

MAGIC AC1 XIP

Quick Guide

Version 5.100 (23.01.2018)

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MAGIC AC1 XIP

New features in Version 5.100

VLAN
Secure Streaming
SIP Proxy Server support
Hiding Predefined Transmission Modes

- MAGIC AC1 supports IEEE 802.1Q virtual LANs.
- The checkbox “VLAN” enables or disables VLAN globally.
- Every service / protocol in the table can be assigned to a VLAN.
- TPID
 - none: This service / protocol is not assigned to a VLAN
 - 802.1Q Tag: This service / protocol is assigned to a VLAN
- Priority
 - Priority level of the service /protocol in a VLAN from 0 (lowest) to 7 (highest).
- VID
 - VLAN identifier. Specifies the VLAN to which the service / protocol belongs.

Configuration

Operation Settings

- Line Interface
- LAN
- SIP
- Data Interface
- Backup
- Security
- Relay / TTL
- Transmission
 - Pre Defined
 - ISDN Auto Modes
 - SIP Auto Modes
 - User Defined
- System Settings
 - General
 - Audio Interface
 - Headset Interface
 - LAN Interface
 - NTP
 - ISDN Remote Control
 - SNMP Parameters
 - VLAN**
 - Quick Dial
 - PC Software
 - Date and Time

VLAN

☒ VLAN (for LAN 1 only)

| Service | TPID | Priority | VID (12-Bit) |
|------------------------------------|------------|----------------------|--------------|
| Control | 802.1Q Tag | 3 (Excellent Effort) | 1 |
| SIP/VoIP/AoIP | 802.1Q Tag | 6 (Voice) | 2 |
| NTP | none | | |
| SNMP | none | | |
| SNMP NMS 1 | none | | |
| SNMP NMS 2 | none | | |
| SNMP NMS 3 | none | | |
| SNMP NMS 4 | none | | |
| IP Leased Line Secure Stream 2 (*) | none | | |

(*) VLAN for IP Leased Line Secure Stream 2 is only used when Secure Stream 1 has a different destination than Stream 2!

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

OK Cancel Apply Now

VLAN

- VLANs usually have their own subnets. Therefore a second and third IP address along with subnet mask and gateway can be configured.
- Assign the IP address to a service / protocol on the configuration page of the service / protocol.

The screenshot shows the 'Configuration' window for an AVT device. The sidebar on the left contains a tree view with the following categories: Operation Settings (Line Interface, LAN, SIP, Data Interface, Backup, Security), Relay / TTL, Transmission (Pre Defined, ISDN Auto Modes, SIP Auto Modes), User Defined, System Settings (General, Audio Interface, Headset Interface, LAN Interface, NTP, ISDN Remote Control, SNMP Parameters, VLAN, Quick Dial, PC Software), and Date and Time. The 'LAN Interface' category is selected and highlighted in blue.

The main configuration area is titled 'LAN Interface' and contains the following sections:

- LAN 1** (selected tab)
 - Primary IP Address:**
 - ☐ Use DHCP
 - IP Address: 172.20.40.55
 - Subnet Mask: 255.255.0.0
 - Default Gateway: 172.20.1.1
 - DNS Server: 172.20.1.1
 - Ethernet Speed: Auto (dropdown)
 - Second IP Address:**
 - 172.10.1.18
 - 255.255.255.240
 - 172.10.1.17
 - Third IP Address:**
 - 172.5.131.74
 - 255.255.255.252
 - 172.5.131.73
- Port Addresses:**
 - Control Port 1: 10000
 - Control Port 2: 10001
 - Audio Port: 5004
- Trusted IP Networks:**

| | IP Address | Subnet Mask |
|------------|------------|-------------|
| Network 1: | | |
| Network 2: | | |
| Network 3: | | |

☐ Enable Remote Control from non-local and non-trusted networks (Remote login password is needed for access)

At the bottom right, there are three buttons: OK, Cancel, and Apply Now.

Multiple IP addresses

- Secure streaming makes the audio streaming between AVT Codecs more resilient by sending a duplicate of the stream.
- The second stream can be sent over a different network via VLAN.
- Enable secure streaming for encoder to activate the duplicate stream.
- Enable secure streaming for decoder to set up the internal buffer management for receiving duplicate streams.
- Second Remote IP Address:
 - Select a subnet from the drop down menu. Either the primary IP address or the second or third if VLAN is enabled for secure stream 2.
 - Enter the IP address of the remote codec.
- The second stream can be delayed up to 500 ms, increasing the overall transmission delay accordingly.

The screenshot shows the 'Configuration' window with the 'LAN' tab selected. The left sidebar lists various settings categories: Operation Settings (Line Interface, LAN, Data Interface, Backup, Security, Relay / TTL, LAN Transmission Modes), System Settings (General, Audio Interface, Headset Interface, LAN Interface, NTP, SNMP Parameters, VLAN, PC Software, Date and Time), and Date and Time.

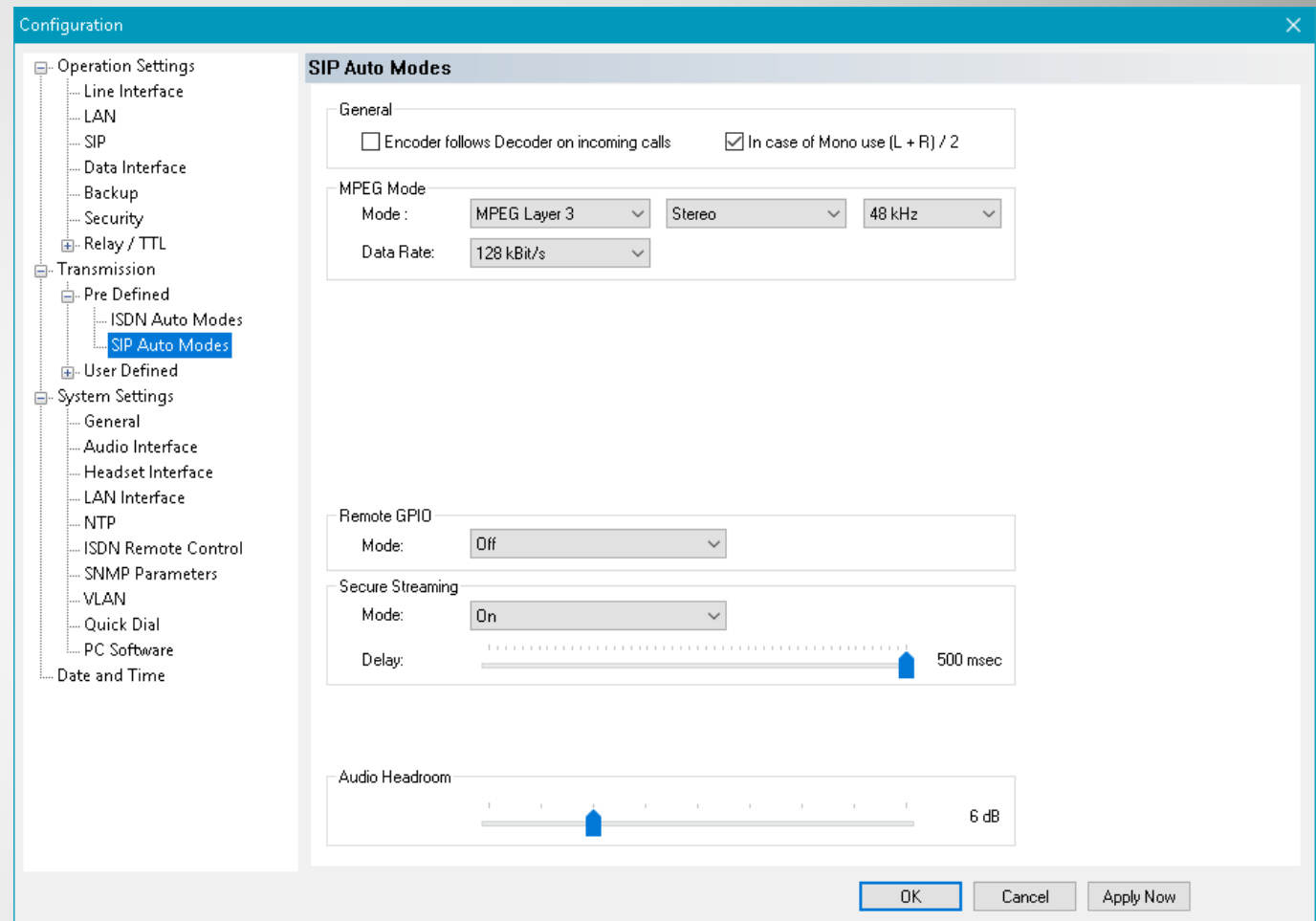
The main 'LAN' configuration area includes the following sections:

- LAN Parameters:**
 - Decoder Buffer Mode: Automatic (dropdown)
 - Decoder Buffer Size: 2000 msec (slider)
 - Encoder Packet Size: 20 msec (slider)
 - Remote IP Address: 172.20.40.50 (text field)
- Secure Streaming:**
 - ☒ Enable Secure Streaming for encoder
 - ☒ Enable Secure Streaming for decoder
 - Second Remote IP Address: LAN 1 : 172.10.1.18 (dropdown) and 172.10.1.19 (text field)
 - Delay: 500 msec (slider)
 - ☐ Multicast Reception
 - Group Address: (text field)
- Quality of Service (DiffServ):**
 - Voice: 184 (text field) (0..255) EF DSCP: 46dec
 - SET DEFAULT button

At the bottom right, there are buttons for 'OK', 'Cancel', and 'Apply Now'.

LAN - Secure Streaming

- Secure streaming makes the audio streaming between AVT Codecs more resilient by sending a duplicate of the stream.
- Enable secure streaming in the transmission mode settings.
- The second stream can be delayed up to 500 ms, increasing the overall transmission delay accordingly.
- The settings are valid for both directions of the connection.



SIP - Secure Streaming

- MAGIC AC1 XIP now supports SIP accounts, provided through a proxy server.

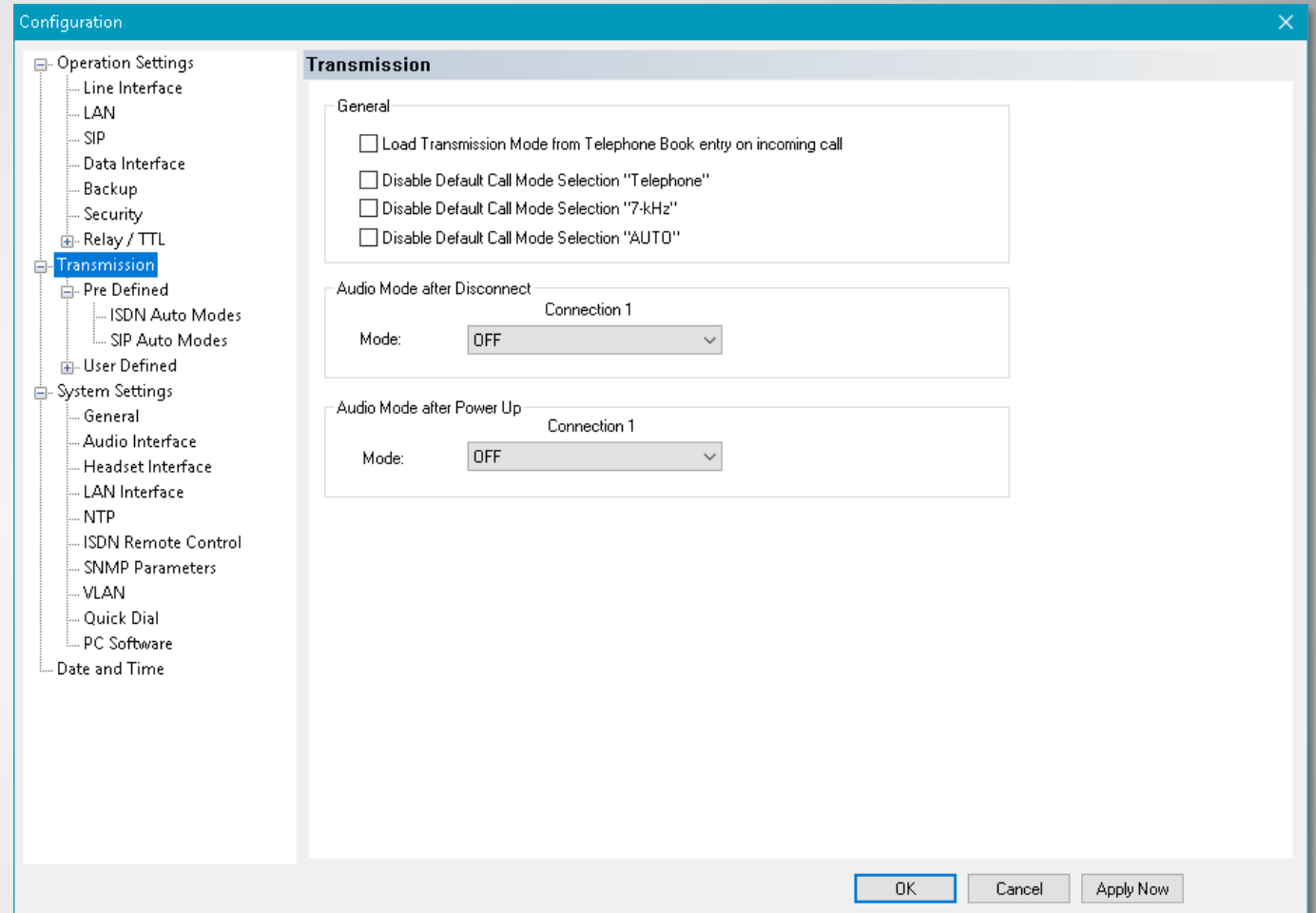
The screenshot shows a 'Configuration' window with a tree view on the left and a 'SIP' configuration panel on the right. The tree view includes categories like Operation Settings, Transmission, System Settings, and Date and Time. The 'SIP' panel contains two sections: 'SIP Parameters' and 'Prefix Number'. In the 'SIP Parameters' section, the 'Proxy Server' field is highlighted with an orange arrow. The 'Prefix Number' section includes a dropdown for 'Length of Internal Telephone Numbers' and a checkbox for 'Skip Prefix Number on Incoming Call'.

| SIP Parameters | |
|---|---------------------|
| <input checked="" type="checkbox"/> Use STUN Server | |
| NAT Keep Alive Message Time: | 30 sec |
| Registration Time: | 60 sec |
| User Name: | 09115271110 |
| User Authentication: | account@provider.de |
| SIP Password: | •••••••• |
| SIP Server: | registrar.de |
| Proxy Server: | proxy.provider.de |
| STUN Server: | stun.provider.de |

| Prefix Number | |
|--|---|
| Length of Internal Telephone Numbers: | 0 |
| External Prefix Number: | |
| <input type="checkbox"/> Skip Prefix Number on Incoming Call | |

SIP – Proxy-Server

- PC software and front display always show the default transmission modes “Telephone”, “7-kHz” and “AUTO”.
- The page “Transmission” offers the option to disable these default modes individually, thus hiding them from GUI and front display.



Hide Pre Defined Transmission Modes