

IP-NINJAR Management and Control Box

NJR-CTB

<User's Guide>

Ver.1.1.0

IP-NIN JAR C	ONTROL BOX	NJR-CTB
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- Thank you for choosing our Digital Multi Switcher.
- To ensure the best performance of this product, please read this User's Guide fully and carefully before using it and keep this manual beside the product.

IDK Corporation

Trademarks

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Before reading this manual

- All rights reserved.
- Some of the contents in this User's Guide such as product appearance in diagrams, menu operations, communication commands, and so on may differ depending on the version of the product.
- This User's Guide is subject to change without notice. You can download the latest version from IDK's website at: <u>http://www.idkav.com</u>

The reference manual for the NJR-CTB consists of the User's guide (this document) and Command guide. Please download these guides from the website above.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

CE MARKING

This equipment complies with the essential requirements of the relevant European health, safety and environmental protection legislation.

WEEE MARKING



Waste Electrical and Electronic Equipment (WEEE), Directive 2002/96/EC (This directive is only valid in the EU.)

This equipment complies with the WEEE Directive (2002/96/EC) marking requirement. The left marking indicates that you must not discard this electrical/electronic equipment in domestic household waste.

Safety Instructions

Read and understand all safety and operating instructions before using this product. Follow all instructions and cautions as detailed in this document.

Enforcement Symbol	Description	
A Warning	Indicates the presence of a hazard that may result in death or serious personal injury if the warning is ignored or the product is handled incorrectly.	
A Caution	Indicates the presence of a hazard that may cause minor personal injury or property damage if the caution is ignored or the product is handled incorrectly.	

Symbol	Description	Example
Caution	This symbol is intended to alert the user. (Warning and caution)	Electrical Hazard
Prohibited	This symbol is intended to prohibit the user from specified actions.	Do not disassemble
Instruction	This symbol is intended to instruct the user.	Unplug

	Warning
	Do not place the product in any unstable place. Install the product in a horizontal and stable place. Otherwise, it may fall/turn over and lead to injury.
\bigcirc	Do not place the product in any environment with vibration. Otherwise, it may move/fall and lead to injury.
Prohibited	Keep out any foreign objects. In order to avoid fire or electric shock, do not allow foreign objects, such as metal and paper, to enter the product from the vent holes.
	 For power cable/ plug: Do not scratch, heat, or modify, including lengthening them. Do not pull, place heavy objects on them, or pinch them. Do not bend, twist, or tie them together forcefully. Misuse of the power cable and plug may cause fire or electric shock. If power cables/plugs become damaged, contact your IDK representative.
Do not disassemble	Do not repair, modify or disassemble. Since the product includes circuitry that uses potentially lethal, high voltage levels, disassembly by unauthorized personnel may lead to the risk of fire or electric shock. For internal inspection or repair, contact your IDK representative.
Do not touch	In the event of electrical storms, keep away from the main unit and cables such as power cable and LAN cable. Contact may cause electric shock
	For installation: The product is intended to be installed by skilled technicians. For installation, please contact a system integrator or IDK. Improper installation may lead to the risk of fire, electric shock, injury, or property damage.
	Set the power plug in a convenient place to unplug easily. Unobstructed access to the plug enables unplugging the product in case of any extraordinary failure, abnormal situation or for easy disconnection during extended periods of non-use.
Instruction	Insert the power plug into an appropriate outlet completely. If the plug is partially inserted, arching may cause the connection to overheat, increasing the risk of electrical shock or fire. Do not use a damaged plug or connect to a damaged outlet.
	Clean the power plug regularly. If the plug is covered in dust, it may increase the risk of firer.
	Unplug immediately if the product smokes, makes unusual noise, or produces a burning odor. If you continue to use the product under these conditions, it may cause electric shock or fire. After confirming that the product stops smoking, contact your IDK representative.
Unplug	Unplug immediately if the product falls and/or if the cabinet is damaged. If you continue to use the product under these conditions, it may increase the risk of electrical shock or fire. For maintenance and repair, contact your IDK representative.
	Unplug immediately if water or other objects are directed inside. If you continue to use the product under these conditions, it may increase the risk of electrical shock or fire. For maintenance and repair, contact your IDK representative.
For connect	tion
Instruction	Differences in ground potential among product population of interconnected products and other external devices may increase the risk of electric shock to personnel or cause damage to the devices or cabling infrastructure. When using cables to connect devices, including connection of long-distance transmission cables, unplug the power cables of all interconnected devices. Power may be restored after all signal/control cables are connected to each device.

	Do not place the product in any place where it will be subjected to high temperatures. If the product is subjected to direct sunlight or high temperatures while under operation, it may affect the product's performance and reliability and may increase the risk of fire	
	Do not place the product in humid, oil smoke filled, or dusty place. If the product is placed near humidifiers or in a dusty area, it may increase the risk of fire or electric shock.	
\bigcirc	Do not block the vent holes. If ventilation slots are blocked, it may cause the product to overheat, affecting performance and reliability and may increase the risk of fire.	
Prohibited	Do not place or stack heavy objects on the product. Failure to observe this precaution may result in damage to the product and other property and may lead to the risk of personal injury.	
	Do not exceed ratings of outlet and wiring devices. Exceeding the rating of an outlet may increase the risk of fire and electric shock.	
	Use only the supplied AC adapter and power cable.	
	Do not use the supplied AC adapter and power cable with other products. If non-compliant adapter or power cables are used, it may increase the risk of fire or electrical shock. Always use the supplied AC power connection cable for this product.	
	Do not plug or unplug with wet hands. Failure to observe this precaution may increase the risk of electrical shock.	
No wet hands		
	Use and store the product within the specified temperature/humidity range. If the product is used outside the specified range for temperature and humidity continuously, it may increase the risk of fire or electric shock.	
Instruction	Turn off devices while making connections to another device. Failure to observe this precaution may increase the risk of fire or electric shock.	
	If the product won't be used for an extended period of time, unplug it. Failure to observe this precaution may increase the risk of fire.	
Unplug	Unplug the product before cleaning. To prevent electric shock.	
For installation		
For rack mount	devices:	
Instruction	Mount the product in a the rack meeting EIA standards, and maintain spaces above and below for air circulation. For your safety, attach an L-shaped bracket in addition to the panel mount bracket kit to improve mechanical stability.	
For devices with rubber feet:		
Instruction	Never insert screws without the rubber feet into the threaded holes on the bottom of the product. Doing so may lead to damage when the screws contact electrical circuitry or components inside the product. Reinstall the originally supplied rubber feet using only the originally supplied screws.	
Altitude:		
Instruction	Do not place the product at elevations of 2,000 meters (6562 feet) or higher above sea level. Failure to do so may shorten the life of the internal parts and result in malfunctions.	

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1 About this Guide

This guide containts the basic explanation of the NJR-CTB Control Box and procedures for using an NJR-CTB Control Box to control the NJR-01UHD and NJR-04HD.



[Figure 1.1] Document structure

Model number	User's guide	Command Guide	
NJR-T01UHD / NJR-R01UHD	NJR-T01UHD / NJR-R01UHD	NJR-T01UHD / NJR-R01UHD	
	User's guide	Command Guide	
NJR-T04HD / NJR-R04HD	NJR-T04HD / NJR-R04HD	NJR-T04HD / NJR-R04HD	
	User's guide	Command Guide	
NJR-CTB	NJR- CTB	NJR- CTB	
	User's guide	Command Guide	
IP-NINJAR Configurator (for free)	IP-NINJAR Configurator User's guide		

2 Included items

Make sure all items below are included in the package. If any items are missing or damaged, please contact IDK.



3 Product outline

The NJR-CTB is the control device to command comprehensively the NJR-01UHD and NJR-04HD. It allows you to check connections and communications among products, switch video, control videowall, and so on using WEB browser or external control devices via LAN.

The NJR-CTB enables extension, distribution, matrix switching, videowall, multiview using with IP-NINJAR series transmitters, receivers, and a 10GbE switch. Additionally, the Web GUI allows you to set, manage and control IP-NINJAR products that are connected to a network.



[Figure 3.1] Audio/Video over IP Network system diagram

Notes:

- Use the NJR-CTB with IP-NINJAR series products.
- The NJR-CTB cannot be connected to OPF series products of optical input/output slot boards of FDX series products.

4 Features

Management

- · Automatically detecting IP-NINJAR series products on the network and displaying the list
- · Checking status of all connectet IP-NINJAR products through Web browser
- Setting up connected IP-NINJAR products
- Configuring Videowall and Multiview layout pattern by Web brower
- Naming devices, registering groups
- Registering display pattern preset
- User administration management

Control input

- · WEB browser operation eliminates the need for software installation
- · Controlling from external devices using control commands

Control output

· Sending control command to external devices

Other

- AC adapter with locking mechanism
- Virtual Matrix function
- Supporting HTTPS
- · Logging device status and output to external device via API
- · Redanduncy, backup, and restore

5 Panels





[Figure 5.1] NJR-CTB drawing

[Table 5.1] Part name and description

Number	Part name	Description		
1	Power button	Powers on/off the NJR-CTB.		
2	Power LED	Shows power status of the NJR-CTB.		
		Powered on: Lights in green.		
		Powered off: Does not light.		
3	Access LED	Shows HDD disk access status		
		Being accessed: Lights in green.		
		No accessed: Does not light		
4	Power supply connector	For the provided AC adapter.		
5	FG (Frame ground)	For indoor ground terminal. M3 screws are used.		
6	MAINTENANCE port	Connexts to the data network segmanet which is separated from the		
		IP-NINAJAR 10G network segment.		
\bigcirc	LAN port	Connects to IP-NINJAR 10G network segment.		

6 System configuration example

The NJR-CTB enables extension, distribution, matrix switching, videowall, multiview using with IP-NINJAR series transmitters, receivers, and a 10GbE switch. Additionally, the Web GUI allows you to set, manage and control IP-NINJAR products that are connected to a network.

- ① The Blu-ray player inputs video and audio signals to the HDMI input connector of the NJR-T01UHD/NJR-T04HD.
- ② The NJR-T01UHD/NJR-T04HD sends these signals to the 10GbE switch over a fiber optic cable.
- ③ The 10GbE switch sends these signals to the selected NJR-R01UHD/NJR-R04HD or multiple NJR-R01UHD/NJR-R04HD.
- (4) The NJR-R01UHD/NJR-R04HD outputs these received signals to monitors from its HDMI output connector.
- ⑤ The analog audio output connector of the NJR-R01UHD outputs digital or analog audio of NJR-T01UHD/NJR-T04HD.



[Figure 6.1] System configuration example

7 Preparations

Before using connecting the NJR-CTB, follow the precautions and instructions below.

7.1 Attaching Rubber feet

First, clean the bottom surface of the NJR-CTB as needed, and then peal the release papers from the rubber feet and place them in each of the four corners.

7.2 Installation

Follow the instructions below when installing the NJR-CTB.

- Do not place the NJR-CTB on another device directly.
- Do not block vent holes. To provide adequate ventilation, maintain sufficient clearances around the NJR-CTB (30 mm/1.18 inches or more).
- Prepare ventilating equipment to keep the ambient temperature at 40 degrees C/104 degrees F or less. If inadequately vented, the life of parts may be shortened and operation may be affected.

7.3 Cabling

Follow the precautions below when connecting NJR-CTB to an external devices.

- · Read the user's guides of the external devices carefully.
- When connecting a cable to the NJR-CTB or a compatible product, dissipate static electricity by touching grounded metal such as racks before handling single cables. Failure to observe this precaution may result in ESD (electrostatic discharge) damage.
- Turn off all devices.
- Be sure to fully seat all plugs and connections and dress cables to reduce stress on connectors.

7.3.1 Connecting LAN cable

The NJR-T01UHD and NJR-R01UHD send broadcast packets through the 10GbE LAN ports periodically for the purposes of internal system management. If the 10GbE LAN port is connected to an existing network, it may cause a **broadcast storm**^{*} and may severely interfere with normal network operation. Contact IDK before attempting to connect the 10GbE LAN ports of an IP-NINJAR system to any existing network infrastructure.

*A broadcast storm occurs when a network is overwhelmed by continuous broadcast traffic resulting in a network meltdown.

During installation, it is important to avoid the creation of network loops. Contact IDK if you require assistance with network implementation.

7.3.1.1 MAINTENANCE / LAN port specification

LAN and MAINTENANCE port assignments are as follows.

Since Auto MDI / MDI-X that distinguishes and switches straight/cross cables automatically is supported, extra care is not necessary to connect the NJR-CTB to PC, HUB or the like.



Die	Signal			
Pin	MDI		MDI-X	
number	1000BASE-T	100BASE-TX/10BASE-T	1000BASE-T	100BASE-TX/10BASE-T
1	TRX+ (Transmitted/Received	TX+ (Transmitted data+)	TRX+ (Transmitted/Received	RX+ (Received data+)
	data+)		data+)	
2	TRX- (Transmitted/Received	TX- (Transmitted data-)	TRX- (Transmitted/Received	RX- (Received data-)
	data-)		data-)	
3	TRX+ (Transmitted/Received	RX+ (Received data+)	TRX+ (Transmitted/Received	TX+ (Transmitted data+)
	data+)		data+)	
4	TRX+ (Transmitted/Received	N.C. (No Connection)	TRX+ (Transmitted/Received	N.C. (No Connection)
	data+)		data+)	
5	TRX- (Transmitted/Received	N.C. (No Connection)	TRX- (Transmitted/Received	N.C. (No Connection)

	data-)		data-)	
6	TRX- (Transmitted/Received	RX- (Received data-)	TRX- (Transmitted/Received	TX- (Transmitted data-)
	data-)		data-)	
7	TRX+ (Transmitted/Received	N.C. (No Connection)	TRX+ (Transmitted/Received	N.C. (No Connection)
	data+)		data+)	
8	TRX- (Transmitted/Received	N.C. (No Connection)	TRX- (Transmitted/Received	N.C. (No Connection)
	data-)		data-)	

[Figure 7.1] LAN port

7.3.1.2 MAINTENANCE / LAN communication specification

Dhysical lover	10Base-T (IEEE802.3i) / 100Base-TX (IEEE802.3u) /
Physical layer	1000Base-T (IEEE802.3ab)
Network layer	ARP, IP, ICMP
Transport layer	ТСР
	Port used for command control: 1100
	Port used for WEB browser control (HTTP): 80
Application layer	HTTP

[Table 7.1] LAN communication

Note: Up to 8 connections can be used simultaneously for command control.

7.3.1.3 Limit on the number of TCP-IP connections and port overload management

The NJR-CTB's maintenance port supports a maximum of eight simultaneous connections (eight logical ports). To maintain optimal system accessibility, it is advisable to issue "port-open" and "port-close" commands before and after command or query strings are issued. This approach enables eight or more control devices to be effectively interfaced simultaneously and without concern for communication errors. As a safeguard, the NJR-CTB incorporates a 30-second timeout window for each port. If any port is inactive for more than 30 seconds, it will be closed automatically.

[Table 7.2] Increasing connections

Your PC software		NJR-CTB
Connecting TCP-IP	\rightarrow	(Occupying 1 port)
Sending command (@xxx)	\rightarrow	
	Ļ	Replying command (@xxx)
Closing TCP-IP	\rightarrow	(Releasing 1port)

Note:

If no command is sent from the PC side to the NJR-CTB for 30 seconds, the NJR-CTB automatically disconnects from that device.

7.3.2 DIN plug AC adapter with lock

Attaching and removing AC plug

AC plug shapes of the AC adapter with screw type lock mechanism differ from one country to another; use an appropriate AC plug.

For inquiries for the AC plug, contact us directly.

Removing:

Hold the joint of the AC adapter (1) and slid the AC plug from the AC adapter (2).



[Figure 7.2] Removing AC plug

Attaching:

Attach the AC plug to the AC adapter (3) until it clicks (4).



[Figure 7.3] Attaching AC plug

Plugging and unplugging DC plug

Plug the DC plug to the power supply connector of the NJR-CTB until it clicks. Grab the portion mentioned below when unplugging the DC plug.



[Figure 7.4] Plugging and unplugging DC plug

8 Basic Operation

Settings and controlling can be performed from LAN communication or WEB browser by connecting the LAN port of the NJR-CTB to an IP-NINJAR product or 10GbE switch.



[Figure 8.1] Setting NJR-CTB

8.1 Control via LAN communication

The NJR-CTB can be accessed and controlled via LAN communication.

Connecting a control device to the NJR-CTB's MAINTENANCE port or the LAN port of the IP-NINJAR using a LAN cable enables system control and status queries by communication command.

For details of communication command, refer to "NJR-T01UHD/NJR-R01UHD Command Guide" or "NJR-CTB Command Guide".

8.2 Control using WEB browser

The NJR-CTB connected to LAN can be accessed and controlled by menu operations on a WEB browser (e.g. Microsoft Internet Explorer) .

Enter the following IP address into the address bar of the WEB browser.

For details of control using a WEB browser, see Chapter 10.

[Table 8.1] Default IP address: Maintenance Port

Control port number of WEB browser	Default IP address: Maintenance Port				
80 (used generally)	https://192.168.1.199				

8.3 Setting method

[Table 8.2] Available setting method

C: Command input, G: GUI operation, WC: WEB browser and command input, No: Not supported, -: N/A

	Setting method								
	NJR-T	01UHD /	NJR	-T04HD /	NJR-CTB	1			
Cotting item	NJR-I	R01UHD	NJF	R-R04HD		Daga			
Setting item		LAN		LAN		Fage			
	RS-232C	(IP-NINJAR	RS-232C	(IP-NINJAR	LAN				
		Configurator)		Configurator)					
Non-signal input monitoring*	С	С	С	С	WC	-			
Setting HDCP input*	С	С	С	С	WC	-			
Output mode*	С	С	С	С	WC	-			
Digital audio output mute*	С	С	С	С	WC	-			
Output audio*	No	G	-	-	WC	-			
EDID resolution*	С	С	С	С	WC	-			
Copying EDID*	С	С	-	-	WC	-			
WXGA mode*	С	С	С	С	WC	-			
Deep Color input*	С	С	С	С	WC	-			
Audio format*	С	С	С	С	WC	-			
Speaker configuration*	С	С	С	С	WC	-			
Output resolution*	-	-	С	С	С	-			
Aspect ratio for sink device*	-	-	С	С	С	-			
Aspect ratio*	-	-	С	С	С	-			
Aspect ratio control*	-	-	С	С	С	-			
Overscan*	-	-	С	С	С	-			
Display position*	-	-	С	С	С	-			
Display size*	-	-	С	С	С	-			
Masking*	-	-	С	С	С	-			
Automatic sizing*	-	-	С	С	С	-			
Background color*	-	-	С	С	С	-			
Test pattern*	-	-	С	С	С	-			
Cropping*	-	-	С	С	С	-			
Brightness*	-	-	С	С	С	-			
Contrast*	-	-	С	С	С	-			
HUE*	-	-	С	С	С	-			
Saturation*	-	-	С	С	С	-			
Sharpness*	-	-	С	С	С	-			
Gamma*	-	-	С	С	С	-			
Default color*	-	-	С	С	С	-			
HDCP re-authentication*	-	-	С	С	С	-			
Output Sync Signal when	-	-	С	С	С	-			
there is no input signal*									

	Setting method								
	NJR-T	01UHD /	NJR	-T04HD /	NJR-CTB				
Cotting items	NJR-F	R01UHD	NJF	R-R04HD		Dama			
Setting item		LAN		LAN		Page			
	RS-232C	(IP-NINJAR	RS-232C	(IP-NINJAR	LAN				
		Configurator)		Configurator)					
Output Video image when	-	-	С	С	С	-			
there is no input signal*									
Deep Color output*	-	-	С	С	С	-			
Video type*	-	-	С	С	С	-			
Matrix switch*	-	-	С	С	С	-			
Master Sync Signal*	-	-	С	С	С	-			
Frame delay*	-	-	С	С	С	-			
Audio level*	-	-	С	С	С	-			
Multiple channel audio	-	-	С	С	С	-			
input*									
Lip synch*	-	-	С	С	С	-			
Test tone*	-	-	С	С	С	-			
RS-232C communication*	No	G	No	G	WC	-			
LAN*	No	G	No	G	WC	-			
MAC address*	No	G	No	G	WC	-			
Initialization*	No	G	No	G	WC	-			
Reboot*	No	G	No	G	WC	-			
Input status*	С	С	С	С	WC	-			
Output status*	С	С	С	С	WC	-			
EDID of monitor*	С	С	С	С	WC	-			
Version*	С	С	С	С	WC	-			
Channel information	No	No	No	No	WC	24			
Output resolution	No	No	No	No	WC	24			
Video distribution	No	No	No	No	WC	24			
Switching channel	No	No	No	No	WC	25			
Crosspoint	No	No	No	No	WC	27			
Videowall	No	No	No	No	WC	28			
Multiview	No	No	No	No	WC	29			
RS-232C communication	No	No	No	No	WC	30			
NJR-CTB LAN	No	No	No	No	WC	30			

*: This User's Guide explains only settings of NJR-CTB. For settings of NJR-01UHD and NJR-04HD, refer to "NJR-T01UHD/NJR-R01UHD User's Guide" or "NJR-T04HD/NJR-R04HD User's Guide".

9 Settings

Each item can be set via LAN communication or using a WEB browser.

This User's Guide explains only settings of NJR-CTB. For settings of NJR-01UHD and NJR-04HD, refer to "NJR-T01UHD/NJR-R01UHD User's Guide" or "NJR-T04HD/NJR-R04HD User's Guide".

9.1 Basic settings

9.1.1 Channel information

Sets channel information to IP-NINJAR products connected to a 10Gb E switch. Channel information is allocated to IP-NINJAR products connected to a 10Gb E switch.

Communication command

@GCHI	Getting channel information
@SCHI	Setting channel information

9.1.2 Output resolution

Sets the output resolution from the receiver.

Communication command

@GVOS@GVOSGetting video output@SVOSSetting video output

9.1.3 Video distribution

Sets video distribution.

- For transmitters, settings for starting and stopping video distribution and initializing distribution address can be set.

[Default]: Video distribution: Stop Distribution address is not set

- For receivers, setting for stopping video distribution can be set.

[Default]: Video distribution: Stop

Communication command

@GVDS Getting video distribution@SVDS Setting video distribution

NJR-01UHD / NJR-04HD

NJR-01UHD / NJR-04HD

9.2 Switching channel

9.2.1 Switching video and digital audio channel simultaneously

Specifies the receiver to which video and digital audio that are input to the transmitter are distributed.

Communication command

@GSW Getting switching video and digital audio channel simultaneously @SSW Setting switching video and digital audio channel simultaneously

9.2.2 Switching video channel

Specifies the receiver to which video that is input to the transmitter are distributed.

Communication command

@GSV	Getting switching video channel
@SSV	Setting switching video channel

9.2.3 Switching digital audio channel

Specifies the receiver to which digital audio that is input to the transmitter are distributed.

Communication command

@GSA Getting switching digital audio channel @SSA Getting switching digital audio channel

9.2.4 Switching analog audio channel

Specifies the receiver to which analog audio that is input to the transmitter are distributed.

Communication command

@GSAA Getting switching analog audio channel @SSAA Setting switching analog audio channel

9.2.5 Switching RS-232C channel

Specifies the receiver or transmitter to which RS-232C that is input to the transmitter or receiver are distributed.

Communication command

@GSWR Getting switching RS-232C channel NJR-01UHD / NJR-04HD

NJR-01UHD / NJR-04HD

NJR-01UHD / NJR-04HD

NJR-01UHD / NJR-04HD

NJR-01UHD

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@SSWR Setting switching RS-232C channel

9.3 Crosspoint

9.3.1 Loading cross point preset

Loads registered cross point preset.

Communication command

@RCPP Loading cross point preset

9.3.2 Cross point preset

Sets preset of cross point.

Communication command

@GCPP	Getting cross point preset
@SCPP	Setting cross point preset

NJR-01UHD / NJR-04HD

9.4 Videowall

9.4.1 Loading videowall preset

Loads registered videowall preset.

Communication command

@RVWP Loads videowall preset

9.4.2 Videowall preset

Sets videowall preset.

Communication command

@GVWP	Getting videowall preset
@SVWP	Setting videowall preset

NJR-01UHD / NJR-04HD

9.5 Setting Multiview

9.5.1 Loading multiview preset

Loads registered multiview preset.

Communication command

@RMVP Loading multiview preset

9.5.2 Multiview preset

Sets multiview preset

Communication command

@GMVP	Getting multiview preset
@SMVP	Setting multiview preset

NJR-01UHD / NJR-04HD

9.6 Communication setting

9.6.1 Setting RS-232C communication

Sets communication between transmitter and receiver via RS-232C.

Communication command

@GRSS Getting RS-232C communication setting@SRSS Setting RS-232C communication

9.6.2 Setting LAN

NJR-CTB / NJR-01UHD / NJR-04HD

Sets the IP-NINJAR network to DHCP (Dynamic Host Configuration Protocol) or sets IP address, subnet mask and default gateway as a static address.

Communication command

@GIPS Getting LAN setting@SIPS Setting LAN

9.7 Maintenance

9.7.1 Version

Gets version information of IP-NINJAR products.

Communication command

@GIVC Getting version information

9.7.2 Initialization

NJR-CTB / NJR-01UHD / NJR-04HD

NJR-CTB / NJR-01UHD / NJR-04HD

Initializes settings of IP-NINJAR products and communication settings (LAN, RS232C) as needed. Note that once initializing settings, these previous setting values cannot be restored. When the initialization completes, the NJR-CTB reboots with new settings automatically.

Communication command

@CLRC Initialization

9.7.3 Reboot

NJR-CTB / NJR-01UHD / NJR-04HD

Reboots IP-NINJAR products.

Communication command

@RBTC Reboot

10 WEB browser

The NJR-CTB's MAINTENANCE port enables IP-NINJAR products status display, control, setting, and maintenance using the GUI on a WEB browser.

In order to access to the GUI, enter "https://CCC. CCC. CCC. CCC" (C:IP address set for the MAINTENANCE port; [Default]: 192.168.1.199) into the address bar of a WEB browser.

The login screen will be displayed. The user name and password of factory default are as follows.

User name: admin

Password: admin

10.1 GUI(Graphic User Interface)

An IP-NINJAR product connected to a network as the first time is detected automatically and displayed on the GUI. For channels, settings allocated automatically is saved.

IP-NINJAR products that was already detected and saved are displayed on the GUI even it is disconnected from the network unless saved data is deleted.



[Figure 10.1] GUI

- ① Selects a main menu. The selected menu is indicated in red.
 - : Displays each status of the connected IP-NINJAR products
 - Control : Controls the connected IP-NINJAR products
 - Setup : Sets the connected IP-NINJAR products
 - Maintenance : Does maintenance the connected IP-NINJAR products and NJR-CTB

Once anIP NINJAR product is connected to the network, the information of the connected device will be saved in the NJR-CTB unless the data is deleted.

② Selects a submenu.

Status

- ③ Displays Tags of transmitters and receivers. Filters devices by assigning Tags to each unit.
- ④ Displays transmitters and receivers connected on the network.
- (5) Displays information of each transmitter and receiver.
- 6 Switches between "Video" and "Network" displayed on (5).
- O Switches between Grid display and List display for (4).

10.2 Status (Display device status)



Status: Displays basic and detailed information of devices.

[Figure 10.2] Status

10.2.1 Basic status

Click the "Status" button and then basic information of each transmitter and receiver is displayed on the information display area.



[Figure 10.3] Grid display

~	• Name	Ch:	. Part v	Resolu	ition ~	Signal	<u>Мо</u>	Color Dep	Y	Color Spa.x.	HDCF	Su.x.	HDCP Sigr.	HDx.	Audio
~	7 Input 1	1	NJR-TO1UHD	1920×10)80p	HDMI		24bits	F	RGB	2.2		true	-	PCM ^
4															
Ū)														
đ															
	 Name 	Ch:	MAC	~	IP	~	Netma	ask	~	Gateway	~	OEM	~	Mode	
2	7 Input 1	1	D8:80:39:A7	7:26:61	169.254.98.3	38	255.25	5.0.0		0.0.0.0		Gener	ic	Model	^

[Figure 10.4] List display

Number	Name	Description
1	Connection status on the	Online: Devices are connected to the network and the
	network	NJR-CTB recognizes the devices.
		X Offline: No device is connected to the network or the
		NJR-CTB cannot recognize the device.
2	Icon	Can be edited by users from Setup.
3	Name	Can be renamed from Setup.
4	Ch. #	Device channel number
		Can be edited from Setup.
5	Part	IDK product name
6	Resolution	Signal resolution that is input from the source device
	Signal Mode	Signal type that is input from the source device
	Color Space	Signal color format that is input from the source device
	HDCP Status	HDCP authentication between the transmitter and receiver
	Digital Audio	Audio information that is input from the source device
$\overline{\mathcal{O}}$	Resolution	Signal resolution that is output to the sink device
	Signal Mode	Signal type that is output to the sink device
	Color Space	Signal color format that is output to the sink device
	Switching Mode	Setting of switching mode
	HDCP Status	HDCP authentication between the receiver and sink device
	Digital Audio	Audio information that is output to the sink device
8	OEM	Manufacturer of the connected device that can be edited
		from Setup
	Model	Model name of the connected device that can be edited from
		Setup
	Serial	Serial number of the connected device that can be edited
		from Setup
	MAC Address	MAC address
	IP Address	IP address
	Gateway	Gateway

[Table 10.1] Status window

The transmitter detects +5V signal from the source device while the receiver detests HPD (Hot Plug Detect) signal from the sink device. Even if +5V or HPD signal is detected, video signal may not be received or video may not be displayed on the display device. In such a case, ckeck the video signal information and status in "Input Status" and "Output Status".

10.2.2 Displaying detailed status information

Select "Status" in the main menu and left click the information display area of each transmitter and receiver to check the detailed information. You can get the information also by selecting "Control" and right click the information display area of each transmitter and receiver.





[Table 10.3] Buttons and information on detailed status window

Number	Name	Description
1	Switching button	Switches VIDEO/NETWORK of displayed information.
2	Close button	Closes the window. You can close it also by left clicking the outside of the window.

Number		Name	Э	Description					
3	Device Info)	Part	IDK product name					
			Firmware	Firmware version					
			MAC	MAC address					
			Channel	Channel number information					
			Name	Channel name that can be edited by user					
			Manufacturer	Manufacture name that can be edited by user					
			Model	Model number that can be edited by user					
			Serial #	Connected device's serial number that can be edited by					
				user					
4	Connection status			Online: Devices are connected to the network and the					
				NJR-CTB recognizes the devices.					
				X Offline: No device is connected to the network or the					
				NJR-CTB cannot recognize the device.					
5	Icon			Channel icon that can be edited by user					
6	Tags			Tag information of the device					
$\overline{\mathcal{O}}$	Input Configuration			Displays the device setting information					
	Output Co	nfiuration	1	[See: 10.4.1 Devices (Setting device)(P.41)]					
8	Input	Resolu	tion	Signal resolution that is input from the source device					
	Status	Signal	Mode	Signal type that is input from the source device					
		Color D	Depth	Signal color depth that is input from the source device					
		Color S	Space	Signal color format that is input from the source device					
		HDCP	Status	HDCP authentication between the transmitter and					
				receiver					
		HDCP	Stream Type	HDCP2.2 stream type that is input from the source device					
		Digital .	Audio Status	Audio information that is input from the source device					
9	Video Sign	al		On: The transmitter and source device are connected.					
				X Off: The transmitter and source device are not					
		1		connected.					
10	Input	Resolu	tion	Signal resolution that is output to the sink device					
	Status	Signal	Mode	Signal type that is output to the sink device					
		Color D	Depth	Color depth that is output to the sink device					
		Color S	Space	Signal color format that is output to the sink device					
		HDCP	Support	HDCP authentication between the receiver and sink					
				device					
		HDCP	Signal	Audio information that is output from the sink device					
		Digital .	Audio Status	Audio information that is input from the source device					
1	Video Sign	al		On: The receiver and sink device are connected.					
				X Off: The receiver and sink device are not connected.					
(12)	IP Settings	5		Displays network setting information.					
				[See: 10.4.1 Devices (Setting device)(P.41)]					
(13)	RS-232C S	Settings		Displays RS-232C setting information.					
				[See: 10.4.1 Devices (Setting device)(P.41)]					

[Table 10.4] Buttons and information on detailed status window

10.3 Control (Device control)

Switches video, digital audio, analog audio, and RS-232C on a network. Videowall and multiview that is set in "Setup" can also be switched. When switching only multiview (only video), you need to switch digital audio separately.

IP-NIN	Ĵar	() Status	Control	Setup	X Maintenance
Switching Mode: Video /	Audio Video Digital Audio Analog Audio RS-232				
TX Tags Al Al P Unassigned	Input (TX) Devices Input 1 Ch. 1 1920x1080p@60 PCM, 48kHz				
RX Tags	Output (RX) Devices Output Output 1 Output 1 Input Ch/- Input Ch. 1/1 1920x1080p@60 PCM, 48kHz		3	Instant Ma	de Salvo Mode

[Figure 10.6] Control window

10.3.1 Switching procedure

There are two methods to switching video and audio in the Control window.

Instant Mode

- 1. Select the submenu you want to switch. The selected submenu is highlighted in red.
- 2. Select "Instant Mode". The selected mode is highlighted in red.
- 3. Left click the transmitter you want to switch. The information display area of the selected transmitter is highlighted in red. The information display area of already selected receiver is highlighted in red.
- 4. Left click the receiver you want to switch video and audio. Multiple receivers can be selected. The information display area of the selected receiver is highlighted in red.

Switching Mode: Video	/ Audio Video Digital Audio Anale	og Audio RS-232	0		Live	
TX Tags	Input (TX) Devices	Step3			Step2	
RX Tags	Output (RX) Devices Output 1 Ch. 1 Input Ch/- 1920X1080p@60 PCM, 48kHz	Output 2 Ch. 2 Input Ch. 1 / 1 1920x1080p@60 PCM, 48kHz	Step4	5	Instant Mode Salvo N	Mode

[Figure 10.7] Instant Mode

Salvo Mode

- 1. Select the submenu you want to switch. The selected submenu is highlighted in red.
- 2. Select "Salvo Mode". The selected mode is highlighted in red.
- 3. Left click the transmitter you want to switch. The information display area of the selected transmitter is highlighted in red. The information display area of already selected receiver is highlighted in red.
- 4. Left click the receiver you want to video and audio. Multiple receivers can be selected. The information display area of the selected receiver is highlighted in red. It is not switched yet at this point.
- 5. Left click "Take Salvo".

Note:

Videowall Channels cannot be selected or switched during Salvo Mode.

IP-NIN	AR Step1	Stat	us Control	Setup Main	Ntenance
Switching Mode: Video /	Audio Video Digital Audio Analog Audio RS-232	9			Live Updates
TX Tags Al CUnassigned	Input (TX) Devices		Step5	Ste	pp2
RX Tags Au C Unassigned	Output (RX) Devices Output 1 Ch. 1 Input Ch/- Input Ch/- Input Ch/- Input Ch/- Input Ch/- Device Ch. 2 Input Ch. 1/1 Input Ch/- Device Ch. 2 Input Ch. 1/1 Input Ch. 48kHz Device Ch. 2 Input Ch. 1/1 Input Ch. 48kHz Device Ch. 2 Input Ch. 1/1 Input Ch. 48kHz Device Ch. 2 Input Ch. 1/1 Input Ch. 48kHz Device Ch. 2 Input Ch. 48kHz Device Ch. 48kHz	Step4	Take Salv	b Instant Mode	Silve Mode

[Figure 10.8] Salvo Mode

10.4 Setup (Settings)

IP-NIN	ĴAR		() Status	Control	Setup	Maintenance
Devices Tags TX Tags TX Tags TX Tags TUnassigned	Input (TX) Devices Input (TX) Devices Input 1 Ch.1 NR-T01UHD Resolution: 1200: 1080:0559 99 Signal Mode: HOM HOD P Stars: Not Allword	Multiviewers	5		1	Network List
RX Tags	Digital Audio: PCM, 488Hz	Output 2 Ch. 2 NJR-R01UHD Resolution: 120x:100x:080 Switching Mode: Genick HDCP Status: 22 Digital Addie: CM, 48kHz	3	3		Network List

Sets basic information, video, audio, network, videowall, and multiview.

[Figure 10.9] Setup

10.4.1 Devices (Setting device)

Select "Devices" to set operation information, video, audio, and network. Left click the information display area of each device to open the detailed setting window.



[Figure 10.10] Setup window

[Table 10.5] Buttons and portion on Setup window

#	Name	Description
1	Display switching button	Switches VIDEO/NETWORK of displayed information.
2	Reboot button	Reboots the selected device.
	Save button	Saves changed settings.
	Delete button	Deletes information on the GUI.
		<i>Note:</i> All information linked to the channel is deleted.
3	Close button	Closes the window.

④ Device Info Channel Channel number information Name Channel name that can be edited by user Manufacturer Manufacture name that can be edited by user Model Model number that can be edited by user Serial # Connected device's serial number that can be edited by user ⑤ Icon Can be edited by users. When left clicked, another window appears. ⑥ Input Config (Transmitter) EDID Resolution Sets the EDID resolution. Signal Monitor Sets the EDID color depth. Signal Monitor Time Output Color Sets the Signal Monitor Time Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enables or disables HDCP input. Inable Digital Audio Mute Mutes digital audio.
Name Channel name that can be edited by user Manufacturer Manufacture name that can be edited by user Model Model number that can be edited by user Serial # Connected device's serial number that can be edited by user (5) Icon Can be edited by users. When left clicked, another window appears. (6) Input Config (Transmitter) EDID Resolution Sets the EDID resolution. Signal Monitor Sets the EDID color depth. Signal Monitor Time Output Color Sets the Signal Monitor Time HDCP Input Enables or disables HDCP input. Hable Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Manufacturer Manufacture name that can be edited by user Model Model number that can be edited by user Serial # Connected device's serial number that can be edited by user (5) Icon Can be edited by users. When left clicked, another window appears. (6) Input Config (Transmitter) EDID Resolution Sets the EDID resolution. (7) EDID Color Depth Sets the EDID color depth. (7) Signal Monitor Sets the Signal Monitor Time Time Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enables or disables HDCP input. Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Model Model number that can be edited by user Serial # Connected device's serial number that can be edited by user (5) Icon Can be edited by users. When left clicked, another window appears. (6) Input Config (Transmitter) EDID Resolution Sets the EDID resolution. Signal Monitor Sets the EDID color depth. Signal Monitor Time Output Color Space Sets the color format when video is transmitted to a receiver. HDCP Input Enable Enables or disables HDCP input. Enable Enables or disables HDCP input. Enable Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Serial # Connected device's serial number that can be edited by user (5) Icon Can be edited by users. When left clicked, another window appears. (6) Input Config (Transmitter) EDID Resolution Sets the EDID resolution. (7) EDID Color Depth Sets the EDID color depth. (7) Signal Monitor Sets the Signal Monitor Time Time Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enables or disables HDCP input. Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
(5) Icon Can be edited by users. When left clicked, another window appears. (6) Input Config (Transmitter) EDID Resolution Sets the EDID resolution. (Transmitter) EDID Color Depth Sets the EDID color depth. Signal Monitor Sets the Signal Monitor Time Time Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enable Enables or disables HDCP input. Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Imput EDID Resolution Sets the EDID resolution. Config EDID Color Depth Sets the EDID color depth. (Transmitter) Signal Monitor Sets the Signal Monitor Time Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enables or disables HDCP input. Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Input Config (Transmitter)EDID ResolutionSets the EDID resolution.(Transmitter)EDID Color DepthSets the EDID color depth.Signal Monitor TimeSets the Signal Monitor TimeOutput Color SpaceSets the color format when video is transmitted to a receiver.HDCP Input EnableEnables or disables HDCP input.Digital Audio MuteMutes digital audio.EDID AudioSets the EDID audio format and speaker configuration.
Config (Transmitter)EDID Color DepthSets the EDID color depth.Signal Monitor TimeSets the Signal Monitor TimeOutput Color SpaceSets the color format when video is transmitted to a receiver.HDCP Input EnableEnables or disables HDCP input.Digital Audio MuteMutes digital audio.EDID AudioSets the EDID audio format and speaker configuration.
(Transmitter) Signal Monitor Sets the Signal Monitor Time Time Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enables or disables HDCP input. Enable Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Time Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enable Enables or disables HDCP input. Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Output Color Sets the color format when video is transmitted to a receiver. Space HDCP Input Enable Enables or disables HDCP input. Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
Space Enables or disables HDCP input. Enable Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
HDCP Input Enables or disables HDCP input. Enable Digital Audio Mute Digital Audio Mute Mutes digital audio. EDID Audio Sets the EDID audio format and speaker configuration.
EnableDigital Audio MuteMutes digital audio.EDID AudioSets the EDID audio format and speaker configuration.
Digital Audio MuteMutes digital audio.EDID AudioSets the EDID audio format and speaker configuration.
EDID Audio Sets the EDID audio format and speaker configuration.
Settings When left clicked, another window appears.
⑦ Settings Output Color Sets the color format when video is transmitted to a receiver.
(Receiver) Space
Output Resolution Sets output resolution when "Fast Switch" is selected for
"Switching Mode".
Switching Mode Sets switching mode of the receiver.
Digital Audio Sets audio that is output from the HDIVII connector.
Output
8 IP Settings Mode Sets connection mode to the device's network
IP Device's IP address
Mask Device's subnet mask
Gateway Device's gateway
(9) RS-232C Baud rate Sets device's baud rate
Settings Data Bits Sets device's data bit
Stop Bits Sets device's stop bit
Parity Sets device's parity

[Table 10.6] Buttons and portion on Setup window (Cont'd)

10.4.2 Tags (Setting and assigning Tags)

Creates, edits, and assigns Tags.

Assigning Tags enables status display and settings to be filtered for when multiple devices are displayed on the GUI.



[Figure 10.11] Tags window

[Table 10.7] Buttons and portions on Tags window

Number	Name	Description
1	Available Tags	Displays assignable Tags.
2	NEW button	Creates a new Tag.
3	EDIT button	Edits or deletes existing Tags.
4	Switching transmitter ⇔	Switches between a transmitter and receiver.
	receiver	
5	Invert button	Switches between Selected / Not selected
	All button	Selects all.
	None button	Cancel all selections.
6	Transmitter and receiver display	Displays transmitters and receivers.
	area	

10.4.2.1 Tags (Creating new tag)

Procedure for creating a new tag:

- 1. Select the transmitter or receiver.
- 2. Click the "NEW" button.
- 3. Enter the name.
- 4. Select the color.
- 5. Click the "Save" button to save these settings.

IP-NIN JAR		Status	Control	Setup	X Maintenance
Devices Tags II Video Walls O Multiviewer Available Tags O	5				Step2
Step1	New Tag	Step3 Step4 Step5			

[Figure 10.12] Window for creating tag

10.4.2.2 Tags (Editing tag)

Procedure for editing a tag:

- 1. Select the transmitter or receiver.
- 2. Select the Tag you want to edit.
- 3. Click the "Edit" button.
- 4. Edit the Tag name.
- 5. Select the Tag color.
- 6. Click the "Save" button to save these settings.

To delete a Tag, left click the "Delete" button.



[Figure 10.13] Window for editing Tag

10.4.2.3 Tags (Assigning Tag)

Procedure for assigning a Tag to devices:

- 1. Select the transmitter or receiver.
- 2. Select the Tag you want to assign.

3. Select the device. If you want to assign multiple Tags, use Invert/All/None buttons to assign them collectively.

Devices have multiple Tags at the same time. You can check the assigned Tags in the detailed status of each device.

IP-NIN JAR	() Status	Control	Setup	Maintenance
Available Tags 0 test4 test5 test6				
Step1 Receivers Output 1 Ch 1 DB:80.39:A6:AE:74 DB:80.39:A6:34:CD Step3				

[Figure 10.14] Window for assigning Tags

10.4.3 Video Walls (Setting videowall)

Sets and saves videowall configuration.

A configured Videowall is added to the "Output (RX) Devices" area of the "Control" tab ("**10.3 Control (Device control)**"), and the configured Videowall will be switched as a receiver.

You can select a layout from four preset patterns and assign receivers to each display area. Video that is output from receivers is synchronized with input video. There may be a gap between upper and lower monitors.

IP-NIN	AR	() Status	Control	Setup Maintenan	ce
A Devices Tags	Video Walls Multiviewers				
Videowall Edit O Available Videowalls: New J Name: Save Delete	Videowall Patterns				
Videowall Receiver Layo	ut By Row 👔				

[Figure 10.15] Window for setting Videowall

[Table 10.8] Buttons and portion on Videowall window

Number	Name	Description
1	Videowall Edit	Creates new videowalls, selects existing videowalls, names
		videowalls, and deletes videowalls.
2	Videowall Patterns	Selects a videowall pattern.
3	Videowall Receiver Layout By	Assigns receivers to the selected layout.
	Row	

[Figure 10.16] Videowall layout patterns

10.4.3.1 Video Walls (Creating new videowall configuration)

Procedure for creating a new videowall configuration:

- 1. Click the "New" button.
- 2. Enter the desired name into the "Name" field.
- 3. Select a layout.
- 4. Left click the desired cell to open another window. Select the receiver you want to assign. Right click the cell (receiver) you want to cancel.
- 5. Left click the "Save" button to save configurations.

Saved configurations are added to the Control window and can be switched.

IP-NIN JA	R	Status	Control	Setup	Maintenance	
Step1 New Videowall New New New New Step2 Name: New Videowall Save Delete	Video Walls Multiviewers					
Step5 Videowall Receiver Layout Br Click to select Ch	<pre>/Row ● X Click to select Ch X Click to select Ch X Click to select Ch X Step4</pre>	3				

[Figure 10.17] Window for creating new Videowalls

10.4.3.2 Video Walls (Editing Videowall configuration)

Procedure for editing videowall:

Videowall configuration can be selected from "Available Videowalls", and the selected videowall configuration can be edited and deleted.

Left click the "Bezel Compensation" button for a window pane effect. Left click the "Save" button to save the setting.

10.4.4 Multiviewers (Setting multiview)

Sets and saves Multiview configuration. Saved configurations are added to the Control window and the video can be switched the same as a transmitter.

You can select a layout from eight preset patterns.

IP-NIN	Ĵar	() Status	Control	Setup	Maintenance
E Devices 💊 Tage	Video Walls Multiviewers				
Multiviewer Edit ● Available Multiviewers: ● New ● Name: ● Resolution: ●	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	3 4 7 8 11 12 15 16	4	1	2 3 6
3	Multiviewer From				
					-

[Figure 10.2] Window for setting multiview

[Table 10.9] Buttons and portion on multiview window

Number	Name	Description
1	Multiviewer Edit	Creates a new Multiview configuration, selects an existing
		Multiview configuration, names and deletes Multiview
		configuration
2	Multiview Patterns	Selects a Multiview layout from eight patterns.
3	Select Inputs to Create	Assigns transmitters to the selected layout.
	Multiviewer From	



	[1	2	3	4			2		
1		5	6	7	8		1	3	1	2
2		9	9	1	0		_	4		

[Figure 10.19] Multiview layout patterns

10.4.4.1 Multiviewers (Creating new Multiview configuration)

Procedure for creating a new Multiview configuration:

- 1. Click the "New" button.
- 2. Enter the desired name into the "Name" field.
- 3. Select a desired resolution that is output from receivers.
- 4. Select a layout.
- 5. Left click the desired cell to open another window. Select the receiver you want to assign. Right click the cell (transmitter) you want to cancel.
- Left click the "Save" button to save configurations.
 Saved configurations are added to the Control window and can be switched.

IP-NIN	AR	O Control Setu	p Maintenance
Cevices Tags	Video Walls Multiviewers Multiviewer Patterns • 1 2 3 4 7 8 9 1	3 4 7 8 11 12 15 16	2 3 6
Step6 Select Inputs to Create M	ultiviewer From	Click to select Ch	Step4

[Figure 10.3] Window for creating multiview

10.4.4.2 Multiviewers (Editing Multiview configuration)

Procedure for editing a Multiview configuration:

Multiview configuration can be selected from "Available Videowalls", and the selected videowall configuration can be edited and deleted.

Left click the "Save" button to save the setting.

10.5 Maintenance

IP-NIN J AR		Status	Control	Setup	Maintenance
1 My Account 🖄 User Manager	© Settings				GUI Version: 1.1.0 / 1.1.0
					1000
	Logged in user: adr	nin Logout			
	Change Password 🚱	Roles 😧			
	New Password	Control: 🔗 Setup: 🔗 Maintenance: 🖌			
	Confirm New Password	Admin: 🕑			
	Change Password				
and the second second					
					_

Logs outs, adding administrators, changes password, the NJR-CTB's IP address and SSL.

[Figure 10.20] Maintenance window

10.5.1 Maintenance (My Account)

IP-NINĴA	AR		Status	Control	Setup	Maintenance
1 My Account	Manager 🔅 s	Settings			11	GUI Version: 1.1.0 / 1.1.
		Logged in user: a	dmin Logout			
		Change Password	Roles 😧			
		Old Password	Status: 🖌			
		New Password	Setup: 🗹 Maintenance: 🗹			
		Confirm New Password	Aumin. ®			
		Change Password				
						and the second se

Changes password and logs out.

[Figure 10.21] My Account window

10.5.2 Maintenance (User Manager)

Adds and changes users. Left click the "Add User" button to add a user. Enter the desired User name and Password, and then select roles. Left click the "Save" button to save the settings. In order to change user settings, select the user.



[Figure 10.22] User Manager window

10.5.3 Maintenance (Setteings)

Changes IP address and SSL of NJR-CTB's MAINTENANCE port.

IP-NIN J AR			Status	Control	Setup	Maintenance
My Account 😢 User Manager	Settings	IP Settings Static 192.168.1.199 255.255.255.0 Save Network Settings	Backend Settings HTTPS / SSL: 🗭 Save Backend Settings	0		GUI Version: 1.1.0/1.1.0

[Figure 10.23] Maintenance window

11 Product specification

lte	em	Description
Managing	Units	512 units
IP-NINJAR	Groups	32 groups
products		
Display function	Preset	256 patterns
	Videowall	5 x 5
Network	Protocol	TCP/IP,UDP/IP,HTTP,ICMP,DHCP
	Connections	Up to 8
External control	LAN	2 port, RJ-45 port 10Base-T / 100Base-T X / 1000Base-T (Auto Negotiation),Auto MDI / MDI-X
General	AC adapter	Input: AC ~ 100 V - 240 V \pm 10 %,50 Hz / 60 Hz \pm 3 Hz
		Output: DC 12 V 3A (the AC adapter is provided)
	Power	About 16 W
	consumption	
	Dimensions	8.27 x 1.73 x 5.9" / 210 (W) x 44 (H) x 150 (D) mm (EIA 1/2U rack, projections not included)
	Weight	2.65 lbs./1.2 kg
	Temperature	Operating: 32°F to 104°F/0°C to +40°C
		Storage: -4°F to +1/6°F/-20°C to +80°C
	Humidity	Operating/Storage: 20% to 90% (Non Condensing)

12 Troubleshooting

This chapter recommends what to do if you have problems operating the NJR-CTB. Refer to manuals of connected devices as well, since they may possibly be the cause of the problem.

In case the NJR-CTB does not work correctly, please check the following items first.

- ·Are the NJR-CTB and all devices plugged in and powered on normally?
- ·Are cables connected correctly?
- •Are there no loose connections?
- ·Are appropriate cables supported by devices being used?
- ·Are specifications of connected devices matched to each other?
- ·Are there any close objects that may cause noise?

If additional assistance is required, please perform the following tests and then contact us.

- 1. The problem occurs at all connectors?
- 2. Connect the devices using genuine cables without connecting the NJR-CTB. The problem still cannot be solved?

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