

CHAZY CONTROL

Central Management Box for CHAZY 4K AV over IP series



User Manual VER 1.0

VER1.0

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

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1. Introduction

This Video over IP Controller is used to control and manage Chazy 4K and Dante IP products. It supports dual 1G network ports, with support for network isolation of Control network and Multicast video distribution network. The product supports Web GUI/TCP/RS -232/IR/GPIO controls and PoE.

2. Features

- Support for Auto, DHCP and Static IP configurations
- HTTPS, SSH, SFTP compatible
- · Built-in Web GUI, with Drag & Drop interface
- Live video previews
- · Video, audio, RS-232, IR, USB control and management of the distributed system
- Dual network ports (VIDEO LAN port supports PoE) to isolate Controls and Multicast networks.
- · Support LAN/RS-232 port control and third-party control systems via API
- · Support IR signal receiving and loop output (3.5mm audio jack, 12V level)
- · 4 channel GPIO control ports (5V/12V optional level)
- · Multiple circuits protection, lightning protection and ESD design

3. Package Contents

- 1x Chazy Control
- 1x 20kHz-60kHz 12V IR Receiver Cable (1.5 meters)
- 1x IR Blaster Cable (1.5 meters)
- · 2x 3-pin 3.81mm Phoenix Connector (Male)
- 1x 6-pin 3.81mm Phoenix Connector (Male)
- 2x Mounting Ears
- 4x Machine Screws (KM3*6)
- 1x 12V/1A Locking Power Adaptor

4. Specifications

	Technical										
Network Bandwidth	100M/1G										
Transmission Distance	100m CAT 5E/6/6A/7										
Control Ports	2x 1G LAN [RJ45 connector] [VIDEO LAN support POE] 1x IR IN [3.5mm audio jack, 12V level] 1x IR OUT [3.5mm audio jack] 1x DIGITAL I/O [6 -pin 3.81mm phoenix connector] 2x RS -232 [3-pin 3.81mm phoenix connector] 1x UPDATE [Micro USB, 5 -pin female]										
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)										
Dimensions	204mm (W) × 98.5mm (D) × 21.5 mm (H)										
Housing	Metal Enclosure										
Color	Turtle Aqua										
Weight	508g										
Power Supply	12V/1A										
Power Consumption	1.8W (Max.)										
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F										
Storage Temperature	-20°C ~ 60°C /-4°F ~ 140°F										
Operating Humidity	20% ~ 80% RH (relative humidity, non-condensing)										
Storage Humidity	10% ~ 90% RH (relative humidity, non-condensing)										

5. Operation Controls and Functions 5.1 Front Panel



No.	Name	Function Description
1	RESET Button	Press and hold this button (about 10 seconds) until STATUS LED starts flashing, Controller will be reset automatically.
2	POWER LED	The red LED will light on when the Controller is powered on.
3	STATUS LED	The status LED will flash in yellowish-green every 1 second until Controller boots up completely and Control LAN is ready, then it becomes solid.
4	UPDATE	Firmware update port.



5.2 Rear Panel



No.	Name	Function Description
1	DC 12V	DC 12V/1A power input port.
2	VIDEO LAN (POE)	1G Video LAN port, supporting PoE. Note: When POE is enabled, DC 12V/1A power supply is not required.
3	CONTROL LAN	The TCP/IP control network port.
4	3-pin Phoenix Connectors	Two identical RS -232 serial communication ports.
5	6-pin Phoenix Connector	4 channel I/O level outputs, 1 channel grounding, 1 channel power supply (supports up to 12V/0.5A) to the outside.
6	IO LEVEL DIP Switch	Used to control I/O level output and VOUT voltage. Switch to left: 5V I/O level output, VOUT is 5V. Switch to right: 12V I/O level output, VOUT is 12V.
7	IR IN	12V IR signal input port.
8	IR OUT	IR signal output port.

5.3 IR Pin Definition



6. Rack Mounting Instruction

6.1 6U Rack Mounting

This Controller can be mounted in a standard 6U rack (Please contact your supplier for 6U rack sale). The mounting steps are as follows:

Step 1: Use included screws to fix two mounting ears on the Controller, as shown in the figure below:



Step 2: Insert the Controller with mounting ears into a 6U rack (up to 10 units can be installed vertically), as shown in the figure below:



Step 3: Use screws to fix mounting ears on the rack to complete the mounting, as shown in the figure below:



6.2 1U Rack Mounting

This Controller also can be mounted in a standard 1U rack (up to 4 units can be installed horizontally). The mounting steps are as follows:

Step 1: Stack two Controllers on top of each other, then use included screws to fix two 1U rack panels on the Controllers, as shown in the figure below:



Step 2: Fix two 1U rack panels on another two stacked Controllers in the same way, then use screws to fix two 1U rack panels together, as shown in the figure below:



Step 3: Fasten screws between two 1U rack panels, so that four Controllers are mounted in a 1U rack, as shown in the figure below:



7. Web GUI Operation Guide

7.1 Preparation before Entering the System

You can use Controller's Web GUI to control all IP products at the Switch. The operation steps are as follows.

Step 1: Input the Controller's default IP address (Control LAN port: 192.168.6.100; Video LAN port: 169.254.8.100) or the URL (http://controller.local) into the Web browser address bar on the PC to enter the Web GUI login interface.



At first login, please select the initial username (admin), input the initial password (admin), and select the desired language on the above login interface. Then click "Login" to enter the password modification interface as shown below.

Please set a six-digit password using letters or numbers, then use the new password to log in to the Web GUI.

For the first time, you need to set up the system, as shown in the following figure:

Welcome to AV over IP system setup guide. It leads you to create the system easily by following steps. You can click the [Close] button to load an existing system in web page directly.



Step 2: Click the "Close" button to load an existing system in web page directly, or click "Next" button to go to the next step.



On this interface, you need to set the IP mode of Video LAN.

Mode 1: Automatically managed by Controller Box.

The IP addresses of the Video LAN port, Encoders and Decoders are assigned by the Controller automatically, and the connection method is as following.



Step 3: Click the "Next" button and wait for the completion to enter the interface as shown in the figure below.



 If you select "Automatically add Encoders and Decoders to system", and click the "Next" button to enter the Device page, the system starts to search for devices. All the connected devices will be searched and added into the system (presented in the Encoder/Decoder list) automatically, as shown below.

т	URT	LE			De	evice					Ð
9	Encoder	Decoder									
۲	D	Type	Name	MAC	IP	Firmware	Status	Up Time	RX Link	Member	
88	→ 1	Gen 2	PC Chazy 4K TX	6C:DF:FB:01:3D:B7	169.254.10.1	1.10.04	•	11 day,23 hr,59 min	3	Member	
2	> 2	Gen 2	Encoder 002	6C:DF:FB:01:3D:85	0.0.0.0	3.01.18	•	00 day,00 hr,00 min	0	Null	
ŧ	> 3	Gen 2	Chazy 4K USB-C	6C:DF:FB:00:04:EB	169.254.10.3	1.10.02	•	04 day,03 hr,25 min	0	Null	
<u>\$</u>											
p											
	Device										
	Search	Device Sear	ch Device Via Wizard	Add All Into System							
	Encoder			Clear	All	Decoder				(Clear All
	Index	MAC	IP			Index	MAC	IP			

If you select "List all discovered Encoders and Decoders", and click the "Next" button to
enter the Device page, the system starts to search for devices. All the connected devices
will be searched and listed in the Device list. Then an inquiry box will pop up. If selecting
"Yes", all searched devices will be added into the system directly; If selecting "No", you
need to manually add them into the system by clicking the "Add" button behind each device
one by one or clicking "Add All Into System".



If you want to change the IP mode of Video LAN, you can click "Search Device Via Wizard" on the Device interface, and switch back to the IP mode select interface.

Mode 2: DHCP mode.

The IP addresses of the Video LAN port, Encoders and Decoders are assigned by the Router automatically, and the connection method is as following.



Select "DHCP Mode" on the interface shown below, and click "Next".



The rest of the steps are the same as the Mode 1 operation.

Mode 3: Static IP mode by manual settings.

The IP addresses of the Video LAN port, Encoders and Decoders are manually set by the user, and the connection method is as following.



TURTLE

Ultimo Dante Audio Decoder



Select "Static IP mode by manual settings" on the interface shown below, and click "Next".

To do	setup AV over IP system, you need to set the IP management mode of the Video LAN main. The IP management modes are:
0	Automatically managed by Controller Box.
	This is the mode as factory default. The IP address assignments to Controller Box Video LAN, Encoders and Decoders will be managed by Controller Box firmware automatically. In this mode, there is no need to add router in the system on Video LAN domain.
0	DHCP mode.
	This is the mode for system in which there is a DHCP router on Video LAN domain to assign IP addresses for Controller Box Video LAN, Encoders and Decoders. The router acts as a DHCP server. It's recommended to set the net mask of router to 255.255.0.0.
0	Static IP mode by manual settings.
	This is the mode for system in case IP address resources can be assigned manually for Controller Box Video LAN, Encoders and Decoders. Reminders as below:
	 a. The network settings of Controller Box Video LAN, Encoders and Decoders must be on the same subnet. b. It's recommended to set the net mask of Controller Box Video LAN, Encoders and Decoders to 255:255.0.0.
_	
	Close

After entering the interface shown in the figure below, manually set the IP address, subnet mask and gateway of the Video LAN.

P Address	169 · 254 · 8 · 100	
Subnet Mask	255 - 255 - 0 - 0	
latoway	169 - 254 - 8 - 1	
teminder:		
Once Controller Box Vie	to LAN network is set, the IP addresses of following discovered Encoders and Decoders will be assigned to the	e same domain with
Controller Box Video LA	 Please click the [Next] button to set the IP address range of Encoders and Decoders. 	

Note:

The IP network domain of the Video LAN port must be different from that of the Control LAN port.



For example, we set the Video LAN network as shown in the above figure, and click the "Next" button. After the progress reaches 100%, enter the interface as shown in the figure below.



On this interface, you can set the IP address range of Encoders and Decoders.

After the setting is complete, click the "Next" button to enter the interface as shown in the figure below.



The rest of the steps are the same as the Mode 1 operation.

7.2 Functions and Operation

7.2.1 Device

On this page, you can click the Encoder/Decoder tab to check the information of the Encoders and Decoders in the system, such as ID, Type, Name, MAC address, IP address, Firmware version, Online/Offline Status, Up Time, RX Link, Member/Source. Besides, you can configure each Encoder/Decoder after clicking the drop-down icon on the left side of ID.

٦	URT	'LE			[Device					Ð
0	Encoder	Decoder									
۲	D	Type	Name	MAC	P	Firmware	Status	Up Time	RX Link	Member	
*	→ 1	Gen	2 PC Chazy 4K TX	6C:DF:FB:01:3D:87	169.254.10.1	1.10.04	•	11 day,23 hr,59 min	3	Member	
â	⇒ 2	Gen	2 Encoder 002	6C:DF:F8:01:3D.85	0.0.0.0	3.01.18	0	00 day,00 hr,00 min	0	Null	
*	⇒ 3.	Gen	2 Chazy 4K USB-C	6C:DF:FB:00:04:EB	169.254.10.3	1.10.02	•	04 day,03 hr,25 min	0	Null	
Ŷ											
1											
	Device										
	Search	Device	Search Device Via Wizard	Add All Into System							
					_	-					_
	Index	MAC	P	C	lear All	Index	MAC	p			Clear All

Note: The controller can simultaneously control two types of Encoders and Decoders (distinguished by Gen 1/2) in one system.

1	ruf	ŧТ	LE				De	vice					Ð
θ	Enco	oder	Decoder										
۲		ID	Type	Narr	e M	AC	IP.	Firmware	Status	Up Time	RX Link	Member	
100	Basic :	Settings	5										
-*			Name Ø		PC Chazy 4K TX								
R			Change ID		1			Preview					
ŧ			Power LED Flashing		011								
兌	A/V Se	ettings											
P			EDID		4K2K30_444,Dolby/DTS			Copy EDID		Select a deco	oder V		
			Audio		HDM			Transmission M	lode 🛛	Multicast			
			Dante Bridoe 👁		On								
	-												

Encoder Configuration Basic Settings

• Name: The name of the Encoder can be changed. (The maximum length is 16 characters. Special characters are not supported.)

Note: The Dante AV -ATM device can only be renamed here. The characters "", "_" and "'" that are not allowed for showing in Dante page will be replaced with "-". After renaming, the new name will be refreshed synchronously on the Dante page.

• **Change ID:** The ID of the Encoder can be set. (ID range:1-762) Note: Both ID and name can not be duplicated.

• **Power LED Flashing:** Click the drop-down menu to select the power LED flash status. **Off:** The front panel power LED is steady on after flash status is turned off.

Flashing: The front panel power LED flashes.

Flashing 90s then off: The front panel power LED is steady on after flashing for 90s.

· Preview: The preview of the Encoder.

A/V Settings

- EDID: Click the drop-down menu to select the EDID for the Encoder.
- · Copy EDID: Click the drop-down menu to select a Decoder for EDID copy.
- Audio: Click the drop-down menu to select the audio source (HDMI/Analogue).

(1) When HDMI is selected, Encoder HDMI input is the audio source for Encoder HDMI output and Decoder audio output.

(2) When Analogue is selected, Encoder audio input is the audio source for Encoder HDMI output and Decoder audio output.

Transmission Mode: Click the drop-down menu to select the transmission mode (Multicast/Unicast).

• **Dante Bridge:** Click the drop-down menu to select On/Off to turn on/off the Dante bridge function. When set to "On", the Encoder will receive the audio from Dante network, and then bridge it to the AV over IP system to be the audio source for the Decoders without Dante function.

Note: The Encoder HDMI loop output keeps outputting the native audio source, and will not be influenced by the setting here.

	LE			[Device			
Encoder	Decoder							
D	Type	Name	MAC	p	Firmware Status	Up Time	RX Link N	<i>lember</i>
Network Setti	ngs O	Apply)					
	IP Mode	Static			IP Address	169.254.10.1		
	Subnet Mask	255.255.0.0			Gateway	169.254.1.1		
Dual LAN Port	t Settings	Apply)					
	Dante VLAN Tag Enabled	011			Dante VLAN Tag(1~4095)			
	Dante VLAN IP Mode	DHCP			Dante VLAN IP Address			
	Dante VLAN Subnet Mask				Dante VLAN Gateway			
	Encoder ID Network Setti	Encoder Decoder D Type Network Settings • Subnet Mask Dual LAN Port Settings Darte VLAN Tag Enabled Darte VLAN Bubnet Mask	Encoder Decoder D Type Name Network Settings Active P Mode Static Subnet Mask 255.255.00 Datal LAN Port Settings Dente VLAN Tag Enabled Off Dette VLAN Subnet Mask C00.00	Encoder Decoder D Type Name MAC ID Type Name MAC Network Settings • Assay Stanc V Subnet Mask 255-255.0.0 D D Data LAN Port Settings Assay Off V Dente VLAN Tag Enabled Off V D Dente VLAN Subnet Mask DDCD D V	Encoder Decoder D Type Name MAC IP Network Settings Activ Static Sta	Encoder Device D Type Name MAC P Mode Subnet Mask 255 255.0.0 Dail LAN Purt Settings Address Daile VLAN Taglinabilid Off Daite VLAN Taglinabilid Off	Decoder Decoder D Type Name MAC P Pirmare Status Up Time PAdress 100/254.101 Subret Mask 255.256.00 Date VLAN Tag Enabled Off Date VLAN Edenest Mask 6000	Decoder Decoder D Type Name MAC P Primare Status Up Time RX Link k Network Settings Acel/ P Address 160.254.10.3 Line Status Line XEX P Address 160.254.10.3 Datal LAN Port Settings Acel/ Durte VLAN Tagli-Loopies Durte VLAN Tagli-Loopies Data VLAN Englished Off Durte VLAN Tagli-Loopies Durte VLAN Tagli-Loopies Data VLAN Settings Cocio Durte VLAN Tagli-Loopies Durte VLAN Tagli-Loopies

Network Settings

- · IP Mode: Click the drop-down menu to set the IP mode (Static/DHCP).
- · IP Address: The IP address of the Encoder.
- · Subnet Mask: The Subnet Mask of the Encoder.
- · Gateway: The Gateway of the Encoder.

Note:

(1) If the IP mode is set to "Static", you can manually set the IP Address, Subnet Mask and Gateway as required. Then click "Apply", the Encoder will immediately reboot to take effect.
(2) If the IP mode is set to "DHCP", it will search and be filled with the IP Address assigned by the router automatically.

(3) If the Encoder is actually alive in the system but with incorrect network segment settings, even though the Encoder is offline, its network settings including IP address can be changed and set.

Dual LAN Port Settings

- Dante VLAN IP Mode: The Dante VLAN IP mode (Static/DHCP) of the Encoder.
- · Dante VLAN IP Address: The Dante VLAN IP address of the Encoder.
- · Dante VLAN Subnet Mask: The Dante VLAN Subnet Mask of the Encoder.
- · Dante VLAN Gateway: The Dante VLAN Gateway of the Encoder.
- Dante VLAN: Click the drop-down menu to select On/Off to turn on/off the Dante VLAN.
- · Dante VLAN Tag (2~4095): The Dante VLAN tag of the Encoder.

т	URT	'LE			C	Device					
0	Encoder	Decoder									
	ID	Type M	Name	MAC	IP	Firmware Statu	s Up Time	RX Link	Member		
88	Hardware Usage										
-*		CEC Pin Usage	ARC/eARC			Capability of Amplifier C	n HDMI IN Port	ARC/eARC			
8		ARC/eARC Return From	None			Network Interface Usag	Copper				
*	RS-232 Setti	ngs	Apply								
<u>\$</u>		RS-232 Command Relay	Off	×		Parity	None				
p		Baud Rate	115200			Data Bits	8 bit				
		Stop Bits	1 bit								

Hardware Usage

• **CEC Pin Usage:** Click the drop-down menu to set the CEC pin usage (ARC/ eARC/CEC/Off). After switching, the Encoder will immediately reboot to take effect.

• **ARC/eARC Return From:** Click the drop-down menu to select a Decoder for ARC/eARC audio return.

Note: Only Encoders with ARC/eARC function can perform this setting.

• Capability of Amplifier On HDMI IN Port: It indicates the ARC capability supported by the Amplifier.

Note: When the amplifier on HDMI IN port only supports ARC, and the TV connected to the Decoder only supports eARC, the setting of "eARC Down grade To ARC" on the Decoder needs to set "On" to achieve the audio path working normally. The eARC downgrade of the Dec oder will also apply onto all Encoders that select this Decoder.

• **Network Interface Usage:** Click the drop-down menu to set the network port (Fiber/Copper).

Note: Only Encoders that integrate Copper and Fiber ports can perform this setting.

RS-232 Settings

• **RS - 232 Command Relay:** Click the drop-down menu to select On/Off to turn on/off the RS - 232 command relay function.

• Parity: Click the drop-down menu to set the parity.

- Baud Rate: Click the drop-down menu to set the baud rate.
- Data Bits: Click the drop-down menu to set the data bits.

• Stop Bits: Click the drop-down menu to set the stop bits.

After setting, click "Apply" to take effect.

т	URT	'LE			[Device					Ð
8	Encoder	Decoder									
•	D	Type	Name	MAC	IP	Firmware	Status	Up Time	RX Link	Member	
*	Port Settings										
R		IR Voltage	12V			IO Voltage		12V			
÷		IO 1 Direction	Output			10 1		Low			
£		Relay 1	Open			Relay 2		Open			
0	Rebo	at Re	place Remove	Remove All	Factory	Reset					
	> 2	Gen 2	Encoder 002	6C:DF:FB:01:3D:B5	0.0.0.0	3.01.18	۰	00 day,00 hr,00 min	0	Null	

Port Settings

- · IR Voltage: Click the drop-down menu to select the 5V/12V IR voltage.
- · IO Voltage: Click the drop-down menu to select the 5V/12VIO voltage.
- · IO 1 Direction: Click the drop-down menu to set the IO 1 direction (Input/Output).
- · IO 1: Click the drop-down menu to set the IO 1 level (Low/High).
- · IO 2 Direction: Click the drop-down menu to set the IO 2 direction (Input/Output).
- · IO 2: Click the drop-down menu to set the IO 2 level (Low/High).
- Relay 1: Click the drop-down menu to select Open/Close Relay 1.
- · Relay 2: Click the drop-down menu to select Open/Close Relay 2.

Reboot: Click the Reboot button to reboot the Encoder.

Replace: Click to replace the offline Encoder (which is in the system) with an online Encoder (which is not in the system).

For example, follow steps below to replace Encoder 001 with Encoder 006:

Step 1. Unplug the network cable of Encoder 001 to make it be offline. (Using external power supply.)

Step 2. Connect Encoder 006 to the system.

Step 3. Click the Replace button, which is clickable after Encoder 001 is set to be offline. Then a window will pop up, as shown below. At this moment, click "Scan for Devices" to search devices. After Encoder 006 is searched, select it and click "Replace" to replace Encoder 001.

	Device		Device
oder	Replace Encoder 001 X	ter	Replace Encoder 001 ×
Alle (11000) x (1107	If you want to replace the encoder with a new device, please ensure only't default product is connected. If you want to replace the encoder with a preset up device, please ensure it is not already part of this project. When ready please press "Search for Devices".	Name MAC	Please select a device to be used as the replacement. This process could take up to 1 minute. Replacement Select a replacement
	Search for Belvices	Reptor	Select a replacement Encoder Discovered (169.254.10.7)

Remove: Click the Remove button to remove the Encoder from the system. **Remove All:** Click this button to remove all Encoders from the system. **Factory Reset:** Click this button to restore the Encoder to factory settings.

Decoder Configuration

				Devid	e				Ð
Encoder	Decoder								
ID	Туре	Name	MAC	IP	Firmware	Status	Up Time	Source	
⇒ 1	Gen 2	TV	6C:DF:FB:01:3D:F1	169.254.20.1	1.10.04	•	00 day,00 hr,00 min	PC Chazy 4K TX 🗸 🗸	
> 2	Gen 2	Desk	6C:DF:FB:01:3D:EC	169.254.20.2	1.10.04	•	12 day;00 hr;03 min	PC Chazy 4K TX \vee	
> 3	Gen 2	Chazy 4K RX TV	6C:DF:FB:00:04:E8	169.254.20.3	1.10.03	•	04 day;03 hr;31 min	PC Chazy 4K TX 🔗	
	Encoder ID 1 2 3	Encoder Decoder ID Type 1 Oen 2 2 Oen 2 3 Oen 2	Decoder Type Name ID Type Name x 1 Gen 2 TV x 2 Gen 2 Desk x 3 Gen 2 Chazy 4K RK TV	Decoder Decoder ID Type Name MAC I Gen 2 TV 6CDF/F8013D/F1 I Gen 2 Desk 6CDF/F8013D/EC I Gen 2 Desk 6CDF/F8013D/EC I Gen 2 Chazy 4K/RX TV 6CDF/F80106/E8	Decoder Decoder ID Type Name MAC IP 1 Oen 2 TV 6C:DF:FB:013D:F1 169:264:20.1 2 Oen 2 Desk 6C:DF:FB:013D:F1 169:254:20.2 3 Oen 2 Chary.4K:RX:TV 6C:DF:FB:0004:E8 169:254:20.3	Decoder Decoder ID Type Name MAC IP Firmware 1 Gen 2 TV GCDF/FB.013D.F1 199.254.20.1 130.04 2 Gen 2 Desk GCDF/FB.013D.FC 199.254.20.2 130.04 3 Gen 2 Chazy 4K RX TV GC.DF/FB.00.04.68 199.254.20.3 130.03	Decoder Decoder ID Type Name MAC IP Firmware Status v 1 Oen 2 TV 6C.DF.FB.013D.F1 199.254.20.1 110.04 Image: Control 100 and 100	Dacoder Dacoder ID Type Name MAC IP Firmware Status Up Time v 1 Gen 2 TV 6C.DF/F8.0130.PT 198.254.20.1 110.04 IP 0 day,00 hc,00 min v 2 Gen 2 Desk 6C.DF/F8.0130.EC 199.254.20.2 110.04 IP 12 day,00 hc,01 min v 3 Gen 2 Chazy 4K.RX.TV 6C.DF/F8.000.6E8 199.254.20.3 110.03 IP 04 day,03 hc,31 min	Decoder Decoder ID Type Name MAC IP Firmware Status Up Time Source 1 Gen 2 TV 6C:DFFB:013D:F1 169:264:20.1 110:04 IP Od day,00 hc00 min IPC:Dmary 4K:TX V 2 Gen 2 Desk 6C:DFFB:013D:FC 169:254:20.2 110:04 IP 12 day,00 hc00 min IPC:Dmary 4K:TX V 3 Gen 2 Chary 4K:RX TV 6C:DFFB:00:04:E8 169:254:20.3 110:03 IP Od day,03 hc31 min IPC:Dmary 4K:TX V

Basic Settings

• Name: The name of the Decoder can be changed. (The maximum length is 16 characters. Special characters are not supported.)

Note: The Dante AV -A[™] device can only be renamed here. The characters "", "_" and "'" that are not allowed for showing in Dante page will be replaced with "-". After renaming, the new name will be refreshed synchronously on the Dante page.

· Change ID: The ID of the Decoder can be set. (ID range:1-762)

Note: Both ID and name can not be duplicated.

• **Power LED Flashing:** Click the drop-down menu to select the power LED flash status. **Off:** The front panel power LED is steady on after flash status is turned off.

Flashing: The front panel power LED flashes.

Flashing 90s then off: The front panel power LED is steady on after flashing for 90s.

т	'URT	LE			Devi	се		Ð
θ	Encoder	Decoder						
•	ID	Туре	Name	MAC	p	Firmware	Status Up Time	Source
*	Basic Settin	gs Name Ø	Chazy 4K RX TV			Hotkey Setting	Setting	
R		Change ID	3				Disalari	
≆		Power LED Flashing	Off			Preview	Not Detected	
ж. Р	A/V Settings							1
		Video Output	On			Video Mute	011	
		Rotation & Flip	Rotate 0°			Scaling	1080±860	

• **Hotkey Setting:** You can set up to 20 sets of hotkeys for Decoders. Click the "Setting" button to pop up the Hotkey Setting window, as shown in the following figure. Click the "+" icon to create a new hotkey, and then set the ID, function key, toggle key, action, signal/ target separately. Click the "-" icon to delete the corresponding hotkey settings.

Hotkey Setting

	otting					
Index	ID	Function key	Toggle key	Action	Signal/Target	Delete
1		Left Ctrl 🗸	1	Subscribe From	Encoder 002 V	
2	2 ~	Left Ctrl 🗸	2	Share Source To \checkmark	Decoder 003 V	
3	+					

For example:

After completing the hotkey settings for ID 1 and 2, as shown in the above figure. Press the function key "Left Ctrl" and toggle key "1" simultaneously 3 times in 1 second to execute the action "Subscribe From" to the signal "Encoder 002", that is, switch the signal source of Decoder 001 to Encoder 002. If press the function key "Left Ctrl" and toggle key "2" simultaneously 3 times in 1 second, the action "Share Source To" can be executed to the target "Decoder 003", that is, the current signal source "Encoder 002" of Decoder 001 will be switched to Decoder 003 at the same time.

Notes:

(1) Only Encoders and Decoders that support USB KVM functionality can perform hotkey settings.

(2) The toggle keys are limited to the keys within the red box on the keyboard, as shown in the following figure.

Esc	FI F	2	8	4)	15	F6	F7	FB	F9	F10)[FI	1 [8	2 Fi	n Prt	sc) \$107	*		0
			;	5	5	:	67	:		t 9	10]:	ł	8	ckspace	+)[-	nemik
Tab 🚝	Q		E		R	т	Y	U				P	I.	1	1	7	.8	9
CapsLoc	:*	A][5	D	F	G][н			к][ι) («		Enter	4	5	.6
� Shift	-	z	x	6		v][в][N	м	< ,		2	!	∲ Shi	ft	1 end	, 2	3
Ctrl	Fn	0	Alt	Г						Alt	1	Ctrl	1-	14	-	0	· .	ote

· Preview: The preview of the Decoder.

Besides, you can click the drop -down menu of "Source" on the Decoder list to select signal source for the Decoder.

Т	URT	LE			Dev	ice			Ð
0	Encoder	Decoder							
œ	D	Туре	Name	MAC	p	Firmware S	tatus Up Time	Source	
*	A/V Settings	Video Output	On			Video Mute	011		
R		Rotation & Flip	Rotate 0°			Scaling	1080p@60		
≆		Show ID OSD	Off			Output Mode	Matrix		
兌		Transmission Mode	Multicast			Audio Source On Outputs	Dante		
0		Dante Bridge Ø	On			ULL Mode	011		
	Locked Signa	I Routing							
		Video	Follow			Audio	Follow		

A/V Settings

- Video Output: Click the drop-down menu to select On/Off to turn on/off the video output.
- Video Mute: Click the drop-down menu to select On/Off to mute/unmute the video output.

• Rotation & Flip: Click the drop-down menu to select Rotate 0°/90°/180°/270° to rotate the image, or select Flip Horizontal/Vertical to flip the image.

• Scaling: Click the drop-down menu to set the video output scaling resolution.

• Show ID OSD: Click the drop-down menu to select On/Off to turn on/off the ID OSD display.

• **Output Mode:** In the Video Wall mode, you can click the drop-down menu to select Matrix or Video Wall as the output mode. While, in the Matrix mode, this option cannot be selected.

• **Transmission Mode:** Click the drop-down menu to select the transmission mode (Multicast/Unicast).

Audio Source On Outputs: Click the drop-down menu to select the audio source for Decoder HDMI output and analog audio output.

Native: Use AV over IP system audio stream as the audio source.

Dante: Use Dante audio from Dante network as the audio source.

In case of setting the audio routing of the Decoder in the Dante page, "Dante" must be selected.

• **Dante Bridge:** Click the drop-down menu to select On/Off to turn on/off the Dante bridge function. When set to "On", the Decoder will bridge the audio stream which the Decoder subscribes into Dante network, so that the audio stream in AV over IP system can be used for Dante devices in Dante network.

٦	URT	LE				Dev	/ice					Ð
θ	Encoder	Decoder										
 ⊕ □□ 	D	Type	N	iame	MAC	IP	Firmware	s	tatus	Up Time	Source	
	Locked Signa	al Routing										
-*		Video		Follow			Audio		Follow	r		
8		IR		Follow			RS-232		Follow	r		
≆		USB		Follow			CEC		Follow	r		
Ŷ		USB Data		Off								
P	Network Set	ings O		Apply								
		IP Mode		Static			IP Address		169.2	54.20.3		
		Subnet Mask		255 255 0 0			Gateway		169.2	5411		

Locked Signal Routing

Different signals can be independently routed between Encoders and Decoders, including Video, Audio, IR, RS -232, USB and CEC; When clicking the drop-down menu and selecting "Follow", the corresponding signal comes from the current Encoder.

For example, follow steps below to change the video routing of Decoder 001 to be from Encoder 002.

Step 1. Click the drop-down menu of Video to select "Encoder 002".

_ocked Signal Routing	
Video	Encoder 002
IR	Follow
	Encoder 001
USB	Encoder 002
USB Data	Off

Step 2. Switch to the Matrix page and you will see a red frame on Decoder 001.

Mark Encoder Decoder No Source No Source No Signal Comp Mark C No Signal Comp Mark C Comp Mark C C Comp Mark C C C C C C C C C C C C C C	TURTLE		Mat	ix		ę
Encoder Encoder No Source Ros Source R	Matrix					
No Source Preve field C Convy AV No Signal C Convy AV C C C C C C C C C C C C C C C C C C C	Encoder		Decod	ĸ		
No Signal Converting Converti	No Source	Preview Deck	P	_	Device	
No Signal Adds PC dary 44 TX EIC Dary 44 TX 0 Own 44 Usis c Colory 44 TX EIC Dary 44 TX EIC Dary 44 TX			Video	PC Chary 4K TX Excked	Offline	
No Signal Image: Signal image: S		1 415 68	- Audo	PC Chary 4K TX	e-PC Charge 4K TX	Enc:PC Chary 4K TX
No Signal #5-312 #Comp with: D www.music with #Comp with:	2	10 to	1.	PC Chaty 4K TX		
Chary Ak Use-C	No Signal		R5-232	PC Chazy 4K TX		
DEC PC DHay 4K TX		and the second s	USB	PC Chazy 4K TX		
	Chazy 4K 050-C		CEC	PC Childy 4K TX		
			_			

Step 3. Double-click the preview image of Decoder 001 to check the current settings. The video source has been locked to Encoder 002, while other signals still follow Encoder 001, as shown in the figure above. And you can change the source of audio, IR, RS -232, USB and CEC in the same way.

In addition, you can click the drop-down menu of USB Data to select On/Off to turn on/off the USB data.

Network Settings	Accity		
IP Mode	(Static ~)	IP Address	(169.254.20.2
Subnet Mask	(255.255.0.0)	Gateway	(169.254.1.1

Network Settings

- · IP Mode: Click the drop-down menu to set the IP mode (Static/DHCP).
- · IP Address: The IP address of the Decoder.
- Subnet Mask: The Subnet Mask of the Decoder.
- · Gateway: The Gateway of the Decoder.

Note:

(1) If the IP mode is set to "Static", you can manually set the IP Address, Subnet Mask and Gateway as required. Then click "Apply", the Decoder will immediately reboot to take effect.
(2) If the IP mode is set to "DHCP", it will search and be filled with the IP Address assigned by the router automatically.

(3) If the Decoder is actually alive in the system but with incorrect network segment settings, even though the Decoder is offline, its network settings including IP address can be changed and set.

22 / 40

т	URT	'LE			Devi	ce			Ð
θ	Encoder	Decoder							
•	D	Type	Name	MAC	IP	Firmware	Status Up Time	Source	
88	Dual LAN Po	rt Settings	Apply)					
-*		Dante VLAN Tag Enabled	Off			Dante VLAN Tag(1~4095)			
Я		Dante VLAN IP Mode				Dante VLAN IP Address			
ŧ		Dante VLAN Subnet Mask				Dante VLAN Gateway			
黛	Hardware Us	age							
P		CEC Pin Usage •	ARC/6ARC			Sink Capability	ARC/bARC		
		Audio Return Path	ARC/6ARC			eARC Downgrade To ARC	Off		
		Naturii Interface I Ienna	Conner						

Dual LAN Port Settings

- ① Dante VLAN IP Mode: The Dante VLAN IP mode (Static/DHCP) of the Decoder.
- ② Dante VLAN IP Address: The Dante VLAN IP address of the Decoder.
- ③ Dante VLAN Subnet Mask: The Dante VLAN Subnet Mask of the Decoder.
- ⊕ Dante VLAN Gateway: The Dante VLAN Gateway of the Decoder.
- ⑤ Dante VLAN: Click the drop-down menu to select On/Off to turn on/off the Dante VLAN.
- ⑥ Dante VLAN Tag(2~4095): The Dante VLAN tag of the Decoder.

٦	URT	LE			Dev	/ice			Ð
θ	Encoder	Decoder							
۲	D	Type	Name	MAC	Ρ	Firmware	Status Up Time	Source	
-5	Hardware Us	age							
Å		CEC Pin Usage	ARC/eARC			Sink Capability			
18		Network Interface Usage	Copper						
Ŷ	RS-232 Sett	ings	Apply						
P		RS-232 Command Relay 9	Off			Parity	None		
		Baud Rate	115200			Data Bits	8 bit		
		Otan Bita	4.64						

Hardware Usage

• **CEC Pin Usage:** Click the drop-down menu to set the CEC pin usage (ARC/eARC/CEC/ Off). After switching, the Decoder will immediately reboot to take effect.

Sink Capability: It indicates the ARC capability (eARC/ARC/None) supported by the TV.

 \cdot Audio Return Path: Click the drop-down menu to select the audio return path (ARC/ S/PDIF).

• **eARC Downgrade To ARC:** When the amplifier on HDMI IN port only supports ARC, and the TV connected to the Decoder only supports eARC, the setting of "eARC Downgrade To ARC" needs to set "On" to achieve the audio path working normally. The eARC downgrade of the Decoder will also apply onto all Encoders that select this Decoder.

Note: The settings of "Sink Capability", "Audio Return Path" and "eARC Downgrade To ARC" are available only for Decoders that support ARC/eARC.

• Network Interface Usage: Click the drop-down menu to set the network port (Fiber/ Copper).

Note: Only Decoders that integrate Copper and Fiber ports can perform this setting.

RS-232 Settings

• **RS-232 Command Relay:** Click the drop-down menu to select On/Off to turn on/off the RS-232 command relay function.

Note: When the RS-232 command relay function is turned on, the Decoder's locked signal routing function is disabled.

- · Parity: Click the drop-down menu to set the parity.
- · Baud Rate: Click the drop-down menu to set the baud rate.
- Data Bits: Click the drop-down menu to set the data bits.
- · Stop Bits: Click the drop-down menu to set the stop bits.

After setting, click "Apply" to take effect.

т	URT	LE			Devid	ce			Ð
0	Encoder	Decoder							
•	D	Type	Name	MAC	IP	Firmware	Status Up Time	Source	
-*	Port Settings	1							
R		IR Voltage	12V			IO Voltage	12V		
*		IO 2 Direction	Output			10 2	Low		
兌		Relay 1	Open			Relay 2	Open		
P	Rebo	ot Replace	Remove	Remove All	Factory Reset				
	> 3	Gen 2	Chazy 4K RX TV	6C:DF:FB:00:04:E8	169.254.20.3	1.10.03	 04 day,03 hr,3 	8 min PC Chaz	у 4К ТХ 🖂

Port Settings

- · IR Voltage: Click the drop-down menu to select the 5V/12V IR voltage.
- · IO Voltage: Click the drop-down menu to select the 5V/12V IO voltage.
- IO 1 Direction: Click the drop-down menu to set the IO 1 direction (Input/Output).
- IO 1: Click the drop-down menu to set the IO 1 level (Low/High).
- IO 2 Direction: Click the drop-down menu to set the IO 2 direction (Input/Output).
- IO 2: Click the drop-down menu to set the IO 2 level (Low/High).
- Relay 1: Click the drop-down menu to select Open/Close Relay 1.
- Relay 2: Click the drop-down menu to select Open/Close Relay 2.

Reboot: Click the Reboot button to reboot the Decoder.

Replace: Click to replace the offline Decoder (which is in the system) with an online Decoder (which is not in the system). The method to replace Decoders is the same as the Encoder replacement.

Remove: Click the Remove button to remove the Decoder from the system.

Remove All: Click this button to remove all Decoders from the system.

Factory Reset: Click this button to restore the Decoder to factory settings.

Device

· Search Device: Click this button to search devices which are not in the system.

• Search Device Via Wizard: Click this button to switch back to the IP mode select interface and follow the Wizard to set up the system.

• Add All Into System: Click this button to add all searched devices into the system, then the devices will be listed on the Encoder/Decoder list.

7.2.2 Matrix

Matrix Switching Function

• Left-click the Encoder and drag it to Decoder, then release the mouse to realize one-to-one switching.



• Left-click the Encoder and drag it to All Decoders, then release the mouse to realize one-to-all switching.

Note: Encoders can only be dragged to the Decoder preview of the same type to achieve signal switching. For one -to-all switching, only the Decoders of the same type will output the same signal.

• Left-click the Encoder and drag it to multiple Decoders, then release the mouse to realize one-to-many switching.

Disconnect the Signal Connection

Click the "No Source" image in the Encoder preview list with the left mouse button and drag it to the Decoder preview image. Release the mouse to disconnect the Decoder from the signal source, and the corresponding display will show "No Source". If you drag the "No Source" image to "All Decoders" and release the mouse, a prompt window will pop up as shown below. Manually enter "YES" and then click "Yes", all Decoder signal sources in matrix mode will be disconnected. After that, you need to configure Encoders for Decoders again. Therefore, please proceed with caution.



Signal Routing Query

Double-click the preview image of Decoder to check the Video/Audio/IR/RS-232/USB corresponding relationship between the Encoder and Decoder.



7.2.3 Video Wall

т	URTL	E				\	/ide	o Wall				Ð
⊕ ⊕	Video Wall Lis	t Video Wall S	iource					Settings				
* R = 2 P	0	anı	N-Count No Dett	H-Count	Show OSD	Cre Airr	Note	Video Wall Name	Preset Name	Cass No Dete	Source	

Video Wall Creation

On the Video Wall List interface of this page, you can create and configure video wall as required. Please follow below steps to create and configure a video wall.

Step 1: Click "Create", a pop-up window will be shown as below.

Create a new Vide	eo Wall	×
Video Wall ID	(1	\sim
Video Wall Name	Video Wall 1	\square
Row Number	(2	
Column Number	(2	Â
	Go	

You can set the Video Wall ID, Video Wall Name, Row Number and Column Number. Then click "Go" to create the video wall.

Note:

(1) Up to 9 video walls can be created.

(2) The video wall name can be changed after the video wall is created.

Step 2: Select the video wall that you want to configure, then click "Assign Decoder" at the bottom of the Video Wall List interface to enter the Decoder assignment interface. Click each screen to select the corresponding Decoder device, then click "Apply" to take effect.

.ist							Settings			
	Name	V-Count	H-Count	Show OSD		Create	Video Wall Name	Preset Name	Class	Source
	(Video Wall 1) 2	2	(0#		Harrow .	Video Wali 1	Preset 1	Class A	Encoder 001
2	Video Wall 2) +	2	01			Video Wall 2	Preset 1	Class A	Enco
	Video Wall 2) 1	2	OH			Video Wall 2	Presett 1	Class A	Encoder 001
Assign	(Video Wall 2 Decodor Class Pr) 1 esat] []	2 Jorder Adjust	(Off			Video Wall 2	Preset 1	Cless A	Encoder 001
Assign	(Video Wall 2 Decoder Class Pr) 1 eset [2 londer Adjust	ment	-		Video Wall 2	Preset 1	Class A	Encoder 001

Notes: A Decoder can only be assigned to one video wall.

Step 3: Click "Class Preset" to enter the class configuration preset interface, then click each screen to select the corresponding Class as required (the same class name will form a video wall, you can create a regular or irregular video wall by Class Preset). Then click "Apply" to take effect.

The preset name can be changed with letters or numbers (max length: 16 characters).

58						Settings			0
	Name	V-Count	H-Count	Show OSD	Create	Video Wall Name	Preset Name	Class	Source
	(Video Wall 1	2	2	(0#		Video Wall 1	Preset 1	Class A	Encoder 001
	(Video Wall 2	1	2	Off		Video Wall 2	Preset 1	Class A	Encoder 001
						Video Wall 2	Preset 1	Cless B	Encoder 001
Assign	Decoder Class Pres	set B	lorder Adjust	mont		Pre	set1 🔍 🗛	wy Cear	Create Presel Den
Assign	Decoder Class Pre	set 8	lorder Adjust	morit		Pre	H1) (4	NY Cear	Create Preuel

Besides, you can click the drop -down menu icon behind the preset name to switch different presets (the selected preset will be high-lighted in Settings), click "Create Preset" to create up to 9 configurations for different application scenarios, click "Clear" to clear and reset video wall class settings, or click "Delete" to delete the current class preset from the system. After setting, you should click "Apply" to take effect.

Step 4: Click "Border Adjustment" to enter the Border Adjustment interface, then click the drop-down menu to set the Base Width, Image Width, Base Height and Image Height. Finally, click "Apply" to adjust the border of each Decoder, or click "Apply All" to adjust the borders of all Decoders.

List						Settings			
iD	Name	V-Count	H-Count	Show OSD	Create	Video Wall Name	Preset Name	Class	Source
1	Video Wall 1) 2	2	(on ~)	Renae	Video Wall 1	Presist 1	Class A	(Encoder 001 V)
2	Video Wall 2) 1	2	(011 ~~)		Video Wall 1	Preset 2	Class A	(Encoder 001 💛
						Video Wall 1	Preset 2	Class B	(Encoder 001 v)
						Video Wall 2	Preset 1	Class A	(Encoder 001 🗠
						Video Wall 2	Preset 1	Class B	Encoder 001
Assign De	ecoder Class Ph	eset. B	order Adjusti	nent					
[Row, Colum	n) Display B	Base Width		Image Width	Base He	ight	Image Height		
(1,1)(Decode	H 001) (1000)	1000	(1	000	1000	Acoly	Apply All
[1,2](Decode	er 002)	1000)	1000	(10	00	1000	Accity	Acoly Al

Note: The Base value cannot be more than 2 times the Image value.



Video Wall Source



After the video wall is created and configured, you can click the Video Wall Source tab to check the video wall preview, video wall class, and its corresponding signal source. You can click the "VW" icon on the preview of video wall to switch different video walls, or click the "Pre" icon to switch different presets.

Besides, you can directly drag Encoders to the video wall to change signal sources. If you drag "No Source" to the video wall, then the signal source of the video wall will be disconnected, and the corresponding windows will display "No Source".



Note:

- (1) If the Encoder is offline, it can't be dragged to the matrix of video wall.
- (2) Only Encoders of the same type can be dragged to the video wall to switch signals.



Video Wall Remove

If you want to delete a video wall, just select the video wall on the "Video Wall List", then click "Remove". A prompt window will pop up and you can delete it after clicking "Yes".



Notes:

(1) Each Decoder can be set into a part of a video wall array. Each system can contain multiple video walls with different sizes. Each video wall can be assigned to different screens and different layouts that range from $1x^2$ up to $9x^9$.

(2) The controller creates and manages the video wall configurations and provides a simplified control interface and API commands to third party control system.

7.2.4 Dante

	Dante	
Routing Device Info (Dante Stock Status Events Update	a
	Routing Device Into (*Danke Partnersters Partnersters Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Partnersters Routing Routing Partnersters Routing Routing Partnersters Routing Ro	Dance Roding Device Info Clock Status Events Update -* Danke Facturesmin -* Danke Facturesmin (B Charge Adde Ph

Routing

All devices in the system are displayed on this interface. Before setting the Dante routing, you can filter devices as required by checking the items on the left side of the interface, or directly enter the filter items in the input box of Filter Transmitters/Filter Receivers. If clicking "Clear All", all filter items will be cleared.

TURTLE		Dante	a.
•	Routing Device Inf	to Clock Status Events Update	
Clear All Ell El	-& Dante FilterTransmitters	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Video Format Autio Sample Rote Latency Subscription	FiterReceivers	O transmission Onary-A PO-Ona	
E Tx Multicest Plows E AES67	Chazy-4K-RX-TV		
2	B 01 G 01	e e	
	O2 Desk Desk Monitror		
	Ω 01 Ω 02		
	Ω 01 Ω 02		

Click the "+" icons of Transmitters and Receivers to expand devices, then set the Dante routing according to your need.

The Dante routing of video or audio L/R channel can be set independently. After pairing the Dante AV-A[™] devices on the Routing interface, video routing will refresh synchronously on the Matrix interface. At the same time, USB, IR, RS -232, CEC and audio routing will also follow the configuration and synchronize the refresh. Similarly, the video routing of Dante AV-A[™] devices will be refreshed synchronously on the Routing interface after pairing videos on the Matrix interface.

Device Info

Ro	uting	Device Info CI	ock Status Event	ts Update					
	ID	Name	Model Name	Product Version	Dante Version	Primary Address	Primary Link Speed	Secondary Address	Secondary Link Speed
	1	DEP-1	DA22XLR-WP-US- V2	1.0.1	1.3.3.5	169.254.77.210	100Mbps	N/A	N/A
×	2	Decoder-002	DAV-R	2.0.0	1.3.3.3	169.254.20.3	1Gbpe	N/A	NJA
÷	3	Decoder-001	DAV-R	2.0.0	1.1.1.1	169.254.20.2	10bps	N/A	N/A
ł	4	DEP-2	DU-TR-22	1.0.1	1.2.1.1	169.254.5.252	100Mbps	N/A	N/A
	5	Encoder-002	DAV-T	2.0.0	1.1.1.1	160.254.10.5	10bps	N/A	NUA
	6	Encoder-001	DAV-T	2.0.0	1.1.1.1	109.254.10.1	10bps	N/A	NJA
x	7	Ultimo-1	DP-8-22	10.0	42.82	169.254.213.123	100Mbps	N/A	N/A
2	8	Ultimo-2	DU-TR-22	10.0	4.2.6.5	169.254.224.123	tooMbps	N/A	N/A

The Device Info interface displays the information of devices in the system, including ID, name, model name, product version, Dante version, primary address, primary link speed, secondary address and secondary link speed. In addition, you can view details or configure each device after clicking the drop-down icon on the left side of ID.

Device Configuration

• **Receive:** The Receiver Channels displays the current receiver channels and the channels they are routed to. You can filter the channels by entering the items in the input box of Available Channels.



Rou	ting	Device Info	Clock Status Events	Update					
	1D	Name	Model Name	Product Version	Dante Version	Primary Address	Primary Link Speed	Secondary Address	Secondary L
	1	169.254.20.2 Decoder-002	DAV-R	2.0.0	1.1.1.1	169.254.20.2	1Gbps	14/A	N/A
lece	ive								
	Receiver	Channels		1.1	Available Channels				
	Channel		Connected To		Filter				
	E (01		01@Encoder-001 📀	6	Decoder-002 Decoder-001				
	G (01			0	Decoder-004 Decoder-005				
	- (E] DEP-1] Encoder-001				
	·* (02			E	Encoder-002				

• **Transmit:** The Transmit Channels displays the selected transmit channels, and you can rename each channel. The Multicast Transmit Flows displays the current multicast flow, and you can add new multicast flows by clicking the "+" icon or delete the multicast flow by clicking "Delete".

Routing Device Info Clock Status Events	Update
Transmit	
Transmit Chansels	Multicast Transmit Flows
Channel	
Ω (01	A Mutricast Flow2: 01,02
n (02	
	Delete

• **Status:** You can view the manufacturer information (model name/manufacturer/product version), Dante information (Dante model/Dante software version) and interfaces (IP address/Mac Address).

• Device Config: You can view/set the sample rate (44.1k/48k/88.2k/98k), encoding formats

outing Device Info Clock Status Events Upda	ate
atus	
Manufacturer Information	Dante Information
Model Name DAV-R Manufacturer: Habor Pry Lill. Product Version: 2.0.0	Davite Model: Davite MV-X Davite Software Version: 1111
Interfaces	
P 16 P Address: 169,254,20,2 MAC Address: 6c df 50-01 Tirec	

(PCM 16/24/32), and the device latency (2/3/4/5/10 msec), reboot the device, or clear the configuration of the device. Rename device is only available for third-party Dante devices. The characters " ", "_" and " ' " are not allowed.



Rename Device	Sample Rate
Decoder-002	Sangle Role (48). Sangle Role Pul-up: Tis divisit date not support sangle rate judi-up configuration
Ercoding	Device Latency
threading (RCM 24	Lidency: (

• Network Config: You can view/set the network configuration of the device.

R	outing C	Device Info Clock Status Events Update
24	stwork Config	
	Address	
	X Oblin and	Adata Automotick (tabled)
	10	0025420.7
>	Netroack:	(255.255.0.0
	DNS Server:	(1270.0.1
	Gateway:	(109.254.1.1
		The backet count for configured

• **AES67 Config:** You can view/set the AES67 configuration of the third-party Dante device. Note: Dante AV-A[™] devices does not support this setting.

Oner All		ES67 Co	nfig					
dedia Type Video Format Natio Sample Rate Latency Subscription Tx Multicast Plans		AESI Current New:	7 Mode Disabled	<u>)</u>		RTP Multicast Address P Current Profix N New Address Profix (n Set	
M3467	¢	1 2	Decoder-002	DAV-R	2.0.0	1111	169,254,20,3	10bps
		5 3	Decoder-001	DAV-R	2.0.0	1333	109.254.20.2	1Gbps
		1 4	DEP-2	DU-TR-22	1.0.1	1211	109,254,5.252	100Mbps
			Encoder (107	DAY-T	2.0.0	1333	109.254.10.5	YOtapis
			L'ILLIAN COL					

Clock Status

The Clock Status interface displays the clock status of devices in the system, including ID, name, Sync status, mute status, clock source, primary v1 multicast, primary v2 multicast, secondary v1 multicast, secondary v1 multicast and preferred leader.

Note: When the clock of the device synchronize the time of the leader Dante device, the Sync light is green, otherwise, both the Sync and mute lights are red and there is no signal output.

Routing	Device Info	Clock Status	Ever	its Upda	to				
ID	Name	Sync	Mute	Clock Sourc e	Primary v1 Multicast	Primary v2 Multicast	Secondary v1 Multicast	Secondary v2 Multicast	Preferred Leader
1	DEP-1			Dante	Follower	Disabled	N/A	NA	N/A
2	Decoder-002			Dante	Follower	54/A	N/A	N/A	N/A
3	Decoder-001	•		Dante	Follower	N/A	N/A	NA	N/A
4	DEP-2			Dante	Follower	Disabled	N/A	N/A	N/A
5	Encoder-002			Dante	Follower	N/A	N/A	NA	N/A
6	Encoder-001			Dante	Follower	N/A	N/A	N/A	N/A
7	Ultimo-1			Dante	Leader	Disabled	N/A	NIA	
8	Ultimo-2			Dante	Follower	Disabled	N/A.	N/A	0

Events

The Events interface displays the event information of devices in the system, including number, timestamp, device name and event content.

	Routi	ng Device Info Clock Statu	s Events U	odate		
	No.	Timestamp		Name	Content	
	161	2024-09-26 10:01:04		Encoder-002	Clock Syn	c locked
	162	2024-09-26 10:01:04		Encoder-002	Audio UnN	lute
>						
						Ene Char

Update

Third-party Dante devices in the system can be updated on this interface. Click the drop down menu to select the Dante device type "Ultimo/DEP", then check the box to select the devices to be updated, and click "Upload Dante Firmware" to upload the update firmware. After loading, you need to click "Update All" to update firmware for all devices, or click "Update" to update firmware for a single device.

Juno		Upload Conto Fermane			
	ID .	Name	Firmware	Model	Unputer of A
3	1	Liltimo-1	42.82	Ultimol(2	Cutor
3	2	Ultimo-2	42.65	UltimoX2	

7.2.5 User

User					
					Create C
Name		Encoder IDs	Decoder IDs		
guest			a0		
Access					
and 10 million					heavy
Encoder		Select AB Class	Decoder		Select All Clear
Transfer 001	Transfer 202		C Decision OCT	C December 000	

On this page, you can add new user accounts with their own control privileges. This will allow you to create a unique login and limit features such as inputs and outputs that each person has access to. Follow steps below to create a new User.

Step 1: Click "Create", a pop-up window will be shown as below.

Create User	>
Liner Neme	
User Name	
User Password	
Confirm Password	
	Go

Step 2: Input the User Name, User Password and Confirm Password. Then click "Go" to create the User.

Notes:

(1) The username requires a minimum of 6 characters and a maximum length of 12 characters. Special characters are not supported; The password has a minimum of 6 characters and a maximum of 8 characters.

(2) The Password and Confirm Password must be the same.

Name Encoder Ds purst af af af	
Name Encoder Ds part1 af af uorr af af	
part al com unir al al com	
a k w	
Access Password	
Rev.	2
Encoder Geer Al Coar Geer Al Coar	

After the new User is created, you can select the Encoders and Decoders as required by checking the devices on the bottom of the User page one by one, or directly click "Select All" to select all devices in the system. Then click "Apply" to take effect.

Besides, you can click "Password" to change the User's password, or click "Remove" to delete the User. If you want to login with the new User, just click the logout icon at the upper right corner of this page to log out, and then login with the new user name and password.

7.2.6 Controller Settings

т	URTLE			Controller	Controller Settings				
⊜ ⊕	System Configurations								
88	Save	Load	Clear						
.*	Controller Settings								
~	General								
8	Version	1.10.08			GUI Version				
2	RS-232 BaudRate	57600			SSH	On v			
0	HTTPS	On			SSH Port	22			
	Teinet	On			Domain Name	controller			
	Teinet Port	23							
	Control Network	Apply							
	DHCP	Off			Subnet Mask	255.255.0.0			
	IP Address	192.168.0.101			Gateway	192.168.0.1			
	Video Network	Apply							
	DHCP	011			Subnet Mask	255.255.0.0			

System Configurations: Click "Save" to save the current configuration; click "Load" to load the system configuration JSON file and replace the current system configurations (It's strongly recommended to save the current configurations before loading); click "Clear" to clear system configurations already created and configured in the controller, and you need to set up the system again.

Controller Settings

• **General:** The general settings of the Controller. You can check the Controller Version, GUI Version and Domain Name. In addition, you can set the RS-232 BaudRate, HTTPS, Telnet, Telnet Port, SSH and SSH Port.

(10000)	CL B Marrison	Cun
Course	DOI WINDIN	Cm
(57600 ~)	SSH	(on ~)
(v) v)	SSH Port	(n)
(On +)	Domain Name	controller
(23		
Austr		
(Oii V)	Subret Mask	255.255.255.0
10.2.1601.05.100	Gateway	(193:100.0.1
Note		
(~ ma	Subret Mask	(255.255.0.0
(NED 254 8 NO	Gateway	(160.254.8.1
	(10335) 52600 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	L00.305 OUI Version SH600 SH Off SH Porti On Domain Name 23 Submit Mark On Submit Mark On Gateway On Submit Mark On Submit Mark

• **Control Network:** The network port configuration of the Controller connected to the router, PC directly or network Switch in where the PC for control is. When DHCP is set to "Off", you can manually set the IP Address, Subnet Mask and Gateway as required, then click "Apply" to take effect. When DHCP is set to "On", the system will search and fill the IP Address with the one assigned by the router automatically.

Note: When DHCP is set to "Off" which is in Static IP mode, the network settings of Control LAN and PC should stay in same network segment. Otherwise, the controller Web GUI can not be accessed from PC until you change PC network settings in same network segment.

• Video Network: The network port configuration of the Controller connected to the network where the Encoders and Decoders stay. When DHCP is set to "Off", you can manually set the IP Address, Subnet Mask and Gateway as required, then click "Apply" to take effect. When DHCP is set to "On", the system will search and fill the IP Address with the one assigned by the router automatically.

Note: When DHCP is set to "Off" which is in Static IP mode, the network settings of Video LAN and Encoders/Decoders should stay in same network segment. Otherwise, Encoders/ Decoders would be showed as offline. In this case, you should change Video LAN or Encoders/Decoders IP settings to be in same network segment to bring Encoders/Decoders back online. If the Encoders/Decoders are actually alive in the system but with incorrect network segment settings, even though Encoders/Decoders are showing offline, their network settings including IP address can be changed and set.

• **Controller Reset:** Click "Settings Reset" to reset controller all settings except network settings; Click "Network Reset" to reset controller network settings; Click "Reset All" to reset controller all settings including network settings.

TURTLE				Firmware Update				Ð			
0	Firmwa	are Update									
⊕	Upload	User EDID 1 Upload	User EDID 2	Upload Decod	ier Logo Picture	Upload Controller Firm	ware Upload	d Encoder or Decoder Firmwa			
*	Encode	r				Update All	Decode	H.			Update All
R	ID	IP/MAC	Firmware	MCU Firmware	SS Firmware		ID.	IP)MAC	Firmware	MCU Firmware	
÷	1	169.254.10.1 6C:DF:F8:01:3D:87	1.10.04	1.03.29 1.00.02		Update	1	169.254.20.1 6C:DF:F8:01:3D:F1	1.10.04	1.02.26 1.00.02	Update
Ŷ	2	0.0.0.0 6C:DF.FB:01:3D:85	3.01.18			Update	2	169.254.20.2 6C:DF:FB:01:3D:EC	1.10.04	1.02.26 1.00.02	Update
1	3	169.254.10.3 6C:DF:FB:00:04:EB	1.10.02	1.00.10 1.00.04		Update	3	169.254.20.3 6C:DF:FB:00:04:E8	1.10.03	1.00.05 1.00.04	Update

7.2.7 Firmware Update

• **Upload User EDID 1/2:** Click the button to open an EDID binary file and upload it to User EDID 1/2.

• **Upload Decoder Logo Picture:** Click the button to upload the Decoder Logo Picture. Then click "Update All" to apply the picture for all Decoders or click "Update" to apply the picture for a single Decoder.

Note: The jpg picture must be greater than 4kB, less than or equal to 512kB, and the resolution of the picture must be less than or equal to 1920x1080.

· Upload Controller Firmware: Click the button to upload the Controller update firmware.

• **Upload Encoder or Decoder Firmware:** Click the button to upload the Encoder/Decoder update firmware. After loading, you need to click "Update All" to update firmware for all Encoders/Decoders, or click "Update" to update firmware fora single Encoder/Decoder.

7.2.8 Password

Т	URTLE	Password	Ð
 ● ●	Password Old Password New Password Confirm Password		

On this page, you can change the password by inputting the New Password and Confirm Password, and then clicking "Apply" to take effect.

Notes:

(1) The password requires a minimum length of 6 characters and a maximum of 8 characters. Special characters are not supported.

(2) The New Password and Confirm Password must be the same.

(3) After changing password, the system will skip to the Web GUI login interface

automatically. You need to log in the Web GUI again with the new password.

In addition, there is a logout icon in the upper right corner of each page of the Web GUI. Clicking the icon will exit the Web GUI and automatically skip to the login interface.

8. Application Example



Notes:

(1) The Controller has two LAN ports, one is Video LAN and the other one is Control LAN. The purpose of designing Controller with two LAN ports is to isolate audio/video (AV) network from control network. So to make AV network as an independent network which can not be accessed from control network directly, it's for bringing network security and avoiding AV network traffic flowing into the network in which the controls and managements are for the IP system.

The strongly recommended system setup is connecting Video LAN and Encoders/Decoders in a network Switch, connecting Control LAN and PC in another network Switch. The controls from Control LAN can be achieved by Web GUI/Telnet or SSH login/API commands, all these controls can be bridged by the Controller and applied onto Video LAN. The two LANs are isolated.

For simple usage, you can only connect all Encoders/Decoders and Video LAN and PC RJ-45 port into a single network, and let the Control LAN port not-connected (floating), as Video LAN also supports Web GUI/Telnet or SSH login/API commands controls, this seems "convenient" for general use scenarios, but this is only suggested for system in which there is no network isolation requirement or network traffic non-sensitive.

Only Control LAN connected while Video LAN floating, this is not allowed.

(2) For the default IP mode of Control LAN port of the Controller Box is DHCP, the PC also needs to be set to "Obtain an IP address automatically" mode, and an optional DHCP server (e.g. network router) is recommended in the system.

(3) If there is no DHCP server in the system, 192.168.6.100 will be used as the IP address of Control LAN port. You need to set the IP address of the PC to be in the same network segment. For example, set PC's IP address as 192.168.6.88.

(4) You can access the Web GUI by inputting URL "http://controller.local"or the Control LAN port IP address 192.168.6.100 (in case of no optional router) on your computer's browser.
(5) No need to care about settings of Video LAN port of the Controller Box, as they are managed by Controller automatically (Default).

(6) When the Network Switch does not support POE, the Encoder, Decoder and Controller Box should be powered by DC power adapter.