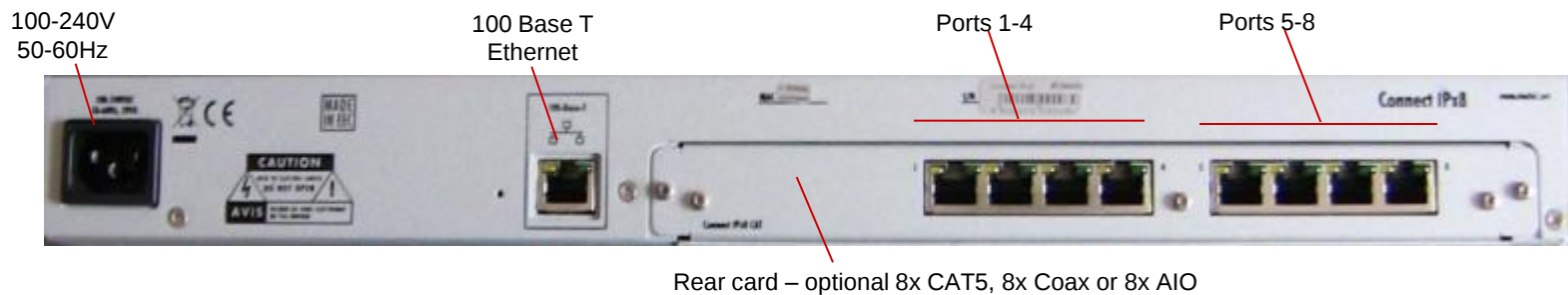
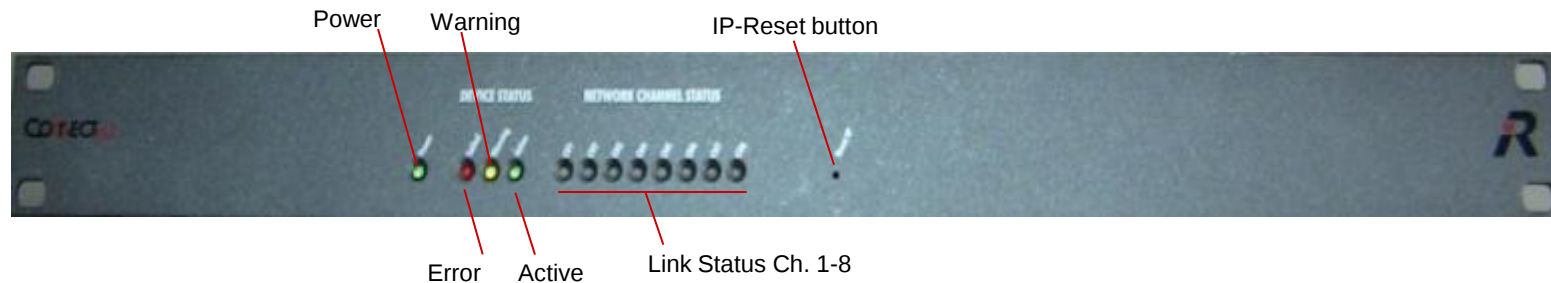


Connect IP x2 / x8

Description of the CONNECT IPx8



The CONNECT IPx2 is similar constructed.
It supports only 2x CAT5 or 2x AIO Ports.
All further settings are identically to the CONNECT IPx8

Setup IP-address

- Connect the main cable to the device
- Connect the „100-Base-T“-connector to an Ethernet Network
 - for the first setup of the Interface, it is recommended to make a direct connection to a PC network card with a **X-Over** Cat5 cable. to set the IP-address to the right range of your network.
 - to connect the CONNECT IPx2/8 to a network via a Switch/Hub you have to use a 1:1 Cat5 cable.
- Wait until the device has booted and the „Active“ LED is flashing green.
- If a valid network is detected, the orange LED on the Ethernet Cat5 jack lights up. The green LED shows the network traffic.



To reset the device to the factory default settings, just press the Reset button for 3 seconds with a thin object.

All LED's on the front will light up for a short moment.

The IP-address, device name and passwords will be resettet to default settings.



PC IP-configuration

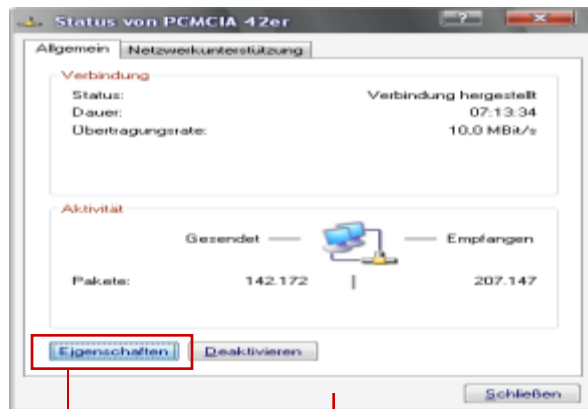
The default IP-Address of the CONNECT IPx2/8 is **192.168.42.160**.

To change the IP-address of the device, you first have to connect to the default address.

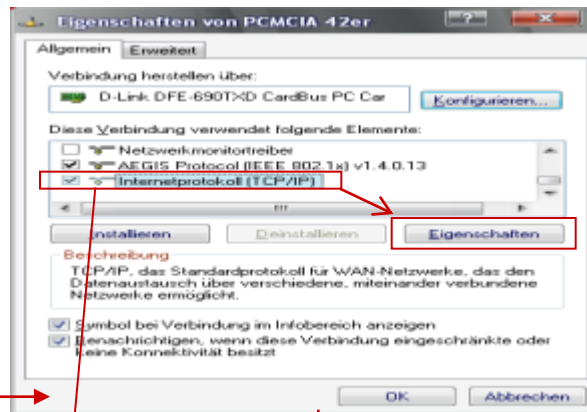
Therefore it is necessary to change temporary the IP-address of the connected PC.

Open the properties of the network interface of the PC.

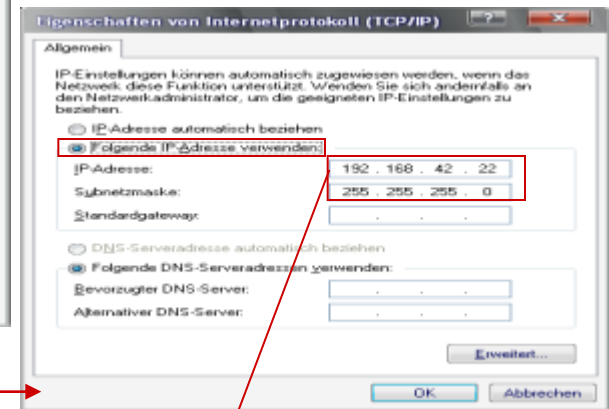
(Start > Settings > Network connections)



Open the properties of
your LAN connection



Open the properties
of the TCP/IP protocol



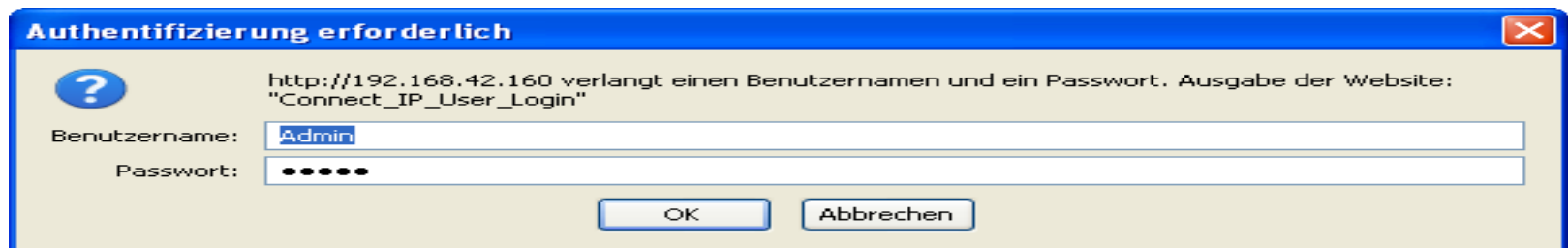
Change the IP-address of your
PC to **192.168.42.x**
(x not 160)

Configure CONNECT IPx2/8

- Open any Internet-Browser
- Type in <http://192.168.42.160> and connect to this address.



- In the Login window type in following data's:
 User : **Admin**
 Password: **Admin**

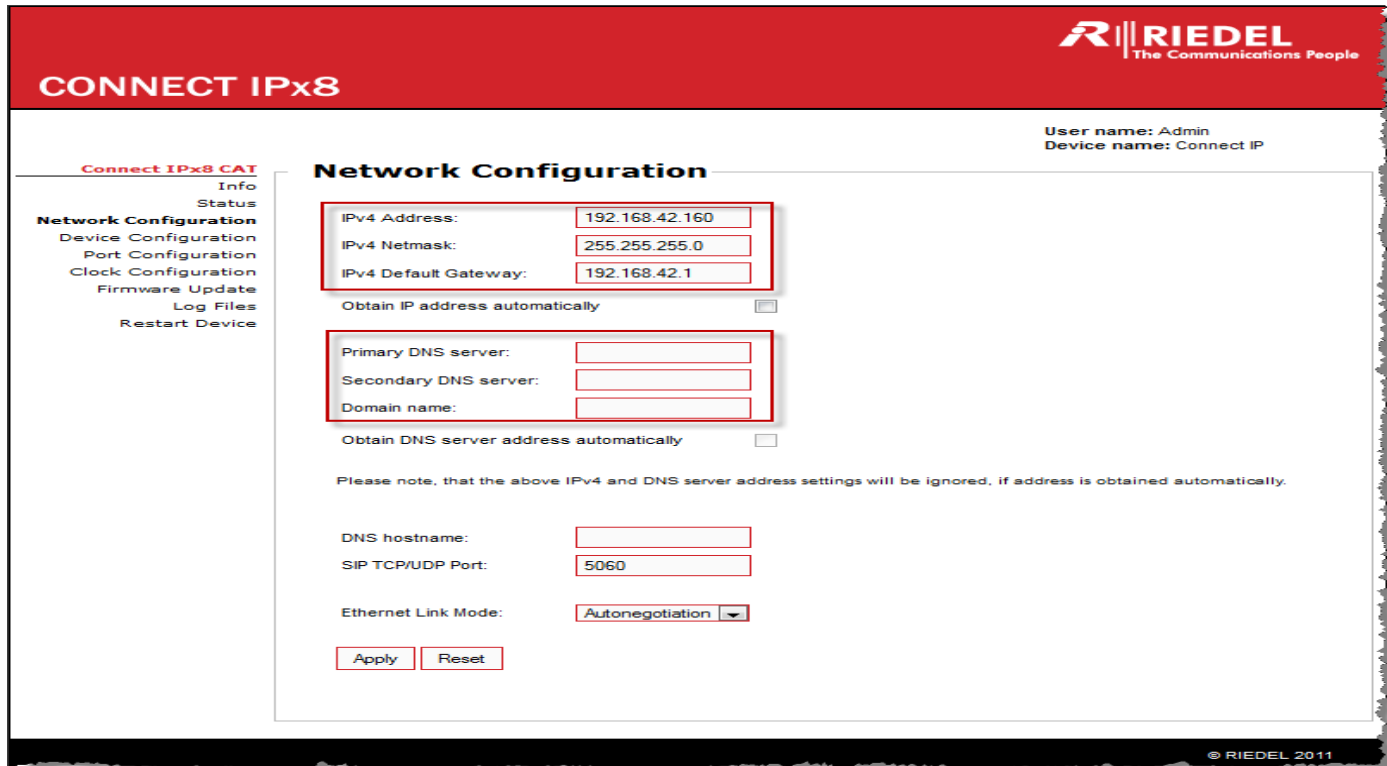


- Now you can use the configuration webpage

Click on „**Network Configuration**“.

Change IP-settings corresponding to your network.

When you activate “**Obtain IP address automatically**” and “**Obtain DNS server automatically**”, the Connect IPxX is getting the addresses from a DHCP server (if available). A unique DNS-hostname is required for this device for DHCP



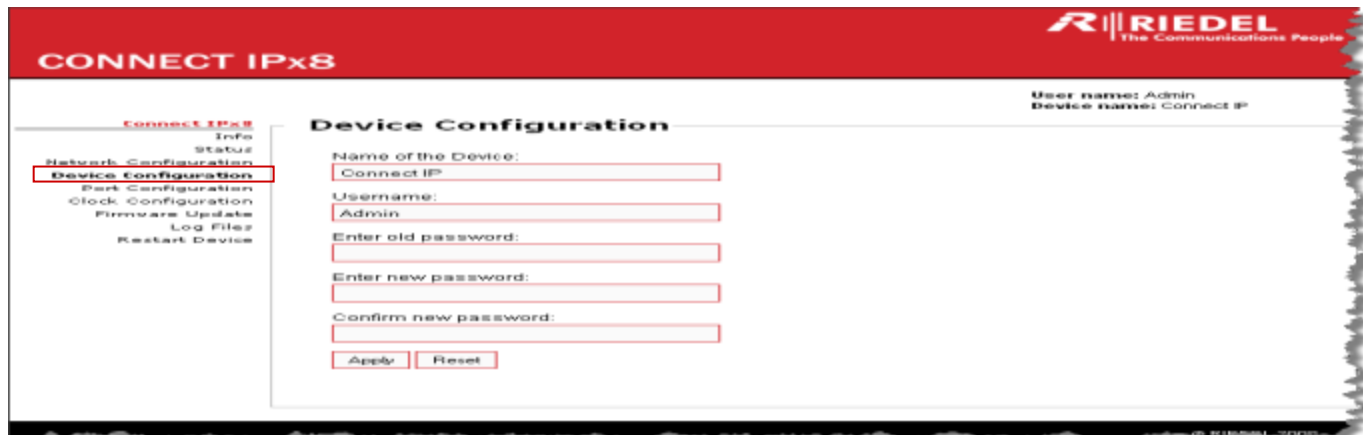
The screenshot shows the 'CONNECT IPx8' web interface. The top header is red with the RIEDEL logo and tagline. Below the header, the page title 'CONNECT IPx8' is displayed. On the right, the user information 'User name: Admin' and 'Device name: Connect IP' is shown. A left sidebar contains a menu with options: 'Connect IPx8 CAT', 'Info', 'Status', 'Network Configuration' (highlighted), 'Device Configuration', 'Port Configuration', 'Clock Configuration', 'Firmware Update', 'Log Files', and 'Restart Device'. The main content area is titled 'Network Configuration'. It contains several input fields: 'IPv4 Address' (192.168.42.160), 'IPv4 Netmask' (255.255.255.0), and 'IPv4 Default Gateway' (192.168.42.1). Below these is a checkbox for 'Obtain IP address automatically'. Further down are fields for 'Primary DNS server', 'Secondary DNS server', and 'Domain name', followed by a checkbox for 'Obtain DNS server address automatically'. A note states: 'Please note, that the above IPv4 and DNS server address settings will be ignored, if address is obtained automatically.' Below this are fields for 'DNS hostname' and 'SIP TCP/UDP Port' (5060). At the bottom, there is a dropdown for 'Ethernet Link Mode' set to 'Autonegotiation'. Two buttons, 'Apply' and 'Reset', are at the bottom left. The footer of the interface shows '© RIEDEL 2011'.

Press „**Apply**“ to send the changes to the CONNECT IPx2/8.

Afterwards press the button Please restart your Connect IP by pressing this button in the new opening window to restart the device.

Now you can connect your CONNECT IPx2/8 to your Network with the VoIP-Client card. All further settings and configurations will be done with the DIRETOR configuration software and the VoIP card.

If you want, you can also change the name of the device, username and password in „**Device Configuration**“. No reset is needed when changing these settings.



CONNECT IPx8

User name: Admin
Device name: Connect IP

Device Configuration

Connect IPx8
Info
Status
Network Configuration
Device Configuration
Port Configuration
Clock Configuration
Firmware Update
Log Files
Restart Device

Name of the Device:
Connect IP

Username:
Admin

Enter old password:

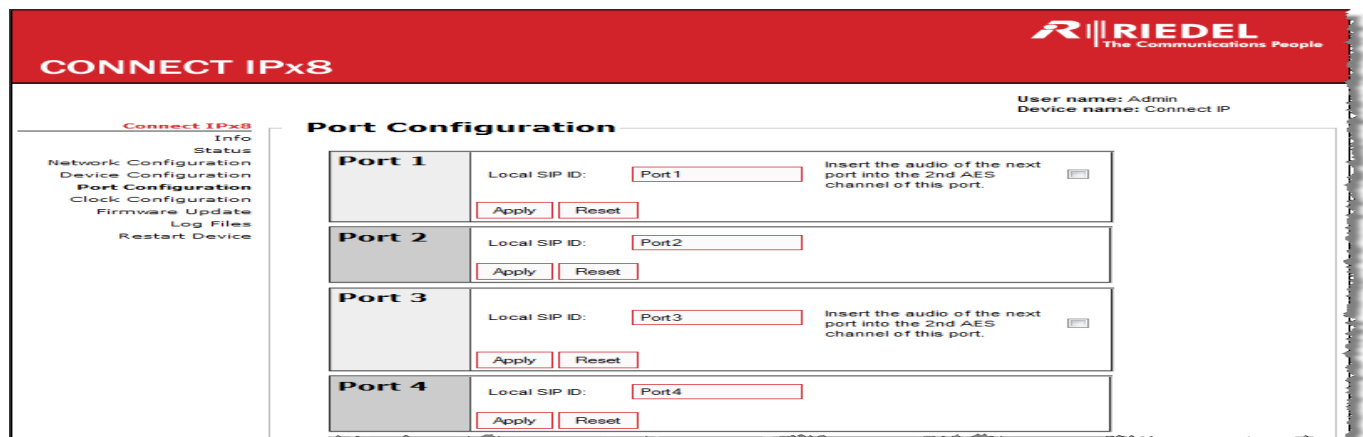
Enter new password:

Confirm new password:

Apply Reset

With the link „**Port Configuration**“ you can change the names of the available ports.

Attention: The same names have to be configured in the DIRECTOR VoIP-setup afterwards.



CONNECT IPx8

User name: Admin
Device name: Connect IP

Port Configuration

Connect IPx8
Info
Status
Network Configuration
Device Configuration
Port Configuration
Clock Configuration
Firmware Update
Log Files
Restart Device

Port 1	Local SIP ID: Port1 Apply Reset	Insert the audio of the next port into the 2nd AES channel of this port. ☐
Port 2	Local SIP ID: Port2 Apply Reset	
Port 3	Local SIP ID: Port3 Apply Reset	Insert the audio of the next port into the 2nd AES channel of this port. ☐
Port 4	Local SIP ID: Port4 Apply Reset	

Firmware update

Your ARTIST system and the CONNECT IPx2/8 must always have the same firmware version installed, to work properly.

If you update your ARTIST system, all already connected CONNECT IPx2/8 are also automatically updated via the network.

To update a CONNECT IPx2/8 manually to the needed version, you can also update the device directly via the web interface.

Open the function „**Firmware Update**“ and select the needed standard ARTIST Client-firmware.

Press the „*Update the firmware*“ button, so send the file into the interface.
All LED's start flashing.

The update process takes up to 1 minute

After the successful update press the button „**Restart Device**“.



Connecting ports

When all VoIP ports are configured correctly in the DIRECTOR software (see *DIRECTOR-Manual*, chapter 9.11.4.2), and also the network connection and the IP-routing is done correctly, the CONNECT IPx2/8 shows the connected ports.



Attention: These LED's indicates only the status of the network/port connections. It is not showing, if a panel is physically connected to this port or not.

Now, depending of the installed rear card, connect your panels, analogue- or AES 4-wires.

If you are using a CAT5 rear card, a green LED on the CAT5 jack indicates a working panel.



You can also see the port status information in the web interface.

Just click on „**Status**“ to see detailed information of the VoIP108 <> CONNECT IPx2/8 port connections.

If a port is showing a green background, the port is successfully connected to the VoIP108 card. If it's a yellow background, the IP connection is established, but the panel is not connected. You can see all information like used audio codec, IP-address, receive buffer size, etc.

This page is automatically refreshing.



CONNECT IPx8

Connect IPx8 CAT

- Info
- Status**
- Network Configuration
- Device Configuration
- Port Configuration
- Clock Configuration
- Firmware Update
- Log Files
- Restart Device

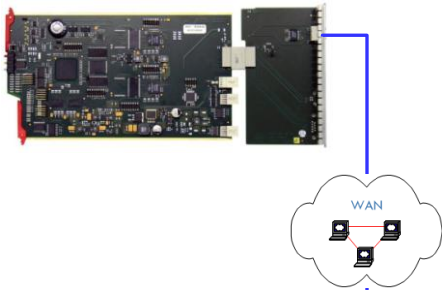
User name: Admin
 Device name: Connect IP

Status

	Local:	Remote:	Connection Uptime:	Audio Codec:	Audio Packet Size:	Receive Buffer:
Port 1 Control Panel connected	Port1@192.168.42.160	Port1@192.168.42.38	143	G.722 64kbps PLC	20 ms	80 ms
Port 2 Waiting for Control Panel	Port2@192.168.42.160	Port2@192.168.42.24	81	G.722 64kbps PLC	20 ms	80 ms
Port 3 Control Panel connected 2-Ch. Mode	Port3@192.168.42.160	Port3@192.168.42.24	81	G.722 64kbps PLC	20 ms	160 ms
Port 4	Port4@192.168.42.160	Port4@192.168.42.120	0	G.722 64kbps PLC	20 ms	80 ms
Port 5 4-Wire Mode	Port5@192.168.42.160	Port5@192.168.42.38	143	G.722 64kbps PLC	20 ms	160 ms
Port 6	Port6@192.168.42.160	Port6@192.168.42.120	0	G.722 64kbps PLC	20 ms	80 ms

Setup AES 4-Wire

Variation I: 4-Wire in 2Ch. Mode



AES Ch.1 TX	AES Ch.2 TX
Channel 1	Channel 2
AES Ch.1 RX	AES Ch.2 RX
Channel 1	Channel 2

1.

Bay	Card Type	Port	Type	Expan...	Long Name
A	CPU-128F G2				
B	CPU-128F G2				
1	VoIP-108-G2	1.1	4-Wire (VoIP)		AES 4-Wire 2 channels
		1.2	(the port above uses this channel too)		
		1.3	<unused>		
		1.4	<unused>		
		1.5	<unused>		
		1.6	<unused>		
		1.7	<unused>		
		1.8	<unused>		

2.

Properties of Port 'AES 4-Wire 2 channels' (Type 4-Wire (VoIP))

General Details 1 Details 2 Trunking Gain Beep Virt. Keys VoIP Usage Rights

Long Name: AES 4-Wire 2 channels

8-char Labels: Local: PORT 1.1

Alias:

If an Alias is entered, it overrides the 8-char local label.

Room-Code: <not assigned>

☒ Enable 2nd audio channel
The 2nd channel can be used independently or for stereo sound

OK

3.

Properties of Port 'AES 4-Wire 1st Channel' (Type 4-Wire (VoIP))

General Details 1 Details 2 Trunking Gain Beep Virt. Keys VoIP Usage

Remote Port Address

Remote Host: 192.168.42.160

Remote SIP-ID: Port1

sip:Port1@192.168.42.160

Audio Codec: G.722 64kbps PLC

Audio Packet Size: 20 ms

Receive Buffer Size: 160 ms

CONNECT IPx8

User name: Admin
Device name: Connect IP

Connect IPx8 CAT

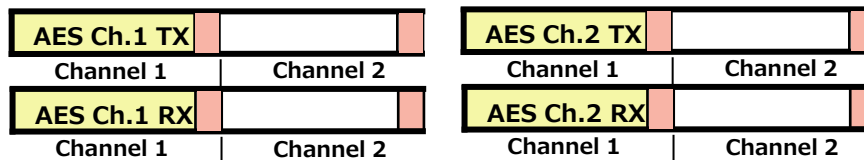
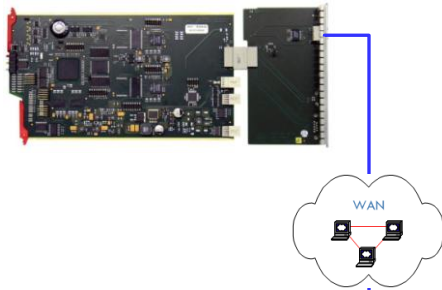
Status

Network Configuration
Device Configuration
Port Configuration
Clock Configuration
Firmware Update
Log Files
Restart Device

Port 1 4-Wire Mode 2-Ch. Mode	local: Port1@192.168.42.24 remote: Port1@192.168.42.28 voice Activity Detection: On voS (DiffServ): 0	Connection Uptime: 10 Audio Codec: G.722 64kbps PLC Audio Packet Size: 20 ms Receive Buffer: 160 ms
Port 2	local: Port2@192.168.42.24 remote: Port2@192.168.42.120 voice Activity Detection: On voS (DiffServ): 0	Connection Uptime: 0 Audio Codec: G.722 64kbps PLC Audio Packet Size: 20 ms Receive Buffer: 80 ms

Setup AES 4-Wire

Variation II: 2 separate Channels



1.

Bay	Card Type	Port	Type	Expan...	Long Name
A	CPU-128F G2				
B	CPU-128F G2				
1	VoIP-108-G2	1.1	4-Wire (VoIP)		AES 4-Wire 1st Channel
		1.2	4-Wire (VoIP)		AES 4-Wire 2nd Channel
		1.3	<unused>		
		1.4	<unused>		
		1.5	<unused>		
		1.6	<unused>		
		1.7	<unused>		
		1.8	<unused>		

2.

Properties of Port 'AES 4-Wire 1st Channel' (Type 4-Wire (VoIP))

General Details 1 Details 2 Trunking Gain Beep Virt. Keys VoIP Usage

Remote Port Address: 192.168.42.160

Remote SIP-ID: Port1

sip:Port1@192.168.42.160

Audio Codec: G.722 64kbps PLC

Audio Packet Size: 20 ms

Receive Buffer Size: 160 ms

Properties of Port 'AES 4-Wire 2nd Channel' (Type 4-Wire (VoIP))

General Details 1 Details 2 Trunking Gain Beep Virt. Keys VoIP Usage

Remote Port Address: 192.168.42.160

Remote SIP-ID: Port2

sip:Port2@192.168.42.160

Audio Codec: G.722 64kbps PLC

Audio Packet Size: 20 ms

Receive Buffer Size: 160 ms

CONNECT IPx8

User name: Admin
Device name: Connect IP

Connect IPx8 CAT Info Status

Network Configuration
Device Configuration
Port Configuration
Clock Configuration
Firmware Update
Log Files
Restart Device

Status

Port 1
4-Wire Mode

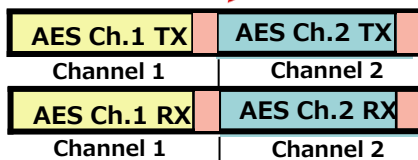
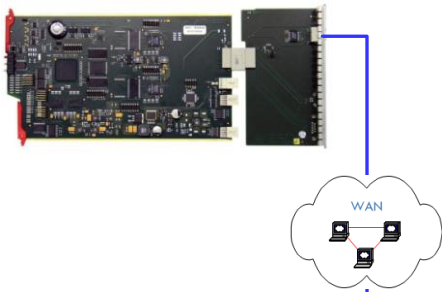
Local:	Port1@192.168.42.24	Connection Uptime:	66
Remote:	Port1@192.168.42.29	Audio Codec:	G.722 64kbps PLC
Voice Activity Detection:	On	Audio Packet Size:	20 ms
QoS (DiffServ):	0	Receive Buffer:	160 ms

Port 2
4-Wire Mode

Local:	Port2@192.168.42.24	Connection Uptime:	17
Remote:	Port2@192.168.42.29	Audio Codec:	G.722 64kbps PLC
Voice Activity Detection:	On	Audio Packet Size:	20 ms
QoS (DiffServ):	0	Receive Buffer:	160 ms

Setup AES 4-Wire

Variation III: 2 separate Channels merged



1.

Node #1					
Bay	Card Type	Port	Type	Expan...	Long Name
A	CPU-128F G2				
B	CPU-128F G2				
1	VoIP-108-G2	1.1	4-Wire (VoIP)		AES 4-Wire 1st Channel
		1.2	4-Wire (VoIP)		AES 4-Wire 2nd Channel
		1.3	<unused>		
		1.4	<unused>		
		1.5	<unused>		
		1.6	<unused>		
		1.7	<unused>		
		1.8	<unused>		

2.

Properties of Port 'AES 4-Wire 1st Channel' (Type 4-Wire (VoIP))

General Details 1 Details 2 Trunking Gain Beep Virt. Keys VoIP Usage

Remote Port Address: 192.168.42.160

Remote SIP-ID: Port1

sip:Port1@192.168.42.160

Audio Codec: G.722 64kbps PLC

Audio Packet Size: 20 ms

Receive Buffer Size: 160 ms

Properties of Port 'AES 4-Wire 2nd Channel' (Type 4-Wire (VoIP))

General Details 1 Details 2 Trunking Gain Beep Virt. Keys VoIP Usage

Remote Port Address: 192.168.42.160

Remote SIP-ID: Port2

sip:Port2@192.168.42.160

Audio Codec: G.722 64kbps PLC

Audio Packet Size: 20 ms

Receive Buffer Size: 160 ms

3.

CONNECT IPx8

Connect IPx8 CAT

Status

Port 1

4-Wire Mode 2-Ch. Mode

Local: Port1@192.168.42.24

Remote: Port1@192.168.42.25

Voice Activity Detection: On

GOS (DiffServ): 0

Connection Uptime: 139

Audio Codec: G.722 64kbps PLC

Audio Packet Size: 20 ms

Receive Buffer: 160 ms

Port 2

Output is routed to the 2nd AES Channel of the previous port.

Local: Port2@192.168.42.24

Remote: Port2@192.168.42.25

Voice Activity Detection: On

GOS (DiffServ): 0

Connection Uptime: 0

Audio Codec: G.722 64kbps PLC

Audio Packet Size: 20 ms

Receive Buffer: 80 ms

CONNECT IPx8

Connect IPx8 CAT

Info Status Network Configuration Device Configuration Port Configuration Clock Configuration Firmware Update Log Files Restart Device

Port Configuration

Port 1

Local SIP ID: Port1

Stun Server: stunserver.org

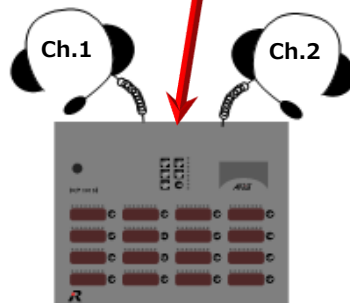
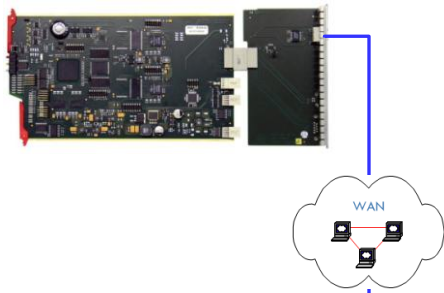
Insert the audio of the next port into the 2nd AES channel of this port. ☒

Apply Reset

Port 2

Local SIP ID: Port2

Setup Panel in 2-channel mode



1.

Bay	Card Type	Port	Type	Expan...	Long Name
A	CPU-128F G2				
B	CPU-128F G2				
1	VoIP-108-G2	1.1	DCP-1016E	<u...>	2ch. Panel
		1.2	(the port above uses this channel too)		
		1.3	<unused>		

2.

Properties of Panel '2ch. Panel' (type DCP-1016E)

General Details 1 Details 2 Trunking GPIO Virt. Keys VoIP Usage Rights

Long Name: 2ch. Panel

8-char Labels
Local: port 1.1

Alias:

If an Alias is entered, it overrides the 8-char local label.

Room Code:
Room-Code: <not assigned>

☐ Enable Room-Code for speaker mode
☐ Enable Room-Code for headset mode

☒ Enable 2nd audio channel
The 2nd channel can be used independently or for stereo sound

OK Cancel Apply

3.

Properties of Panel '2ch. Panel' (type DCP-1016E)

General Details 1 Details 2 Trunking GPIO Virt. Keys VoIP Usage Rights

Remote Port Address
Remote Host: 192.168.42.160

Remote SIP-ID: Port1

sip:Port1@192.168.42.160

Audio Codec:
Audio Codec: G.722 64kbps PLC
Audio Packet Size: 20 ms
Receive Buffer Size: 160 ms

CONNECT IPx8

CONNECT IPx8 CAT

Info Status

Network Configuration
Device Configuration
Port Configuration
Clock Configuration
Firmware Update
Log Files
Restart Device

User name: Admin
Device name: Connect IP

Status

Port 1
Control Panel connected
2-Ch. Mode

Local:	Port1@192.168.42.24	Connection Uptime:	18
Remote:	Port1@192.168.42.23	Audio Codec:	G.722 64kbps PLC
Voice Activity Detection:	On	Audio Packet Size:	20 ms
QoS (DiffServ):	0	Receive Buffer:	80 ms

Port 2

Local:	Port2@192.168.42.24	Connection Uptime:	0
Remote:	Port2@192.168.42.21	Audio Codec:	G.722 64kbps PLC
Voice Activity Detection:	On	Audio Packet Size:	20 ms
QoS (DiffServ):	0	Receive Buffer:	80 ms