LOCATION:** Enter a string describing where the MAGIC THipPro is located. This string is part of the standard MIB.

SNMP (3)

- **SEND ALL TRAPS AT SYSTEM STARTUP:** Enable this option to send all traps when the MAGIC THipPro has finished booting.
- **SEND TRAPS IMMEDIATELY AFTER ENABLING:** Enable to send a trap immediately after it was enabled in the configuration.
- **CATEGORY A-D ALIAS:** Each Trap may be assigned to a category. Enter strings to describe the categories. The strings can be read by the network management station.
- **ALARM TRAPS:** All available traps are listed in this table.
 - Select all traps which should be sent to the network management station.
 - Click into the CATEGORY column to assign a trap to a category.
- There are four categories. To decrease the number of traps to send, assign several alarms to a category and select only the category trap at the end of the list.
- Find more information about the alarms in the SYSTEM MONITOR section of this document.
- **Additional Traps:**
 - **AUTHENTICATION FAILURE:** A request used an unknown community string.
 - **COLD START:** The SNMP agent is reinitialising.
- **Note:** Find the MIB files in the MIB folder inside the installation directory of the MAGIC THipPro PC software.

MAGIC THipPro MAGIC THipPro Pure

System Login

System Login (1)

The screenshot shows a 'Configuration' window with a tree view on the left and a 'System Login' configuration area on the right. The tree view includes categories like 'Local' and 'MAGIC THipPro', with 'System Login' selected under 'System Settings'. The 'System Login' area contains two sections: 'USER' and 'ADMINISTRATOR', each with 'Password' and 'Confirm Password' fields. The status bar at the bottom shows 'Client ID: 1' and 'Studio: 1', and buttons for 'OK', 'Abbrechen', and 'Apply Now'.

Configuration

Local MAGIC THipPro

- ... Studio Audio Assignment
- ... Clients Audio Assignment
- ... Clients Restrictions
- ... Signal Processing
- ... Line Labels
- ... Studio Settings
- ... Auto Answer
- ... Intro / Data Privacy Query
- ... Answering Machine
- ... DTMF
- ... Actions
- + GPIO
- ... Ember+ Consumer Extension
- ... Ember+ Dial Pad Extension
- + System Settings
 - ... General
 - ... Line Interface
 - ... Caller Line Grouping
 - ... VoIP (LAN/SIP)
 - ... Collaboration Services
 - ... Audio Interface
 - ... PRETALK Streaming
 - ... AES67
 - ... LAN Interface
 - ... NTP
 - ... VLAN
 - ... DHD Audio Matrix
 - ... Ember+
 - ... PhonerSet / Remote Light
 - ... ACconnect
 - ... Stream Quality Measuremen
 - ... SNMP
 - System Login**

System Login

USER

Password:

Confirm Password:

ADMINISTRATOR

Password:

Confirm Password:

Client ID: 1 Studio: 1

OK Abbrechen Apply Now

Login (2)

- Protect the configuration of the MAGIC THipPro from unauthorized access via passwords. Configure the passwords on the SYSTEM LOGIN configuration page.
- There are two levels of privileges:
 - ADMINISTRATOR: Specify an administrator password to restrict
 - displaying and changing the configuration.
 - importing configurations.
 - managing presets.
 - opening the system panel.
 - accessing the file system.
 - updating the firmware.
 - resetting to factory settings.
 - USER: Specify a user password to restrict loading presets.
- Note: If you forgot your password, you need to reset the MAGIC THipPro to factory settings.
- Note: The local configuration on the PC is protected via operating system privileges. See SETTINGS LOCATION in the Local Configuration.

MAGIC THipPro MAGIC THipPro Pure

Operation Settings

- These settings can be stored in Presets or in Super Presets.

Clients / Security (1)

Configuration

Local MAGIC THipPro

Clients / Security

Computer Access List (access rights)

LAN Client / Screener PCs News Desk Client PCs Call PINs for Client PCs

Client	Alias	Computer Name / IP Address	Chat Name
1	S1-Presenter 1	172.20.10.10	
2	S1-Presenter 2	172.20.10.11	
3	S1-Screener	172.20.10.12	
4	S2-Presenter 1	172.20.10.13	
5	S2-Presenter 2	172.20.10.14	
6	S2-Screener	172.20.10.15	
7	Prod 1	172.20.10.16	
8	Prod 2	172.20.10.17	
9	Technician	172.20.10.18	
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Add this PC to list

An empty list means no access protection is active!

Client ID: 9 Studio: 2

OK Cancel Apply Now

Clients / Security (2)

- Manage connected PC clients on the CLIENTS / SECURITY page.
- Only Clients specified in one of the lists are permitted to connect to the unit. Other clients are required to enter the administrator login password. If no password is configured on the LOGIN configuration page, access is granted to any PC.
- It is necessary to add the PC clients to one of the lists to be able to assign PRETALK, HOLD and ON AIR audio lines to them.
- Enter all PCs running the MAGIC THipPro LAN Client software or the MAGIC THipPro Screener software on the LAN CLIENT / SCREENER PCS list.
 - CLIENT: The internal ID of a client.
 - ALIAS: A label for the client to easily identify the client on other configuration pages with client specific settings or in the system monitor.
 - COMPUTER NAME / IP ADDRESS: A client is identified by the system by its Windows computer

name or by its IP address used to access the system. If several PCs are to be identified as the same client, you may enter an alias here. Enter the same alias in the local settings of the PC software on the respective client PCs:

- LAN Client / News Desk Client: Go to MENU – CONFIGURATION – SYSTEM – LOCAL – CLIENT SETTINGS – LOCATION. Set CLIENT to TAKE IF FROM LOCAL SETTINGS and enter the alias in COMPUTER NAME ALIAS.
- Screener Client: Enter the alias under MENU – LOCAL SETTINGS – GENERAL – COMPUTER NAME ALIAS.
- CHAT NAME: Enter a name which is used in the built-in chat window. If the chat name is empty, the ALIAS is used.
- ADD THIS PC TO LIST: Adds the Windows computer name of the PC currently used for configuration to the list. Only applicable if the PC is not yet in the list.

Clients / Security (3)

Configuration

Local MAGIC THipPro

Clients / Security

Operation Settings

- Clients / Security
- Studio Definition
- Database
- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- Remote Light Audio Assignn
- PhonerSet Audio Assignmen
- Clients Restrictions
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions
- GPIO
 - Ember+ Consumer Extensior
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN
 - DHD Audio Matrix
 - Ember+

Client ID: 9 Studio: 2

Computer Access List [access rights]

LAN Client / Screener PCs News Desk Client PCs Call PINs for Client PCs

Client	Alias	Computer Name / IP Address	Application
1	News 1	172.20.10.1	News Desk Client
2	News 2	172.20.10.2	News Desk Client
3	News 3	172.20.10.3	News Desk Client
4	News 4	172.20.10.4	News Desk Client
5	News 5	172.20.10.5	News Desk Client
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

An empty list means no access protection is active!

OK Cancel Apply Now

Clients / Security (4)

- News Desk Clients (NDC) are basically LAN Clients with a limited feature set. NDCs can not configure the system and provide no ON AIR buttons. Install the LAN Client software on NDC PCs. The LAN Client switches to NDC view when connecting to the system.
- Enter all PCs which should act as News Desk Clients in the NEWS DESK CLIENT PCS list.
 - CLIENT: The internal ID of a client. It identifies the client on configuration pages where client specific settings are configured.
 - ALIAS: A label for the client to easily identify the client in the system monitor. Also used as chat name in the built-in chat window.
 - COMPUTER NAME / IP ADDRESS: A client is identified by the system by its Windows computer name or by its IP address used to access the system. If several PCs are to be identified as the same client, you may enter an alias. Enter the alias in the LOCAL

SETTINGS of the PC software under CLIENT SETTINGS – LOCATION.

- APPLICATION: Just informative.
- Note: Clients on the NEWS DESK CLIENT PCS list are not permitted to configure the system. If you add the PC currently used for the configuration, you will be locked out of the configuration after pressing OK.

Clients / Security (5)

Configuration

Local MAGIC THipPro

Clients / Security

Computer Access List (access rights)

LAN Client / Screener PCs News Desk Client PCs Call PINs for Client PCs

Client	Alias	Call Pin
1	S1-Presenter 1	****
2	S1-Presenter 2	****
3	S1-Screener	****
4	S2-Presenter 1	****
5	S2-Presenter 2	****
6	S2-Screener	****
7	Prod 1	
8	Prod 2	
9	Technician	
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

An empty list means no access protection is active!

Client ID: 9 Studio: 2

OK Cancel Apply Now

Clients / Security (6)

- By default, each client is permitted to make long-distance or international calls or calls to cell phone networks.
- Enter a CALL PIN for clients which should be restricted to local calls only.
- On these clients, the users must enter the CALL PIN each time they want to make long distance or international calls or calls to cell phone networks.

Studio Definition (1)

Configuration

Local MAGIC THipPro

Studio Definition

Caller Lines 1: 172.20.10.17\SQLEXPRESS.PhoneBook Database 2 Database 3 Database 4 Database 5 Database 6

Name	Database	Colour	Channels
			1 2 3 4 5 6 7 8 9 10 11 12 13 14 CF CF
Line Groups			CALL IN VIP CALL IN VIP PR... PR... NEWSDESKS
Studio 1	1	Text	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Studio 2	1	Text	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Prod 1	1	Text	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Prod 2	1	Text	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
Studio 5	1	Text	<input type="checkbox"/>
Newsdesks	1	Text	<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

CF: Call Forwarding Line

Client ID: 9 Studio: 1

Background colour: Text
Luminance difference: 13
Text colour: Black White
SET DEFAULT
OK Cancel

OK Cancel Apply Now

Studio Definition (2)

- Assign the telephone lines to studios on the CALLER LINES tab of the STUDIO DEFINITION configuration page. Up to six studios for LAN clients and Screener clients can be enabled via the ADMIN STUDIO licences. The News Desk Client licence includes a separate studio for the News Desk Clients. It is always displayed as the last studio in the list. If 6 Admin Studio licences are enabled, LAN Clients and Screener clients can access the News Desk Client studio as well. The number of studios is always limited to 6.
 - **NAME:** Enter a name for each studio.
 - **DATABASE:** Select a telephone book database for each studio. Studios which share at least one telephone line must use the same database.
 - **COLOUR:** Define the colour scheme of the studio. It applies to:
 - the menu bar at the top,
 - the menu side bar and
 - telephone lines which are not assigned to a LINE GROUP.
- Press the coloured rectangle to open the colour configurator:
 - **BACKGROUND COLOUR:** Click the coloured rectangle to select a background colour.
 - **LUMINANCE DIFFERENCE:** Side by side channels are easier to identify if they have slightly different colors. This setting changes the brightness of the selected background color for every second channel.
 - **TEXT COLOUR:** Set the colour of all text displayed on the selected background colour to BLACK or WHITE.
 - **SET DEFAULT:** Set all colours to default values.
- **CHANNELS:** Assign each telephone line to as many studios as desired. The configured line groups are displayed at the top for better orientation. Call Forwarding lines are marked with “CF”. They cannot be assigned to a studio.

Database (1)

Configuration

Local
MAGIC THipPro ACip31

Operation Settings
Clients / Security
Studio Definition
Database
News Desk Pool
Mode & Audio Line
Internal HOLD Signals
Studio Audio Assignment
Clients Audio Assignment
PhonerSet Audio Assignment
Clients Restrictions
Signal Processing
Line Labels
Studio Settings
Auto Answer
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Answering Machine
Night Service
DTMF
Actions
Telephone Client Application
GPIO
Ember+ Consumer Extension
Ember+ Dial Pad Extension
System Settings
General
Line Interface
Caller Line Grouping
VoIP (LAN/SIP)
Collaboration Services
Audio Interface
PRETALK Streaming
AES67

Client ID: 3 Studio: 1

Database

Caller Lines 1: 172.20.1.2\SQLEXPRESS.CallerTHipPro_TF_minimal Database 2 Database 3 Database 4 Database 5 Database 6

Database

SQL Server: 172.20.1.2\SQLEXPRESS Test/Open Connection

Database: PhoneBook

User: ScreenerUser

Password: ●●●●●●●●

Network Library: Default

Telephone Book

Phone Number Types	Connection Types	Mode	Resolution	Sampling Rate	Data Rate	Secure Stream	Remot...
unkown	Telephone	▼					
mobile	Telephone	▼					
office	Telephone	▼					
private	Telephone	▼					
TEAMS	Collaboration Services						
MP2	MPEG Layer 2	Stereo	▼	48 kHz	192 kBit/s	▼ OFF	▼ OFF

Add Phone Number Type Save

Location Details

Country: Deutschland (+49) Country Code: +49

City: <local> Area Code: 911

Label for in-house calls: <in-house> Disable Number Formatting

Always dial Country Code

Operation Parameters

Auto-lock info: 4 Hours (Default) ▼

Show cleared info after lock time

Delete Protection: No ▼

Activate User Content Filter

Share Screening info between studios

Data Privacy disagreement as default

OK Abbrechen Apply Now

Database (2)

- Configure to up to six databases on the DATABASE page.
- THipPro uses Microsoft SQL or Microsoft SQL Express databases to store caller information (phone book) as well as additional information like layouts for MAGIC THipPro Screener, Social Media content (X (Twitter)) and Show Profiles.
- Assign a database to a studio on the STUDIO DEFINITION configuration page.
- Find the SQL SERVER 2012 INSTALLATION document in the download section of our website. It describes:
 - How to install the Microsoft SQL Express server.
 - How to configure the Microsoft SQL server.
 - How to install the MAGIC THipPro phone book database on a Microsoft SQL server.
 - The manual also applies to newer versions of the Microsoft SQL server.
- DATABASE: Enable the database and specify the parameters to access the database.
 - SQL SERVER: Network address of the Microsoft SQL server followed by the database instance separated by a backslash ('\'). Depending on the SQL server configuration the database instance might be omitted.
 - DATABASE: The SQL database name.
 - USER: The SQL database user name.
 - PASSWORD: The users SQL database password.
 - NETWORK LIBRARY: Chose a network library which uses a protocol which is supported by the specified SQL server:
 - DEFAULT: The driver on the Client PC choses the network library automatically.
 - NAMED PIPES
 - TCP/IP
 - TEST/OPEN CONNECTION: Establish a connection to the SQL server. If the connection fails, additional information about the error is displayed.

Database (3)

■ TELEPHONE BOOK

- The MAGIC THipPro phone book stores up to three phone numbers per contact. Phone number types help to classify the phone numbers.
- All Algorithms which are to be used with ACconnect codec channels must be specified as phone number types.
- Four phone number types are available by default:
 - Unknown
 - Mobile
 - Office
 - Home
- PHONE NUMBER TYPES:
Click on a phone number type to edit the name.
Erase the name to delete the phone number type.
Default phone number types cannot be deleted.
- ADD PHONE NUMBER TYPE: Click to add a phone number type to the list. Edit the parameters directly in the list.

- SAVE: Press to save the changes in the database.
- CONNECTION TYPES: Chose a connection type:
 - TELEPHONE: For telephone numbers used on THipPro channels.
 - COLLABORATION SERVER: For Microsoft Teams contacts.
 - ALL OTHERS: ACconnect algorithms depending on the licenced algorithms of the connected ACip3 including G.711, G.722, MP2, MP3, aptX, AAC, Opus, PCM.
- MODE: Mono or stereo mode for certain algorithms.
- RESOLUTION: 16/20/24 bits/sample for certain algorithms.
- SAMPLING RATE: 32/48 kHz for certain algorithms.
- DATA RATE: 16...384 kBit/s for certain algorithms.

Database (4)

- **SECURE STREAM:** Secure streaming is only possible between AVT codecs. The audio streams is sent twice with an optional delay between the streams to improve error tolerance. The second stream uses the audio port of the first stream increased by one.
 - **ON:** The ACip3 sends a duplicate of the stream additionally. The ACip3 also expects to receive two streams.
 - **OFF:** Compatible with any AoIP codec.
 - **AUTO:** The ACip3 sends the Stream twice. If no second stream is received within 10 seconds, sending the second stream is stopped.
 - **DELAY:** Specify the delay between the two streams (0 – 500 ms). This also increases the overall audio delay.
- **REMOTE GPIO:** Only possible between AVT codecs. Transmits GPIO input states of TTL, DHD Set Logic, Ember+ to the other end. There, these input states may be assigned to any TTL, DHD Set Logic or Ember+ GPIO output.
 - **OFF:** Compatible with any AOIP codec.
 - **RTP:** Send the GPIO input states along with the audio stream.
- **LOCATION DETAILS:** With these parameters the MAGIC THipPro can distinguish between local, long-

distance and international calls. They are also necessary to store the telephone numbers in a standardized format.

- **COUNTRY:** Select the country in which the MAGIC THipPro is located, from the list. This automatically sets the COUNTRY CODE. If the desired country cannot be found, set the country code manually.
- **COUNTRY CODE:** The international dialling code of the country in which the MAGIC THipPro is located.
- **CITY:** Select the city in which the MAGIC THipPro is located from the list. This automatically sets the AREA CODE. If the desired city cannot be found, set the area code manually. Using the MAGIC THipPro Screener, it is possible to import area codes into the database. Find the area codes of some countries in the installation directory of MAGIC THipPro Screener.
- **AREA CODE:** National telephone number prefix for the city in which the MAGIC THipPro is located.

Database (5)

- **LABEL FOR INHOUSE CALLS:** This label is displayed instead of the caller's city when a call is identified as coming from an internal extension.
- **DISABLE NUMBER FORMATTING:** Enable to store and display telephone numbers of incoming calls as they are signaled by the telephone network.
- **ALWAYS DIAL COUNTRY CODE:** Enable to prefix the country code also for national calls.
- **OPERATION PARAMETERS:** Manage access to database content.
 - **AUTO-LOCK INFO:** Information about each call may be stored by the user in the info record. Set the timeout when the system locks the info record after the last editing. If an info record is locked, the screener must use a new info record for entering call information. The locked dataset remains in the database to display the history of the caller. As long a caller is on the noted callers list, the info record is not locked.
 - **SHOW CLEARED INFO AFTER LOCK TIME:** Enable to automatically create a new record when the current info record was locked by the AUTO-LOCK.
- **DELETE PROTECTION:** Set the time period during which a contact cannot be deleted from the database after it has been last edited.
- **ACTIVATE USER CONTENT FILTER:** By default, each client PC is permitted to access the phone book. If the user content filter is active, each user must log in with username and password to access the phone book. Each user only has access to the phone book entries he or she has created. The entries created by other users cannot be accessed. Specify usernames and passwords on the USER CONTENT FILTER configuration page.
- **SHARE SCREENING INFO BETWEEN STUDIOS:** When someone calls, the software displays the information that was collected during the last call. By default, it the software only displays this information if the last calls was in the same studio. Enable this option to also display information that was collected in a different studio of the THipPro.
- **DATA PRIVACY DISAGREEMENT AS DEFAULT:** New contacts are entered as not having agreed to data privacy by default.

User Content Filter (1)

Configuration

Local

MAGIC THipPro ACip31

- Operation Settings
 - Clients / Security
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 - Studio Audio Assignment
 - Clients Audio Assignment
 - PhonerSet Audio Assignmen
 - Clients Restrictions
 - Signal Processing
 - Line Labels
 - Studio Settings
 - Auto Answer
 - Intro / Data Privacy Query
 - Answering Machine
 - Night Service
 - DTMF
 - Actions
- GPIO
- Ember+ Consumer Extension
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN

Client ID: 9 Studio: 2

User Content Filter

1: 172.20.10.17\SQLXPRESS.PhoneBook

#	Title	Login Name	Password
1	Show A	UserA	***
2	Show B	UserB	***
3	Filter 3		
4	Filter 4		
5	Filter 5		
6	Filter 6		
7	Filter 7		
8	Filter 8		
9	Filter 9		
10	Filter 10		
11	Filter 11		
12	Filter 12		
13	Filter 13		
14	Filter 14		
15	Filter 15		
16	Filter 16		

Delete All Caller for Filter

Reset Filter Data

Show Passwords

OK Cancel Apply Now

User Content Filter (2)

- Specify usernames and passwords for the User Content Filter of each database on the USER CONTENT FILTER page.
 - Activate the User Content Filter in the OPERATION PARAMETERS section off the DATABASE configuration page.
 - By default, each client PC is permitted to access the phone book. If the user content filter is active, each user must log in with username and password to access the phone book.
 - Each user only has access to the phone book entries he or she has created. The entries created by other users cannot be accessed.
 - The User Content Filter credentials cannot be stored in a Preset.
 - You may specify a custom image for each user on the STUDIO SETTINGS configuration page which is displayed on the upper right corner of the PC software if a user is logged in.
- When recording PRETALK streams, the software stores the files in a separate subfolder for each content filter (1-16).
 - TITLE: Specify the label of the Login. It is used:
 - when notifying the user that he or she has successfully logged in.
 - when specifying the custom image file path in the STUDIO SETTINGS configuration page.
 - LOGIN NAME: Specify the username.
 - PASSWORD: Specify the password.
 - DELETE ALL CALLER FOR FILTER: Delete all phone book entries of the currently selected user.
 - RESET FILTER DATA: Resets the whole list to its default values. (Software must be run as administrator).
 - SHOW PASSWORDS: Display the configured passwords as plain text. (Software must be run as administrator)

News Desk Pool (1)

Configuration

Local
MAGIC THipPro ACip3 1

News Desk Pool

News Desk Client Studio

News Desk Cli... Channels

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Line Groups	CALL IN		VIP		CALL IN		VIP		PROD		PROD		NEWS			
News 1													<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
News 2													<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
News 3													<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
News 4													<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
News 5													<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Client ID: 1 Studio: 1

OK Abbrechen Apply Now

News Desk Pool (2)

- Assign individual telephone lines to News Desk Clients on the NEWS DESK POOL page.
- By default, each News Desk Client displays all telephone lines assigned to the News Desk Studio.
- Select the checkboxes to display only distinct channels on the respective news desk client.

Mode & Audio Line (1)

Configuration

Local

MAGIC THipPro ACip31

- Database
- User Content Filter
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- Mode & Audio Line**
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- PhonerSet Audio Assignmen
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- Night Service
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- Ember+ Consumer Extensior
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light

Client ID: 9 Studio: 2

Mode & Audio Line

Audio Interfaces Audio Streams AES67

Audio Interface	Function	No Input Alarm	Ringing Tone	Label
Handset 1	Pretalk 10	<input type="checkbox"/>	<input type="checkbox"/>	PRE TALK
Handset 2	Pretalk 11	<input type="checkbox"/>	<input type="checkbox"/>	PRE TALK
XLR Analogue 1	External HOLD 1	<input type="checkbox"/>	<input type="checkbox"/>	
XLR Analogue 2	External HOLD 2	<input type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 1 Left	On Air 1	<input type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 1 Right	On Air 2	<input type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 2 Left	On Air 3	<input type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 2 Right	On Air 4	<input type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 3 Left	On Air 5	<input type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 3 Right	On Air 6	<input type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 4 Left	External HOLD 3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
AES/EBU 4 Right	External HOLD 4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Caution: Invalid settings are red

Default Settings

OK Cancel Apply Now

Mode & Audio Line (2)

- Assign logic audio lines to physical and AoIP audio interfaces on the MODE & AUDIO LINE page.
 - With MAGIC THipPro, the audio interfaces are not directly assigned to certain functions. Instead, they are assigned to so called audio lines. These audio lines are then assigned to studios or clients.
 - This allows for shifting a function to a different audio interface more easily.
 - It is also possible to assign multiple audio interfaces to an audio line.
 - The input signals of these audio interfaces are then mixed.
 - The output signal is sent to each audio interface.
 - All audio interfaces are mono.
 - Input and output of an audio interface cannot be separated.
- There are 5 columns:
 - AUDIO INTERFACE: Identifies the audio interface.
 - FUNCTION: Click to select an audio line.
 - NO INPUT ALARM: Select this option to disable the input alarm of an AES/EBU digital audio interface when it is used as an output only.
 - RINGING TONE: An audio interface assigned to a Pretalk audio line will output a ringing tone if this option is enabled.
 - LABEL: Click to change the label of the respective button in the MAGIC THipPro LAN Client PC software. Font and font size can also be configured.

Mode & Audio Line (3)

- The available audio interfaces are grouped into up to four categories:
 - **AUDIO INTERFACES:** Contains the physical audio interfaces (handsets, analogue interfaces, digital AES/EBU interfaces). If there less than five Pretalk Streaming licences installed the respective streams are also displayed here.
 - **AUDIO STREAMS:** Contains the pretalk streams if there are five or more Pretalk Streaming licences installed on the MAGIC THipPro.
 - **AES67:** Contains AES67 channels if the AES67 licence is installed and AES67 is activated under SYSTEM SETTINGS – AES67.
 - Note: This is a software implementation of AES67 running on the main DSP.
 - **DANTE:** Contains the Dante channels if the Dante hardware module is installed on the MAGIC THipPro.
 - Note: Dante is not available when AES67 is activated under SYSTEM SETTINGS – AES67.
 - The Dante module is compatible to AES67.
- **RAVENNA:** Contains the RAVENNA channels if the Ravenna hardware module is installed on the MAGIC THipPro.
 - Note: Ravenna is not available when AES67 is activated under SYSTEM SETTINGS – AES67.
 - The Ravenna module is compatible to AES67.

Mode & Audio Line (4)

- Physical audio interfaces as well as AES67 and Dante and Ravenna audio channels can be assigned to the following audio lines:
 - PRETALK 1-20: Assign one of 20 pretalk audio lines. (The full capacity is only available with a DANTE or a Ravenna module). Pretalk audio lines can only be assigned to individual clients. They are used to talk to callers off air.
 - External HOLD 1-6: Assign one of 6 HOLD audio lines. Hold audio lines can be assigned to studios or clients. They provide the audio signal fed to the caller when the call is put in hold.
 - ON AIR 1-28: Assign one of 28 on air audio lines. (The full capacity is only available with a DANTE or a Ravenna module). On air audio lines can be assigned to studios or clients. They are used to connect the unit to the faders of the mixing console.
 - OFF CONFERENCE 1-6: Assign one of 6 off conference audio lines. They can be assigned to studio faders. Use off conference audio lines to provide an off-air audio conference between callers.
- PHONERSET MONITOR 1-8: Assign one of 8 PhonerSet monitor audio lines. They output the audio signal of the caller of the respective PhonerSet. This can be used to record the caller externally.
- NOT USED: The audio interface will not be available in the further configuration.

Mode & Audio Line (5)

- Audio streams can only be used to transfer audio between the MAGIC THipPro and the LAN Client or Screener Client PC software. They can be assigned to the following audio lines:
 - **PRETALK 1-20:** Assign one of 20 pretalk audio lines. (The full capacity is only available with a DANTE or a Ravenna module). Pretalk audio lines can only be assigned to individual clients. They are used to talk to callers off air.
 - **DYNAMIC PRETALK:** Assign any number of audio streams to the pool of dynamic pretalk audio lines. These audio lines can be assigned to PC clients only. Whenever a client puts a call in Pretalk it requests a stream from the pool. If all audio lines of the pool are in use, the Pretalk button in the PC software is deactivated.
 - **NOT USED:** The audio interface will not be available in the further configuration.

Mode & Audio Line (6)

- The AES67 tab is only displayed when the built-in AES67 feature of the THipPro is licenced and activated on the AES67 configuration page.
- With the built-in AES67, it is also necessary to assign the audio channels of the received AES67 streams to the Functions (= audio lines).
- This is because the RX and TX channels are not automatically linked, as is the case with physical audio interfaces.

Mode & Audio Line (7)

Configuration

Local

MAGIC THipPro ACip3 1

Operation Settings

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- ... Clients Audio Assignment
- ... PhonerSet Audio Assignment
- ... Clients Restrictions
- ... Signal Processing
- ... Line Labels
- ... Studio Settings
- ... Auto Answer
- ... Intro / Data Privacy Query
- ... Answering Machine
- ... Night Service
- ... DTMF
- ... Actions
- ... GPIO
- ... Ember+ Consumer Extension
- ... Ember+ Dial Pad Extension

System Settings

- ... General
- ... Line Interface
- ... Caller Line Grouping
- ... VoIP (LAN/SIP)
- ... Collaboration Server
- ... Audio Interface
- ... PRETALK Streaming
- ... AES67
- ... LAN Interface

Mode & Audio Line

Audio Interfaces Audio Streams RAVENNA Channels

Tx Channel	Function	Rx Assignment	Ringing Tone	Label
TF-THipPro-Studio-A; Ch. 1	On Air 1	Mixer-Studio-A; Ch. 1		
TF-THipPro-Studio-A; Ch. 2	On Air 2	Mixer-Studio-A; Ch. 2		
TF-THipPro-Studio-B; Ch. 1	On Air 3	Mixer-Studio-B; Ch. 1		
TF-THipPro-Studio-B; Ch. 2	On Air 4	Mixer-Studio-B; Ch. 2		
TF-THipPro-Studio-B; Ch. 3	On Air 5	Mixer-Studio-B; Ch. 3		
TF-THipPro-Studio-B; Ch. 4	On Air 6	Mixer-Studio-B; Ch. 4		
7		-		
8		-		
9		-		
10		-		
11		-		
12		-		
13		-		
14		-		
15		-		
16		-		

Caution: Invalid settings are red!

Default Settings

Client ID: 5 Studio: 2

OK Abbrechen Apply Now

Mode & Audio Line (8)

- The RAVENNA tab is only displayed if the THipPro is equipped with a Ravenna module and the built-in AES67 feature is disabled.
 - The THipPro can utilize 32 channels of the Ravenna module for both directions (input and output).
 - It is recommended to configure the input and output streams in the Ravenna web interface first. The channels and stream names are then available in the THipPro configuration.
 - Note: It could take up to a minute until the streams are available to the configuration dialog. Try to switch to any other configuration page and back to Mode & Audio Line to update the table.
 - Find the manual of the Ravenna web interface on our website avt-nbg.de under Downloads > Documentations > RAVENNA RAV2 Module.
 - TX CHANNEL: Displays the Ravenna stream names and channel numbers if the output streams are already configured in the Ravenna web interface.
- FUNCTION: Assign an audio line of the THipPro to a Ravenna channel.
 - RX ASSIGNMENT: Select a channel from a stream which is currently received by the Ravenna module to assign it to the audio line.
 - Note: Configure the Input streams in the Ravenna web interface first. Only then are they available in the configuration.
 - Tipps:
 - The IP address of the Ravenna module can be found under Menu > Administration > Registration. Then, select RAVENNA at the top.
 - An overview of Ravenna streams and channels used by the THipPro can be found in the System Monitor under Menu > System Monitor > Ravenna State > Show Streams.
 - Find the Ravenna stream status in the web interface of the Ravenna module.

Mode & Audio Line (9)

- Ravenna Input Streams

- In the Ravenna web interface, up to 32 input streams can be configured.
- The Ravenna module can send up to 32 mono audio channels to the THipPro base board.
- For each stream a START CHANNEL needs to be set in the Ravenna web interface. This channel number refers to the internal channel number of the THipPro.
- The Ravenna module can only receive a whole stream. There is no way of selecting a single channel or a part of a stream.
This means if a stream with 8 channels is received and START CHANNEL is set to 1, Ravenna audio channels 1-8 of the THipPro are occupied.
For the next stream the START CHANNEL must be set to 9 or higher to avoid overlapping audio signals.

- Ravenna Output Streams

- In the Ravenna web interface, up to 32 output streams can be configured.
- For each stream a START CHANNEL and NUMBER OF CHANNELS must be set in the Ravenna web interface.

These channel numbers refer to the Ravenna Tx channels of the THipPro.

Example: THipPro Ravenna Tx channels 1-6 should be transmitted via one Ravenna stream, the START CHANNEL should be set to 1 and NUMBER OF CHANNELS should be set to 6.

Internal HOLD Signals (1)

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MAGIC THipPro ACip31

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 - Ember+ Consumer Extension
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN

Client ID: 9 Studio: 2

Internal HOLD Signals

#	Name	Length	Import	Record/Play	PC Path of Dynamic HOLD Signal	...
1	Music on hold	32.76 sec	Import	Record/Play		...
2	Announcement	19.11 sec	Import	Record/Play		...
3	Weather	-	Import	Record/Play	C:\AVT\Weather\Daily Weather.wav	...
4			Import	Record/Play		...
5			Import	Record/Play		...
6			Import	Record/Play		...

OK Cancel Apply Now

Internal HOLD Signals (2)

- Manage HOLD signal audio files on the INTERNAL HOLD SIGNALS page.
- The MAGIC THipPro provides six slots for audio files being up to 32 seconds long.
- These file can be played repeatedly as HOLD signal or as an intro when a caller is put on hold.
- The six slots are presented in a table:
 - NAME: Enter a label for the audio file to reference it in other configurations.
 - LENGTH: Length of the stored audio file in seconds.
 - IMPORT: You can import an audio file. Only the first 32 seconds of the audio file are imported. The import module supports WAVE and MP3 audio files. They are automatically converted to a mono file with 16 kHz sampling frequency.
 - RECORD/PLAY: Opens a window to record, play and delete internal Hold signal files. (See next page for details.)
- PC PATH OF DYNAMIC HOLD SIGNAL: Enter the path of a Hold signal file stored on the PC or a network drive. The PC software then imports the file. The PC software on the PC which serves as master checks if the file has changed and automatically updates the Hold signal if necessary.
 - Note: A path can only be entered if a static Hold Signal is already recorded or imported. This file serves as a fallback if there is a problem with importing the file from the specified path.
 - An updated file is detected and imported within 2 minutes.

Internal HOLD Signal Recording (1)

HOLD Signal Recording [X]

HOLD signal

Name:

Signal duration: 32.76 sec

Record source:

max. 32 sec

HOLD signal recording

Test recorded HOLD signal

Internal HOLD Signal Recording (2)

- Use the RECORD/PLAY button on the INTERNAL HOLD SIGNALS page to open the HOLD SIGNAL RECORDING window.
- NAME: Enter a label for the audio file to reference it in other configurations.
- SIGNAL DURATION: Length of the currently stored Hold signal file.
- RECORD SOURCE: Select an audio interface of the MAGIC THipPro. You can choose from:
 - All Handset interfaces
 - All Analogue Audio interfaces
 - All AES/EBU channels
 - All AES67 channels
 - All DANTE channels
 - The Pretalk Audio Stream assigned to the PC which is recording the Hold signal.
- PROGRESS BAR: Shows the length of the Hold signal being recorded.
- HOLD SIGNAL RECORDING: Control the recording of a Hold signal:
 - LEVEL METER: Shows the level of the audio signal on the selected Record Source.
 - RECORD BUTTON: Starts recording.
 - STOP BUTTON: Stops recording
 - SAVE: Stores the file on the MAGIC THipPro.
- TEST RECORDED HOLD SIGNAL
 - LEVEL METER: Level of the recording being played back.
 - PLAY BUTTON: Playback of the recording.
- DELETE FILE: Delete the Hold signal file from the MAGIC THipPro

Studio Audio Assignment (2)

- Define which audio lines are used in the studios on the AUDIO ASSIGNMENT tab of the STUDIO AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- STUDIO: Displays the name of the studio as defined on the STUDIO DEFINITION configuration page.
- By default, the system presents the same two On-Air fader buttons on each telephone line. Alternative assignments can be defined under ADDITIONAL ON AIR.
- FADER 1: Select an audio line from the drop-down list for On-Air fader 1.
 - ON AIR N: Assigns the On-Air audio line to fader 1.
 - HIDDEN: The fader 1 button is not displayed on the main panel of the LAN Client and Screener Client PC software.
- NOT USED: The fader 1 button is shown on the main panel of the LAN Client PC software but deactivated. The fader 1 button is not displayed on the main panel of the Screener Client PC software.
- FADER 2: Select an audio line from the drop-down list for On-Air fader 2.
 - ON AIR N: Assigns the On-Air audio line to fader 2.
 - OFF CONFERENCE N: Assigns the off-conference audio line of the respective studio to fader 2.
 - NOT USED : The fader 2 button is not displayed on the main panel of the LAN Client and Screener Client PC software.

Studio Audio Assignment (3)

- **HOLD:** Select a Hold signal from the drop-down list.
 - **ON AIR:** Depending on the configuration of **ADDITIONAL ON AIR:**
 - **OFF** or **USE ADDITIONAL ON AIR LINES:** Use the mix-minus (clean feed) of the last used On-Air audio line.
 - **FIXED ROUTING TO CALLER LINES:** Use the Mix-minus (clean feed) of the respective On-Air audio line.
 - **ON AIR N:** Use the Mix-minus (clean feed) of a specific On-Air audio line.
 - **Internal Hold signal identified by its name:** Use a hold signal which is stored on the **MAGIC THipPro** as defined on the **INTERNAL HOLD SIGNALS** configuration page.
 - **EXTERNAL HOLD SIGNAL N:** Use an external audio signal as defined on the **MODE & AUDIO LINE** configuration page.
 - **STUDIO RELATED HOLD:** Only available for studios 3-6. If a line is set to **HOLD** by the user, the system checks the preceding studios in ascending order if the line is available there. If it finds a studio, the **THipPro** selects the **HOLD** signal of that studio.

- **ADDITIONAL ON AIR:** Configure more complex distributions of audio lines here. Click on the cell to open the configuration window:
 - **FIXED ROUTING TO CALLER LINES:** Enable this option to set Fader 1 to a separate audio line for each telephone line. Any On-Air audio line can be assigned to as many telephone lines as desired. The fixed routing mode can only be configured per studio, not per client.

<input checked="" type="checkbox"/> Fixed routing to caller lines	
Line 5 : CALL IN	On Air 5
Line 6 : CALL IN	On Air 6
Line 7 : CALL IN	On Air 7
Line 8 : VIP	On Air 8
OK	Cancel

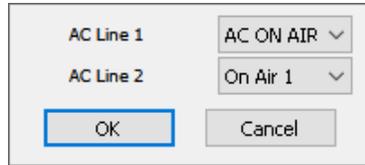
Studio Audio Assignment (4)

Fixed routing to caller lines
 Use additional ON AIR lines
 ON AIR 1
 ON AIR 2
 ON AIR 3
 ON AIR 4
 ON AIR 5
 ON AIR 6
 ON AIR 7
 ON AIR 8
 ON AIR 9
 ON AIR 10
 ON AIR 11
 ON AIR 12
 Show all lines on each fader (*)
 Multi Fader Mode (M)
OK Cancel

- **USE ADDITIONAL ON AIR LINES:** Enable this option to assign three or more On-Air audio lines to the telephone lines of the studio. The audio lines of the studio will also be available on the ACconnect lines. Access these audio lines via long clicking the ON AIR buttons on the main panel of the LAN Client PC software. They are presented in a pop-up window.

- **SHOW ALL LINES ON EACH FADER (*):** When ADDITIONAL ON AIR LINES are configured, the On-Air audio line of Fader 1 is not provided in the pop-up window of Fader 2 and vice versa. Enable this option to include these On-Air audio lines in the pop-up windows as well. An asterisk (*) is displayed in the Additional On-Air column of the table to indicate that this option is enabled.
- **MULTI FADER MODE (M):** Enable this option to display up to four On-Air buttons on the main panel of the LAN Client PC software when ADDITIONAL ON AIR LINES are configured. The letter M (M) is displayed in the Additional On-Air column of the table to indicate that this option is enabled. (This setting only affects the LAN Client PC software.)

Studio Audio Assignment (5)



- **ACCONNECT ON AIR:** Define the default On-Air audio line of the available ACconnect lines on the LAN Client PC software.
 - **AC ON AIR:** The native audio interface of the Codec as configured on the ACCONNECT configuration page.
 - **ON AIR N:** An audio line of the MAGIC THipPro. The audio signal is streamed to the MAGIC THipPro with limited audio quality. The native audio interface remains available via long click on the On-Air button.
 - **Note:** This configuration does not affect the Screener Client PC software.

Studio Audio Assignment (8)

- Define the details of the Hold signals on the HOLD SIGNAL DEFINITION tab of the STUDIO AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- STUDIO: Displays the name of the studio as defined on the STUDIO DEFINITION page.
- HOLD: Displays the Hold signals as it is configured on the AUDIO ASSIGNMENT tab of the STUDIO AUDIO ASSIGNMENT page.
- INTRO: An external Hold signal or an On-Air Hold signal can be preceded by an intro when a call is accepted directly onto Hold. This is usually used with Auto Answer onto Hold.
 - INTRO OFF: No Intro. When a call is accepted onto hold the configured hold signal starts playing immediately.
 - Internal Hold signal identified by its name.
- REPETITIONS: An intro can be played up to seven times.
- PAUSE: Set the pause between the repetitions of the intro to 0 – 7 seconds.
- HOLD LABEL: Define the inscription on the Hold button on the main panel of the LAN Client PC software.

Clients Audio Assignment (1)

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MAGIC THipPro ACip31

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 - Clients Restrictions
 - Signal Processing
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 - Studio Settings
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 - GPIO
 - Ember+ Consumer Extension
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN

Client ID: 9 Studio: 1

Clients Audio Assignment

Audio Assignment HOLD Signal Definition

Client	Studio Access	Pretalk	Fader 1	Fader 2	HOLD	Add. On Air	Conference
1 : S1-Presenter 1	1	1	Studio	Studio	Studio	Studio	PRE TALK <input type="checkbox"/> ON AIR <input checked="" type="checkbox"/>
2 : S1-Presenter 2	1	2	Studio	Studio	Studio	Studio	PRE TALK <input type="checkbox"/> ON AIR <input checked="" type="checkbox"/>
3 : S1-Screener	1	3	On Air 11	On Air 12	Music on hold		PRE TALK <input checked="" type="checkbox"/> ON AIR <input type="checkbox"/>
4 : S2-Presenter 1	2	4	Studio	Studio	Studio		PRE TALK <input type="checkbox"/> ON AIR <input checked="" type="checkbox"/>
5 : S2-Presenter 2	2	5	Studio	Studio	Studio		PRE TALK <input type="checkbox"/> ON AIR <input checked="" type="checkbox"/>
6 : S2-Screener	2	6	Studio	Studio	Studio	Studio	PRE TALK <input checked="" type="checkbox"/> ON AIR <input type="checkbox"/>
7 : Prod 1	3	7	Studio		Studio		PRE TALK <input type="checkbox"/> ON AIR <input type="checkbox"/>
8 : Prod 2	AC: 1,2	8	Studio		Studio		PRE TALK <input type="checkbox"/> ON AIR <input type="checkbox"/>
9 : Technician	5,1,2,3,4,6	Dynamic	Studio	Studio	Studio	Studio	PRE TALK <input checked="" type="checkbox"/> ON AIR <input checked="" type="checkbox"/>
News Desk Client	6	Dynamic			Studio		PRE TALK <input type="checkbox"/>

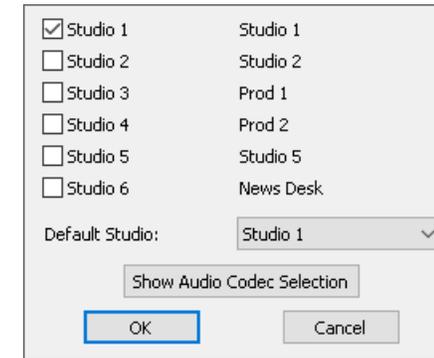
Caution: Invalid settings are red

Settings for this client have gray background colour.

OK Cancel Apply Now

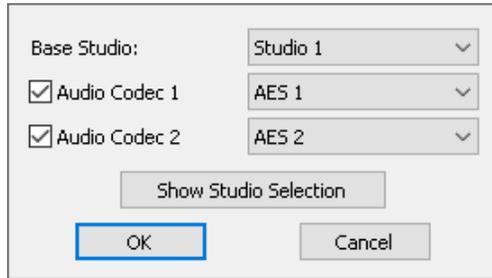
Clients Audio Assignment (2)

- Define which audio lines are used by the clients on the AUDIO ASSIGNMENT tab of the CLIENTS AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- CLIENT: Displays the name of the client as defined on the CLIENTS / SECURITY configuration page.
- By default, the system presents the same two On-Air fader buttons on each telephone line. Alternative assignments can be defined under ADDITIONAL ON AIR.
- STUDIO ACCESS: Click on a cell to open the studio access configuration window.
 - Select the studios to which the client should have access.
 - DEFAULT STUDIO: Select the studio to which the client connects after starting the PC software.



- SHOW AUDIO CODEC SELECTION: Switches to the exclusive audio codec mode if a MAGIC ACip3 audio codec is connected the MAGIC THipPro via ACconnect. In this mode no telephone lines are displayed on the main panel of the LAN Client and Screener Client PC software. Just the audio codec channels are available to the user.

Clients Audio Assignment (3)



- **AUDIO CODEC SELECTION:** In this mode no telephone lines are displayed on the main panel of the LAN Client and Screener Client PC software. Just the audio codec channels of a MAGIC ACip3 connected to the MAGIC THipPro via ACconnect are available to the user.
 - **BASE STUDIO:** Select a studio for the client. The client adheres to the studio related settings such as database, logo, recording folder, etc.
 - **AUDIO CODEC N**
 - Enable a codec channel to display it on the main panel of the PC software.

- Select the audio interface of the audio codec for this client.
- **SHOW STUDIO SELECTION:** Switches to the standard telephone hybrid mode. In this mode telephone lines and optional audio codec lines are displayed on the main panel of the LAN Client and Screener Client PC software.

Clients Audio Assignment (4)

- **PRETALK:** Assign a pretalk audio line exclusively to a client:
 - **PRETALK N:** An audio interface assigned on the **MODE / AUDIO LINE** configuration page.
 - **PHONERSET PRETALK N:** Use the **MAGIC PhonerSet** telephone as pretalk interface for a client using the PC software.
The RX and TX signal of the PhonerSet can be recorded at the PC software using the **RECORD** button. There must be a **DYNAMIC** audio stream configured on the **MODE & AUDIO LINE** configuration page. The dynamic stream must be available when the PhonerSet goes to Pretalk to be able to record.
 - **DYNAMIC:** The client will allocate a pretalk stream whenever the user clicks on the pretalk button on the main panel. If all pretalk streams are already in use the pretalk button turns white.
 - **HIDDEN:** The pretalk button is not displayed on the main panel of the PC software.

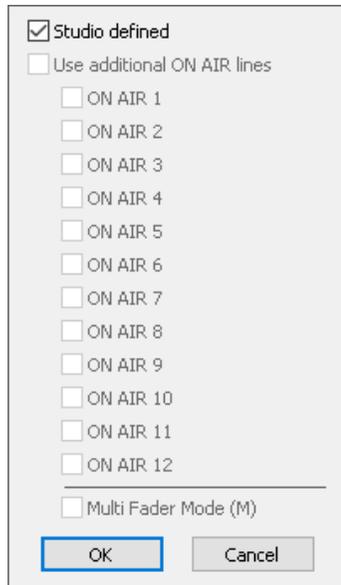
- **NOT USED:** The pretalk button is displayed but deactivated on the main panel of the LAN Client PC software. The pretalk button is not displayed on the main panel of the Screener Client.
- **FADER 1:** Select an audio line from the drop-down list for On-Air fader 1.
 - **STUDIO:** The client uses the audio line which is configured on the **STUDIO AUDIO ASSIGNMENT** configuration page. This is the recommended setting especially if a user can access more than one studio.
 - **ON AIR N:** Assigns the On-Air audio line to fader 1.
 - **HIDDEN:** The fader 1 button is not displayed on the main panel of the LAN Client and Screener Client PC software.
 - **NOT USED:** The fader 1 button is shown on the main panel of the LAN Client PC software but deactivated. The fader 1 button is not displayed on the main panel of the Screener Client PC software.

Clients Audio Assignment (5)

- **FADER 2:** Select an audio line from the drop-down list for On-Air fader 2.
 - **STUDIO:** The client uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. This is the recommended setting especially if a user can access more than one studio.
 - **ON AIR N:** Assigns the On-Air audio line to fader 2.
 - **NOT USED :** The fader 2 button is not displayed on the main panel of the LAN Client and Screener Client PC software.
- **HOLD:** Select a Hold signal from the drop-down list.
 - **STUDIO:** The client uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. This is the recommended setting especially if a user can access more than one studio.
 - **ON AIR N:** Use the Mix-minus (clean feed) of a specific On-Air audio line.
- **Internal Hold signal identified by its name:** Use a hold signal which is stored on the MAGIC THipPro as defined on the INTERNAL HOLD SIGNALS configuration page.
- **EXTERNAL HOLD SIGNAL N:** Use an external audio signal as defined on the MODE & AUDIO LINE configuration page.

Clients Audio Assignment (6)

- **ADDITIONAL ON AIR:** Configure more complex distributions of audio lines here. Click on the cell to open the configuration window.
 - **STUDIO DEFINED:** The client uses additional On-Air settings which are configured on the STUDIO AUDIO ASSIGNMENT configuration page. This is the recommended setting especially if a user can access more than one studio and it is also the only way to use fixed routing to caller lines.



The image shows a configuration window titled "Studio defined". It contains the following options:

- Studio defined
- Use additional ON AIR lines
 - ON AIR 1
 - ON AIR 2
 - ON AIR 3
 - ON AIR 4
 - ON AIR 5
 - ON AIR 6
 - ON AIR 7
 - ON AIR 8
 - ON AIR 9
 - ON AIR 10
 - ON AIR 11
 - ON AIR 12
- Multi Fader Mode (M)

At the bottom of the window are two buttons: "OK" and "Cancel".

Clients Audio Assignment (7)

- **USE ADDITIONAL ON AIR LINES:** Enable this option to assign three or more On-Air audio lines to the telephone lines of the studio. The audio lines of the studio will also be available on the ACconnect lines. Access these audio lines via long clicking the ON AIR buttons on the main panel of the LAN Client PC software. They are presented in a pop-up window.
- **SHOW ALL LINES ON EACH FADER (*):** When **ADDITIONAL ON AIR LINES** are configured, the On-Air audio line of Fader 1 is not provided in the pop-up window of Fader 2 and vice versa. Enable this option to include these On-Air audio lines in the pop-up windows as well. An asterisk (*) is displayed in the Additional On-Air column of the table to indicate that this option is enabled.
- **MULTI FADER MODE (M):** Enable this option to display up to four On-Air buttons on the main panel of the LAN Client PC software when **ADDITIONAL ON AIR LINES** are configured. The letter M (M) is displayed in the Additional On-Air column of the table to indicate that this option is enabled. (This

setting only affects the LAN Client PC software.)

The screenshot shows a settings dialog box with the following options:

- Studio defined
- Use additional ON AIR lines
 - ON AIR 1
 - ON AIR 2
 - ON AIR 3
 - ON AIR 4
 - ON AIR 5
 - ON AIR 6
 - ON AIR 7
 - ON AIR 8
 - ON AIR 9
 - ON AIR 10
 - ON AIR 11
 - ON AIR 12
- Show all lines on each fader (*)
- Multi Fader Mode (M)

At the bottom, there are two buttons: **OK** and **Cancel**.

Clients Audio Assignment (8)

- **CONFERENCE:** By default, only one telephone line at a time can be set to a specific audio line. This means only one caller can be in pretalk on a client. And only one caller can be put on an On-Air Fader in a studio. Enable conferencing to enable the client to put more than one telephone line at a time to an audio line. The MAGIC THipPro mixes the audio signals of all callers and the audio interfaces internally.
 - **PRETALK:** Enable this option to allow the client to put more than one caller at the same time in pretalk. The audio signals are mixed by the THipPro. All callers and the user can hear each other.
 - **ON AIR:** Enable this option to allow the client to put more than one caller at the same time on the same On-Air Fader. The audio signals are mixed by the THipPro. All callers can hear each other and the Mix-minus (clean feed).

Clients Audio Assignment (9)

Configuration

Local

MAGIC THipPro ACip31

Operation Settings

- Clients / Security
- Studio Definition
- Database
- News Desk Pool
- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment**
- PhonerSet Audio Assignmen
- Clients Restrictions
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions

GPIO

- Ember+ Consumer Extensior

System Settings

- General
- Line Interface
- Caller Line Grouping
- VoIP (LAN/SIP)
- Audio Interface
- PRETALK Streaming
- AES67
- LAN Interface
- VLAN
- DHD Audio Matrix

Client ID: 9 Studio: 2

Clients Audio Assignment

Audio Assignment HOLD Signal Definition

Client	HOLD	Intro	Repetitions	Pause	HOLD Label
1 : S1-Presenter 1	Studio				HOLD
2 : S1-Presenter 2	Studio				HOLD
3 : S1-Screener	Studio				HOLD
4 : S2-Presenter 1	Studio				HOLD
5 : S2-Presenter 2	Studio				HOLD
6 : S2-Screener	Studio				HOLD
7 : Prod 1	Studio				HOLD
8 : Prod 2	Studio				HOLD
9 : Technician	Music on hold			1 second	HOLD
News Desk Client	Studio				HOLD

Caution: Invalid settings are red

Settings for this client have gray background colour.

OK Cancel Apply Now

Clients Audio Assignment (10)

- Define the details of the Hold signals on the HOLD SIGNAL DEFINITION tab of the CLIENTS AUDIO ASSIGNMENT page.
- Settings that are not valid are displayed in red.
- CLIENT: Displays the name of the client as defined on the CLIENTS / SECURITY page.
- HOLD: Displays the Hold signals as it is configured on the AUDIO ASSIGNMENT tab of the CLIENTS AUDIO ASSIGNMENT page.
- If the Hold signal is set to STUDIO, the further parameters can only be changed on the HOLD SIGNAL DEFINITION tab of the STUDIO AUDIO ASSIGNMENT configuration page.
- INTRO: An external Hold signal or an On-Air Hold signal can be preceded by an intro when a call is accepted directly onto Hold. This is usually used with Auto Answer onto Hold.
 - INTRO OFF: No Intro. When a call is accepted onto hold the configured hold signal starts playing immediately.
 - Internal Hold signal identified by its name.
- REPETITIONS: An intro can be played up to seven times.
- PAUSE: Set the pause between the repetitions of the intro to 0 – 7 seconds.
- HOLD LABEL: Define the inscription on the Hold button on the main panel of the LAN Client PC software.

Remote Light Audio Assignment (2)

- Define which audio lines are used by the clients which control the THipPro via the Remote Light Protocol.
- **PRETALK:** Assign a pretalk audio line exclusively to a client:
 - **PRETALK N:** An audio interface assigned on the **MODE / AUDIO LINE** configuration page.
 - **NOT USED:** No audio line assigned for pretalk.
- **FADER 1:** Select an audio line from the drop-down list for On-Air fader 1.
 - **ON AIR N:** Assigns the On-Air audio line to fader 1.
 - **FADER ON AIR:** Each line has its own audio line (line 1 = On Air 1, line 2 = On Air 2, ...)
 - **NOT USED:** No audio line assigned for fader 1.
- **FADER 2:** Select an audio line from the drop-down list for On-Air fader 2.
 - **ON AIR N:** Assigns the On-Air audio line to fader 1.
 - **FADER ON AIR:** Each line has its own audio line (line 1 = On Air 1, line 2 = On Air 2, ...)
 - **NOT USED:** No audio line assigned for fader 1.
- **HOLD :** Select a Hold signal from the drop-down list.
 - **ON AIR N:** Use the Mix-minus (clean feed) of a specific On-Air audio line.
 - **Internal Hold signal identified by its name:** Use a hold signal which is stored on the **MAGIC THipPro** as defined on the **INTERNAL HOLD SIGNALS** configuration page.
 - **EXTERNAL HOLD SIGNAL N:** Use an external audio signal as defined on the **MODE & AUDIO LINE** configuration page.
 - **NOT USED:** No audio source assigned for hold.

Remote Light Audio Assignment (4)

- Define the details of the Hold signals on the HOLD SIGNAL DEFINITION tab of the CLIENTS AUDIO ASSIGNMENT page.
 - Settings that are not valid are displayed in red.
 - REMOTE DEVICE: Number of the workplace.
 - HOLD: Displays the Hold signals as it is configured on the AUDIO ASSIGNMENT tab of the REMOTE LIGHT AUDIO ASSIGNMENT page.
 - INTRO: An external Hold signal or an On-Air Hold signal can be preceded by an intro when a call is accepted directly onto Hold. This is usually used with Auto Answer to Hold.
 - INTRO OFF: No Intro. When a call is accepted onto hold the configured hold signal starts playing immediately.
 - Internal Hold signal identified by its name.
 - REPETITIONS: An intro can be played up to seven times.
- PAUSE: Set the pause between the repetitions of the intro to 0 – 7 seconds.
 - HOLD LABEL: Configure the label for the Hold button. It is shown on PC clients when the line was operated by a Remote Light workplace.

PhonerSet Audio Assignment (2)

- Define which audio lines are used by the PhonerSet clients on the AUDIO ASSIGNMENT tab of the PHONERSET AUDIO ASSIGNMENT page.
- **STUDIO ACCESS:** Click on a cell to open the studio access configuration window.

<input checked="" type="checkbox"/>	Studio 1	Studio 1
<input type="checkbox"/>	Studio 2	Studio 2
<input type="checkbox"/>	Studio 3	Prod 1
<input type="checkbox"/>	Studio 4	Prod 2
<input type="checkbox"/>	Studio 5	Studio 5
<input type="checkbox"/>	Studio 6	News Desk

Default Studio: Studio 1

OK Cancel

- Select the studios to which the PhonerSet workplace will have access.
- **DEFAULT STUDIO:** Select the studio to which the PhonerSet app connects after starting up.
- **FADER 1/2:** Select an audio line from the drop-down list for On-Air fader 1/2.

- **STUDIO:** The PhonerSet uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. The current studio is taken into account. This is the recommended setting especially if a user can access more than one studio.
- **ON AIR N:** Assigns the On-Air audio line to the fader.
- **NOT USED :** The On-Air fader button is not displayed on the main panel of the PhonerSet app.

PhonerSet Audio Assignment (3)

- **HOLD:** Select a Hold signal from the drop-down list.
 - **STUDIO:** The client uses the audio line which is configured on the STUDIO AUDIO ASSIGNMENT configuration page. The current studio is taken into account. This is the recommended setting especially if a user can access more than one studio.
 - **HOLD (STUDIO N):** Use the Hold signal of a specific studio.
 - **HOLD (NEWS DESK CLIENT):** Use the Hold signal of the News Desk Client configured on the Clients Audio Assignment page.
 - **NOT USED:** The Hold button is not displayed on the main panel of the PhonerSet app.
- **CONFERENCE:** By default, only one telephone line at a time can be set to a specific audio line. This means only one caller can be in pretalk on a client. And only one caller can be put on an On-Air Fader in a studio. Enable conferencing to enable the PhonerSet to put more than one telephone line at a

time to an audio line. The MAGIC THipPro mixes the audio signals of all callers and the audio interfaces internally.

- **PRETALK:** Enable this option to allow the PhonerSet to put more than one caller at the same time in pretalk. The audio signals are mixed by the THipPro. All callers and the user can hear each other.
- **ON AIR:** Enable this option to allow the PhonerSet to put more than one caller at the same time on the same On-Air Fader. The audio signals are mixed by the THipPro. All callers can hear each other and the Mix-minus (clean feed).
- **LABEL:** Click to change the label on the Pretalk button of the MAGIC THipPro LAN Client PC software which has the PhonerSet configured as pretalk audio line on the CLIENTS AUDIO ASSIGNMENT configuration page. Font and font size can also be changed.

Clients Restrictions (1)

Configuration

Local
MAGIC THipPro ACip31

Operation Settings

- Clients / Security
- Studio Definition
- Database
- User Content Filter
- News Desk Pool
- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- PhonerSet Audio Assignmen
- Clients Restrictions**
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions

GPIO

- Ember+ Consumer Extension

System Settings

- General
- Line Interface
- Caller Line Grouping
- VoIP (LAN/SIP)
- Audio Interface
- PRETALK Streaming
- AES67
- LAN Interface
- VLAN

Client ID: 9 Studio: 5

Clients Restrictions

Client	Long Click Duration	Drop Line	Drop All	Lock Line	Lock All	CF
1 : S1-Presenter 1	250 msec	forbidden	forbidden	allowed	allowed	allowed
2 : S1-Presenter 2	1000 msec	forbidden	forbidden	allowed	allowed	allowed
3 : S1-Screener	1000 msec	allowed	allowed	allowed	allowed	allowed
4 : S2-Presenter 1	1000 msec	long click	long click	allowed	allowed	allowed
5 : S2-Presenter 2	1000 msec	long click	long click	allowed	allowed	allowed
6 : S2-Screener	1000 msec	allowed	allowed	allowed	allowed	allowed
7 : Prod 1	1000 msec	allowed	allowed	allowed	allowed	allowed
8 : Prod 2	1000 msec	allowed	allowed	allowed	allowed	allowed
9 : Technician	1000 msec	allowed	allowed	allowed	allowed	allowed

Settings for this client have gray background colour.

Default Settings

OK Cancel Apply Now

Clients Restrictions (2)

- Manage permissions for each client on the CLIENTS RESTRICTIONS page.
- Possible values for most of the functions are:
 - ALLOWED: The client is allowed to use that function.
 - FORBIDDEN: The client is not allowed to use that function.
 - LONG-CLICK: Some functions could be made accessible by long clicking on a button.
- Each line of the table shows the permissions of a client.
- Each column controls a function :
 - LONG CLICK DURATION: Specify how long the user must press the button so that it is recognized as “long clicked” (250 ms - 2000 ms).
 - DROP LINE: Define if the client can disconnect a line. However, the button is always displayed on the main panel of the PC software. (allowed, forbidden, long-click)
 - DROP ALL: Define if the client can disconnect all lines of a line group. (allowed, forbidden, long-click)
 - LOCK LINE: Define if the client can lock lines so all incoming calls are dismissed automatically. (allowed, forbidden, long-click)
 - LOCK ALL: Define if the client can lock all lines of a line group. Set to forbidden to integrate LOCK ALL with the LIMIT CALL IN function. (allowed, forbidden long-click)
 - LIMIT CALL IN: Define if a client can limit the number of simultaneous incoming calls on a line group. (allowed, forbidden long-click)
 - CF: Define if the client can forward calls. (allowed, forbidden, long-click)
 - CF TOGGLE: Define if the client can switch between the first and the second default call forwarding telephone number on the LAN Client PC software. (allowed, forbidden, long-click)
 - VOLUME CONTROL: Define if the client can adjust the level of the caller via the LAN Client PC software. (allowed, forbidden)

Clients Restrictions (3)

- **AGC TOGGLE:** Define if the client can switch the AGC on and off on the main panel of the LAN Client PC software. (allowed, forbidden)
- **SEND DTMF:** Define if the client can send DTMF tones via the main panel of the LAN Client PC software. (allowed, forbidden)
- **RESET DTMF:** Define if the client can reset the display of received DTMF tones. (allowed, forbidden, long-click)
- **HOLD READY:** Define if the client can set the state of line to Hold ready by clicking the HOLD button twice in the LAN Client and Screener Client PC software (allowed, forbidden)
- **ACTIVATE LINE:** Manage how call details (audio line, phone number, name, ...) on the line on LAN Client and Screener Client PC software are shown.
 - **ALWAYS:** The call details are always displayed.
 - **HOLD READY:** The call details are only shown when the caller was set to HOLD READY by another client. Otherwise, the line is disabled.
 - **INCOMING CALLS AND HOLD READY:** The call details are only shown when the caller was set to HOLD READY by another client or an incoming call is ringing. Otherwise, the line is disabled.
- **ANONYMITY REQUEST:** A caller may request that his name not be mentioned On-Air. The screener then sets the "Anonymous" flag in the caller's record. This restriction manages how the PC software displays the caller's data on the main panel:
 - **RESPECT:** The LAN Client PC software as well as the Screener Client PC software in Presenter mode display * Anonymity Requested *. The Screener Client PC software always displays the caller's data.
 - **IGNORE:** The PC software displays the caller's data.
- **MANAGE PRESETS:** Define if the client can open the preset manager on the PC software. (allowed, forbidden)
- **LOAD SUPER PRESET:** Define if the client can load a super preset from the PC software. (allowed, forbidden)

Clients Restrictions (4)

- **LOAD PRESET:** Define if the client can load a preset from the PC software. (allowed, forbidden)
- **SELECT STUDIO:** Manage how a client which has access to more than one studio can switch between studios:
 - **ALLOWED:** The user may switch between studios.
 - **FORBIDDEN:** The client cannot switch between studios at all.
 - **GP INPUT:** The client can only switch between studios via a GP input (TTL, DHD SetLogic, Ember+)
- **PHONE BOOK:** Define if the client can use the phone book button on the menu bar of the LAN Client PC software. (allowed, forbidden, long-click)
- **ENABLE DATA EDIT:** Define if the client can create or change records in the phone book database via the PC software. (allowed, forbidden, long-click)
- **VOICE DISGUISE:** Define if the client can activate voice disguise for line groups from the menu bar of the PC software. (allowed, forbidden, long-click)
- **ANSWERING MACHINE:** Define if the client can activate the answering machine. (allowed, forbidden)
- **NIGHT SERVICE:** Define if the client can activate the night service. (allowed, forbidden)
- **AUDIO CODEC LINE:** Manage how ACconnect audio codec lines are displayed in the PC software.
 - **ALLOWED:** The ACconnect lines are displayed and fully operational.
 - **ON AIR DISABLED:** The ACconnect lines are displayed with the On-Air button disabled.
 - **HIDDEN:** The ACconnect audio codec lines are not displayed.
- **RECEIVE GROUP CHAT:** Define if group messages are displayed on the client's chat windows (yes, no)
- **USER LOGIN:** Define if a user can login to the user content filter form the PC software. (allowed, forbidden)
- **ENABLE MCS VIDEO:** Define if the software displays live video of a WebRTC or MS Teams call on that client. (MCS = MAGIC Collaboration Services)
- **TOGGLE NDI OUTPUT:** Define if the client is allowed to change video output via NDI of a WebRTC or MS Teams call.

Signal Processing (1)

Configuration

Local

MAGIC THipPro ACip31

- Database
- News Desk Pool
- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- PhonerSet Audio Assignmen
- Clients Restrictions
- Signal Processing**
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions
- GPIO
- Ember+ Consumer Extensior
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light
 - ACconnect

Client ID: 9 Studio: 2

Signal Processing

Line Settings

Line	Automatic Gain Control	Expander
1	off	ON
2	off	ON
3	off	ON
4	off	ON
5	off	ON
6	off	ON
7	off	ON
8	off	ON
9	off	ON
10	off	ON
11	off	ON
12	off	ON
13	off	ON
14	off	ON
15	off	ON
16	off	ON
17*	off	ON
18*	off	ON
19*	off	ON
20*	off	ON

*) Only for PRETALK

Set AGC on/off for all lines

Automatic Gain Control Settings (AGC) / Expander

Threshold: -40 dBFS

Level: -25 dBFS

Limiter: 0 dBFS

Speed:

Volume control default value

0 dB

Echo Cancellor

Active

Line Basis Delay: msec (0..120)

Line Level Offset Attenuation (Send): -6 dB

Voice Disguise

Voice Disguise

Pitch:

Ratio:

Auto Ducking of Caller

Default Settings

OK Cancel Apply Now

Signal Processing (2)

- Define the signal processing parameters on the SIGNAL PROCESSING page.
- LINE SETTINGS:
 - AUTOMATIC GAIN CONTROL: The AGC controls the amplifier which processes the audio signal of the caller. Enable the AGC to maintain a certain audio level despite variations in the caller's voice or differences between callers. The AGC parameters can be modified under AUTOMATIC GAIN CONTROL SETTINGS (AGC) / EXPANDER. The user can enable or disable the AGC for each call individually by clicking on the level meter on the main panel of the LAN Client PC software.
 - EXPANDER: There are expander filters for all telephone line inputs and outputs. The expanders are always on. They lower the level of quiet audio signals even more to reduce noise. The threshold under AUTOMATIC GAIN CONTROL SETTINGS (AGC) / EXPANDER is used for AGC and the expander for received audio signals. The threshold for transmitted

audio signals is -52 dBFS.

- AUTOMATIC GAIN CONTROL SETTINGS (AGC) / EXPANDER: Define the filter parameters for AGC and expander.
 - THRESHOLD: The AGC is only applied to audio signals above this level. The expander is only applied to audio signals below this level.
 - LEVEL: Define the target level for the AGC. The AGC tries to maintain this level for the audio signal of the caller. By default the amplifier has a range of 32 dB. Which means it can lower the signal by 16 dB and amplify the signal by 16 dB. If the target level is set higher than -20 dBFS the range of 32 dB remains but splits differently. The higher the target level the more amplification is possible at the cost of lowered possible attenuation.

Signal Processing (3)

- **LIMITER:** By default, the limiter clips the audio signal at 0 dBFS. If AGC is enabled the limiter threshold can be adjusted in the range between the AGC level and 0 dBFS.

The AGC reacts relatively slow to changes in the level of an audio signal. Otherwise, the AGC would constantly adjust the amplification and the caller's voice would sound unsteady.

Imagine a caller who starts to talk very quietly but suddenly gets very loud. The amplification would be high in the beginning and the sudden loud voice would get even louder until the AGC adjusts the amplification to the new level. The limiter can react within milliseconds and lower the audio signal immediately.

- **SPEED:** Define how fast the AGC should adjust to changes in the audio signal coming from the caller. (SLOW, MEDIUM, FAST, VERY FAST)
- **VOLUME CONTROL DEFAULT VALUE:** The level of the audio signal coming from the caller can be

adjusted manually in the LAN Client PC software if AGC is disabled. Define the default amplification here. It is set each time a call is disconnected so, the next call starts with the default value.

Signal Processing (4)

- **ECHO CANCELLER:** The echo canceller eliminates echo coming back from the caller in POTS, ISDN and VoIP mode. It is not used for HD-Voice calls. There is a dedicated echo canceller for each telephone line.
It is recommended to adjust the audio levels so that TX level displayed on the main panel of the PC software is between -18 dBFS and -12 dBFS.
 - **ACTIVE:** Enables the echo cancellers. Especially analogue telephones cause strong echoes.
 - **LINE BASIS DELAY:** The echo canceller can detect and eliminate echoes with a delay of up to 120 ms. Each telephone network has an individual minimum round-trip time for echo signals. This timespan can be ignored by the echo canceller. The defined line basis delay moves the 120 ms range of the echo canceller.
A value of e.g. 60 ms enables the hybrid to eliminate echoes which occur within 60 ms to 180 ms.
Recommended values:

- POTS, ISDN: 0 ms
 - POTS, ISDN with PBX: 40 ms
 - VoIP: 60 ms
- **LINE LEVEL OFFSET ATTENUATION (SEND):** Define how much the level of the audio signal being sent over the telephone channel to the caller is attenuated. Decrease the value if the returned echo signal is too strong to be eliminated by the echo canceller.

Signal Processing (5)

- **VOICE DISGUISE:** Enable this option to add the voice disguise button to the line group menus on the main panel of the PC software. Use these buttons to enable the function on all lines of the respective line group.
 - **PITCH:** Set to UP to shift the voice to higher notes. Set to DOWN to shift the voice to lower notes.
 - **RATIO:** Define how strong the effect should be. Range: 1 (low) 4 (high)
- **AUTO DUCKING OF CALLER:** Define how much the caller's voice is attenuated when an audio signal is sent to the caller e.g. when the presenter speaks. Range: Off, -6 dB ... -42 dB
- **DEFAULT SETTINGS:** Sets the parameters on this page to factory default.

Line Labels (1)

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Line Labels

Line	Label
1	{grp} - {lineid}
2	{grp} - {lineid}
3	{grp} - {lineid}
4	{grp} - {lineid}
5	{grp} - {lineid}
6	{grp} - {lineid}
7	{grp} - {lineid}
8	{grp} - {lineid}
9	{grp} - {lineid}
10	{grp} - {lineid}
11	{grp} - {lineid}
12	{grp} - {lineid}
13	{grp} - {lineid}
14	{grp} - {lineid}
15	{grp} - {lineid}
16	{grp} - {lineid}
AC 1	{lineid}
AC 2	{lineid}

Variables

- {index} Line index (1 based)
- {lineid} SIP user*
- {grp} Name of the line group*
- {sipsrv} Used SIP server*
- {sipsrv#} 1: Main SIP Server
2: Backup SIP Server
- {sipaut} Used SIP authentication*
- {sipdisp} SIP display name*

* A format specifier can be added.
:# Take only the last # characters
-:# Take only the first # characters
Example: {lineid:4}

Default Settings

Client ID: 9 Studio: 2

OK Cancel Apply Now

Line Labels (2)

- Define the labels of all telephone lines displayed on the main panel of the PC software on the LINE LABELS page.
- **LINE**: Shows the line numbers of the telephone channels and ACconnect channels available in the system.
- **LABEL**: Enter any text. You may also mix text with the supported variables:
 - {index}: Line index
 - **{lineid}**: telephone number derived from the line interface settings.
 - VoIP: SIP User as defined on the VoIP (LAN / SIP) configuration page.
 - ISDN: MSN as defined on the MSN configuration page.
 - POTS: Phone number as defined on the POTS Phone Numbers configuration page.
 - **{grp}**: Name of the line group the telephone line is part of.
- **{sipsrv}**: Only in VoIP mode. SIP server name / address currently used.
- {sipsrv#}: Only in VoIP mode. 1 if the main SIP server is currently used. 2 if the backup SIP server is currently used.
- **{sipaut}**: Only in VoIP mode. SIP authentication as defined on the VoIP (LAN / SIP) configuration page.
- **{sipdisp}**: Only in VoIP mode. SIP display name as defined on the VoIP (LAN / SIP) configuration page.
- The output of variables in bold can be modified:
 - {...#}: Use only the last # characters. (e.g. {lineid:4})
 - {...-#}: Use only the first # characters.

Studio Settings (1)

The screenshot shows the 'Configuration' window with the 'Studio Settings' tab selected. The left sidebar contains a tree view of settings categories, with 'Studio Settings' highlighted. The main area displays settings for 'Studio 1' (selected from a tabbed interface including Studio 2, Prod 1, Prod 2, Studio 5, and News Desk). The settings include:

- Logo: Z:\AVT\THipPro\AVT_Pure.png (with a 'Browse' button)
- PRETALK Streaming Recording Folder: Z:\AVT\THipPro\Recordings Studio 1 (with a 'Browse' button)
- Social Media Server Client: Client 3: S1-Screener (dropdown menu)
- Preferred Language: EN (English) (dropdown menu)
- Social Media File Cache Folder: Z:\AVT\THipPro\Cache Studio 1 (with a 'Browse' button)
- Twitter Application: <none> (dropdown menu)
- Facebook Application: (dropdown menu)

At the bottom of the window, there are three buttons: 'OK', 'Cancel', and 'Apply Now'. The status bar at the bottom left shows 'Client ID: 9' and 'Studio: 2'.

Studio Settings (2)

- Define studio-oriented features on the STUDIO SETTINGS page.
- There is a tab for each studio.
- All clients of a studio need read and write access to the folders configured on this page.
- LOGO: Define the logo is displayed in the top right corner of the LAN Client and Screener Client PC software. If a user switches to another studio, the logo changes as well. If the logo cannot be found, each PC software client displays the logo defined in its local settings.
- PRETALK STREAMING RECORDING FOLDER:
Define a central folder for all recordings made via Pretalk Streaming in this studio.
 - When CONTENT FILTERS are active the software stores the recordings in separate subfolders for each user login (1-16).
 - It is recommended to delete files that are no longer needed, as the PC software monitors the folder to display all available recordings in the RECORDINGS list. A large folder slows down the software significantly.
- SOCIAL MEDIA SERVER CLIENT: A PC running the Screener Client PC software acts as social media server. The server connects to the social media service such as X (Twitter) and provides the other clients with social media content. The dedicated Screener Client should not be used for other purposes since downloading a lot of media files may block the Screener client PC software for some time.

Studio Settings (3)

- **PREFERRED LANGUAGE:** Define the default language for searching the social network. The language can be changed for individual searches in the search mask.
- **SOCIAL MEDIA CACHE FOLDER:** Define a folder to store pictures and other media. The cache provides fast access to these files.
- **TWITTER APPLICATION:** Select your X (Twitter) application which provides access to the social network. The application must be created via the Local Settings of the Screener Client PC software.
- **FACEBOOK APPLICATION:** Not supported now.

Auto Answer (1)

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 - LAN Interface
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 - DHD Audio Matrix

Client ID: 9 Studio: 2

Auto Answer

Auto Answer on all channels

Channel Index	1	2	3	4	5	6	7	8	9	10	11	12	13	14	CF	CF
Line Groups	CALL IN	VIP	CALL IN	VIP	PR...	PR...	NEWSDESKS	-	-							
Auto Answer Channel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	-				

Answer call on audio line: Associated Line Group

Auto Answer Delay: 2 sec

Line Grp. 1	Line Grp. 2	Line Grp. 3	Line Grp. 4	Line Grp. 5	Line Grp. 6	Line Grp. 7	Line Grp. 8
CALL IN	VIP	CALL IN	VIP	PROD	PROD	NEWSDESKS	8
HOLD (Associate Studio)	ON AIR (Associated Studi...)	HOLD (Associate Studio)	HOLD (Associate Studio)	ON AIR (Associated Studi...)	ON AIR (Associated Studi...)	HOLD (Associate Studio)	HOLD (Associate Studio)

OK Cancel Apply Now

Auto Answer (2)

- Define how the system accepts incoming calls automatically on the AUTO ANSWER page.
- **AUTO ANSWER ON ALL CHANNELS:** Select to activate the feature on all telephone channels.
- **AUTO ANSWER CHANNEL:** Enable auto answer on individual channels. The line groups are displayed for better overview.
- **ANSWER CALL ON AUDIO LINE:** Define the audio line which is set on the telephone channel when a call is answered automatically.
 - **ASSOCIATED LINE GROUP:** Define an individual audio line for each line group in the table at the bottom of the page.
 - **HOLD (ASSOCIATED STUDIO):** Use the Hold signal of the first studio the channel can be found in.
 - **HOLD (NEWS DESK CLIENT):** Use the Hold signal of the News Desk Client as configured on the Clients Audio Assignment page.
 - **HOLD (STUDIO N):** Use the Hold signal of a specific studio.
 - **OFF CONFERENCE N:** Use one of the Off Conference audio lines.
 - **ON AIR (ASSOCIATED STUDIO):** Use the audio line of On-Air fader 1 of the first studio the channel can be found in.
 - **ON AIR N:** Use a specific On-Air audio line.
 - **PHONERSET N PRETALK:** Use a specific PhonerSet pretalk audio line.
 - **PRETALK N:** Use a specific Pretalk audio line.
- **AUTO ANSWER DELAY:** Define how long a call must ring before the system accepts the call. During that time the call can be answered manually by the user.

Intro / Data Privacy Query (1)

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 - AES67

Client ID: 3 Studio: 1

Intro / Data Privacy Query

Channel Index	Channels														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	CF
Line Groups	CALL-IN	CALL-OUT	TE...	FM4 Hörer	FM...	Pro...	News	-							
Activation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-											

Name	Length	Import	Record/Play	PC Path of Dynamic DPQ Signals
Announcement	8,94 sec	Import	Record/Play	...
Agree Message	3,65 sec	Import	Record/Play	...
Disagree Message	4,62 sec	Import	Record/Play	...

Intro mode (without data privacy processing)

Auto answer incoming calls

Always start Data Privacy Query (Even when caller has previously agreed query)

Audio line after agreement: HOLD (Associated Studio)

Number of Announcements: 4

Pause time after announcement: 10 seconds

Drop line in case of disagreement

Activate DTMF Confirmation

DTMF code to agree: 1

DTMF code to disagree: 0

Activate Agree Message

Activate Disagree Message

OK Abbrechen Apply Now

Intro / Data Privacy Query (2)

- Define how messages to callers are automatically played back before the call is signalled in the PC software on the INTRO / DATA PRIVACY QUERY page.
 - The data protection regulations raised the demand for mechanisms to inform callers about how their data is used and to obtain their consent to the use of the data.
 - When this feature is activated, incoming calls are answered automatically by the MAGIC THipPro.
 - The caller's data (phone number, name if available, etc.) is displayed on the line.
 - The HOLD button shows a symbol which message is currently playing. The other audio line buttons are deactivated. Press the HOLD button to stop the message and accept the call right away.
- After the Intro / Data privacy query process is done all audio line buttons are blinking yellow. The caller hears the configured Hold signal.
 - If a caller disagrees to consent by pressing a key on his or her phone the system can hang up automatically.
 - The caller's decision is stored in the phone book database to
 - prevent the callers from hearing the announcement the next time they call.
 - be able to delete the caller's records via an SQL script manually or via the windows scheduler. (Find an example in the installation directory of the MAGIC Screener software under .\SQL User Script.

Intro / Data Privacy Query (3)

- Several scenarios are possible e.g.:
 - **Intro only:** The system plays the intro and then signals the incoming call. No decision is stored.
 - **Wait for consent:** The system plays the intro and advises the callers to hang up if they do not agree. The data privacy field of the caller's phone book database record is set to "agreed" if the caller stays on the line.
 - **Query consent:** The system plays the intro which advises the callers to press a button on their phone if they agree or press a different button if they disagree. The decision is stored in the data privacy field of the caller's phone book database record.
- **ACTIVATION:** This feature can only be activated or deactivated for all lines of a line group.
- **MESSAGES:** Three different messages can be stored on the system:
 - **ANNOUNCEMENT:** The message that a caller hears after the MAGIC THipPro has answered the call.
 - **AGREE MESSAGE:** The message that a caller hears before the call is signalled in the PC software.
 - **DISAGREE MESSAGE:** The message that a caller hears after they pressed the button that tells the system that they disagree.

Intro / Data Privacy Query (4)

- The message are configured in the table of DPQ signals:
 - NAME: The names are predefined and cannot be changed.
 - LENGTH: Length of the stored audio file in seconds.
 - IMPORT: You can import an audio file. Only the first 24 seconds of the audio file are imported. The import module supports WAVE and MP3 audio files. They are automatically converted to a mono file with 16 kHz sampling frequency.
 - RECORD/PLAY: Opens a window to record, play and delete a message file. (See next page for details.)
 - PC PATH OF DYNAMIC DPQ SIGNALS: Enter the path of a DPQ message file stored on the PC or a network drive. The PC software then imports the file. The PC software on the PC which serves as master checks if the file has changed once per minute and automatically updates the DPQ message if necessary.
 - Note: A path can only be entered if a static DPQ

message is already recorded or imported. This file serves as a fallback if there is a problem with importing the file from the specified path.

Intro / Data Privacy Query (5)

Announcement Recording ✕

Announcement

Name:

Signal duration: 9.11 sec

Record source: ▾

max. 24 sec

Announcement recording

████████████████████

Test recorded Announcement

████████████████████

Intro / Data Privacy Query (6)

- Use the RECORD/PLAY button on the INTRO / DATA PRIVACY QUERY page to open the DPQ MESSAGE RECORDING window.
- NAME: The names are predefined and cannot be changed.
- SIGNAL DURATION: Length of the currently stored DPQ message file.
- RECORD SOURCE: Select an audio interface of the MAGIC THipPro. You can choose from:
 - All Analogue Audio interfaces
 - All AES/EBU channels
 - All AES67 channels
 - All DANTE channels
- PROGRESS BAR: Shows the length of the DPQ message being recorded.
- MESSAGE RECORDING: Control the recording of a

DPQ message:

- LEVEL METER: Shows the level of the audio signal on the selected Record Source.
- RECORD BUTTON: Starts recording.
- STOP BUTTON: Stops recording
- SAVE: Stores the file on the MAGIC THipPro.
- TEST RECORDED DPQ message
 - LEVEL METER: Level of the recording being played back.
 - PLAY BUTTON: Playback of the recording.
- DELETE FILE: Deletes the DPQ message file from the MAGIC THipPro.

Intro / Data Privacy Query (7)

- **INTRO MODE (WITHOUT DATA PRIVACY PROCESSING):** The MAGIC THipPro accepts the calls automatically and plays the Announcement message. The data privacy entry in the phone book database is not set.
- **AUTO ANSWER INCOMING CALLS:** The system automatically accepts incoming calls and plays the Announcement.
- **ALWAYS START DATA PRIVACY QUERY (EVEN WHEN CALLER HAS PREVIOUSLY AGREED QUERY):** The system ignores the data privacy entry in the phone book database when a call comes in and plays the announcement message every time.
- **AUDIO LINE AFTER INTRO:** Define the Hold signal the caller hears after the Intro / Data Privacy Query process is done.
 - **HOLD (STUDIO N):** The Hold signal of a studio.
 - **HOLD (NEWS DESK CLIENT):** The Hold signal configured for the News Desk Clients on the Clients Audio Assignment configuration page.
 - **HOLD (ASSOCIATED STUDIO):** The Hold signal of the first studio to which the respective telephone line is assigned to.
- **NUMBER OF ANNOUNCEMENTS:** Define how many times the announcement should be repeated. (1 – 4)
- **PAUSE TIME AFTER ANNOUNCEMENT:** Define how long the pause after each announcement message should be. (0 – 10 seconds)
- **DROP LINE IN CASE OF DISAGREEMENT:** Enable if the MAGIC THipPro should disconnect the line when the disagree-DTMF code was received.

Intro / Data Privacy Query (8)

- **ACTIVATE DTMF CONFIRMATION:** The MAGIC THipPro can detect which button the caller pressed on the phone by analysing the received DTMF tones. Enable this function to use the DTMF codes to update the data privacy field of the caller's phone book database record automatically.
 - **DTMF CODE TO AGREE:** Define the DTMF code that the callers enter when they agree to the storing of their data.
 - **DTMF CODE TO DISAGREE:** Define the DTMF code that the callers enter when they disagree to the storing of their data.
- **ACTIVATE AGREE MESSAGE:** Enable to play the agree message. The agree message is played when:
 - The caller stays on the line after the Pause time after announcement.
 - The caller sent the DTMF code to agree and DTMF CONFIRMATION is activated.
- **ACTIVATE DISAGREE MESSAGE:** Enable to play the disagree message. The Disagree message is played when:
 - the caller sent the DTMF code to disagree and DTMF CONFIRMATION is activated.

Answering Machine (1)

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Client ID: 9 Studio: 2

Answering Machine

CALL IN VIP CALL IN VIP PROD PROD NEWSDESKS Line Group 8 Line Group 9 Line Group 10 Unassigned

Function: Auto Message and DROP

Parameters	Values
Recorded HOLD Signal	Internal HOLD signal 2 (Announcement)
Pause (sec)	3
Repetitions	2

Activation Button Label: AM

Active Answ. Machine Message: * Answering Machine *

OK Cancel Apply Now

Answering Machine (2)

- Configure the Answering Machine mode and parameters on the ANSWERING MACHINE page.
- The answering machine is configured and activated per line group.
- Activate the answering machine via the line group menu of the PC software's menu bar.
- Configure the answering machine for each line group individually on the respective tab.
- **FUNCTION:** Select a mode:
 - **NO ANSWERING MACHINE OPERATION.**
 - **AUTO MESSAGE AND DROP:** Every call on any line of the line group is automatically accepted. The MAGIC THipPro plays a message and disconnects the call thereafter.
 - **RECORD CALLER:** The MAGIC THipPro accepts incoming calls automatically. The system plays a message and streams the caller's audio signal to a PC via Pretalk Streaming. The PC records the caller's message.
- **AUTO MESSAGE AND DROP parameters:**
 - **RECORDED HOLD SIGNAL:** Select a recorded Hold signal from the list. Configure the Hold signal files on the INTERNAL HOLD SIGNALS configuration page.
 - **PAUSE (sec):** Define the pause after each repetition of the Hold signal.
 - **REPETITIONS:** Define how many times the Hold signal is played before the MAGIC THipPro hangs up.
 - **ACTIVATION BUTTON LABEL:** Define the label of the button which is used to activate the answering machine. The button is displayed in the respective line group menu of the PC software's menu bar.
 - **ACTIVE ANSW. MACHINE MESSAGE:** Define the message that is displayed on those telephone lines in the PC software where the answering machine is active.

Answering Machine (3)

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Client ID: 9 Studio: 2

Answering Machine

CALL IN VIP CALL IN VIP PROD PROD NEWSDESKS Line Group 8 Line Group 9 Line Group 10 Unassigned

Function: Record Caller

Parameters	Values
Recording Client	Client 1: S1-Presenter 1
Max. Recording Time (sec)	240
Enable Beep after Greeting Message	Yes
Greeting Message	Announcement.wav
Recording Timeout Message	Thank you.wav
Show Recordings on Clients	S1-Presenter 1, S1-Presenter 2, S1-Screener, Technician
Recordings Base Folder	The recordings base path must be defined at "Studio Settings" page

Activation Button Label: Activate ASW

Active Answ. Machine Message: Answering Machine active!

OK Cancel Apply Now

Answering Machine (4)

- **RECORD CALLER parameters:**
 - **RECORDING CLIENT:** Select a PC client. It plays the greeting and timeout messages and does the recording of the caller.
There must be a pretalk stream assigned to the client which is used for audio transmission. You may assign a fixed pretalk stream or a dynamic pretalk stream. The pretalk stream of this client is reserved for recording of callers when the answering machine is active. The user can not talk to callers on other lines using pretalk.
 - **MAX. RECORDING TIME (SEC):** Set the timeout after which the answering machine will hang up automatically. Select 0 to only play the message without recording a message.
 - **ENABLE BEEP AFTER GREETING MESSAGE:** The answering machine will play a beep tone after the greeting message to indicate that it is ready to record a message.
 - **GREETING MESSAGE:** Click on the input field to select a greeting message. The message is played directly after the system accepted the call.

The message files must be stored in a specific folder to show up here. The path is determined by the name of the LINE GROUP and the RECORDINGS BASE FOLDER:

<Recordings Base Folder>\<Line Group Folder>\Messages.

The folder is automatically created when importing a message via the icon on the right.

The file format is WAV, 16 Bit, 48 kHz, Mono.

- **RECORDING TIMEOUT MESSAGE:** Click on the input field to select a timeout message. The message is played after the max. recording time exceeded, before the system hangs up.
The message files must be stored in a specific folder to show up here. The path is determined by the name of the LINE GROUP and the RECORDINGS BASE FOLDER:
<Recordings Base Folder>\<Line Group Folder>\Messages.
The folder is automatically created when importing a message via the icon on the right.
The file format is WAV, 16 Bit, 48 kHz, Mono.

Answering Machine (5)

- **RECORDINGS BASE FOLDER:** The studio recording folder is used as the recording base folder. Configure the folder under STUDIO SETTINGS – PRETALK STREAMING RECORDING FOLDER.
- **ACTIVATION BUTTON LABEL:** Define the label of the button which is used to activate the answering machine. The button is displayed in the respective line group menu of the PC software's menu bar.
- **ACTIVE ANSW. MACHINE MESSAGE:** Define the message that is displayed on those telephone lines in the PC software where the answering machine is active.
- It is recommended to delete recordings that are no longer needed, as the PC software monitors the folder to display all available recordings in the RECORDINGS list. A large folder slows down the software significantly.

Night Service (1)

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Client ID: 9 Studio: 2

Night Service

CALL IN VIP CALL IN VIP PROD PROD NEWSDESKS Line Group 8 Line Group 9 Line Group 10 Unassigned

Function: Transfer incoming call

#	Phone Numbers	Phone Number Alias	
1 *	315	<input checked="" type="checkbox"/> Studio B	<input checked="" type="checkbox"/>
2	320	<input checked="" type="checkbox"/> News Room	<input checked="" type="checkbox"/>
3	325	<input checked="" type="checkbox"/> Hotline	<input checked="" type="checkbox"/>
4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Activation Button Label: Night Service

Active Night Service Message: All calls will be routed to {name} ({number})

Variables

- {number} Selected number for call transfer
- {name} Alias of selected number

* MAGIC THipPro Screener uses only # 1 on activation

OK Cancel Apply Now

Night Service (2)

- Configure the Night Service mode and parameters on the NIGHT SERVICE page.
 - When night service is activated, all incoming calls are forwarded to another telephone.
 - Up to six different call forwarding destinations can be defined.
 - The night service mode is configured and activated per line group.
 - Activate the night service via the line group menu of the PC software's menu bar. If several phone numbers are configured the user can choose a number.
 - When the night service is activated, the respective telephone lines on the main panel of the PC software are disabled, and a message is displayed.
- Configure the night service for each line group individually on the respective tab.
 - **FUNCTION:** Select a mode:
 - NO NIGHT SERVICE OPERATION.
 - TRANSFER INCOMING CALL: Every incoming call is transferred using ECT (Call forwarding by PBX or provider, which is widely supported)
 - CALL FORWARDING INCOMING CALL: Every incoming call is transferred using the call forwarding lines of the MAGIC THipPro. (There must be CALL FORWARDING LINES defined on the LINE INTERFACE configuration page)
 - CALL FORWARDING PROVIDER: The MAGIC THipPro sends a dial code to the provider when Night Service is activated. The command instructs the network to route the call to the desired number. When the night service is deactivated the MAGIC THipPro sends another dial code to the provider to deactivate the call forwarding.

Night Service (3)

- **TRANSFER INCOMING CALL / CALL FORWARDING INCOMING CALL parameters:**
 - #: Six different call forwarding destinations can be defined. Only the first destination can be used by the Screener Client PC software.
 - **PHONE NUMBERS:** Define the call forwarding destinations.
 - **PHONE NUMBER ALIAS:** Enter a short text explaining the destination. It will be presented to the user when selecting a destination and can be used in the night service message.
- **GENERAL parameters:**
 - **ACTIVATION BUTTON LABEL:** Define the label of the button in the line group menu of the PC software's menu bar.
 - **ACTIVE NIGHT SERVICE MESSAGE:** Define the message that is displayed on those telephone lines in the PC software where the night service is active. You may enter any text. You may mix text with the

supported variables:

- {number}: The destination phone number.
- {name}: The phone number alias of the destination.

Night Service (4)

Configuration

Local

MAGIC THipPro ACip31

Operation Settings

- Clients / Security
- Studio Definition
- Database
- News Desk Pool
- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- PhonerSet Audio Assignment
- Clients Restrictions
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service**
- DTMF
- Actions

GPIO

- Ember+ Consumer Extensior

System Settings

- General
- Line Interface
- Caller Line Grouping
- VoIP (LAN/SIP)
- Audio Interface
- PRETALK Streaming
- AES67
- LAN Interface
- VLAN
- DHD Audio Matrix

Client ID: 9 Studio: 2

Night Service

CALL IN VIP CALL IN VIP PROD PROD NEWSDESKS Line Group 8 Line Group 9 Line Group 10 Unassigned

Function: Call Forwarding (Provider)

#	Activation Code	Deactivation Code	Function Alias	
1 *	*21*315#	<input checked="" type="checkbox"/> #21#	<input checked="" type="checkbox"/> Studio B	<input checked="" type="checkbox"/>
2	*21*320#	<input checked="" type="checkbox"/> #21#	<input checked="" type="checkbox"/> News Room	<input checked="" type="checkbox"/>
3	*21*325#	<input checked="" type="checkbox"/> #21#	<input checked="" type="checkbox"/> Hotline	<input checked="" type="checkbox"/>
4		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Activation Button Label:

Active Night Service Message:

Variables

- {number} Selected number for call transfer
- {name} Alias of selected number

* MAGIC THipPro Screener uses only # 1 on activation

OK Cancel Apply Now

Night Service (5)

- **CALL FORWARDING PROVIDER parameters:**
 - #: Four different dial codes can be defined. Only the first dial code can be used by the Screener Client PC software.
 - **ACTIVATION CODE:** Define the dial code to activate the call forwarding. The dial code must include the destination phone number.
 - **DEACTIVATION CODE:** Define the dial code to deactivate the call forwarding.
 - **FUNCTION ALIAS:** Enter a short text explaining the destination. It will be presented to the user when selecting a destination and can be used in the night service message.

DTMF (1)

The screenshot shows a software configuration window titled "Configuration" with a close button (X) in the top right corner. The window is divided into two main sections: a left-hand navigation tree and a right-hand main content area.

Left-hand Navigation Tree:

- Local
 - MAGIC THipPro
 - ACip31
 - Operation Settings
 - Clients / Security
 - Studio Definition
 - Database
 - News Desk Pool
 - Mode & Audio Line
 - Internal HOLD Signals
 - Studio Audio Assignment
 - Clients Audio Assignment
 - PhonerSet Audio Assignment
 - Clients Restrictions
 - Signal Processing
 - Line Labels
 - Studio Settings
 - Auto Answer
 - Intro / Data Privacy Query
 - Answering Machine
 - Night Service
 - DTMF** (highlighted)
 - Actions
 - GPIO
 - Ember+ Consumer Extensior
 - System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - VLAN
 - DHD Audio Matrix

Main Content Area (DTMF):

The main content area is titled "DTMF" and contains two sections:

- DTMF Mode:** A horizontal tabbed interface with tabs for "Studio 1", "Studio 2", "Prod 1", "Prod 2", "Studio 5", and "News Desk". Below the tabs is a dropdown menu labeled "Event Mode".
- DTMF Event Labels:** A table with 11 rows, each representing a DTMF digit and its corresponding label. The labels are: 1: GOAL, 2: PENALTY, 3: RED CARD, 4: YELLOW CARD, 5: (empty), 6: (empty), 7: (empty), 8: (empty), 9: (empty), 0: (empty), * (empty), # (empty).

At the bottom of the window, there are three buttons: "OK" (highlighted with a blue border), "Cancel", and "Apply Now".

Client ID: 9 Studio: 2

DTMF (2)

- Configure how the MAGIC THipPro LAN Client PC software handles DTMF tones the system receives on the DTMF page.
- DTMF (Dual-tone multi-frequency) tones are sent when a caller presses a button (0-9, *,#) on his or her phone. The information is transmitted as a short audio signal which can be detected by the MAGIC THipPro.
- The MAGIC THipPro can also detect signals transmitted via RFC2833 in VoIP mode.
- The DTMF mode is configured per line group.
- Configure the DTMF mode for each studio individually on the respective tab.
- When DTMF reception is active the RESET DTMF button is displayed in the LAN Client PC software. It clears all DTMF tone displays.
- Select a mode:
 - OFF: Received DTMF tones are not displayed.
 - STANDARD: Every received DTMF tone is displayed on the telephone line it was received as a singled digit until the next DTMF tone is received or the line is disconnected.
 - GAME SHOW: On each line only the first received DTMF tone is displayed as a single digit. The first received DTMF tone of all lines is displayed on a green background to indicate who pressed a button first. The DTMF display is reset when the call is disconnected or RESET DTMF is pressed.
 - EVENT MODE: In this mode a text can be assigned to each DTMF code. When a DTMF tone is received the LAN Client PC software displays the text instead of the digit. The text is displayed for five seconds. This comes handy for example when there are reporters in different sports arenas. The operator in the studio has them all on Hold. The reporters signal an event to the studio via DTMF which is displayed as text.

Actions (1)

Configuration

Local
MAGIC THipPro ACip31

Operation Settings

- Clients / Security
- Studio Definition
- Database
- News Desk Pool
- Mode & Audio Line
- Internal HOLD Signals
- Studio Audio Assignment
- Clients Audio Assignment
- PhonerSet Audio Assignmen
- Clients Restrictions
- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions**
- GPIO
 - TTL / Relay
 - Ember+
 - Input
 - Output
 - Consumer Functions
 - Ember+ Consumer Extensior
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Audio Interface

Client ID: 9 Studio: 2

Actions

##	Name	Function	Clients
1	ASW Recording	HOLD signal recording:Internal HOLD signal 2 (Announcement)...	S1-Presenter 1
2	Preset Standard	Load Preset:AZ-TEST	Technician
3	NEXT	Set NEXT line at Line Group:Line Group CALL IN:From:Incomin...	S1-Presenter 1, S1-Presenter 2
4	ASM VIP	Toggle Answering Machine:Line Group CALL IN : Answering M...	S1-Screener
5	Audio Editor	Execute external application:Show Command 4:Command "C:\...	Technician
6	GPO	Set GPO: Ember+ Output 17: PCAction	S1-Presenter 1, S1-Presenter 2
7	Action 7	-	
8	Action 8	-	
9	Action 9	-	
10	Action 10	-	
11	Action 11	-	
12	Action 12	-	
13	Action 13	-	
14	Action 14	-	
15	Action 15	-	
16	Action 16	-	
17	Action 17	-	
18	Action 18	-	
19	Action 19	-	
20	Action 20	-	
21	Action 21	-	
22	Action 22	-	
23	Action 23	-	
24	Action 24	-	
25	Action 25	-	
26	Action 26	-	

OK Cancel Apply Now

Actions (2)

- Assign functions to additional buttons on the menu bar of the PC software on the ACTIONS page.
- Up to 30 actions can be defined.
- Specify which clients display the additional buttons.
- The NEXT action button is always displayed separately on the menu bar. All other action buttons can be displayed under a general ACTIONS button.
- An overview of the specified actions is displayed in a table:
 - NAME: A name of your choice.
 - FUNCTION: Summary of the specified action.
 - CLIENTS: Lists all clients which display a button to execute the action.

Actions (3)

Action # 1

Name: ASW Recording

Function Code: HOLD signal recording

Signal: Internal HOLD signal 2 (Announcement)

Audio Interface: IP Audio Stream 1

Available for:

Client

- Client 1: S1-Presenter 1
- Client 2: S1-Presenter 2
- Client 3: S1-Screener
- Client 4: S2-Presenter 1
- Client 5: S2-Presenter 2
- Client 6: S2-Screener
- Client 7: Prod 1
- Client 8: Prod 2
- Client 9: Technician

OK Cancel

Actions (4)

- Double click a line on the ACTIONS configuration page to open a window to add / edit / delete an action.
- NAME: Enter a name of your choice.
- FUNCTION CODE: Select a function from the drop-down list. Find a detailed description of all function codes on the following pages.
- PARAMETERS: The available parameters depend on the selected function code. Find a detailed description of all parameters on the following pages.
- AVAILABLE FOR: Select the clients where the action should be available.

Actions (5)

Function Code	Parameter	Description
-	-	No function selected. Set this function code to delete a function.
Load Preset	Preset: #: <Preset/Super Preset Name>	Loads the Preset (Operation Settings) with the name #. Loads the Super Preset (Operation & System Settings) with the name #.
HOLD signal recording	Signal: IH: Internal HOLD Signal 1...16 Audio Interface: AI: Audio Interface	Opens a window for recording the internal HOLD Signal IH via the audio interface AI.
Set NEXT line at Line Group	Line Group: GR: Configured Line Group From: F: Incoming Call, Any HOLD, Any HOLD READY, Any HOLD WAS ON AIR To: T: My PRETALK, My ON AIR Post State: PO: My HOLD, My HOLD READY, My PRETALK, DROP line	Allows for automatically bringing the next caller ON AIR by only pressing the action button. The action button only affects lines of the line group GR. The action button only affects calls which are in state F. If a call meets these conditions, clicking the action button will put the call in the state T. If there was a call-in state T before, this call is put into post state PO. "My" indicates that the specified audio line of the client which executes the action is used.

Actions (6)

Function Code	Parameter	Description
Execute External Application	Show Command: SC: Hide Window, Show Window (and set active), Show Window, Show Window minimized Command: C: Path and command line parameters	Runs an external application given in C and sets the window mode of the application as configured in SC.
Set GPO	GPO: G: General Purpose Output (TTL, Relay, DHD SetLogic, Ember+)	Toggles the output specified in G. An output must be configured to SET OUTPUT BY ACTION (PC) on the respective GPIO configuration page to be available here.
Toggle Answering Machine	Line Group: GR: Configured Line Group Mode: M: Configured Answering Machine Mode	Switches the configured answering machine mode M for the line group GR on and off.

GPIO (1)

Configuration

Local
MAGIC THipPro ACip3 1

- ... Clients Restrictions
- ... Signal Processing
- ... Line Labels
- ... Studio Settings
- ... Auto Answer
- ... Intro / Data Privacy Query
- ... Answering Machine
- ... Night Service
- ... DTMF
- ... Actions
- GPIO
 - TTL / Relay**
 - DHD
 - ... Set Logic
 - Ember+
 - ... Input
 - ... Output
 - ... Consumer Functions
 - ... Ember+ Consumer Extensior
 - ... Ember+ Dial Pad Extension
- System Settings
 - ... General
 - ... Line Interface
 - ... Caller Line Grouping
 - ... VoIP (LAN/SIP)
 - ... Collaboration Services
 - ... Audio Interface
 - ... PRETALK Streaming
 - ... AES67
 - ... LAN Interface
 - ... NTP
 - ... VLAN
 - ... DHD Audio Matrix

Client ID: 1 Studio: 1

TTL / Relay

Pin	Dir.	Function 1 (Positive Edge)	Function 2 (Negative Edge)
TTL 1 (Pin 1)	In	Accept incoming call:VoIP Line 1:Audio Line On Air 1	Drop:VoIP Line 1
TTL 2 (Pin 2)	In	-	-
TTL 3 (Pin 3)	In	-	-
TTL 4 (Pin 4)	In	-	-
TTL 5 (Pin 5)	In	-	-
TTL 6 (Pin 6)	In	-	-
TTL 7 (Pin 7)	In	-	-
TTL 8 (Pin 8)	In	-	-
Relay 1 (Pins 14->15) NO	Out	ON AIR:Any VoIP Line	-
Relay 2 (Pins 17->18) NO	Out	Always Open	-
Relay 3 (Pins 19->20) NO	Out	Always Open	-
Relay 4 (Pins 21->9) NO	Out	Always Open	-
Relay 5 (Pins 22->10) NO	Out	Always Open	-
Relay 6 (Pins 23->11) NO	Out	Always Open	-
Relay 7 (Pins 24->12) NO	Out	Always Open	-
Relay 8 (Pins 25->13) NO	Out	Always Open	-

OK Abbrechen Apply Now

GPIO (2)

- Configure GPIOs (General Purpose Input / Output) on the GPIO pages.
- The MAGIC THipPro provides 8 hardware TTLs through its GPIO connector at the back.
 - Each TTL GPIO can be configured individually as input or output.
 - Each pin has an internal pull up resistor. An open pin has therefore the logic state “high”.
 - Use for example an external relay to short the pin to device ground which is also available through the GPIO connector.
 - In the "high" position, a TTL output supplies a voltage of 3.3 V and a maximum current of 10 mA.
- The MAGIC THipPro provides 8 hardware Relays through its GPIO connector at the back.
 - A relay can be loaded with maximum 200 mA and 48 V.
 - Relays are normally open (NO)
- Double-click a list entry to configure the TTL or Relay function.
 - Find the details on the available functions in the Signalling and Control with EmBER+ document available in the download section of our website.
- If DHD AUDIO MATRIX is enabled, up to 96 GPIOs can be configured under GPIO – DHD – SET LOGIC.
 - Each GPIO can be configured individually as input or output.
 - Find the details on the available functions in the Signalling and Control with DHD SetLogic document available in the download section of our website.

GPIO (3)

- If EMBER+ PROVIDER is enabled, up to 96 inputs and 96 outputs can be configured under GPIO – EMBER+ – INPUT/OUTPUT.
 - Find the details on the available functions in the Signalling and Control with EmBER+ document available in the download section of our website.
- If EMBER+ CONSUMER is enabled, up to 20 functions can be configured for each consumer under GPIO – EMBER+ – CONSUMER FUNCTIONS.
 - Find the details on the available functions in the Signalling and Control with EmBER+ document available in the download section of our website.

Ember+ Consumer Extension (1)

Configuration

Local
MAGIC THipPro ACip3 1

- Signal Processing
- Line Labels
- Studio Settings
- Auto Answer
- Intro / Data Privacy Query
- Answering Machine
- Night Service
- DTMF
- Actions
- Telephone Client Application
- GPIO
 - Ember+ Consumer Extension**
 - Ember+ Dial Pad Extension
- System Settings
 - General
 - Line Interface
 - Caller Line Grouping
 - VoIP (LAN/SIP)
 - Collaboration Server
 - Audio Interface
 - PRETALK Streaming
 - AES67
 - LAN Interface
 - NTP
 - VLAN
 - DHD Audio Matrix
 - Ember+
 - PhonerSet / Remote Light
 - ACconnect
 - Stream Quality Measurement
 - SNMP
 - System Login

Client ID: 5 Studio: 1

Ember+ Consumer Extension

WP1 Workplace 2 Workplace 3 Workplace 4 Workplace 5 Workplace 6 Workplace 7 Workplace 8 Workplace 9 Workplace 10

Name of Workplace: WP1

DHD Core: 1 (172.20.75.6:2008) Use Consumer connected to: Provider 1: 172.20.75.6

Trigger Logic ID to open NumberPad: 336 Status ID of NumberPad (VirtualKey): 337

Ember+ Global Label ID for Dial Number: GlobalLabel 5: Dial Number

Channels Index: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Line Groups: CALL IN MP CALL IN MP PR... PR... NEWSDESKS

Assigned Channels:

	Line 1	
Audio Line Assignment		
PRETALK	not used	▼
HOLD	not used	▼
ON AIR Fader 1	On Air 1	▼
ON AIR Fader 2	not used	▼
GPI Functions		
1-Button (CALL/DROP/etc.)	365	✎
Set PRETALK	0	✎
Set HOLD	0	✎
Set ON AIR Fader 1	0	✎
Set ON AIR Fader 2	0	✎
DROP line	367	✎
Transfer Call	366	✎
Redial	397	✎
GPO Functions		
	332	✎

OK Abbrechen Apply Now

Ember+ Consumer Extension (2)

- The EMBER+ CONSUMER EXTENSION makes it easy to control telephone lines of the MAGIC THipPro from a DHD mixing console without using the PC software.
- The mixing console must act as Ember+ provider and support DHD SetLogic.
- Configure the workplaces on the EMBER+ CONSUMER EXTENSION configuration page.
 - Find the complete configuration guide with examples in the Ember+ Consumer Extension document available in the download section of our website.

Ember+ Dial Pad Extension (1)

The screenshot shows the 'Configuration' window for 'Ember+ Dial Pad Extension'. The left sidebar contains a tree view of configuration options, with 'Ember+ Dial Pad Extension' selected. The main area is titled 'Ember+ Dial Pad Extension' and contains a table for 'Ember+ Dial Pad to Client assignment'. The table has 16 columns representing dial pad numbers (1-16) and 10 rows representing clients. Checkmarks indicate the assigned extension for each client.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 : S1-Presenter 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 : S1-Presenter 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 : S1-Screener	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 : S2-Presenter 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 : S2-Presenter 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 : S2-Screener	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 : Prod 1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 : Prod 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>											
9 : Technician	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
News Desk Client	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Client ID: 5 Studio: 1

Buttons: OK, Abbrechen, Apply Now

Ember+ Dial Pad Extension (2)

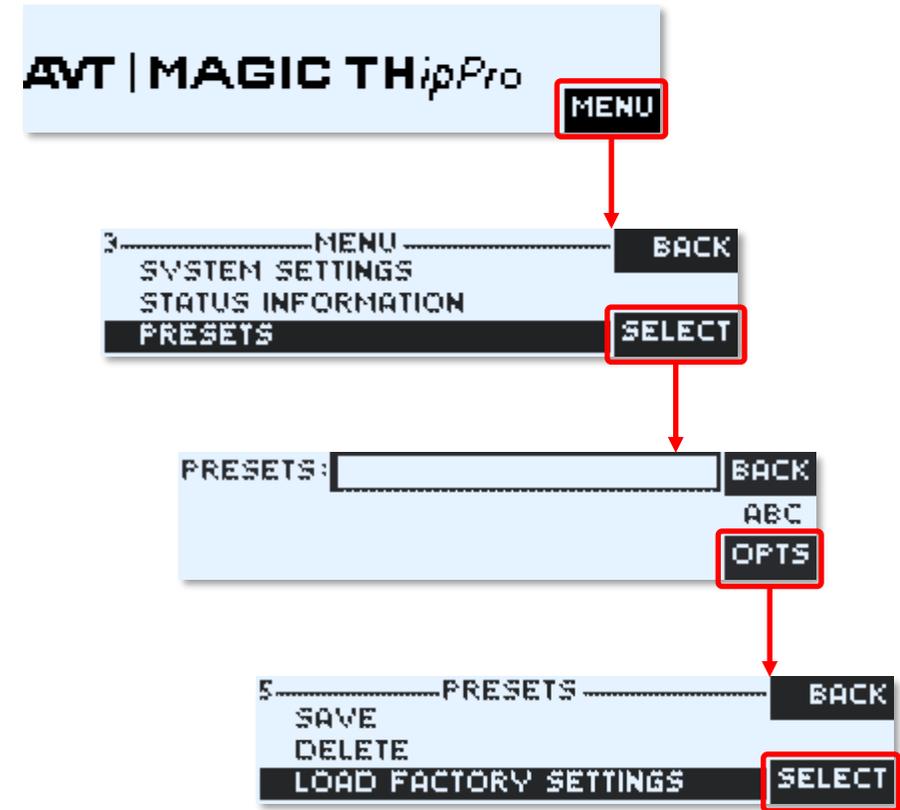
- Define which PC clients display the number entered on the respective Ember+ Dial Pad on the EMBER+ DIAL PAD EXTENSION configuration page.
- Up to 16 pre-defined Dial Pads can be provided by the MAGIC THipPro Ember+ Provider.
- The dial pads can be used by Lawo mixing consoles and tools to make calls.
- Find the dial pads in the Ember+ tree of the MAGIC THipPro under:
AVT MAGIC THipPro > GPIOs > Dial Pad N
- Find the number entered via a dial pad in the Ember+ tree of the MAGIC THipPro under:
AVT MAGIC THipPro > Operation > Dial Pad Numbers > Dial Pad Number N

MAGIC THipPro MAGIC THipPro Pure

Factory Settings

Set Factory Settings (1)

- MAGIC THipPro (and MAGIC ACip3) can be reset to factory settings via Front Display.
- The configuration of the device is reset.
- All files stored on the device are preserved.
- The configurations of all clients (LAN client, Screener, PhonerSet, ...) are preserved.
- If there is no password configured, the device can be reset via front display as shown on the right.
- To reset the THipPro via the front display, go to **Menu > Presets > Opts > Load Factory Settings**.



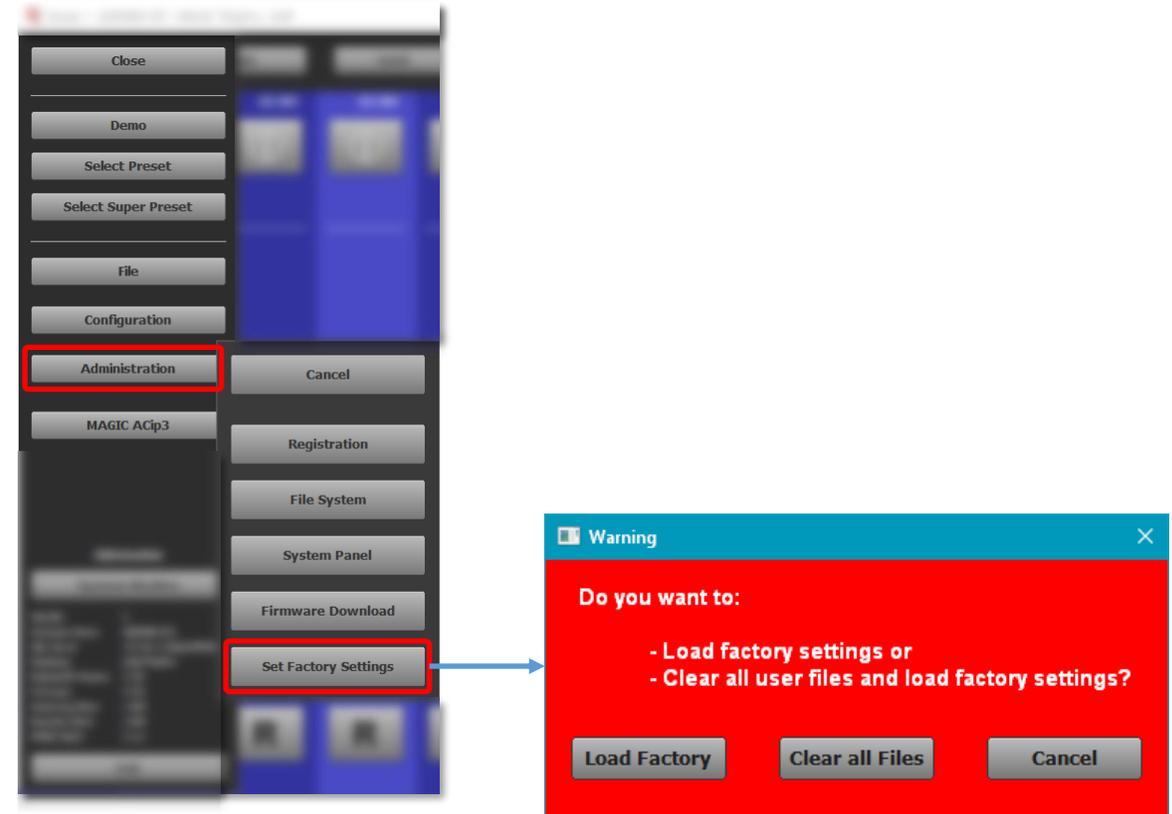
Set Factory Settings (2)

- If there is a password configured but the password is not known, the device can only be reset via the front display.
- To reset the THipPro via the front display, go to **Login > Factory**.



Set Factory Settings (3)

- The MAGIC THipPro can also be reset to factory settings via the LAN Client software.
- Go to **Menu > Administration > Set Factory Settings**.
- Two options are available:
 - **LOAD FACTORY:** The current configuration is reset to factory settings. All files stored on the MAGIC THipPro are preserved including presets, super presets, recorded hold signals, intro / data privacy query / answering machine messages, and the SIP logfile.
 - **CLEAR ALL FILES:** The current configuration is reset to factory settings. All files stored on the MAGIC THipPro are deleted including presets, super presets, recorded hold signals, intro / data privacy query / answering machine messages, and the SIP logfile.
- To also reset a connected ACip3, first reset the ACip3 via **Menu > Magic ACip3 > Set Factory Settings**.



MAGIC THipPro MAGIC THipPro Pure

MAGIC THipPro LAN Client

- Local Settings

Client Settings (1)

Configuration

MAGIC THipPro ACip3 1

Local

Client Settings

- Application Parameters
- Font Settings
- Chat
- Quick Dials
- PRETALK Streaming/Recording
- Social Media
- Settings Folder

Client Settings

Location

Client: Take it from Computer Access List

Studio: Take it from system configuration

Enable Master Client Ability

Computer Name Alias:

Use PRETALK: Take it from system configuration

Caller Lines

Time information shows time on current Audio line

Add salutation: Never

Call Forwarding

1st. default telephone number: ECT - Attended Call Transfer Name:

2nd. default telephone number: ECT - Attended Call Transfer 502 Name: Desk

Client ID: 5 Studio: 1

OK Abbrechen

Client Settings (2)

- Local settings control the look and the behaviour of the LAN Client PC software.
- They are stored on the PC.
- Find settings regarding the client ID, the presentation of caller lines and call forwarding on the CLIENT SETTINGS page.
- LOCATION:
 - CLIENT: Define how the client retrieves its client ID.
 - TAKE IT FROM COMPUTER ACCESS LIST (default): The PC software searches for its computer name in the CLIENTS / SECURITY list. It takes over the client ID assigned to the computer name.
 - TAKE IT FROM LOCAL SETTINGS: You must define the COMPUTER NAME ALIAS below. The PC software searches for the COMPUTER NAME ALIAS in the COMPUTER NAME / IP ADDRESS column of the CLIENTS / SECURITY list of the MAGIC THipPro configuration. It adopts the respective client ID. This is helpful when there are multiple PCs which have the same role. Define an individual Pretalk interface for the client with USE PRETALK.
 - CLIENT N: The PC software takes over a specific client ID of the CLIENTS / SECURITY list. This option is intended to be used when checking how changes to the system configuration affect a specific client.
 - NEWS DESK CLIENT: The PC software adopts the role of a news desk client. This option is intended to be used when checking how changes to the system configuration affect a specific client. Please note that a news desk client is not allowed to change the system configuration.
- ENABLE MASTER CLIENT ABILITY: Access to shared resources like the database or dynamic Hold files is managed by the master client. The master client is automatically determined by the system from all connected clients. If a client does not have access to shared resources, the master client ability should be deactivated for that client.
- COMPUTER NAME ALIAS: See LOCATION – CLIENT – TAKE IT FROM LOCAL SETTINGS on the left.
- USE PRETALK: Only available if CLIENT = TAKE IT FROM LOCAL SETTINGS.
 - TAKE IT FROM SYSTEM CONFIGURATION: The client uses the Pretalk interface defined on the CLIENTS AUDIO ASSIGNMENT configuration page.
 - PRETALK N: Select an individual Pretalk interface.

Client Settings (3)

- **CALLER LINES:**
 - **TIME INFORMATION SHOWS TIME ON CURRENT AUDIO LINE:** By default, a clock is displayed on each telephone line which indicates for how long the caller is already on the line. Enable this option to reset the clock each time the user changes the audio line (Pretalk, Hold, On Air).
 - **ADD SALUTATION:** Select whether the gender of a caller is displayed on the info button of a telephone line. If activated the caller's name is preceded by Mr. or Mrs. If the gender is set in the phonebook database for that contact.
 - **NEVER (default):** No salutation is displayed.
 - **ALWAYS:** The salutation is always displayed.
 - **WHEN FIRST NAME IS MISSING:** The salutation is only displayed when the caller's first name is not stored in the phonebook database.

Client Settings (4)

- **CALL FORWARDING:** Define how call forwarding is presented on the LAN client. Only predefined modes are accessible to the user. Two modes (1st and 2nd) can be defined here. In general, the THipPro allows to talk to the call forwarding destination when the caller is in Pretalk. If the caller is in Hold or On Air, the call transfer is completed directly.

For each mode, three parameters can be set:

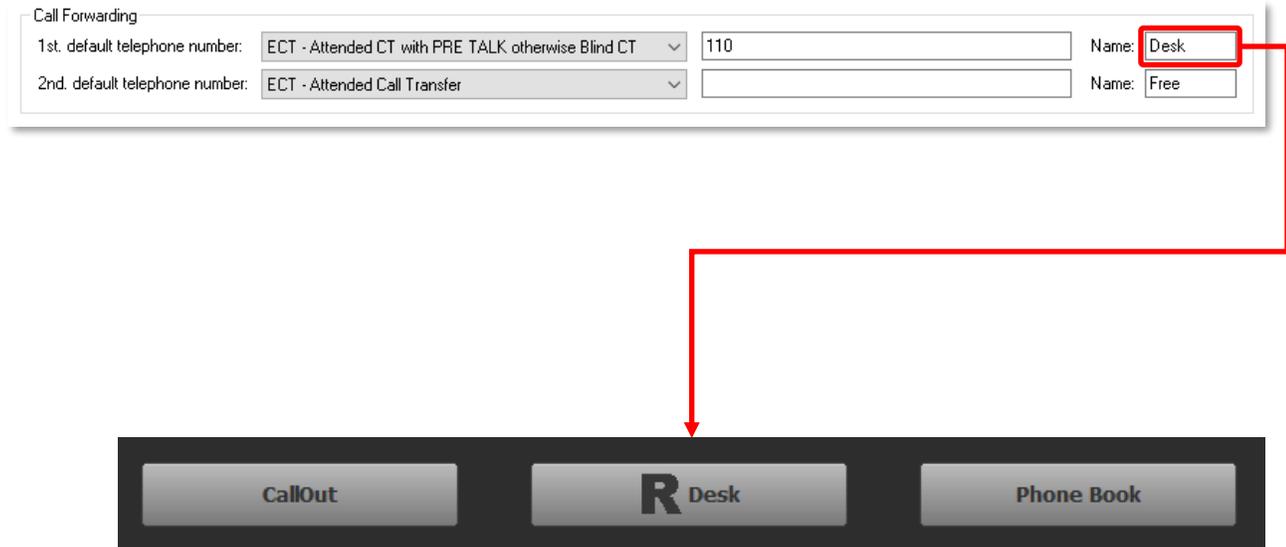
- **TECHNICAL CALL TRANSFER MODE:** Define how the call transfer is carried out technically by the system:
 - **CALL FORWARDING OVER SEPARATE LINE:** Select this mode if the THipPro should control the whole process. Internal telephone lines must be reserved for call forwarding on the LINE INTERFACE configuration page. The THipPro routes audio between the caller line and the call forwarding line. The telephone line is blocked until the caller has hung up.
 - **ECT:** Stands for Explicit Call Transfer. The call forwarding is done by the PBX or the provider. The THipPro informs the PBX or the provider about the call forwarding destination. When the call transfer is completed the caller line is free for the next call.

Three ECT modes are available:

- **ATTENDED CALL TRANSFER:** The user can talk to the call forwarding destination when the call is in Pretalk. Otherwise, the call transfer is completed directly.
- **BLIND CALL TRANSFER:** The call transfer is always completed directly. The user cannot talk to the call forwarding destination.
- **ATTENDED CT WITH PRETALK OTHERWISE BLIND CT:** The user can talk to the call forwarding destination when the call is in Pretalk. Otherwise, the call transfer is completed directly.
- **CALL FORWARDING OVER COLLABORATION SERVER LINE:** Select this mode if the THipPro should control the whole process and the call forwarding destination is a Microsoft Teams account. Internal collaboration server lines must be reserved for call forwarding on the LINE INTERFACE configuration page. The THipPro routes audio between the caller line and the call forwarding line. The telephone line is blocked until the caller has hung up.

Client Settings (5)

- **NUMBER / COLLABORATION SERVER ACCOUNT:** You could leave this field empty or enter a telephone number or a Microsoft Teams account. If the field is empty the user will be prompted to enter the call forwarding destination. Otherwise, the call is forwarded to the number entered here.
- **NAME:** Define the label of the call forwarding button in the top menu bar.
- The call forwarding button in the top menu bar is used to toggle between the two call forwarding modes. The button switches back to the first mode after each call transfer. The second mode is only used temporarily. The label shows which mode is active.



Application Parameters (1)

Configuration

MAGIC THipPro ACip3 1

Local

- Client Settings
- Application Parameters**
- Font Settings
- Chat
- Quick Dials
- PRETALK Streaming/Recording
- Social Media
- Settings Folder

Application Parameters

Main Window Presentation

Screen resolution: 1920*1050

Main window size: Auto

Use Studio Logo if available

Client Logo: X:\AVT\Logo.png

{filterid} or {filtertitle} can be inserted as placeholder at any position of the logo path, if content filters are used.

Side-Bar size: 15 % of the main window width

Show Side-Bar (if available) at application startup

Show title bar (after application restart)

Remember last window position

Show window on fixed position X: 0 Y: 0

Use unicode dingbats (instead of using Wingdings font) in default button text

Wide buttons on caller lines Thick button border

On Screen Keyboard

Keyboard File:

On incoming call ...

Pop up window

Play file Ring.wav

%d in the wave file name will be replaced by the line index (1based) of the line with the incoming call.

Add Touch Screen cleaning option to main menu Disable touch for 30 seconds

Logfile

Logfile Folder: X:\AVT\MAGIC THipPro\Logfiles

File Name Format: <folder>\log-<day of month>.txt (default) Don't log enhanced database/screening messages

Client ID: 5 Studio: 1

Application Parameters (2)

- Define the display of the interface of the software as well as logging on the APPLICATION PARAMETERS configuration page.
- **SCREEN RESOLUTION:** Displays the screen resolution of the monitor the application is displayed on as it is provided by the operating system. This may be different from the resolution defined in the graphic card driver due to the high DPI scaling feature of the operating system.
- **MAIN WINDOW SIZE:** Define the size of the main window. Several options are available:
 - **AUTO:** The window will automatically take up the full screen without covering the taskbar. The window size is determined when the application starts. If the screen resolution changes or the taskbar changes, the application needs to be restarted.
 - **CUSTOM:** Set a custom windows size in pixels. The width and the height must be between 400 and 7680 pixels.
 - **Predefined sizes:** Select one of the predefined windows sizes.
- **LOGO:** The LAN client software can display a custom logo in the top right corner if there is enough space in the top menu bar. The recommended format is PNG with 400x200 pixels and transparent background.
 - **USE STUDIO LOGO IF AVAILABLE:** Enable this option to display the logo defined in the configuration of the MAGIC THipPro on the STUDIO SETTINGS configuration page. The studio logo is displayed if the path is available for the client.
 - **CLIENT LOGO:** Define the logo locally if the studio logo cannot be used. Use the {filterid} or {filtertitle} placeholders to set different logos for each login when USER CONTENT FILTERS are activated.
- **SIDEBAR SIZE:** Define the width of the sidebar on the right in fractions of the app's windows size. The sidebar display LAST CALLS, RECORDINGS or ANSWERING MACHINE messages.

Application Parameters (3)

- **SHOW SIDEBAR (IF AVAILABLE) AT APPLICATION STARTUP:** By default, the sidebar is hidden. Enable this option to show the sidebar when the app starts.
- **SHOW TITLE BAR (AFTER APPLICATION RESTART):** By default, the window has no title bar. The title bar can be useful to drag the window around with the mouse. Enable this option to show the title bar. A restart of the application is required for the changes to take effect.
- **REMEMBER LAST WINDOW POSITION:** The last window position of the main window is stored when closing the app. The next time the app is started, the window is displayed in the same place if this option is enabled. Otherwise, it is displayed in the top left corner of the main screen.
- **SHOW WINDOW ON FIXED POSITION:** Define the position of the top left corner of the application window on the screen when the application starts. The top left corner of the main screen has the coordinates X=0, Y=0.
- **USE UNICODE DINGBATS (INSTEAD OF WINGDINGS FONT) IN DEFAULT BUTTON TEXT:** Define whether to use the Microsoft Wingdings font or Unicode dingbat characters for default labels of the On Air buttons (❶, ❷, ...). Nowadays most fonts include the Unicode characters. So, it is recommended to enable this option.
- **WIDE BUTTONS ON CALLER LINES:** Enable this option to use wider buttons for Pretalk, Hold, On Air,
- **THICK BUTTON BORDER:** Enable this option display thicker edges on the Pretalk, Hold, On Air, ... buttons.
- **ON SCREEN KEYBOARD:** The application can display an on-screen keyboard for text entry. Select a keyboard layout by loading the corresponding KEYBOARD FILE from the installation directory. The keyboard is automatically displayed when it is needed.

Application Parameters (4)

- **ON INCOMING CALL:** Apart from blinking audio line buttons the application can indicate incoming calls in two more ways:
 - **POP UP WINDOW:** Enable this option to bring the LAN client window into the foreground when a call comes in.
 - **PLAY FILE:** Enable this option to play the specified audio file when a call comes in. Use %d to play a different file for each line.
Example: File name C:\Ring %d.wav
An incoming call on the first line plays the file C:\Ring 1.wav. Second line = C:\Ring 2.wav.
- **ADD TOUCH SCREEN CLEANING OPTION TO MAIN MENU:** Enable this option to add a button labeled “Touch Screen Cleaner” to the menu sidebar. Press that button to disable the whole screen for the specified time. During this time the screen can be cleaned without making any undesired inputs. Press escape to abort.
 - **DISABLE TOUCH FOR N SECONDS:** Set time needed for cleaning the screen.
- **LOGFILE:** The LAN client software writes one logfile per day. The file name ends with log-01.txt, log-02.txt, The number stands for the day of the month. So, the logfiles are overwritten each month.
 - **LOGFILE FOLDER:** Specify the folder to store the logfiles in.
 - **BROWSE:** Select a logfile folder from the file system.
 - **OPEN:** Press the button to open the logfile of the current day.
 - **FILE NAME FORMAT:** Specify the file name and optional subfolder.
 - Adding <lan-client> to the file name is recommended when LAN client and Screener use the same logfile folder.
 - Adding <computer name> to the path is recommended when the logfiles of several clients are written to a common network share.
 - **DON'T LOG ENHANCED DATABASE / SCREENING MESSAGES:** Enable this option to get smaller logfiles. Not recommended.

Font Settings (1)

Configuration

MAGIC THipPro ACip3 1

Local

- Client Settings
- Application Parameters
- Font Settings**
- Chat
- Quick Dials
- PRETALK Streaming/Recording
- Social Media
- Settings Folder

Font Settings

Caller Line

	Font Name	Font Size	Font Weight
Line label:	<Default>	<Default>	<Default>
Info button (Name):	<Default>	<Default>	<Default>
Info button (Number/City):	<Default>	<Default>	<Default>
Screening information:	<Default>	<Default>	<Default>
Comment:	<Default>	<Default>	<Default>
Received DTMF information:	<Default>	<Default>	<Default>
Connection time:	<Default>	<Default>	<Default>

Top Line

Button:	<Default>	<Default>	<Default>
---------	-----------	-----------	-----------

Side Bar

Text:	<Default>	<Default>	<Default>
Small text:	<Default>	<Default>	<Default>

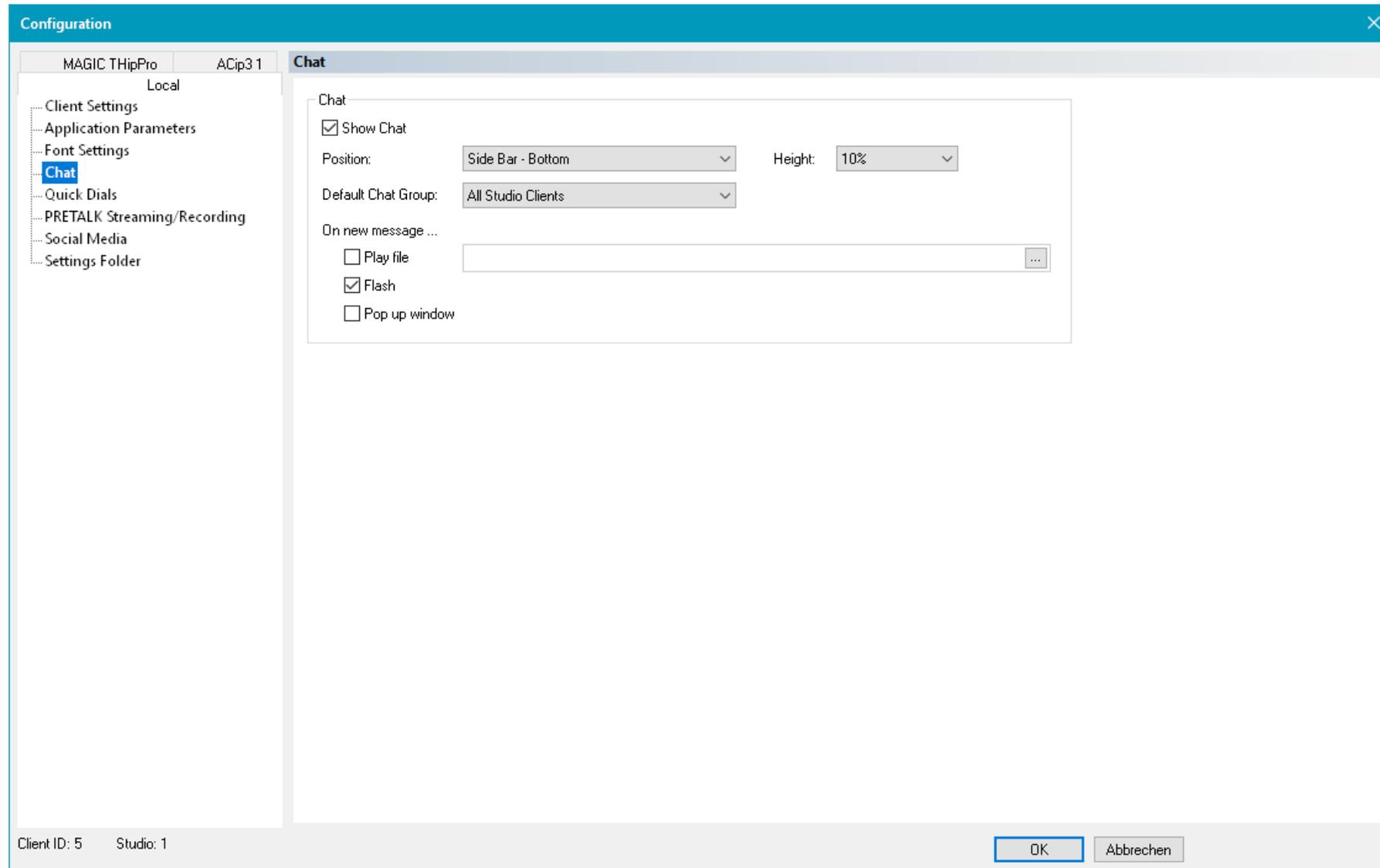
Client ID: 5 Studio: 1

OK Abbrechen

Font Settings (2)

- Define how text is displayed on the main window on the FONT SETTINGS page.
- For each element you can change:
 - FONT NAME
 - FONT SIZE
 - FONT WEIGHT
- CALLER LINE: The text elements on the telephone lines:
 - LINE LABEL
 - INFO BUTTON (NAME)
 - INFO BUTTON (NUMBER / CITY)
 - SCREENING INFORMATION
 - COMMENT
 - RECEIVED DTMF INFORMATION
 - CONNECTION TIME.
- TOP LINE: The button labels on the top menu bar.
 - BUTTON
- SIDEBAR: The text elements on the menu sidebar.
 - TEXT
 - SMALL TEXT
- For each element you can select <default> to reset the value to application default.

Chat (1)



Chat (2)

- Define how the LAN client can access the THipPro chat on the CHAT page.
- The PC clients have an integrated chat function. A chat window can be displayed in the sidebar on the right.
- **SHOW CHAT:** Enable this option if the chat window should be displayed on this client.
- **POSITION:** The chat window can either occupy the upper or the lower half of the sidebar on the right.
- **HEIGHT:** Define the height of the chat window in fractions of the total height of the sidebar on the right.
- **DEFAULT CHAT GROUP:** There are several chat groups. Define which one is show when starting the LAN client.
 - **ALL STUDIO CLIENTS:** The chat group includes all client of a studio.
 - **LAN CLIENTS:** The chat group includes all LAN clients of the studio.
 - **SCREENER:** The chat group includes all Screener clients of the studio.
- **ON NEW MESSAGE:** Define how a new message is indicated.
 - **PLAY FILE:** Enable this option to play the specified audio file.
 - **FLASH:** Enable this option to make the frame of the chat feed flash.
 - **POP UP WINDOW:** Enable this option to bring the application window to the foreground.

Quick Dials

- Up to ten individual quick dials for each LAN client can be configured on the QUICK DIALS page.
- The Quick Dials are displayed on the right in the phone book.
- **NAME:** Enter the name which is displayed on the quick dial button in the phone book.
- **NUMBER:** Enter the telephone number or the Microsoft Teams account which is dialed when the quick dial button in the phone book is pressed.
- **USE COLLABORATION SERVER:** Enable this option if a Microsoft Teams account is entered under NUMBER.

The screenshot shows the 'Configuration' window for 'MAGIC THipPro' on 'ACip3 1'. The 'Quick Dials' section is active, displaying a table with the following data:

	Name	Number	Use Collaboration Server
1:	Peter	205	<input type="checkbox"/>
2:	Paul	206	<input type="checkbox"/>
3:	Jim	191	<input type="checkbox"/>
4:	John	387	<input type="checkbox"/>
5:	Doc		
6:	Jane		
7:	Home		
8:	Service		
9:	Hotline		
10:	Pizza		

Below the table, a list of quick dials is shown, with the names Peter, Paul, Jim, John, Doc, Jane, Home, Service, Hotline, and Pizza. A dial pad overlay is visible in the foreground, showing a list of names (Peter, Paul, Jim, John, Doc, Jane, Home, Service, Hotline, Pizza) and a numeric keypad. The Peter button is highlighted with a red box.

PRETALK Streaming / Recording (1)

The screenshot shows the 'Configuration' window for 'MAGIC THipPro' and 'ACip3 1'. The 'PRETALK Streaming/Recording' section is active. The left sidebar lists settings categories: Client Settings, Application Parameters, Font Settings, Chat, Quick Dials, PRETALK Streaming/Recording (selected), Windows Integration, Social Media, and Settings Folder. The main area is divided into 'Pretalk Interfaces' and 'Recording Interfaces'. 'Pretalk Interfaces' includes 'Audio Input' (Default Communication Device), a checkbox for 'Stream test signal to MAGIC THipPro', 'Quality' (Telephone (Default)), 'Audio Output' (Default Communication Device), and a checkbox for 'Play test signal on audio output'. 'Recording Interfaces' includes 'Recording Input' (Primärer Soundaufnahmetreiber) and 'Recording Output' (Primärer Soundtreiber). The 'General' section includes 'Recording Device' (Pretalk Interface), 'Playback Device' (Pretalk Interface), 'Recording Mode' (Record caller and presenter to a mono audio file), a checked checkbox for 'Use Studio Recording Folder if available', a text field for 'Client Recording Folder' (X:\Public\AVT\MAGIC THipPro\Recordings) with a 'Browse' button, a checkbox for 'Show all recordings', a checkbox for 'Automatically start recording when switching to PRETALK', and an 'External Audio Editor' field with a 'Browse' button. At the bottom, 'Client ID: 6' and 'Studio: 1' are displayed, along with 'OK' and 'Abbrechen' buttons.

Configuration

MAGIC THipPro ACip3 1

Local

- Client Settings
- Application Parameters
- Font Settings
- Chat
- Quick Dials
- PRETALK Streaming/Recording**
- Windows Integration
- Social Media
- Settings Folder

PRETALK Streaming/Recording

Pretalk Interfaces

Audio Input: Default Communication Device

Stream test signal to MAGIC THipPro

Quality: Telephone (Default)

Audio Output: Default Communication Device

Play test signal on audio output

Recording Interfaces

Recording Input: Primärer Soundaufnahmetreiber

Recording Output: Primärer Soundtreiber

General

Recording Device: Pretalk Interface Playback Device: Pretalk Interface

Recording Mode: Record caller and presenter to a mono audio file

Use Studio Recording Folder if available

Client Recording Folder: X:\Public\AVT\MAGIC THipPro\Recordings

Show all recordings

Automatically start recording when switching to PRETALK

External Audio Editor:

Client ID: 6 Studio: 1

PRETALK Streaming / Recording (2)

- There are two ways of using the built-in audio interfaces of the PC for Pretalk with a caller on the THipPro.

- **PRETALK STREAMING**

- Can be used for Pretalk or as audio interface for the answering machine. (See CONFIGURATION - ANSWERING MACHINE for more details.)
- The audio signal of an audio input of the PC is streamed to the THipPro by the LAN Client.
- The THipPro streams the audio signal of the caller to the PC.
- The LAN client outputs the audio signal of the caller to an audio interface of the PC.
- A Pretalk stream is either fixed, where there is a permanent stream between the PC and the THipPro, or dynamic, where the LAN client requests a stream from the THipPro when needed.
- The audio signals of the caller and the user can also be recorded by the LAN client.
- The RECORD button on the LAN client is only available when at least one call is in Pretalk.

- **PRETALK RECORDING**

- Can be used if the audio signals are transmitted between THipPro and PC via the audio interfaces of the THipPro (analogue, AES/EBU, AES67, Dante, Ravenna).
- The LAN client can record the audio signal from the audio input of the PC.
- The LAN client can use an audio output of the PC to play back the recordings.
- The RECORD button on the LAN client is always available.

PRETALK Streaming / Recording (3)

- **PRETALK INTERFACES:** Define the audio interfaces of the PC which should be used for Pretalk streaming.
 - **AUDIO INPUT:** All available audio inputs are listed here. Select an audio input, the Primary Sound Capture Driver or the Default Communication Device. (Check the sound settings of the operating system to see which audio interfaces are set as Primary Sound Capture Driver and Default Communication Device.)
 - **STREAM TEST SIGNAL TO THIPPRO:** If enabled, the LAN client uses the clock provided by the audio interface to generate an audio signal which is streamed to the THipPro. There must be a telephone line in pretalk to hear the audio signal at the caller's end.
 - **QUALITY:** Select the audio quality for the audio stream from the PC to the THipPro. That's what the caller hears. There are two options:
 - **TELEPHONE:** Lower audio quality, saves bandwidth (default)
 - **HD-VOICE:** Higher audio quality
 - **AUDIO OUTPUT:** All available audio outputs are listed here. Select an audio output, the Primary Sound Driver

or the Default Communication Device. (Check the sound settings of the operating system to see which audio interfaces are set as Primary Sound Driver and Default Communication Device.)

- **PLAY TEST SIGNAL ON AUDIO OUTPUT:** If enabled the LAN client generates an audio signal and plays it on the audio output if a pretalk stream from the THipPro is received.
- **RECORDING INTERFACES:** Define the audio interfaces of the PC which should be used for Pretalk Recording.
 - **AUDIO INPUT:** All available audio inputs are listed here. Select an audio input or the Primary Sound Capture Driver. (Check the sound settings of the operating system to see which audio interface is set as Primary Sound Capture Driver.)
 - **AUDIO OUTPUT:** All available audio outputs are listed here. Select an audio output or the Primary Sound Driver. (Check the sound settings of the operating system to see which audio interface is set as Primary Sound Driver.)

PRETALK Streaming / Recording (4)

■ GENERAL

- RECORDING DEVICE: Define if Pretalk Streaming or Pretalk Recording should be used when pressing the RECORD button on the main panel of the LAN client software.
 - PRETALK INTERFACE: Select if Pretalk Streaming should be used.
 - RECORDING INTERFACE: Select if Pretalk Recording should be used.
- PLAYBACK DEVICE: Define which audio output device should be used for playback of recorded audio files.
 - PRETALK INTERFACE: Select if the output device of Pretalk Streaming should be used.
 - RECORDING INTERFACE: Select if the output device of Pretalk Recording should be used.
- RECORDING MODE: Define which audio signals should be recorded.
 - RECORD CALLER TO A MONO AUDIO FILE: Only the audio signal of the caller is recorded and written to a

mono audio file.

- RECORD CALLER AND PRESENTER TO A STEREO AUDIO FILE: The audio signals of the caller and the user of the LAN client are recorded and written to separate channels of a stereo audio file.
- RECORD CALLER AND PRESENTER TO A MONO AUDIO FILE: The audio signals of the caller and the user of the LAN client are recorded and mixed into a mono audio file.

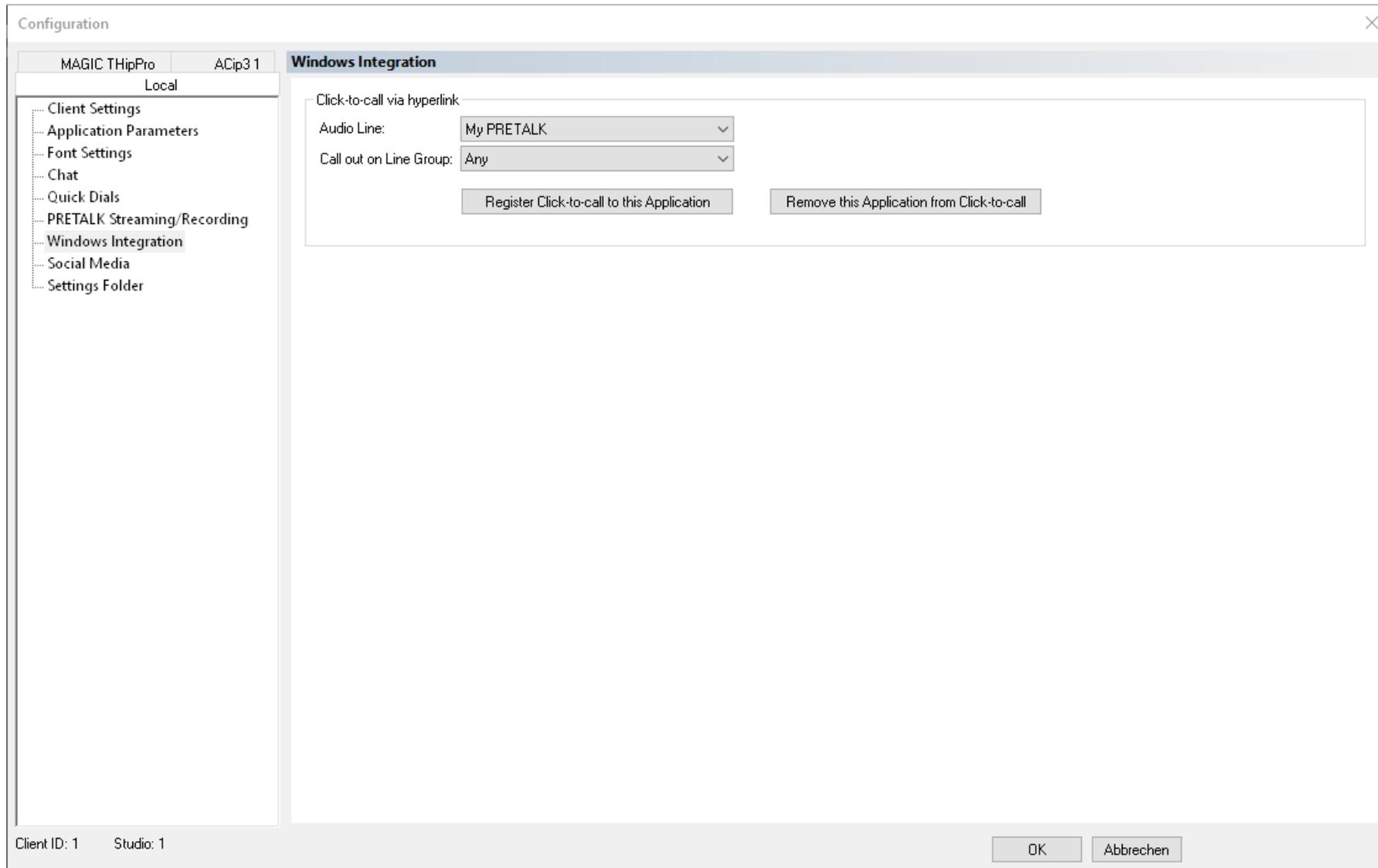
PRETALK Streaming / Recording (5)

- **USE STUDIO RECORDING FOLDER IF AVAILABLE:** Enable this option if the recordings should be stored in the Recording folder which is defined on the STUDIO SETTINGS configuration page of the THipPro. If the studio recording folder is not available for the LAN client, it will use the client recording folder.
- **CLIENT RECORDING FOLDER:** Specify the folder where recordings should be stored. This could be a local folder or a network share. Use the BROWSE button to select a folder from the file system.
- **SHOW ALL RECORDINGS:** By default, the LAN client displays only the recordings created by itself in the Recordings list in the sidebar on the right. Enable this option to display all recordings present in the recording folder used by the LAN client.
- **AUTOMATICALLY START RECORDING WHEN SWITCHING TO PRETALK:** Enable this option to automatically record any caller in Pretalk. Recording stops automatically when a call is switched to Hold

or On Air or when the call is dropped.

- **EXTERNAL AUDIO EDITOR:** Define an external audio editor. Display the Recordings list on the sidebar on the right. Click on a recording with the right mouse button and click EDIT to open the recording in the specified audio editor.

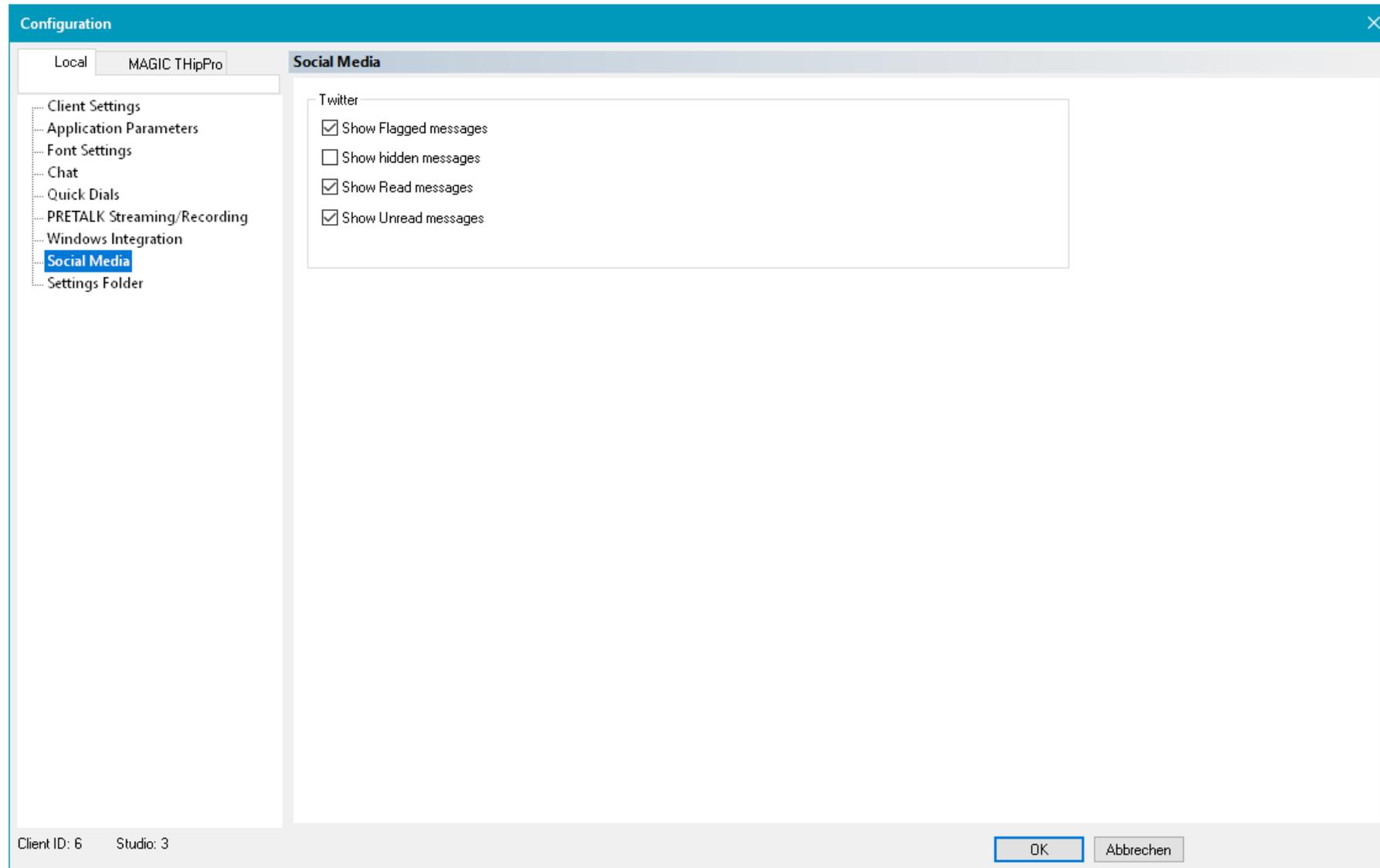
Windows Integration (1)



Windows Integration (2)

- Enable the click-to-call integration of the LAN client on the WINDOWS INTEGRATION page.
- With click-to-call the user can click telephone links e. g. on websites to call via the THipPro.
- For that, the LAN Client must be registered in Windows for click-to-call.
- AUDIO LINE: Select an audio line of the THipPro which is used for calling.
- CALL OUT ON LINE GROUP: The THipPro uses a free line of this line group to call out.
- REGISTER CLICK-TO-CALL TO THIS APPLICATION: Register the LAN client for click-to-call in Windows.
- REMOVE THIS APPLICATION FROM CLICK-TO-CALL: Unregister the LAN client from click-to-call in Windows.

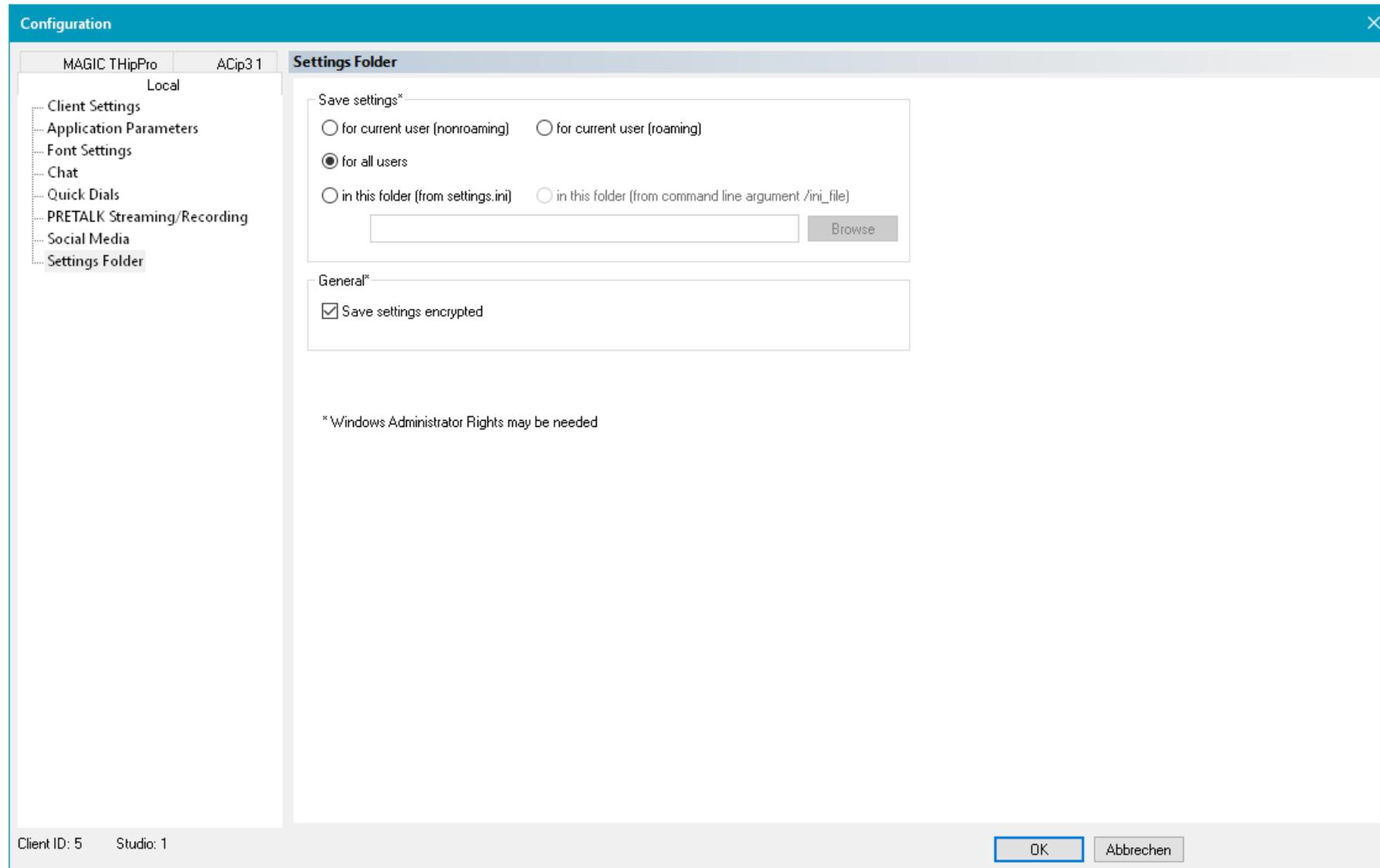
Social Media (1)



Social Media (2)

- Control which X (Twitter) posts are displayed in the LAN client software on the SOCIAL MEDIA page.
- TWITTER
 - SHOW FLAGGED MESSAGES
 - SHOW HIDDEN MESSAGES
 - SHOW READ MESSAGES
 - SHOW UNREAD MESSAGES

Settings Folder (1)



Settings Folder (2)

- Define the storage location of the local settings on the SETTINGS FOLDER page.
- Local settings include all settings under the LOCAL tab in the system configuration as well as the settings under MENU – CONFIGURATION – CONTROL INTERFACE.
- The selected storage location determines which access rights are required to change the local settings.
- Changing these settings may require administrator rights.
- Select a settings location:
 - FOR CURRENT USER (NONROAMING): The settings are saved in the user directory of the logged-in account and are not synchronized to other PCs. User rights are sufficient to change the local settings. (%APPDATA%\LOCAL\AVT\MAGIC THipPro LAN)
 - FOR CURRENT USER (ROAMING): The settings are saved in the user directory of the logged-in account and synchronized to other PCs in the domain. User rights are sufficient to change the local settings. (%APPDATA%\ROAMING\AVT\MAGIC THipPro LAN)
- FOR ALL USERS: All users of the PC use the same settings. Administrator rights are required to change the local settings. (%PROGRAMDATA%\AVT\MAGIC THipPro LAN)
- IN THIS FOLDER (FROM SETTINGS.INI): The settings are saved in an adjustable folder path. The required user rights are determined by the file's properties. The path is saved in the settings.ini file in the installation directory.
- IN THIS FOLDER (FROM COMMAND LINE ARGUMENT /INI_FILE): The settings are saved in an adjustable folder path. The path was passed by command line parameter. The access rights of the folder determine who can change the Local Settings.
- STORE SETTINGS ENCRYPTED: Enable to encrypt the content of the local settings file.

MAGIC THipPro MAGIC THipPro Pure

MAGIC THipPro Screener

- Local Configuration

General (1)

General

Operation

Screeener

Presenter

Pretalk

Appearance

Colours

Database

Twitter

Import External Data

Notifications

Connect to

Interface: Intel(R) Gigabit CT Desktop Adapter #2 / 172.20.225.1 - Private

IP Address: 172.20.30.25 Port: 10000 Alias: TF-THipPro

Backup system available:

IP Address: Port: 10000 Alias:

Computer Name Alias: Use Pretalk: Default

Logfile

Logfile Folder: C:\Users\Public\AVT\MAGIC THipPro\Logfiles

File Name Format: <folder>\log-<day of month>.txt (default)

Default Export Folder

Folder: C:\Users\Public\AVT\MAGIC THipPro\Export

E-Mail

Enabled:

Master ability

Enabled:

Login Password

Password:

Save Settings*

for all users C:\ProgramData\AVT\MAGIC THipPro Screener

for current user C:\Users\screener\AppData\Roaming\AVT\MAGIC THipPro

in this folder

* requires Windows Administrator rights

Save Configuration Load Configuration OK Cancel

General (2)

- Click the MENU icon in the top left corner of the THipPro Screener software and select LOCAL CONFIGURATION.
- A window will be displayed showing the GENERAL configuration page.
- CONNECT TO: Specify how the Screener software connects to a THipPro.
 - INTERFACE: Select the network card of the PC which has access to the THipPro. Select DEFAULT to let the operating system determine the network card automatically.
 - IP ADDRESS: Enter the IP address of the LAN interface of the THipPro to be used for control.
 - PORT: Enter the port number used for PC control (default = 10 000)
- ALIAS: Using the Studio button in the top bar of the main panel, you can switch between the main device and the backup device. The text entered here is shown on the button instead of the IP address of the device.
- BACKUP SYSTEM AVAILABLE: Enable this option if the user should be able to switch between two THipPro devices via a button in the top bar of the main panel.
 - IP ADDRESS: Enter the IP address of the LAN interface of the THipPro to be used for control.
 - PORT: Enter the port number used for PC control (default = 10 000)
 - ALIAS: Using the Studio button in the top bar of the main panel, you can switch between the main device and the backup device. The text entered here is shown on the button instead of the IP address of the device.

General (3)

- **COMPUTER ALIAS NAME:** By default, the Client ID of the Screener is defined by entering the computer name or IP address in the CLIENTS / SECURITY list of the MAGIC THipPro configuration. If multiple clients should share the same client ID, an alias must be defined in the COMPUTER NAME / IP ADDRESS column of the CLIENTS / SECURITY list. The same alias is then entered here. Define an individual Pretalk interface for the client with USE PRETALK.
- **USE PRETALK:** Only available if CLIENT = TAKE IT FROM LOCAL SETTINGS.
 - **DEFAULT:** The client uses the Pretalk interface defined on the CLIENTS AUDIO ASSIGNMENT configuration page.
 - **PRETALK N:** Select an individual Pretalk interface.
- **LOGFILE:** The Screener software writes one logfile per day. The file name ends with log-01.txt, log-02.txt, The number stands for the day of the month. So, the logfiles are overwritten each month.
 - **LOGFILE FOLDER:** Specify the folder to store the logfiles in.
 - **BROWSE:** Select the logfile folder from the file system.
 - **OPEN:** Press the button to open the logfile of the current day.
- **FILE NAME FORMAT:** Specify the file name and optional subfolder.
 - Adding <screener> to the file name is recommended when LAN client and Screener use the same logfile folder.
 - Adding <computer name> to the path is recommended when the logfiles of several clients are written to a common network share.
- **DEFAULT EXPORT FOLDER:** The Screener client can display several lists like Last Callers, Noted Callers, The lists can be exported to PDF or EXCEL files. Specify the folder where the exported files will be stored here.
 - **BROWSE:** Select the export folder from the file system.
- **E-MAIL ENABLED:** Enables sending exported PDF or EXCEL files via E-Mail.

General (4)

- **MASTER ABILITY ENABLED:** Access to shared resources like the database or dynamic Hold files is managed by the master client. The master client is automatically determined by the system from all connected clients. If a client does not have access to shared resources, the master client ability should be deactivated for that client.
- **LOGIN PASSWORD:** Define a password to restrict access to the menu side bar. Only **SYSTEM INFORMATION** and **SYSTEM MONITOR** will be available without logging in.
- **SAVE SETTINGS:** Define the storage location of the local settings here.
 - Local settings include all settings in the **LOCAL CONFIGURATION** window.
 - The selected storage location determines which access rights are required to change the local settings.
 - Changing these settings may require administrator rights.
- **Select a settings location:**
 - **FOR ALL USERS:** All users of the PC use the same settings. Administrator rights are required to change the local settings. (C:\ProgramData\AVTMAGIC THipPro Screener)
 - **FOR CURRENT USER:** The settings are saved in the user directory of the logged-in account and synchronized to other PCs in the domain. User rights are sufficient to change the local settings. (%APPDATA%\ROAMING\AVTMAGIC THipPro Screener)
 - **IN THIS FOLDER:** The settings are saved in an adjustable folder path. The path is saved in the settings.ini file in the installation directory. The access rights of the folder determine who can change the Local Settings.
 - **BROWSE:** Select the storage location from the file system.

Operation (1)

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Operation Mode

- Screener Hide Data Entry Mask
- Presenter View only
- Presenter ON AIR
- Data Manager
- Call Out (requires Layout_CallOut_1920x1080)

On incoming call ...

Pop up window:

Play WAV file: with line no:

Folder: C:\Program Files (x86)\AV

Change RING.WAV for own sounds

Use PRETALK/REC. Sound Device:

General

Show ON AIR button labels: Prevent multiple Instances:

Show Quick Dial buttons: Show CLEAN TOUCH SCREEN: Timer: 30 sec

Global Default Strings (requires application restart)

Salutation for male callers: Mr. Only without First Name:
(In Screener mode always active)

Salutation for female callers: Ms.

Display 'Anonym' marked callers as: * Anonymity Requested *
(only in Presenter mode or LAN client visible)

Chat

Show Chat: Default Chat Group: STUDIO - all clients of my studio

Position: Main/Right List - Top Height: 10%

On new message Beep: Flash: Popup up: Hide Quick Messages:

Save Configuration Load Configuration OK Cancel

Operation (2)

- Set the operation mode and further basic settings on the OPERATION page.
- OPERATION MODE: The Screener software provides several modes which are optimized for certain use cases.
 - SCREENER: Default mode. This mode is optimized for telephony and data acquisition and editing. Provides a Pretalk audio line, lists and the data entry mask.
 - HIDE DATA ENTRY MASK: The data entry mask can be disabled. Entering data on the line itself is still possible.
 - PRESENTER: This mode is optimized for displaying caller information and minimal interaction with the system for the user.
 - VIEW ONLY: The telephone lines cannot be controlled by the user. The Screener is just used to display caller information and line status.
 - PRESENTER ON AIR: Same as PRESENTER.
 - DATA MANAGER: This mode is optimized for editing caller information data. No telephone lines are displayed.
- CALL OUT: Very similar to SCREENER. It displays only one ON AIR button and hides the HOLD button. The data entry mask allows direct access to up to six phone numbers per contact. The layout “Call Out 1920x1080” must be used. (See SCREENER configuration page.)
- ON INCOMING CALL...: The Screener software can notify the user when a call comes in.
 - POP UP WINDOW: Brings the Screener window to the foreground.
 - PLAY WAV FILE: The screener plays an audio file specified under FOLDER on the default audio interface of the PC. The filename must be RING.WAV. It must be a PCM encoded file in WAVE file format.
 - WITH LINE NO: Enable this option if there is an individual audio file for each line. The file names must be RING1.WAV, RING2.WAV,
 - FOLDER: Specify the folder of the audio file. By default, the installation directory of the Screener software is used.
 - USE PRETALK / REC. SOUND DEVICE: The Screener plays the audio on the audio interface defined under PRETALK.

Operation (3)

■ GENERAL

- **SHOW ON AIR BUTTON LABELS:** By default, the Screener software shows AIR 1 or AIR 2 on the ON AIR buttons. Enable this option to show the labels defined on the MODE & AUDIO LINE page of the system configuration.
- **SHOW QUICK DIAL BUTTONS:** Enable this option to display 16 quick dials on the dialog for manual dialling. Open the manual dialling dialog in the main window and click on a quick dial with the right mouse button to configure it. Click on it with the left mouse button to dial the number.
- **PREVENT MULTIPLE INSTANCES:** Enable this option if the software should prevent that a second Screener software can be started on the PC.
- **SHOW CLEAN TOUCH SCREEN:** Enable this option to show a button in the menu sidebar which allows for preventing any user input for a certain timespan. During this time the screen can be cleaned.
 - **TIMER:** Set the amount of time the screen ignores user input.

- **GLOBAL DEFAULT STRINGS:** Changes made here only take effect after restarting the Screener application.

- **SALUTATION FOR MALE CALLERS:** Default: Mr.
- **SALUTATION FOR FEMALE CALLERS:** Default: Ms.
- **ONLY WITHOUT FIRST NAME:** Enable this option if the salutation should only be shown when the first name of the caller is not stored in the database. In Screener mode this is always active.
- **DISPLAY 'ANONYM' MARKED CALLERS AS:** Enter the text that is displayed when a caller is stored in the database as anonymous. The text is only displayed in Presenter mode and in the LAN client.

Operation (4)

- **CHAT**
 - The PC clients have an integrated chat function.
 - **SHOW CHAT:** Enable to access the chat on this client.
- **DEFAULT CHAT GROUP:** Select which group receives messages by this client by default. Other groups can be addressed using @<Group/User>:
 - @All or @Studio: All clients of a studio
 - @Screener: All Screener clients of a studio
 - @LAN: All LAN clients of a studio
 - @ChatName: Dedicated client
- **POSITION:** Define where the chat window is displayed:
 - **RESIZABLE WINDOW:** The chat is shown in an extra window floating on the screen. The chat window can be positioned and resized using the mouse. To open the chat window press CTRL + SHIFT + C.
 - **DATA ENTRY MASK - BOTTOM:** The chat is shown below the data entry mask on the right.
 - **MAIN / RIGHT LIST – TOP:** The chat is shown above the main list. If two lists are shown side by side, it is shown above the right list.
 - **LEFT LIST – TOP:** If two lists are shown side by side, the chat is displayed above the left list.
- **ON NEW MESSAGE:** Define how a new chat message is signalled to the user.
 - **BEEP:**
 - **FLASH:** The frame of the chat window flashes in red.
 - **POPUP UP:** A window pops up informing the user.
- **HIDE QUICK MESSAGES:** There are three buttons at the bottom of the chat window. Right click on a button to define a quick message which is sent when clicking the button with the left mouse button. Enable this option to hide the quick message buttons.

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Layout Settings

Standard Layout: Default

Show Address after Prize only:

Hide/Show Elements

Hide Line Information:

Hide HOLD button:

Show Profiles

Use show profiles:

Allow editing of show profiles:

Allow changing of show profiles:

Caller Notification

Note caller automatically:

Allow 'Noted' on caller lines:

Competitions

Enable Competitons:

Allow editing/creating competitions:

Allow de-/activation of competitions:

Allow managing of winner lists:

Add address in Event/Winner list:

Allow only 'Edit Mode' for client:

Restrictions

Restrict LIST/DELETE/SQL/PRINT & EXPORT COMPLETE DATABASE functions:

Save Configuration Load Configuration OK Cancel

Screener (2)

- **LAYOUT SETTINGS:** Define the layout of the data entry mask.
 - **STANDARD LAYOUT:** The Screener software comes with a variety of layouts for the data entry mask. The layout files are stored in the installation directory of the Screener software under \Layouts. To be able to select a layout here, the layout must be imported into the database first on the DATABASE configuration page. The layout DEFAULT is always available.
 - **SHOW ADDRESS AFTER PRIZE ONLY:** The address information fields (City, ZIP, Street) are not displayed until a prize is entered for a caller.
- **HIDE / SHOW ELEMENTS:** Modify the appearance of the phone lines.
 - **HIDE LINE INFORMATION:** Enable this option to hide the information field. on the phone lines.
 - **HIDE HOLD BUTTON:** Enable this option to hide the HOLD buttons on all lines.
- **SHOW PROFILES:** Show profiles help to group caller information when multiple shows use the same

database. Show profiles are created using the Profile Editor. For each show a title and several topics can be defined. Enable the show profile via the SELECT SHOW PROFILE button above the data entry mask. When the show profile is active you can assign one of the predefined topics to each caller and also enter contact details and additional information. Callers which sound interesting can be noted by pressing the star icon in the data entry mask. An editor can then review all noted callers and decide whom will make it into the show. These callers are then added to the Call Back List by the editor. The other contacts are dismissed. During the show the presenter sees the Call Back List where the contacts are displayed along with the topic and the additional information. The presenter can select a contact and call the number. After the show the Show Profile can be deleted if desired. Optionally, the contacts associated with the Show Profile can be deleted as well.

Screener (3)

- **USE SHOW PROFILE:** Enable this option to make Show Profiles available for this Screener client.
- **ALLOW EDITING OF SHOW PROFILES:** Enable this option if this Screener client should display the Profile Editor. Find the Profile Editor under MENU – PROFILE EDITOR.
- **ALLOW CHANGING OF SHOW PROFILES:** Enable this option to allow this Screener client to activate a Show Profile via the SELECT SHOP PROFILE button above the data entry mask.
- **CALLER NOTIFICATION:** A User can mark a caller by enabling the star icon in the data entry mask. This puts the caller on the Noted Callers list. An editor can later decide if that caller qualifies to be called back during the show. If that is the case the editor puts the caller on the Call Back list. Otherwise, the Noted status should be removed.
 - **NOTE CALLER AUTOMATICALLY:** A caller is noted automatically when changes to the Show Details of the caller are made in the data entry mask.
 - **ALLOW 'NOTED' ON CALLER LINES:** Enable to display the star icon on the phone lines as well.
- **Competitions:** It is possible to manage a whole competition only with the Screener application. Use the Competition Editor to create and edit competitions. Find the Competition Editor under the three-dot menu of the Competitions list.

If, for example, there is a lottery for concert tickets, a Screener user can enter the date, time and location of the event, the available ticket contingent and the number of tickets a winner will receive by default. Tickets for internal purposes can also be reserved here. The ticket price can also be entered for accounting. After the competition is finished the results and winners can be printed for the event team or for accounting.

 - **ENABLE COMPETITIONS:** Enable the competitions feature for this client.
 - **ALLOW EDITING /CREATING COMPETITIONS:** Enable the competition editor for this client.
 - **ALLOW DE- / ACTIVATION OF COMPETITIONS:** Enable this option to allow this client to activate or deactivate a competition.

Screener (4)

- **ALLOW MANAGING OF WINNER LISTS:** Enable this option if the user should be able to use the right mouse button in the Winner list, e.g., to delete a winner.
- **ADD ADDRESS IN EVENT / WINNER LIST:**
- **ALLOW ONLY 'EDIT MODE' FOR CLIENT:** The client cannot start, end or continue a competition. Only the Edit mode is available which allows for editing the winner's information and the prizes won.
- **RESTRICT LIST/DELETE/SQL/PRINT & EXPORT COMPLETE DATABASE FUNCTIONS:** Enable this option if this client should not be allowed to:
 - **DELETE LISTS**
 - **SHOW THE PHONEBOOK LIST**
 - **SHOW THE FLAGGED CALLERS LIST**
 - **SHOW THE GLOBAL SEARCH LIST**

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Operational Functions

- HOLD READY status activates line:
- Show info when caller line is IN USE:
- Enable PREALLOCATED line:

Hide/Show Elements

- Hide Phone Number:
- Hide Last Name:
- Hide Age:
- Hide Mood:
- Hide Rating:
- Hide Exit Button:
- Hide Minimize Button:

Appearance

- Adjust Font Size: Max. Size = 12
- Alternative Presenter Layout:
- Single Line View (Name, Age, City):
- Dual Line View (Name, Age | City):

Save Configuration Load Configuration OK Cancel

Presenter (2)

- **OPERATIONAL FUNCTIONS:**

- **HOLD READY STATUS ACTIVATES LINE:** Deprecated. Configuration moved the CLIENT RESTRICTIONS – ACTIVATE LINE in the MAGIC THlpPro configuration.
- **SHOW INFO WHEN CALLER LINE IS IN USE:** A line is displayed as IN USE when the caller is not ON AIR. Enable this option to show the caller information also when the caller is not ON AIR.
- **ENABLE PREALLOCATED LINE:** If this option is enabled a phone line with a preallocated caller is active and the number can be dialled. Disable this option to show a phone line with a preallocated caller as IN USE. The number can not be dialled.
- **HIDE / SHOW ELEMENTS:** Define which information or buttons should be visible:
 - HIDE PHONE NUMBER
 - HIDE LAST NAME
 - HIDE MOOD
 - HIDE RATING
 - HIDE EXIT BUTTON
 - HIDE MINIMIZE BUTTON

- **APPEARANCE:** Define how the caller information is presented to the user.

- **ADJUST FONT SIZE:** Set the font size used for displaying caller information.
 - **AUTO SIZE:** The application decides on the font size depending on screen space and length of the information for each line independently.
 - **FIX SIZE:** The application decides on the font size used on all lines depending on screen space.
 - **MAX. SIZE = N:** Uses AUTO SIZE with the font size limited to N.
- **ALTERNATIVE PRESENTER LAYOUT:** The default layout shows name and number of the caller on the left and the caller information on the right of the phone line. Enable the alternative layout to display the caller's name and number at the top and the information field at the bottom of the phone line.
 - **SINGLE LINE VIEW (NAME, AGE, CITY):** Enable to show name, age, and city in one line.
 - **DUAL LINE VIEW (NAME, AGE | CITY):** Enable to show name, age, and city in two lines.

Pretalk (1)

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Pretalk Options

Default Call-Forwarding/Transfer Number: 160

Use Explicit-Call-Transfer (R) as default:

Pretalk Interfaces

Audio input: Default Communication Device

Quality: Telephone (Default)

Audio output: Default Communication Device

Recording Interfaces

Recording input: Primärer Soundaufnahmetreiber

Recording output: Primärer Soundtreiber

General

Enable recording: Automatically start recording when switching to PRETALK:

Recording Device: Pretalk Interface Playback Device: Pretalk Interface

Recording Mode: Caller only (Mono file)

Use Studio Recording Folder if available: Show recordings of all clients:

Client Recording Folder: C:\Users\Public\AVT\MAGIC THipPro\Recordings

External Audio Editor:

Save Configuration Load Configuration OK Cancel

Pretalk (2)

- **PRETALK OPTIONS:** Define how calls can be transferred by the Screener.
 - **DEFAULT CALL FORWARDING / TRANSFER NUMBER:** If this field is empty, the user must enter the number the call should be transferred to. If a number is entered, clicking on the call transfer button on the main panel transfers the call automatically to that number. Click the call transfer button on the main panel with the right mouse button to enter the call transfer destination manually.
 - **USE EXPLICIT-CALL-TRANSFER (R) AS DEFAULT:** With explicit call transfer (ECT), the call transfer is done by the PBX or the provider. Disable this option if the THipPro has Call Forwarding lines configured on the LINE INTERFACE configuration page.
- There are two ways of using the built-in audio interfaces of the PC for Pretalk with a caller on the THipPro.

▪ PRETALK STREAMING

- Can be used for Pretalk or as audio interface for the answering machine. (See CONFIGURATION - ANSWERING MACHINE for more details.)
- The audio signal of an audio input of the PC is streamed to the THipPro by the LAN Client.
- The THipPro streams the audio signal of the caller to the PC.
- The LAN client outputs the audio signal of the caller to an audio interface of the PC.
- A Pretalk streams is either fixed, where there is a permanent stream between the PC and the THipPro, or dynamic, where the LAN client requests a stream from the THipPro when needed.
- The audio signals of the caller and the user can also be recorded by the LAN client.
- The RECORD button on the LAN client is only available when at least one call is in Pretalk.

Pretalk (3)

- **PRETALK RECORDING**
 - Can be used if the audio signals are transmitted between THipPro and PC via the audio interfaces of the THipPro (analogue, AES/EBU, AES67, Dante, Ravenna).
 - The LAN client can record the audio signal from the audio input of the PC.
 - The LAN client can use an audio output of the PC to play back the recordings.
 - The RECORD button on the LAN client is always available.
- **PRETALK INTERFACES: Select the audio interfaces for audio input and audio output when using Pretalk Streaming at this client.**
 - **QUALITY:** Select the audio quality for the audio stream from the PC to the THipPro. That's what the caller hears. There are two options:
 - TELEPHONE: Lower audio quality, saves bandwidth (default)
 - HD-VOICE: Higher audio quality
- **RECORDING INTERFACES: Select the audio interfaces for audio input and audio output when using the Pretalk Recording at this client.**

Pretalk (4)

■ GENERAL:

- **ENABLE RECORDING:** Enable this option to display the RECORD button on the main panel.
- **AUTOMATICALLY START RECORDING WHEN SWITCHING TO PRETALK:** Enable this option to start recording automatically whenever a caller is put in Pretalk.
- **RECORDING DEVICE:** Define whether Pretalk Streaming or Pretalk Recording should be used for capturing audio.
- **PLAYBACK DEVICE:** Define whether Pretalk Streaming or Pretalk Recording should be used to playback recordings.
- **RECORDING MODE:** Define the content and the format of the recordings:
 - **CALLER ONLY (MONO FILE):** Only the audio signal of the caller is recorded and written to a mono audio file.
 - **CALLER & SCREENER (STEREO FILE):** The audio signals of the caller and the user of the LAN client are recorded and written to separate channels of a stereo audio file.
 - **CALLER & SCREENER (MONO FILE):** The audio

signals of the caller and the user of the LAN client are recorded and mixed into a mono audio file.

- **USE STUDIO RECORDING FOLDER IF AVAILABLE:** Enable this option if the recordings should be stored in the Recording folder which is defined on the STUDIO SETTINGS configuration page of the THipPro. If the studio recording folder is not available for the Screener client it will use the CLIENT RECORDING FOLDER.
- **SHOW RECORDINGS OF ALL CLIENTS:** By default, the Screener client displays only the recordings created by itself in the Recordings list. Enable this option to display all recordings present in the recording folder used by the Screener client.
- **CLIENT RECORDING FOLDER:** Specify the folder where recordings should be stored. This could be a local folder or a network share. Use the BROWSE button to select a folder from the file system.
- **EXTERNAL AUDIO EDITOR:** Define an external audio editor. Display the Recordings list. Click on a recording with the right mouse button and click EDIT to open the recording in the specified audio editor.

Appearance (1)

The screenshot shows the 'Appearance' settings dialog box for AVT software. The left sidebar contains the following menu items: General, Operation, Screener, Presenter, Pretalk, Appearance (highlighted), Colours, Database, Twitter, Import External Data, and Notifications. The main content area is divided into several sections:

- Font & Reading Order:** Name: Calibri, Right-to-Left:
- General:** OS Keyboard: Clock:
- Window:** Size: 1400 x 1050, X-Position: 0, Y-Position: 0, Remember Last Position:
- Lists:** List Size: Auto, Split List View: 50%, Default List: Top/Right List: <Last selected>, Bottom/Left List: Winner (Today), List Details: Standard, Only for Noted Callers/Call-Back List:
- Caller Lines:** Force 2-Column Line View: Allow INFORMATION below buttons:
- Logo:** Hide Logo: Use Studio Logo if available: Client Logo: C:\Program Files (x86)\AVT\MAGIC THipPro SCREENER\Ressource: [Folder icon], Use PNG file with transparent background and a width of approx. 400 pixels, Alignment: Top Right

At the bottom, there are four buttons: Save Configuration, Load Configuration, OK, and Cancel.

Appearance (2)

- **FONT & READING ORDER:** Define how text is displayed on the main panel of the Screener application.
 - **NAME:** Select a font from a small selection of fonts installed in your system.
 - **RIGHT-TO-LEFT:** Enable to display contact information right aligned.
- **GENERAL**
 - **OS KEYBOARD:** Enable to make use of the Windows 10 On Screen Keyboard when editing text.
 - **CLOCK:** Enable to display the time on the menu bar at the top of the main panel.
- **WINDOW**
 - **SIZE :** Define the size of the main window.
 - **AUTO:** The screener window will automatically take up the whole screen of the active monitor.
 - **CUSTOM:** Define your own window size
 - **WIDTH:** Enter the width of the window in pixels.
 - **HEIGHT:** Enter the height of the window in pixels.
 - **PRE-DEFINED:** Select one of the pre-defined window sizes.
 - **X-POSITION :** Define the horizontal position of the main panel on the screen in pixels. 0 is the left border of the screen.
 - **Y-POSITION :** Define the vertical position of the main panel on the screen in pixels. 0 is the top border of the screen.
 - **REMEMBER LAST POSITION:** The screeners main window can be dragged around on the screen using the grip symbol (↔) in the top right corner. If you enable this option, the screener window will open at the same position it was when the application was closed.

Appearance (3)

- **LISTS:** Define how lists like „Last Calls“ or „Phone Book“ are displayed on the main panel.
 - **LIST SIZE:** Set the width of the lists relative to the width of the main panel.
 - **SPLIT LIST VIEW:** Define how two lists are arranged on the main panel.
 - **OFF:** Only one list is displayed.
 - **SIDE-BY-SIDE:** The lists are displayed next to each other.
 - **PERCENTAGE:** The lists share one column. Select a percentage to define how much space the upper list takes up.
 - **DEFAULT LIST:** Define what the lists display when starting the screener application. The content of the list can be changed by the user during operation by clicking the header of a list and selecting a type from a pop up. You can set the content type for:
 - **TOP/RIGHT LIST**
 - **BOTTOM / LEFT LIST**
 - **LIST DETAILS:** Define how much information is displayed in the “Noted Caller” list and in the “Call-Back” list:
 - **STANDARD**
 - **EXTENDED**
 - **MINIMIZED**
- **CALLER LINES:** The software places the caller lines automatically depending on number of lines displayed and available space. Here you can influence the arrangement.
 - **FORCE 2-COLUMN LINE VIEW:** Caller lines are displayed in two columns next to each other.
 - **ALLOW INFORMATION BELOW BUTTONS:** The information field is displayed below the audio line buttons instead of next to them.

Appearance (4)

- **LOGO:** The Screener software can display a custom logo in the top right corner if there is enough space in the top menu bar. The recommended format is PNG with 400x200 pixels and transparent background.
 - **HIDE LOGO:** Disables the logo.
 - **USE STUDIO LOGO IF AVAILABLE:** Enable this option to display the logo defined in the configuration of the MAGIC THipPro on the STUDIO SETTINGS configuration page. The studio logo is displayed if the path is available for the client.
 - **CLIENT LOGO:** Define the logo locally if the studio logo cannot be used.
 - **ALIGNMENT:** If the logo is smaller than the space reserved, you can define how the logo is positioned:
 - TOP LEFT
 - TOP RIGHT
 - CENTER
- BOTTOM LEFT
- BOTTOM RIGHT

Colours (1)

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Colour assignment

Select colour theme: Dark Grey (Default)

Show Caller Line Grouping Colours: ... as background colour:

Colour adjustment

Select background colour:

1 HOTLINE AVT SUPPORT +49 911 5271 160

TALK HOLD City First Name

2 CALL IN AVT SALES

TALK HOLD Information

Background2 Active Line Background

Enabled Button Background Disabled Button Background

Enabled Button Text Disabled Button Text

Enabled Caller Details Text Disabled Caller Details Text

Preallocated Caller Details Text Information Label

Save Configuration Load Configuration OK Cancel

Colours (2)

- **COLOUR ASSIGNMENT**
 - **SELECT COLOUR THEME:** Select one of the preinstalled colour themes. A preview is shown in the COLOUR ADJUSTMENT section.
 - **SHOW CALLER LINE GROUPING COLOURS:** Display the caller line colours as a fine line next to the audio line buttons of each line. The colours are defined on the CALLER LINE GROUPING configuration page of the MAGIC THipPro.
 - **... AS BACKGROUND COLOUR:** Change the background colour of the whole line to the line group colour.
- **Colour adjustment:** Create your custom design here. The live preview in the middle of the screen shows how any changes made here affect the main panel.
 - **SELECT BACKGROUND COLOUR:** Define the background colour of the main panel. The colours of all elements of the page are derived from this colour.
 - **SLIDERS:** Use the sliders to adjust the brightness of specific elements of the main panel.

Database (1)

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SQL Connection

Driver: SQL Server Native Client 11.0 Disable SQL Server Ping:

Alternative User: Password:
Requires a restart of SCREENER application

Database

Import Area Codes

Area Code File:

Import old Caller Database/Create new database

SQL Server:

User:

Password:

Database:

MDB File:

Layouts

Layout: Default

Status

Database (2)

- The SQL database holds the phonebook as well as area codes and Screener data input mask layouts.
- **SQL CONNECTION:** Define how the Screener software connects to the SQL database.
 - **DRIVER:** Select one of the installed SQL client drivers.
 - **DISABLE SQL SERVER PING:** The Screener software sends ICMP Echo Requests (ping) to the database server to check whether the server is available. Disable this option if these are blocked in your network.
 - **ALTERNATIVE USER:** By default, the Screener software uses the login credentials configured on the DATABASE configuration page of the THipPro. Enter a user name here, if you want to use a different login.
 - **PASSWORD:** Enter the password of the alternative user.
- **DATABASE:** Offers maintenance tools for the SQL database. The SQL Command Line Utilities must be installed on the PC.
 - **DELETE RECORDS:** Deletes all contacts from the phone book.
 - **COMPRESS & BACKUP:** Optimizes the disk space used by the database and creates a backup of the database.
 - **RESTORE:** Restores the phone book from a backup file.
 - **SHOW BACKUP:** Opens the folder where the backup file is located in a windows explorer window.
 - **EXPORT XLS:** Export the phone book to an Excel file.
 - **PRINT PDF:** Print the phone book to a PDF file.
- **IMPORT AREA CODES:** Find area code files for some countries in the installation folder of the Screener software. Press the **BROWSE** button to select an area code file and press **START IMPORT** to import the area codes into the database.
 - You may create and import your own area code files following the example of the included files.

Database (3)

- **IMPORT OLD CALLER DATABASE / CREATE NEW DATABASE:** Import contacts from a MAGIC Touch database or create a new database here.
 - **SQL SERVER:** Enter the path to the SQL server where a new database should be created.
 - **USER:** Enter the login for the SQL server.
 - **PASSWORD:** Enter the password of the login.
 - **DATABASE:** Enter a database name. (Avoid special characters or spaces.)
 - **CREATE NEW:** Press to create a new database using the parameters given above.
 - **MDB FILE:** To import a database of the old AVT MAGIC Touch system, select the database file and press START IMPORT.
 - The data will be imported into the database configured on the DATABASE configuration page of the THipPro.
 - Existing entries are not overwritten.
- **LAYOUTS:** There are multiple layouts for the data input mask at the right of the main panel. Find predefined layouts in the installation directory of the Screener software. Only layouts stored in the database are available for the Screener. Manage the layouts here.
 - **LAYOUT:** Displays all layouts which are installed in the database.
 - **DELETE LAYOUT:** Erase the layout selected under LAYOUT from the database.
 - **IMPORT LAYOUT:** Import a layout into the database. Find the predefined layouts in the installation directory of the Screener Software.
 - It is not possible to customize existing layouts or create new layouts.
 - Activate a layout on the SCREENER configuration page.
 - Use the PROFILE EDITOR in the menu side-bar to assign a layout to a show profile.
- **STATUS:** Displays the progress of any database operation started on this page.

X (Twitter) (1)

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X (Twitter)

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X Application Settings

Use X Application:

Enable X Search for this client:

Show UNREAD posts: Show FLAGGED posts:

Show READ posts: Show HIDDEN posts:

Add/Delete X Application

Select X Application:

Application Name: (must be unique)

Owner:

Consumer Key:

Consumer Secret:

Signature Method:

Version:

Access Token:

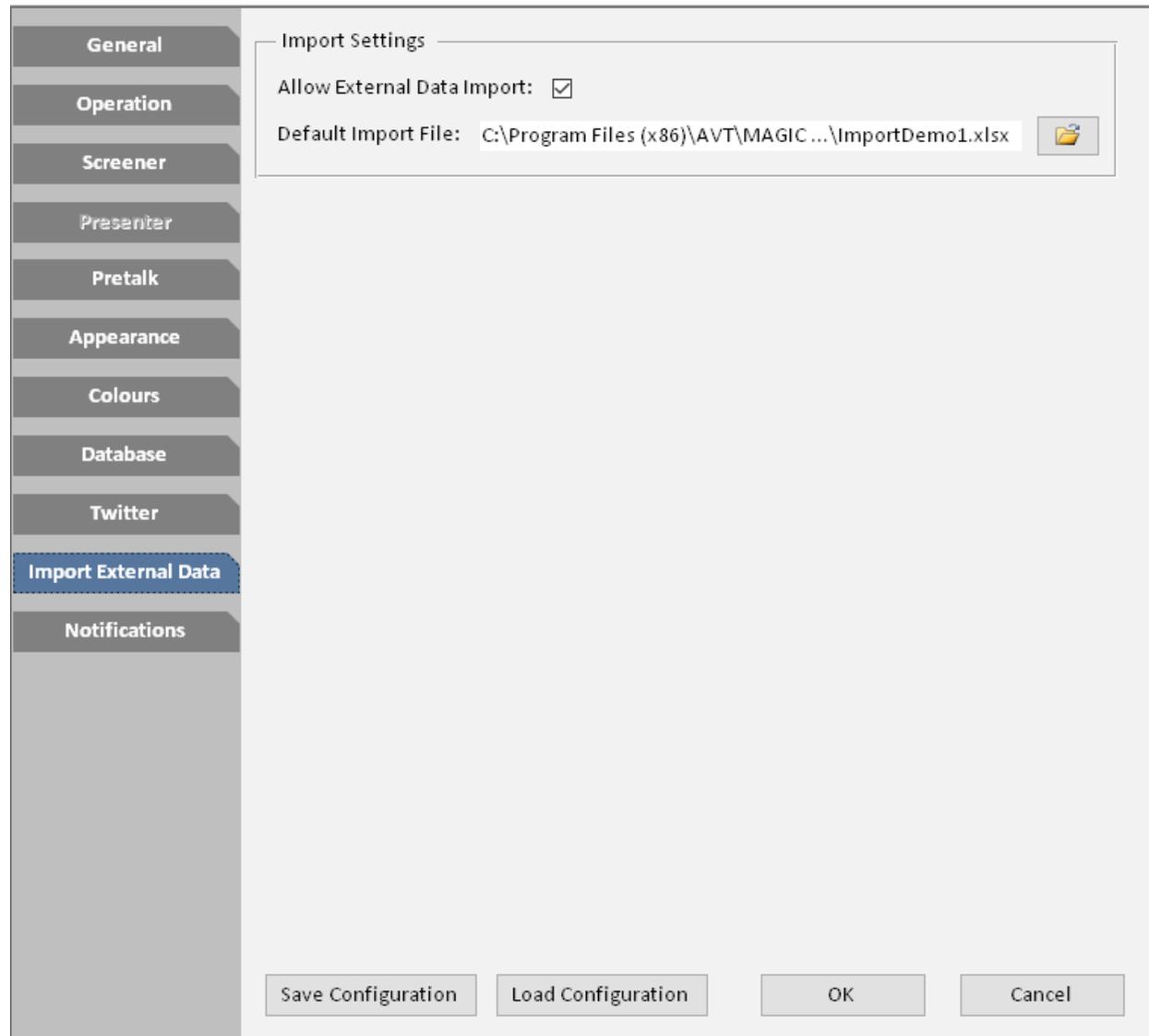
Access Token Secret:

For more details visit [X Developers](#) → [Manage Your Apps](#)

X (Twitter) (2)

- **X APPLICATION SETTINGS:** The MAGIC Screener software can display an X feed on the main panel if the SOCIAL MEDIA licence is installed on the MAGIC THipPro.
 - **USE X APPLICATION:** Enable the X list on the main panel.
 - The X list can be customized for each client:
 - ENABLE X SEARCH FOR THIS CLIENT
 - SHOW UNREAD POSTS
 - SHOW READ POSTS
 - SHOW FLAGGED POSTS
 - SHOW HIDDEN POSTS
- **ADD / DELETE TWITTER APPLICATION:** X offers an API to access one's X account using a custom app instead of the X app. Register on developer.twitter.com to apply for X API login.
 - **SELECT TWITTER APPLICATION:** Displays a list of installed X logins. Select a login to display the details below.
 - **DELETE APPLICATION:** Delete the selected application.
 - **ADD APPLICATION:** Fill in the login details above and press this button to install the X login.

Import External Data (1)



Import External Data (2)

- The Screener Software can be used to import contacts from a Microsoft Excel or text file into the phone book database. Define the parameters of the import on this page. The import itself is started via the side-bar menu of the Screener software.
 - ALLOW EXTERNAL DATA IMPORT: Enable this option to display IMPORT EXTERNAL DATA on the menu side-bar of the Screener software.
 - DEFAULT IMPORT FILE: Set the path of the file holding the data which should be imported.
 - An Excel or text file must be accompanied by a corresponding *.ini file with the exact same file name. The ini file holds some import parameters and a definition of the data columns in the Excel or text file.
 - Find example files in the installation directory of the MAGIC THipPro Screener software.

Notifications (1)

The screenshot shows a configuration window for 'Pushover Notifications'. On the left is a vertical sidebar with menu items: General, Operation, Screener, Presenter, Pretalk, Appearance, Colours, Database, Twitter, Import External Data, and Notifications (which is highlighted in blue). The main area contains the following settings:

- Use Pushover:** Send Test Notification
- Application Name:** AVT
- User/Group Key:** iwdlskdisoHGZGJHGuzg67868
- API Token:** *****
- Priority:** Emergency
- Notification Sound:** Intermission

For more details visit Pushover.net

At the bottom of the window are four buttons: Save Configuration, Load Configuration, OK, and Cancel.

Notifications (2)

- The Screener software can send notifications to the Pushover app which is available in the Google Play Store and in the Apple Store. There is also a Web application available for Google Chrome, Mozilla Firefox and Apple Safari.
- Notifications will be sent for:
 - Result of data import
 - Result of data export
 - Result of SQL user script (Press Ctrl+Q to enter the SQL Query and Script Manager from the main panel.)
- The notifications are displayed in the app until they are confirmed.
- Create your Pushover account at www.pushover.net and enter the API details here.

Email (1)

The screenshot shows a configuration window for email settings. On the left is a vertical sidebar with menu items: General, Operation, Screener, Presenter, Pretalk, Appearance, Colours, Database, X (Twitter), Import External Data, Notifications, and Email (which is highlighted). The main area is titled 'Email' and contains several sections:

- Allow reports to be sent via email in lists:** A section with a label 'Enabled:' and a checked checkbox.
- Use the following account to send emails (requires MS Outlook):** A section with a label 'Account:' and a dropdown menu.
- Message for WebRTC email invitation (max. 255 characters):** A section with a label 'Use Collaboration Server settings:' and an unchecked checkbox. Below it are fields for 'Studio:' (dropdown menu showing 'AVT 1'), 'Subject:' (text field with 'WebRTC Invitation - {LBL}'), and 'Message:' (text area containing a template message).
 - Message text: Dear {FNA} {LNA}
Under the following link you can connect to our studio system via audio and video with any modern web browser.
{LNK}Just contact us if you have any questions.
Best regards
{SIG}
- Variables:** A list of variables and their positions in the message template:
 - {LBL} in Subject | Message: Label
 - {FNA} in Subject | Message: First Name
 - {LNA} in Subject | Message: Last Name
 - {LNK} in Message: Position of WebRTC Link and Validity
 - {SIG} in Message: Email Account Signature

At the bottom of the main area is a 'Save' button. At the bottom of the entire window are four buttons: 'Save Configuration', 'Load Configuration', 'OK', and 'Cancel'.

Email (2)

- The Screener client can use a local MS Outlook account to send Emails with content from the database or WebRTC invitations.
- **ALLOW REPORTS TO BE SEND VIA EMAIL IN LISTS:** Adds the options to EMAIL LIST AS PDF and EMAIL LIST AS XLS to the three-dot-menu of all lists on the main panel of the Screener application.
- **USE THE FOLLOWING ACCOUNT TO SEND EMAILS:** Select the Email account used for sending emails. Only accounts of the local Microsoft Outlook application are available.
- **MESSAGE FOR WEBRTC EMAIL INVITATION:** If the THipPro is connected to the Magic Collaboration Services, the Screener can be used to send WebRTC invitations. Define the email template here.
 - **USE COLLABORATION SERVER SETTINGS:** Enable

to use the template defined in the collaboration services and send the email via the collaboration server.

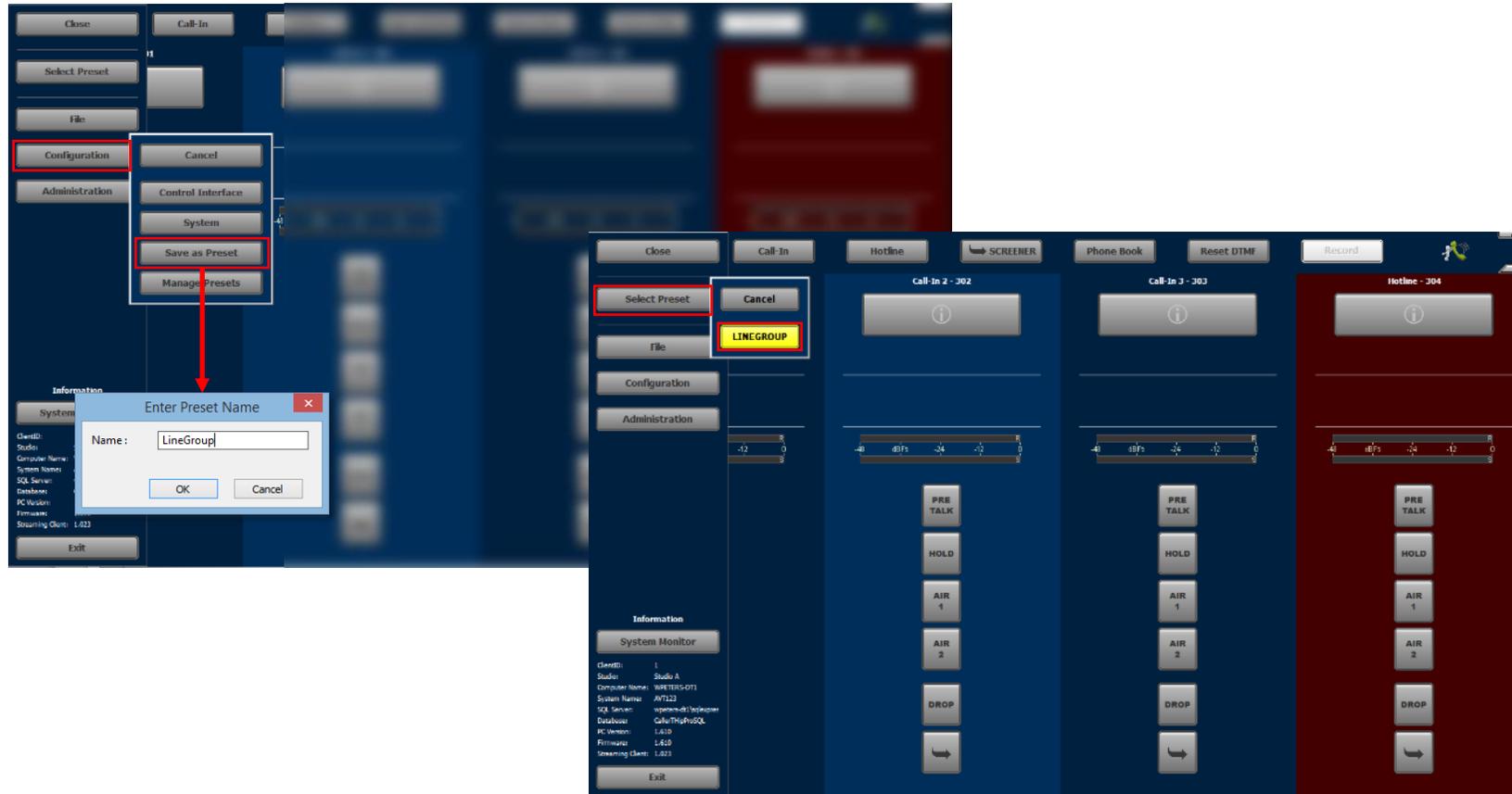
- **STUDIO:** Select the Studio you want the recipient to call.
- **SUBJECT:** Define an email subject.
- **MESSAGE:** Write an email template. The following variables can be used. They will be replaced in the resulting email.
 - **FNA:** First name
 - **LNA:** Last name
 - **LNK:** Individual WebRTC link
 - **SIG:** Email account signature

MAGIC THipPro MAGIC THipPro Pure

Maintenance

- Using the MAGIC LAN Client or
MAGIC Screener Client PC software

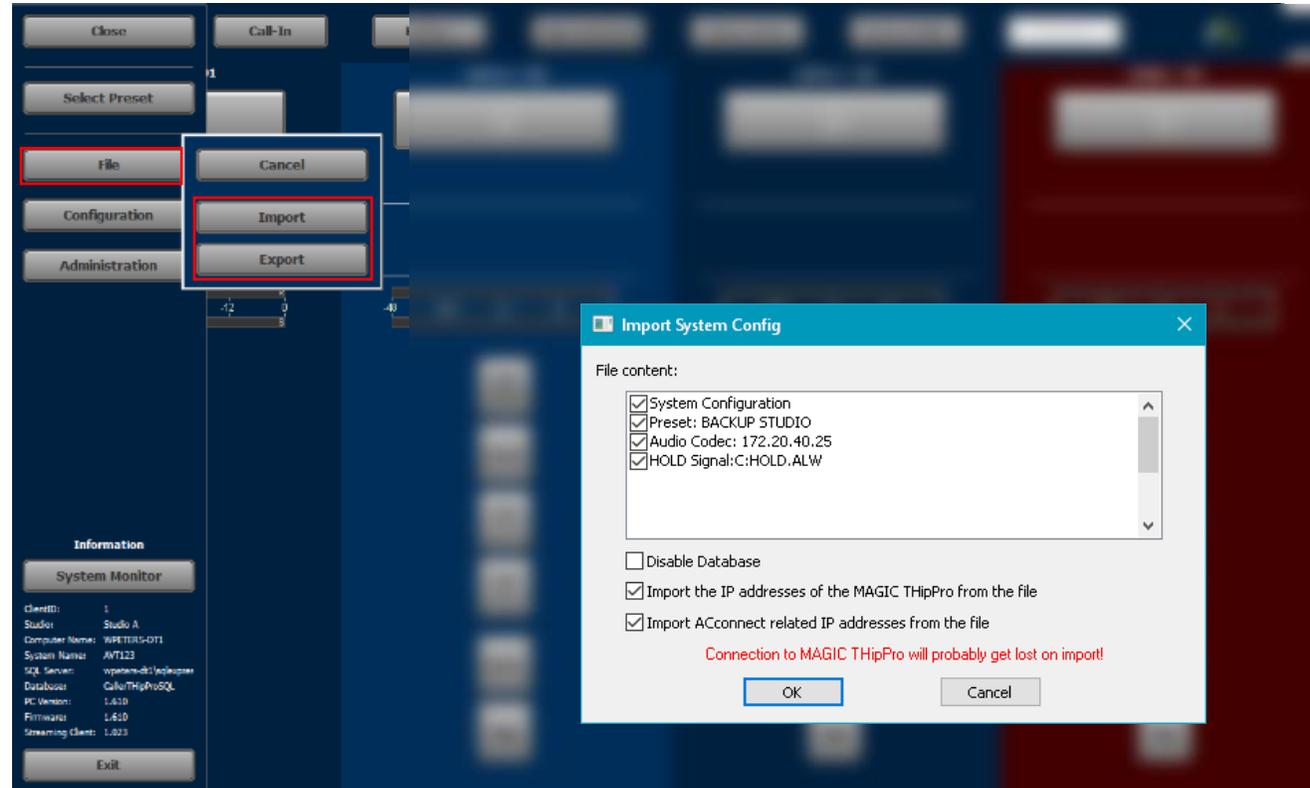
Create/load and manage Presets (1)



Create/load and manage Presets (2)

- PRESETS allow for storing parts of the system configuration on the THipPro.
- Users can load PRESETS during operation.
- Loading a PRESET overwrites the current system configuration.
- Two types of PRESETS are available:
 - PRESET: Contains all configuration pages in the OPERATION SETTINGS branch.
 - SUPER PRESET: Contains all configuration pages in the OPERATION SETTINGS branch and SYSTEM SETTINGS branch.
- ADMINISTRATORS can:
 - Load presets.
 - Save presets.
 - Manage presets via MENU → CONFIGURATION → MANAGE PRESETS.
- Load presets via MENU → SELECT PRESET.
 - Access to loading of PRESETS can be restricted by setting a USER PASSWORD in the configuration.
- In the MAGIC Screener software, SELECT PRESET is located in the top bar.
 - Open the PRESET MANAGER by clicking SELECT PRESET with the right mouse button.

Save/restore a system configuration (1)



Save/restore a system configuration (2)

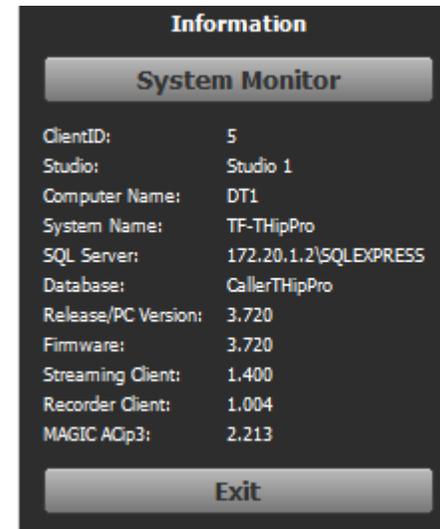
- The complete system settings can be saved on your PC via MENU → FILE → EXPORT
- The system configuration file may contain:
 - The current configuration
 - Presets
 - Super presets
 - Recorded Hold signals
 - Intro / data privacy query signals
 - Audio Codec configuration
- To restore the configuration, go to MENU → FILE → IMPORT.
 - On the import dialog, you may define which parts of the backup should be restored.
 - **DISABLE DATABASE:** The database settings are restored but access to the database is disabled in the configuration.
 - This makes sense if the configured database settings do not fit for a new system because of e.g. a different SQL Server.
- **IMPORT ACCONNECT RELATED IP ADDRESSES FROM THE FILE:** Enable to restore the IP addresses for connecting to an audio codec.
- **IMPORT THE IP ADDRESSES OF THE THIPPRO FROM THE FILE:** Only available when restoring changes the IP Addresses of the THipPro. Enable if you like to restore the IP Address from the backup.
 - After the backup was restored the PC software might lose connection to the THipPro. Enter the new IP address of the THipPro in the PC software under MENU → CONTROL INTERFACE.
- In the **SCREENER SOFTWARE**, click on MENU → **SYSTEM CONFIGURATION** with the right mouse button to import or export the system configuration.

Backing up the Local Configuration

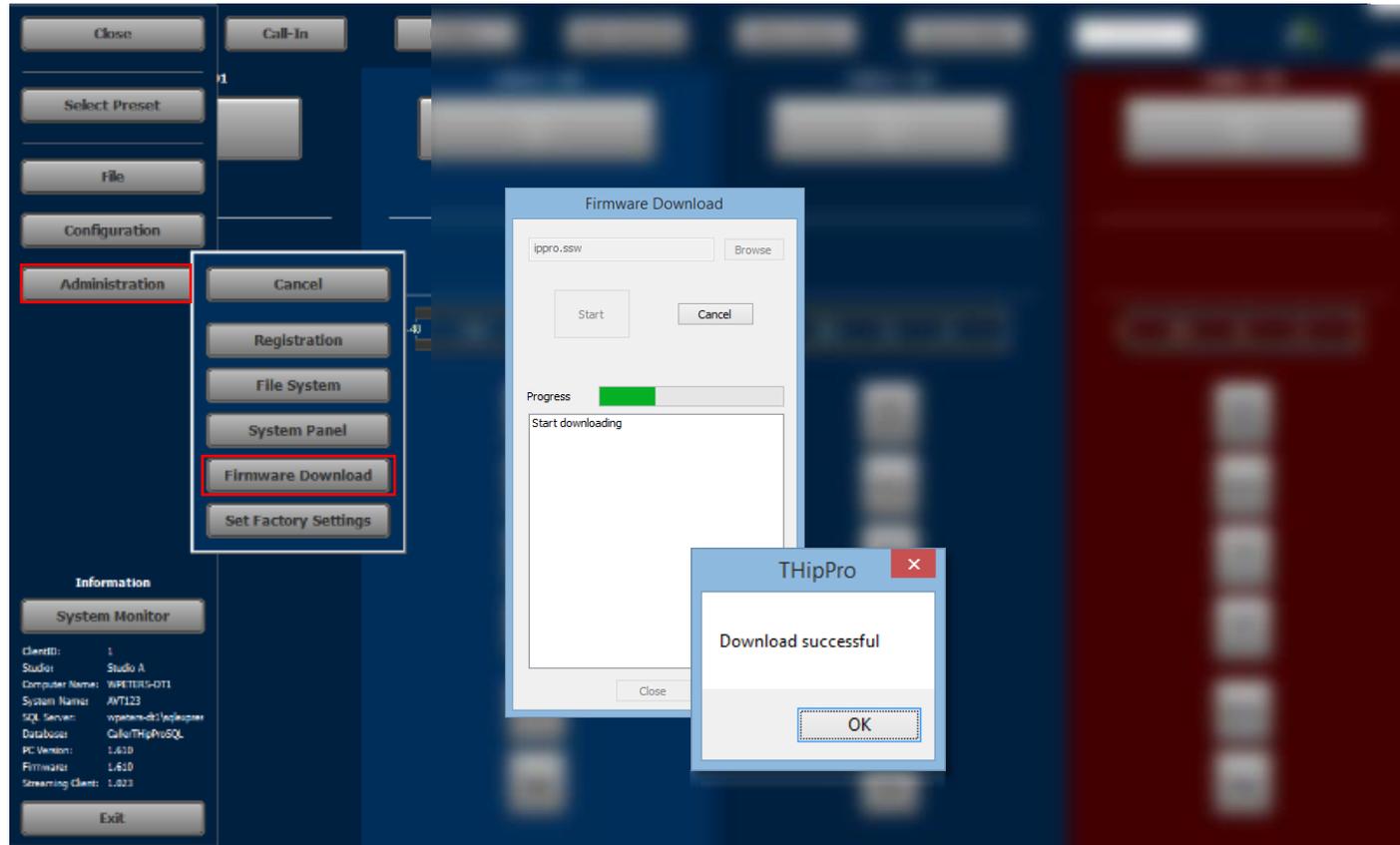
- All local settings of LAN Clients and Screener Clients are saved in separate files on each client PC.
- Find the files in the following folders depending on the SETTINGS FOLDER configuration:
 - For all users:
 - %PROGRAMDATA%\AVT\MAGIC THipPro LAN
 - %PROGRAMDATA%\AVT\MAGIC THipPro SCREENER
 - For the current user (roaming)
 - %APPDATA%\ROAMING\AVT\MAGIC THipPro LAN
 - %APPDATA%\ROAMING\AVT\MAGIC THipPro SCREENER
 - For the current user (nonroaming):
 - %APPDATA%\LOCAL\AVT\MAGIC THipPro LAN
 - Via freely configurable network path
 - Temporary files (logfiles, recordings) are saved under:
 - %USERPROFILE%\AVT\MAGIC THipPro LAN
 - %USERPROFILE%\AVT\MAGIC THipPro SCREENER

System information

- In the lower area of the menu important information is displayed
 - Current Client ID of the workplace
 - Studio connected with the Client
 - Your own computer name
 - The system name
 - The SQL Server in use
 - The database in use
 - The PC Software Version
 - The Firmware Version
 - The Streaming Client Version



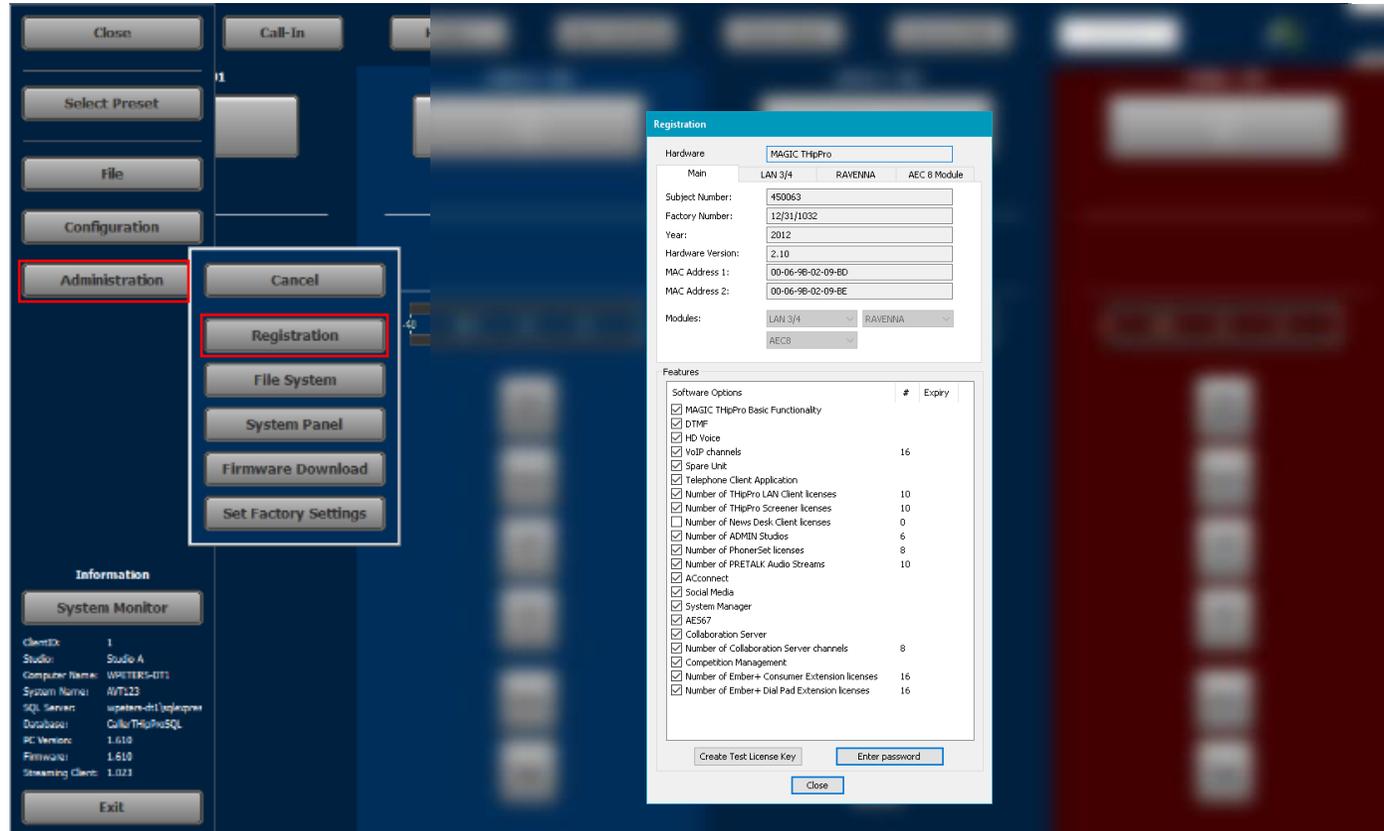
Firmware Download (1)



Firmware Download (2)

- Find updates to the MAGIC THipPro software on our website avt-nbg.de in the DOWNLOAD section under SOFTWARE.
- A new release includes new versions of LAN Client and Screener as well as a new firmware version.
- The firmware file is included in the PC software downloads.
- Update the system by installing the PC software on one client.
- After starting the new version you will be prompted to update the firmware.
 - Confirm and update the firmware.
 - When the update is finished, the unit will restart.
- You may also update the firmware manually via MENU → ADMINISTRATION → FIRMWARE DOWNLOAD.
 - The firmware file included in the PC software is automatically loaded.
 - Click on BROWSE if you are advised to load a different firmware by AVT support.
- When the THipPro has restarted, install the new PC software on all clients connected to the system.
- In the SCREENER SOFTWARE, find the FIRMWARE DOWNLOAD directly under MENU.

Registration (1)



Registration (2)

- Open ADMINISTRATION → REGISTRATION to check which SOFTWARE options are available in your system.
- ENTER PASSWORD: Adding new licences is done by entering a licence password.
- Contact us if you like to purchase a licence.
 - Attach the FACTORY NUMBER of your unit which is displayed in the REGISTRATION window.
- CREATE TEST LICENCE KEY: If you like to test a feature before buying it, create a test licence key and send it to us along with the factory number of the unit.
 - The test licence will work for a limited time.
 - The timer only counts when the unit is running.
 - The test licence enables all available features.
- In the SCREENER SOFTWARE, find the REGISTRATION directly under MENU.

System Monitor (1)

System Monitor - MAGICHipPro

Keep window on top

System alarms

	0 LCA		0 Overheated
	0 Time Keeper		0 MAIN EEPROM
	0 Temperature Sensor		0 Display Contrast DAC
	0 FLASH EPROM		
	0 VCXO		0 I/O Port
	0 DSP 2 Boot		0 DSP 2 Access
	0 Slot 1 Access		0 Slot 2 Access
	0 Slot 3 Access		0 Module Assembly
	0 Ethernet MAC 1		0 Ethernet MAC 2
	0 DANTE Module Access		

Application alarms

	0 AES/EBU Input 1	No AES signal available	
	0 AES/EBU Input 2	No AES signal available	
	0 AES/EBU Input 3	No AES signal available	
	0 AES/EBU Input 4	No AES signal available	
	0 AES67 Rx Stream 1		0 AES67 Rx Stream 2
	0 ACconnect Stream 1		0 ACconnect Stream 2
	0 SIP Registration		
	0 Ember+ Consumer 1		

Ethernet state

LAN 1		0 100 MBit/s, full
LAN 2		0
DANTE		0 1 GBit/s, full

Abs. data rates

TX:	10.3 MBit/s	RX:	20.0 MBit/s
TX:		RX:	

System State

System Temperatur 51 °C DSP Load: 62 %

Connected Ember+ Consumer

Connected PhonerSets	Audio stream	Status	Version
----------------------	--------------	--------	---------

IP Transmission Jitter

Current Max. last 60 sec

OFF

AES67 Rx Streams

AES67 Rx Streams	Packet Loss
Axia01_8ch	0
Axia02_8ch	0

PTP State: Slave PTP Master: 172.20.15.25
Path Delay: 279 µsec

IP Audio Streams

	S1-Presenter 1		S1-Presenter 2
	S1-Screener		S2-Presenter 1
	S2-Presenter 2		S2-Screener
	Prod 1		Prod 2
	IP Stream 9		IP Stream 10

Connected MAGIC ACip3

	172.20.40.120		Stream		Alarms	Sys. Mon.
	172.20.40.120		Stream		Alarms	Sys. Mon.

Connected PCs

1: Technician:LAN 2: DT2:SCR

Database

Database	Master PC
1: 172.20.10.17\SQLEXPRESS.PhoneBook	PC 2

Last Counter Reset: 9/1/2020 10:24:49 AM

Alarm Counter Reset Audio Interface Monitor Line State Monitor Close

System Monitor (2)

- Open MENU – SYSTEM MONITOR to get an overview of the system status.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- The status is displayed as text as well as LEDs:
 - ● : Alarm is active. There is an error.
 - ● : Alarm is active but not relevant for the current configuration.
 - ● : Status is OK.
- Find alarm counters next to the LEDs which indicate how often the alarm occurred since the Alarm Counter was reset.
- The information is organised in sections:
 - SYSTEM ALARMS: These alarms show the status of the MAGIC THipPro hardware.
 - APPLICATION ALARMS: These alarms show the status of the basic functionality of the MAGIC THipPro:
 - AES/EBU Input: The system can detect if there is a valid digital audio signal at the AES inputs. Find more information on the alarm in the right column.
 - AES67 RX STREAM: The built-in AES67 software module cannot receive all configured streams. The status of the DANTE module is not included here.
 - ACCONNECT STREAM: An audio stream from an optional ACip3 audio codec to the MAGIC THipPro is missing.
 - SIP REGISTRATION: At least one of the VoIP lines couldn't register with the SIP server.
 - DHD AUDIO MATRIX: The MAGIC THipPro couldn't connect to a configured DHD core.
 - EMBER+ CONSUMER: The MAGIC THipPro couldn't connect to a configured Ember+ Provider.

System Monitor (3)

- **ETHERNET STATE:** Displays information on each LAN interface of the MAGIC THipPro:
 - **LED:** Displays whether the physical connection to the network could be established.
 - **SPEED:** Displays speed and duplex mode of the network connection. (100MBit/s, full is required)
 - **TX/RX:** Gross data rates of the interface in send and receive direction. The MAGIC THipPro can handle up to 25 MBit/s in RX direction. If the data rate is higher, check for broadcast or multicast traffic that is reaching the THipPro unintentionally.
 - **DANTE:** Displays link state, speed and duplex mode of the optional DANTE module.
- **SYSTEM STATE:** Displays the general system health:
 - **SYSTEM TEMPERATURE:** Displays the temperature on the main board in °C. It is recommended to keep the temperature below 50°C through suitable cooling. The MAGIC THipPro will raise the TEMPERATURE ALARM when 57 °C are reached. A higher temperature can lead to an undefined operation of the device.
- **CONNECTED EMBER+ CONSUMER:** Shows which Ember+ Consumers are connected to the MAGIC

THipPro's Ember+ Provider module.

- **DHD CORE CONNECTIONS:** Show the status of the connections to the configured DHD cores.
- **CONNECTED PHONERSETS:** Shows the status of connected PhonerSet phones:
 - **IP ADDRESS** of the PhonerSet.
 - **AUDIO STREAM:** Status of the audio stream for pretalk.
 - **WORKPLACE:** The workplace configured in the PhonerSet app.
 - **VERSION:** Version number of the PhonerSet app installed on the telephone.
- **IP TRANSMISSION JITTER:** Displays the jitter statistics of a selected VoIP audio stream.
 - **LINE:** Select a telephone line to monitor it.
 - **CURRENT:** Displays the current jitter value.
 - **MAX LAST 60 SECONDS:** Shows the highest jitter value which occurred during the last 60 seconds.

System Monitor (4)

- **AES67 RX STREAMS:** Displays the status of the built-in AES67 software module.
 - **STREAM NAME**
 - **PACKET LOSS:** Number of audio packets lost in the received streams.
 - **PTP STATE:** Precision Time Protocol. The MAGIC THipPro can only work as SLAVE.
 - **PTP MASTER:** IP address of the PTP master in the audio network.
 - **PATH DELAY:** Current delay to the PTP master.
- **RAVENNA STATE:** Displays the state of the optional Ravenna module.
 - **AUDIO ENGINE:** Internal state of the Ravenna module for RX and TX. Refer to the Ravenna web interface for more information.
 - **STREAMS:** State of the configured Rx and Tx streams. Refer to the Ravenna web interface or press SHOW STREAMS for more information.
 - **PTP STATE:** State of the audio clocks of the Ravenna module. Refer to the Ravenna web interface for more information.
- **SHOW STREAMS:** Shows an overview of the configured streams and their status.
- **IP AUDIO STREAMS:** Displays the status of the optional Pretalk Streams.
 - **LED:** Displays whether the MAGIC THipPro receives a pretalk stream from a PC software client.
 - **NAME:** Name of the PC software client to which the stream is currently assigned.
- **CONNECTED MAGIC ACIP3:** Displays the status of connected ACip3 audio codecs using ACconnect.
 - **LED:** Displays whether the PC software can access the MAGIC ACip3.
 - **IP ADDRESS:** IP address of the ACip3 used to control it.
 - **STREAM:** Displays whether the audio stream of the MAGIC ACip3 is reaching the MAGIC THipPro.
 - **ALARMS:** Displays whether there are any alarms active on the MAGIC ACip3.
 - **SYS.MON.:** Click to open the System Monitor of the MAGIC ACip3.

System Monitor (5)

- **CONNECTED PCS:** Displays the PC clients connected to the MAGIC THipPro.
 - **NUMBER:** Internal port used to connect the PC client.
 - **NAME:** Client alias.
 - **TYPE / PORT**
 - **LAN:** LAN Client
 - **SCR:** Screener Client.
 - **NDC:** News Desk Client
 - **HYM:** MAGIC System Manager.
 - **MTC:** Temporary access. The PC is not included in one of the CLIENTS / SECURITY lists. The telephone line control is disabled.
 - **PORT NUMBER:** Type not defined. The PC is not included in one of the CLIENTS / SECURITY lists. The telephone line control is disabled.
 - **INT:** MAGIC THipPro Intercom Client. (Not allowed)
 - **VMS:** MAGIC Voice Mail System Client. (Not allowed)
- **BOLD:** The master PC is printed in bold. It manages access to the SQL phone book database.
- **DATABASE:** State of the SQL phone book database connection.
 - **LED:** Shows whether the database is available.
 - **NUMBER:** Internal port. One for each database.
 - **PATH:** SQL database path.
 - **MASTER PC:** Shows which PC is the master PC. The master PC synchronizes access to the database.

Ravenna Streams (2)

- Open MENU – SYSTEM MONITOR – RAVENNA STATE > SHOW STREAMS to get an overview of the configured Ravenna streams.
 - KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
 - STREAM: The stream number as displayed in the Ravenna web interface.
 - RECEIVE STREAMS: Shows the configured Ravenna input streams.
 - ENABLED: Shows whether the input stream is activated in the Ravenna web interface.
 - NAME: The name of the Ravenna stream.
 - CHANNEL: Shows which audio channels the Ravenna module uses to transmit the audio signal to the MAGIC THipPro base board.
 - STATE: Shows whether the stream is currently being received.
- TRANSMIT STREAMS
 - ENABLED: Shows whether the output stream is activated in the Ravenna web interface.
 - NAME: The name of the Ravenna stream.
 - CHANNEL: Shows which Ravenna Tx channels of the MAGIC THipPro are included in that stream.
 - LAN 1 /2, ERROR, WARNING: Shows if there are any problems on any of the LAN interfaces of the Ravenna module. Get more information in the Ravenna web interface.

Audio Interface Monitor (1)

Audio Interface Monitor - MAGICTHipPro

Keep window on top Show also level info for disabled channels

Test Tone Generator: AES/EBU 1 Left

Audio Interface	Input	Output
AES/EBU 1 Left		
AES/EBU 1 Right		
AES/EBU 2 Left		
AES/EBU 2 Right		
AES/EBU 3 Left		
AES/EBU 3 Right		
AES/EBU 4 Left		
AES/EBU 4 Right		
XLR Analogue 1		
XLR Analogue 2		
Handset 1		
Handset 2		

Audio Interface	Input	Output
IP Audio Stream 1		
IP Audio Stream 2		
IP Audio Stream 3		
IP Audio Stream 4		
IP Audio Stream 5		
IP Audio Stream 6		
IP Audio Stream 7		
IP Audio Stream 8		
IP Audio Stream 9		
IP Audio Stream 10		
PhonerSet 1		
PhonerSet 2		
PhonerSet 3		
PhonerSet 4		
PhonerSet 5		
PhonerSet 6		

Audio Interface	Input	Output
AES67 Ch. 1		
AES67 Ch. 2		
AES67 Ch. 3		
AES67 Ch. 4		
AES67 Ch. 5		
AES67 Ch. 6		
AES67 Ch. 7		
AES67 Ch. 8		

Close

Audio Interface Monitor (2)

- Open MENU – SYSTEM MONITOR – AUDIO INTERFACE MONITOR to get an overview of the audio interfaces.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- TEST TONE GENERATOR: Select an audio interface from the drop-down box to generate a sine test signal on the respective audio output.
- Each audio channel of the device is displayed:
 - AUDIO INTERFACE: Name of the audio channel.
 - AES/EBU: Digital audio interfaces at the back of the device.
 - XLR ANALOGUE: Analogue audio interfaces at the back of the device.
 - HANDSET: Handset audio interfaces at the front of the device.
 - IP AUDIO STREAM: Pretalk streams over IP.
 - PHONERSET: PhonerSet audio streams over IP.
 - AES67: AES67 audio channels of the AES67 software module.
 - DANTE: Audio channels of the Dante hardware module.
 - RAVENNA: Audio channels of the Ravenna hardware module.
- INPUT: Audio level of the signal fed to the device.
- OUTPUT: Audio level of the signal Audio level of the signal emitted by the device.

Line State Monitor (1)

Line State Monitor

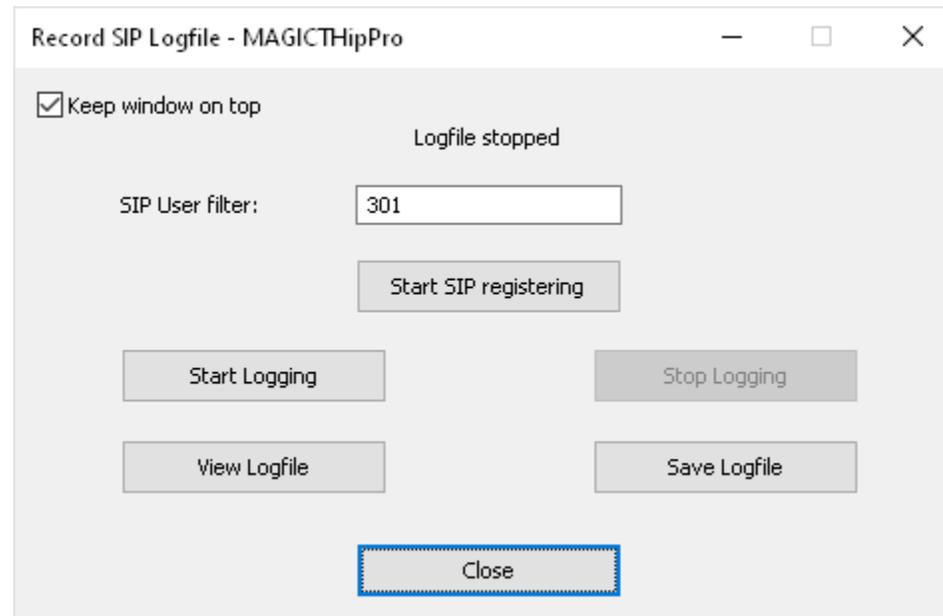
Keep window on top

SIP User	Main SIP Server	Backup SIP Server	#	Collaboration Server
301	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	1	<input type="button" value="Test"/> Not available
302	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	2	<input type="button" value="Test"/> Not available
303	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	3	<input type="button" value="Test"/> Not available
304	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	4	<input type="button" value="Test"/> Not available
305	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	5	<input type="button" value="Test"/> Not available
306	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	6	<input type="button" value="Test"/> Not available
307	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	7	<input type="button" value="Test"/> Not available
308	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	8	<input type="button" value="Test"/> Not available
309	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	9	<input type="button" value="Test"/> Not available
310	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	10	<input type="button" value="Test"/> Not available
311	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	11	<input type="button" value="Test"/> Not available
312	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	12	<input type="button" value="Test"/> Not available
313	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	13	<input type="button" value="Test"/> Not available
314	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	14	<input type="button" value="Test"/> Not available
315	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	15	<input type="button" value="Test"/> Not available
316	<input type="button" value="Test"/> Registration done successfully	<input type="button" value="Test"/> No IP address available	16	<input type="button" value="Test"/> Not available

Line State Monitor (2)

- Open MENU – SYSTEM MONITOR – LINE STATE MONITOR to get an overview of the VoIP telephone lines and the Collaboration Server lines.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- Each telephone line is displayed in a line of the screen:
 - SIP USER: SIP user name as configured.
 - MAIN SIP SERVER: State of registration at the main SIP server.
 - TEST: Click to start registration. The result is displayed next to the button. The test may take up to 2 minutes.
 - STATE: State of the registration process in plain text.
 - BACKUP SIP SERVER: State of registration at the backup SIP server.
 - TEST: Click to start registration. The result is displayed next to the button. The test may take up to 2 minutes.
 - STATE: State of the registration process in plain text.
- COLLABORATION SERVER: State of the registration of the line at the collaboration server for Microsoft Teams.
 - #: Line number
 - TEST: Click to start registration. The result is displayed next to the button. The test may take up to 2 minutes.
 - STATE: State of the registration process in plain text.

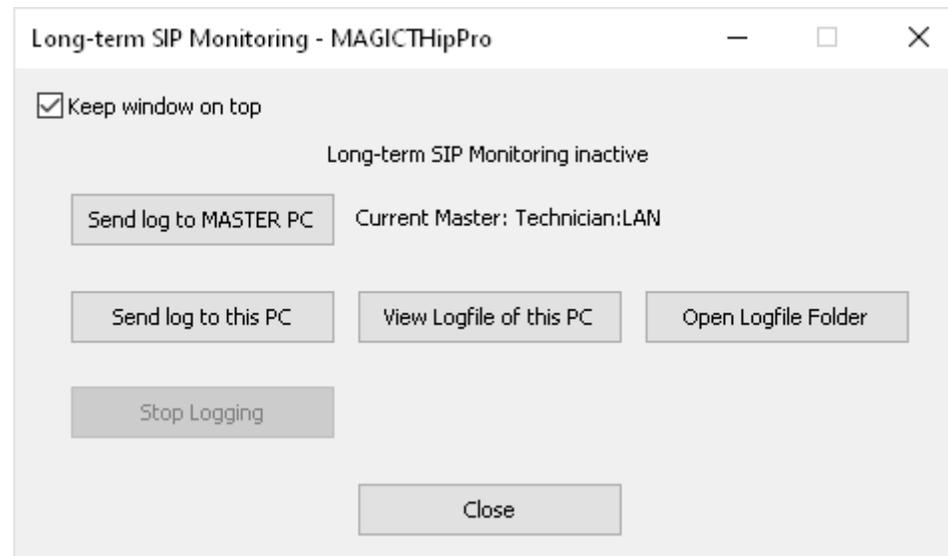
Record SIP Logfile (1)



Record SIP Logfile (2)

- Open MENU – SYSTEM MONITOR – SIP STATE MONITOR – RECORD SIP LOGFILE to save the SIP communication of the MAGIC THipPro to a file.
 - KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
 - The logfile is stored in the internal flash memory of the device. Since the memory space is limited, the logging should not be active for more than one hour.
 - SIP USER FILTER: Enter any string (e.g. the SIP user name) to filter the messages written to the logfile.
 - START LOGGING: Click to start recording the SIP messages.
 - START SIP REGISTERING: This is used if you like to record the SIP registration process. Click while the logging is active.
 - STOP LOGGING: Click to stop recording the SIP messages.
- VIEW LOGFILE: Open the logfile in a text editor on the PC. Available once the logging is stopped.
 - SAVE LOGFILE: Click to save the logfile on the PC. Available once the logging is stopped.

Long-term SIP Monitoring (1)



Long-term SIP Monitoring (2)

- Open MENU – SYSTEM MONITOR – SIP STATE MONITOR – LONG-TERM SIP MONITORING to save the SIP communication of the MAGIC THipPro to a file over a long time period.
- KEEP WINDOW ON TOP: Activate to keep the windows always on top of the screen.
- The logfile is stored on the PC. The recording time is limited by the resources of the PC.
- SEND LOG TO MASTER PC: Starts logging. The master PC writes the logfile to its logfile folder as it is configured in its local settings. The current master PC is displayed next to the button.
 - Note: The master PC role is assigned to a different client if the client on the current master PC loses connection to the MAGIC THipPro.
- SEND LOG TO THIS PC: Starts logging. The logfile is stored on the PC where the logging was started.
 - Note: Do not close the Long-term SIP Monitoring windows as this will stop the logging.
- VIEW LOGFILE OF THIS PC: Click to open the Long-term SIP logfile stored on this PC in a text editor.
- OPEN LOGFILE FOLDER: Click to open the logfile folder of this client in the windows explorer.
- STOP LOGGING: Click to stop logging.



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Support

A modern, multi-story office building with a glass facade and a prominent white AVT logo on the roof. The building is partially obscured by a large, semi-transparent red graphic element that covers the right side of the image. The sky is blue with scattered white clouds. A tree is visible in the foreground between the two building sections.

AVT

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