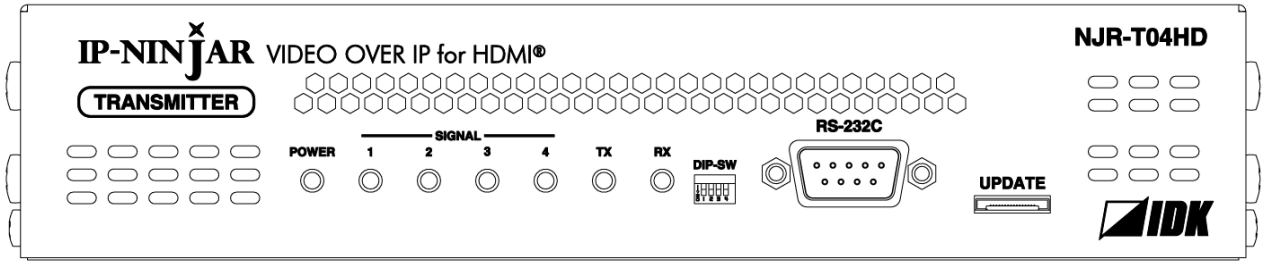
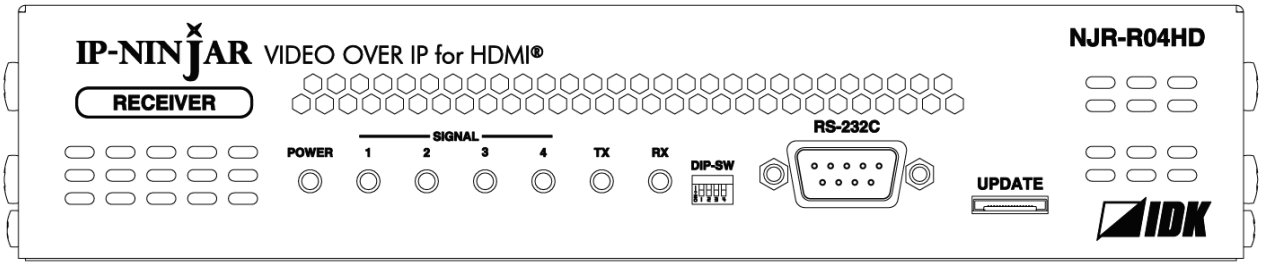
4-channel HDMI Network Extender

NJR-T04HD / NJR-R04HD

<Command Reference Guide>

Ver.1.3.0





- Thank you for choosing our product.
- To ensure the best performance of this product, please read this User's Guide fully and carefully before using it and keep this manual together with the product for reference as needed.

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Before reading this manual

- Some of the contents in this command guide such as product appearance in diagrams, menu operations, communication commands, and so on may differ from one NJR-CTB model to another.
- This command guide is subject to change without notice. You can download the latest version from IDK's website at: http://www.idkav.com

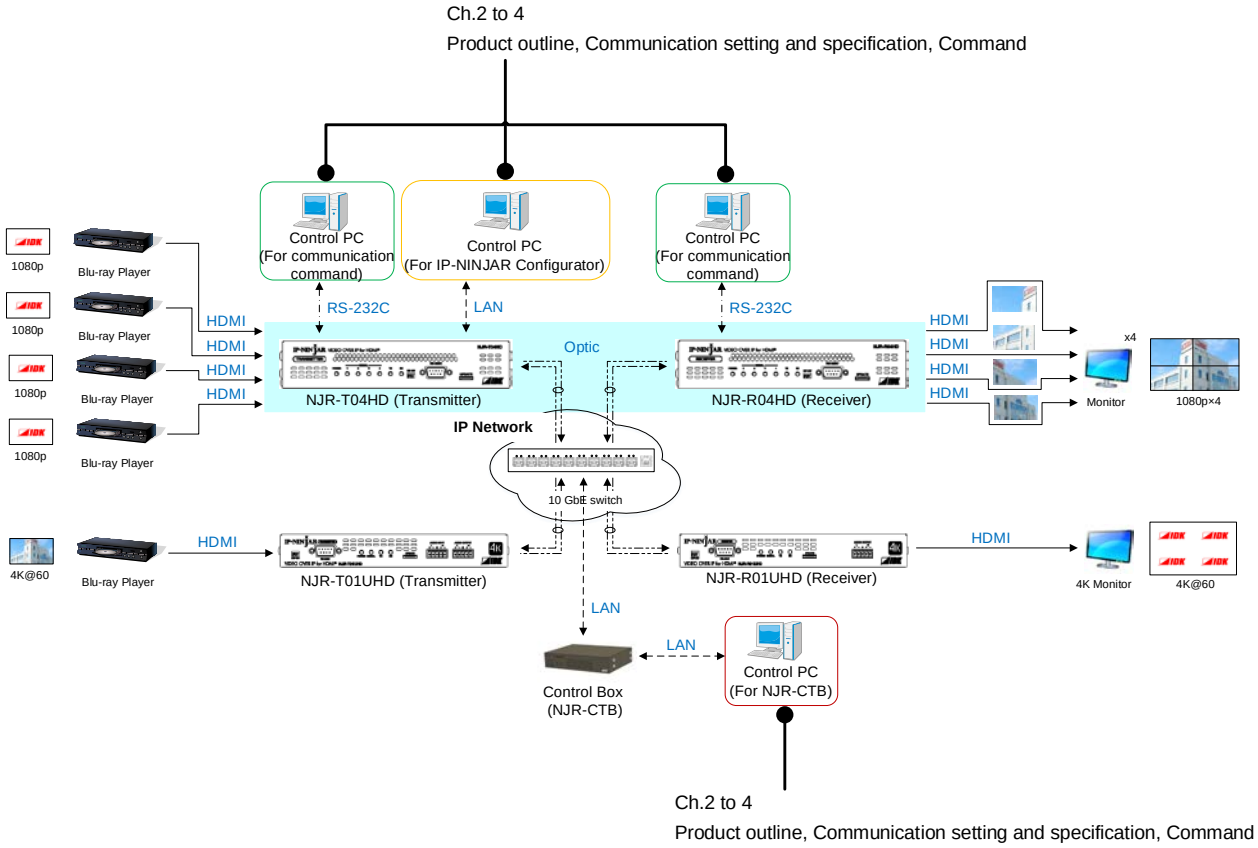
The reference manual for the NJR-T04HD/NJR-R04HD consists of the two following volumes:

- User's guide: Please download from the website above.
- Command guide (this document): Please download from the website above.

Table of Contents

1 How to read this Guide

This guide contains the procedure for commanding NJR-T04HD and NJR-R04HD via RS-232C communication or LAN communication.



[Fig. 1.1] Document structure

[Table 1.1] Documents for IP-NINJAR products

Model number	User's guide	Command guide
NJR-T01UHD / NJR-R01UHD	NJR-T01UHD / NJR-R01UHD User's guide	NJR-T01UHD / NJR-R01UHD Command guide
NJR-T04HD / NJR-R04HD	NJR-T04HD / NJR-R04HD User's guide	NJR-T04HD / NJR-R04HD Command guide
NJR-CTB	NJR-CTB User's guide	NJR-CTB Command guide

2 About this Guide

This guide contains the procedure for controlling NJR-T04HD / NJR-R04HD using commands via RS-232C communication or LAN communication.

■ **Communication commands enables the following main operations:**

- Setting position, size, masking, and image quality
- Setting input, output
- Setting audio
- Setting EDID
- Displaying information

3 Communication configuration and Specifications

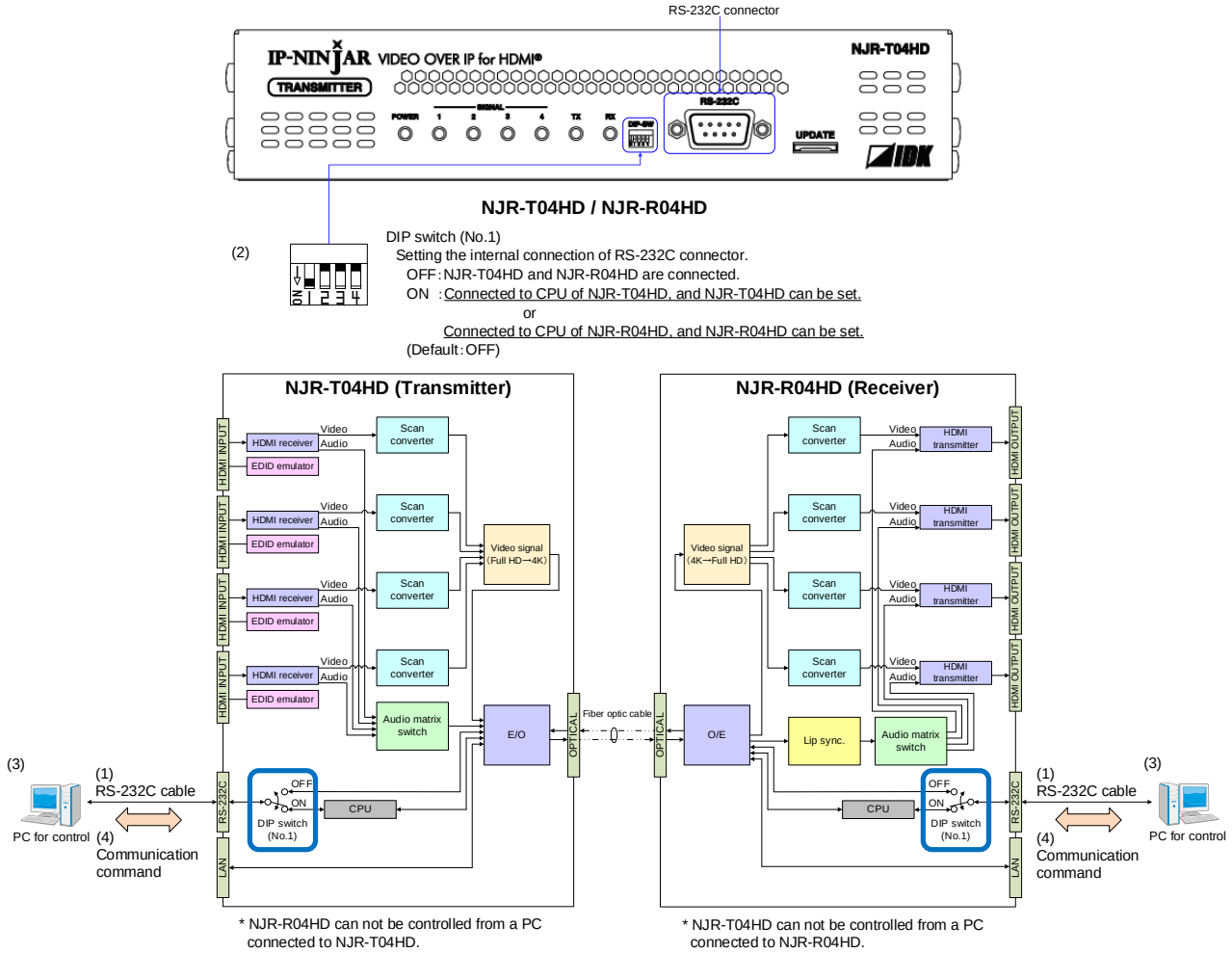
3.1 RS-232C communication

The NJR-T04HD / NJR-R04HD can be accessed and controlled via RS-232C communication.
Connecting a control device to the NJR-T04HD / NJR-R04HD's RS-232C connectors enables system control and status queries per the Command List.

3.1.1 Setup of RS-232C communication

Follow the procedure below.

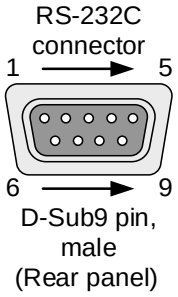
(1) Connect the control device to the RS-232C connector of the NJR-T04HD / NJR-R04HD through an RS-232C cable.
(2) Set the DIP switch 1 to "ON".
(3) See the control device according to "**[Table 3.1] RS-232C specification**".
(4) Send communication command from the control device to the NJR-T04HD / NJR-R04HD.
You can control the NJR-T04HD / NJR-R04HD and get the status information using communication command.



[Fig. 3.1] RS-232C communication setup

3.1.2 RS-232C connector specification

RS-232C pin assignments:



NJR			Control device
Pin No.	Signal name	Cross cable	Signal name
1	N.C.（No connection）		N.C.
2	RD （Received data）	⇄	RD
3	TD （Sent data）	⇄	TD
4	N.C.（No connection）		N.C.
5	GND（Ground）	⟷	GND
6	N.C.（No connection）		N.C.
7	RTS（Request to send）		RTS
8	CTS（Clear to send）		CTS
9	N.C.（No connection）		N.C.

[Fig. 3.2] RS-232C connector

3.1.3 RS-232C communication specification

[Table 3.1] RS-232C specification

Compliant standard	RS-232C
Baud rate	9600 [bps]
Data bit	8 [bit]
Parity check	None
Stop bit	1 [bit]
X parameter	Invalid
Flow control	None
Communication method	Full duplex

3.2 LAN communication

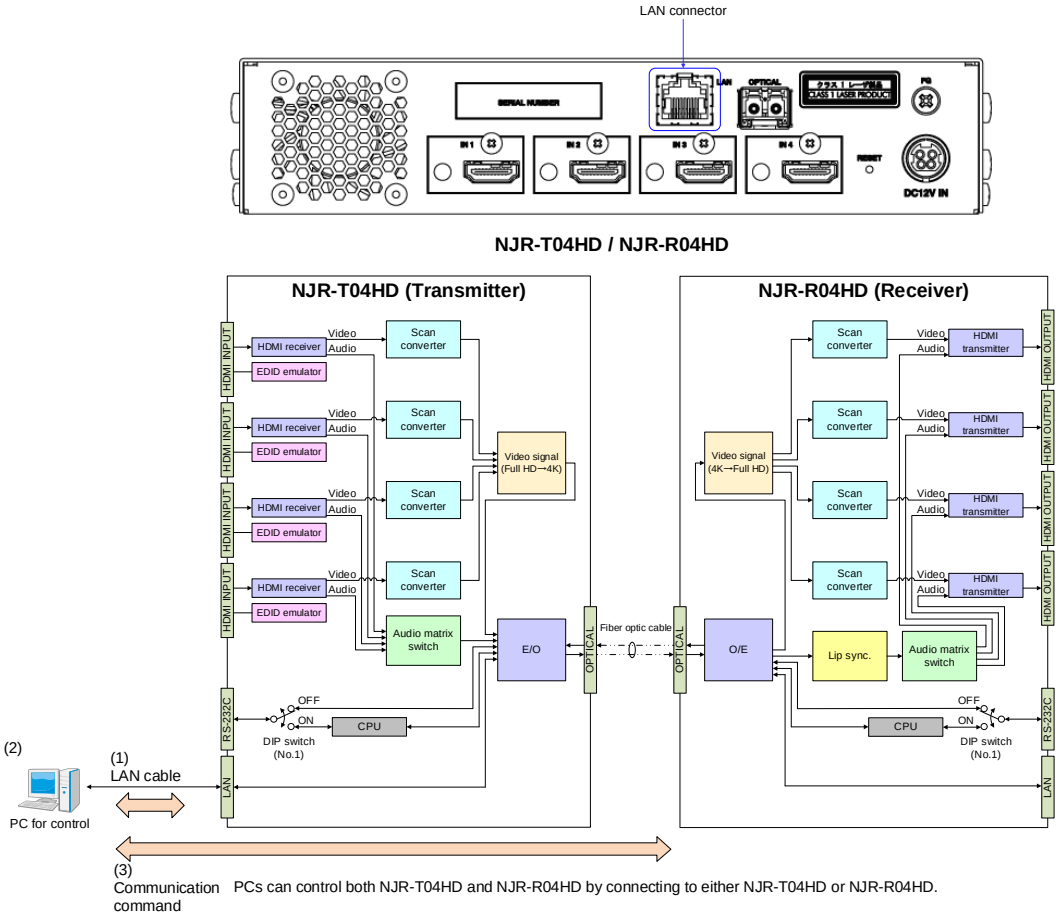
The NJR-T04HD / NJR-R04HD can be accessed and controlled through LAN communication.
Connecting a control device to the NJR-T04HD / NJR-R04HD's LAN connector enables system control and status queries using the IP-NINJAR Configurator (configuration software for IP-NINJAR).
For operations from the IP-NINJAR Configurator, refer to the User's Guide of IP-NINJAR Configurator.
The IP-NINJAR Configurator can be downloaded from
http://www.idkav.com

Note:
When using LAN communication to control the NJR-T04HD / NJR-R04HD, the terminal software cannot be used.

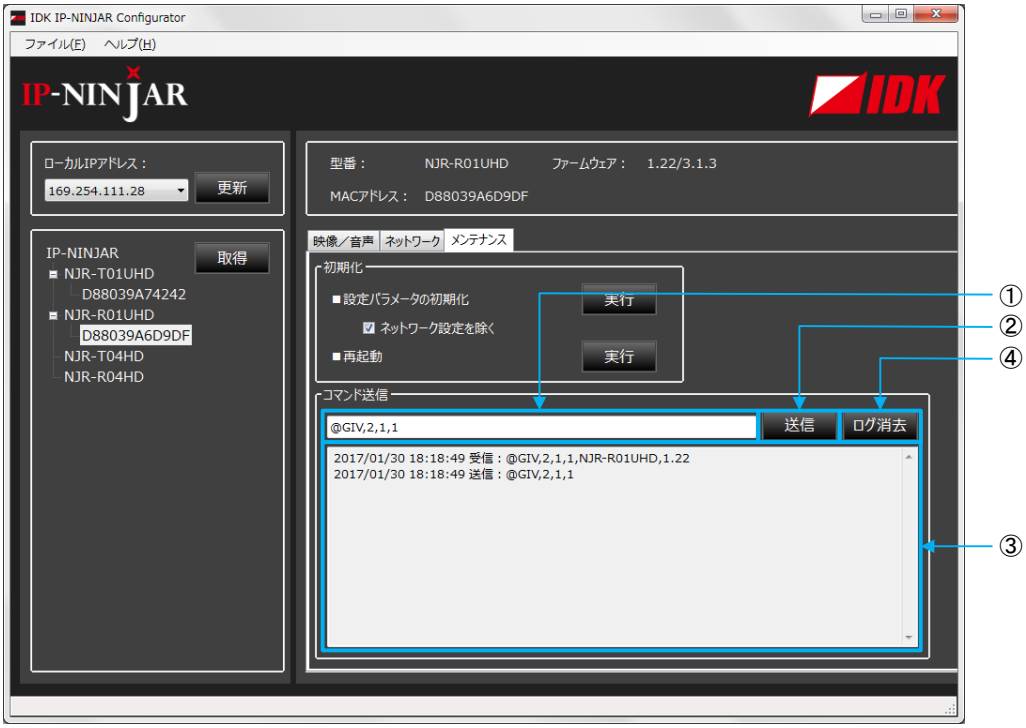
3.2.1 Setup LAN communication

Follow the procedure below.

(1) Connect the control device to the LAN connector of the NJR-T04HD / NJR-R04HD through a LAN cable.
(2) Start the IP-NINJAR Configurator in the control device.
(3) Send communication command from the Maintenance page of the IP-NINJAR Configurator.
You can control the NJR-T04HD / NJR-R04HD and get the status information using communication command.



[Fig. 3.3] LAN communication setup

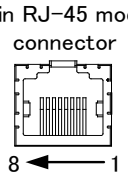


① For entering the desired command.
② For sending the command to NJR-T04HD or NJR-R04HD.
③ For displaying the log.
④ For deleting the log.

[Fig. 3.4] Command input from Maintenance page

3.2.2 LAN connector specification

LAN connector assignment is 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-T04HD / NJR-R04HD to PC, HUB or the like.



Pin No.	Signal name			
	MDI		MDI-X	
	1000BASE-T	100BASE-TX/10BASE-T	1000BASE-T	100BASE-TX/10BASE-T
1	TRX+ (Transmitted/Received data+)	TX+ (Transmitted data+)	TRX+ (Transmitted/Received data+)	RX+ (Received data+)
2	TRX- (Transmitted/Received data)	TX- (Transmitted data)	TRX- (Transmitted/Received data)	RX- (Received data)
3	TRX+ (Transmitted/Received data+)	RX+ (Received data+)	TRX+ (Transmitted/Received data+)	TX+ (Transmitted data+)
4	TRX+ (Transmitted/Received data+)	No connection	TRX+ (Transmitted/Received data+)	No connection
5	TRX- (Transmitted/Received data)	No connection	TRX- (Transmitted/Received data)	No connection
6	TRX- (Transmitted/Received data)	RX- (Received data)	TRX- (Transmitted/Received data)	TX- (Transmitted data)
7	TRX+ (Transmitted/Received data+)	No connection	TRX+ (Transmitted/Received data+)	No connection
8	TRX- (Transmitted/Received data)	No connection	TRX- (Transmitted/Received data)	No connection

[Fig. 3.5] LAN connector

3.2.3 LAN communication specification

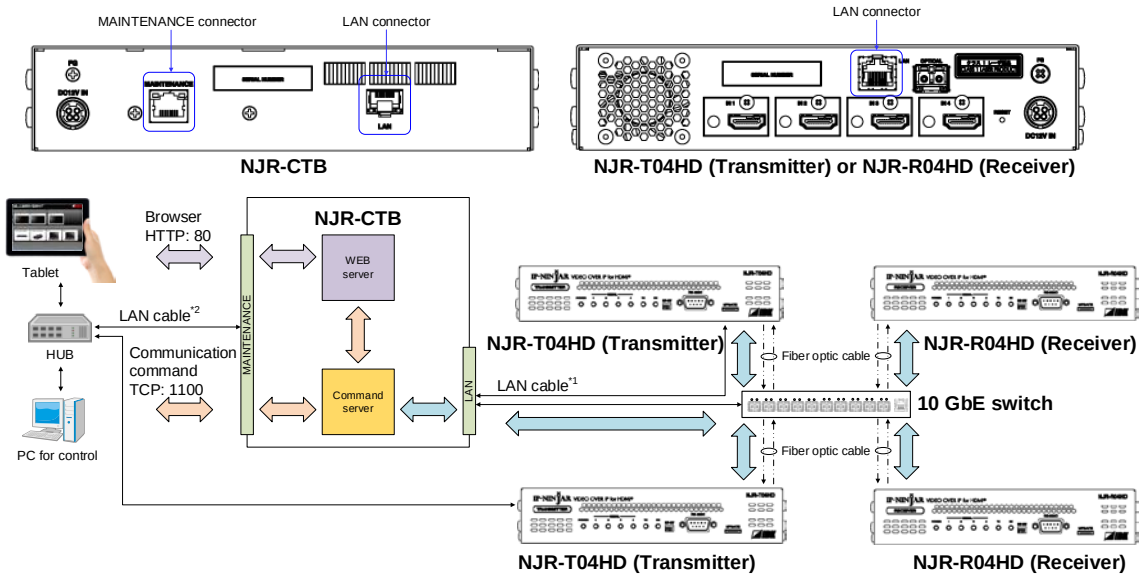
[Table 3.2] LAN communication

Physical layer	10Base-T (IEEE802.3i) / 100Base-TX (IEEE802.3u) / 1000Base-T (IEEE802.3ab)
Network layer	ARP, IP, ICMP
Transport layer	UDP

3.3 External control from NJR-CTB

Connecting a control device to the NJR-CTB's LAN connector enables system control and status queries per the Command List.

For operations from the NJR-CTB, refer to the Command Guide of NJR-CTB.



*1 The LAN connector of NJR-CTB should be connected to the LAN connector of NJR-T04HD / NJR-R04HD or the 10 GbE switch.
*2 PC for control should be connected to the MAINTENANCE connector of NJR-CTB or the LAN connector of NJR-T04HD/NJR-R04HD.

[Fig. 3.6] Connecting to NJR-CTB

3.4 Connecting LAN cable

When connecting a LAN cable to NJR-T04HD / NJR-R04HD / NJR-CTB, avoid making a network loop.

The NJR-T04HD and NJR-R04HD send broadcast packets periodically for the purposes of internal system management.
*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.

4 Command

4.1 Summary

A command consists of “@” (“40” in hexadecimal), 3 or 4 one-byte alphabetical characters (upper and lower cases) followed by parameters (one-byte numbers). For some commands, multiple parameter values can be specified. Processing is executed by sending a delimiter at the end of the command.

Example: @SDT,1,1,1,10000 ↵

“,” (a comma, “2C” in hex) is indicated between a command and parameter and between two parameters.
“↵” is indicated as a delimiter CR LF (return+line feed, “0D” and “0A” in hex).

■ **If an error occurs:**
An error response is returned if an undefined command or inappropriate parameter is included.

Example: @SDT,1 ↵
@ERR,1 ↵

■ **HELP**
Command list is returned as HELP command by sending only delimiter without specifying any command.

Example: ↵
---------- HELP (1/7) ---------- ↵
(OUTPUT TIMING Command) ↵
@GAP / @SAP : Get/Set Aspect ↵
@GOV / @SOV : Get/Set Over Scan ↵
@GNP / @SNP : Get/Set Input Position ↵
@GNS / @SNS : Get/Set Input Size ↵
@GNM / @SNM : Get/Set Input Masking ↵
@IAS : Autosizing ↵
@GBC / @SBC : Get/Set Background Color ↵
@GTP / @STP : Get/Set Video Test Pattern ↵

4.2 Command list

■ **Error status**

Command	Function	Page
@ERR	Error status	27

■ **Position, size, and masking**

Command	Function	Page
@GOT / @SOT	Output resolution	28
@GTD	Actual output resolution	30
@GUM / @SUM	Aspect ration of sink device	31
@GAP / @SAP	Aspect ratio	32
@GOV / @SOV	Overscan	33
@GNP / @SNP	Position	34
@SPS	Moving display position	35
@GNS / @SNS	Size	36
@GNM / @SNM	Masking	38
@IAS	Automatic sizing	40
@GBC / @SBC	Background color	41
@GTP / @STP	Test pattern	42
@GVW / @SVW	Number of videowall displays	43
@GWA / @SWA	Videowall enabled/disabled and coordinate grid	44
@GBE / @SBE	Bezel	46
@GWD / @SWD	Frame delay	47

■ **Image quality**Image quality

Command	Function	Page
@GBR / @SBR	Brightness	48
@GCO / @SCO	Contrast	49
@GHU / @SHU	Hue	50
@GST / @SST	Saturation	51
@GFL / @SFL	Sharpness	52
@GGM / @SGM	Gamma	53
@IDC	Default color	54

■ **Input settings**

Command	Function	Page
@GDT / @SDT	No-signal-input monitoring time	55
@GHE / @SHE	HDCP input enabled/disabled	56

■ **Output settings**

Command	Function	Page
@GEQ / @SEQ	Output equalizer	57
@GDM / @SDM	Output mode	58
@HAU	HDCP re-encryption	58
@GUY / @SUY	Synchronous signal output when no video signal is input	59
@GBO / @SBO	Output video when no video signal is not input	60
@GDC / @SDC	Deep Color	61
@GVT / @SVT	Video output type	62
@GMT / @SMT	Matrix switch	63
@GSK / @SSK	Master synchronous signal	64
@GDL / @SDL	Frame delay	65

■ **Audio**

Command	Function	Page
@GAM / @SAM	Digital audio output mute	66
@GSL / @SSL	Audio level	67
@GAS / @SAS	Audio input for 4K video combination	68
@GLO / @SLO	Lip sync	69
@GAT / @SAT	Test tone output	70
@GAC / @SAC	Test tone level / frequency	71

■ **EDID**

Command	Function	Page
@GVF / @SVF	EDID resolution	72
@GWX / @SWX	Selecting WXGA mode	73

■ **Telop setting**

Command	Function	Page
@GTO / @STO	Telop setting	74
@GTB / @STB	Telop background color	75
@GTC / @STC	Telop font color	76
@GFS / @SFS	Telop font size	77
@GTA / @STA	Telop display position	78
@GTN / @STN	Telop	79

■ **RS-232C setting**

Command	Function	Page
@GCTB / @SCTB	RS-232C communication setting	80

■ **LAN setting**LAN setting

Command	Function	Page
@GIP / @SIP	LAN setting	81
@GMC	MAC address	82

■ **Other setting**Other setting

Command	Function	Page
@GSY / @SSY	Connected device mode	83
@CLRC	Initialization	84
@RBTC	Reboot	84

■ **Information**Information

Command	Function	Page
@GSS	I/O status	85
@GES	Monitor's EDID	88
@GIV	Version	89

4.3 Setting items

Some setting items can be controlled via commands/GUI operation/WEB browser; the others cannot be controlled.

[Table 4.1] Available setting method

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

Command	Setting method		
	NJR-T04HD / NJR-R04HD		NJR-CTB
	RS-232C	LAN (IP-NINJAR Configurator)	LAN
Position, size, and masking			
@GOT / @SOT	C	C	C
@GTD	C	C	C
@GUM / @SUM	C	C	C
@GAP / @SAP	C	C	C
@GOV / @SOV	C	C	C
@GNP / @SNP	C	C	C
@SPS	C	C	C
@GNS / @SNS	C	C	C
@GNM / @SNM	C	C	C
@IAS	C	C	C
@GBC / @SBC	C	C	C
@GTP / @STP	C	C	C
@GVW / @SVW	C	C	C
@GWA / @SWA	C	C	C
@GBE / @SBE	C	C	C
@GWD / @SWD	C	C	C
Image quality			
@GBR / @SBR	C	C	C
@GCO / @SCO	C	C	C
@GHU / @SHU	C	C	C
@GST / @SST	C	C	C
@GFL / @SFL	C	C	C
@GGM / @SGM	C	C	C
@IDC	C	C	C
Input settings			
@GDT / @SDT	C	C	W&C
@GHE / @SHE	C	C	W&C

[Table 4.2] Available setting method (cont'd)

Command	Setting method		
	NJR-T04HD / NJR-R04HD		NJR-CTB
	RS-232C	LAN (IP-NINJAR Configurator)	LAN
Output settings			
@GEQ / @SEQ	C	C	C
@GDM / @SDM	C	C	W&C
@HAU	C	C	C
@GUY / @SUY	C	C	C
@GBO / @SBO	C	C	C
@GDC / @SDC	C	C	C
@GVT / @SVT	C	C	C
@GMT / @SMT	C	C	C
@GSK / @SSK	C	C	C
@GDL / @SDL	C	C	C
Audio			
@GAM / @SAM	C	C	W&C
@GSL / @SSL	C	C	C
@GAS / @SAS	C	C	C
@GLO / @SLO	C	C	C
@GAT / @SAT	C	C	C
@GAC / @SAC	C	C	C
EDID			
@GVF / @SVF	C	C	W&C
@GWX / @SWX	C	C	W&C
Telop setting			
@GTO / @STO	C	C	W&C
@GTB / @STB	C	C	W&C
@GTC / @STC	C	C	W&C
@GFS / @SFS	C	C	W&C
@GTA / @STA	C	C	W&C
@GTN / @STN	C	C	W&C
RS-232C setting			
@GCTB / @SCTB	No	G	W&C
LAN setting			
@GIP / @SIP	No	G	W&C
@GMC	No	G	W&C
Other setting			
@GSY / @SSY	C	C	C
@CLRC	No	G	W&C
@RBTC	No	G	W&C

[Table 4.3] Available setting method (cont'd)

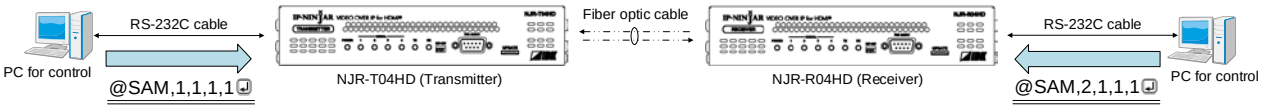
Command	Setting method		
	NJR-T04HD / NJR-R04HD		NJR-CTB
	RS-232C	LAN (IP-NINJAR Configurator)	LAN
Information			
@GSS	C	C	W&C
@GES	C	C	W&C
@GIV	C	C	W&C

4.4 Parameter input format

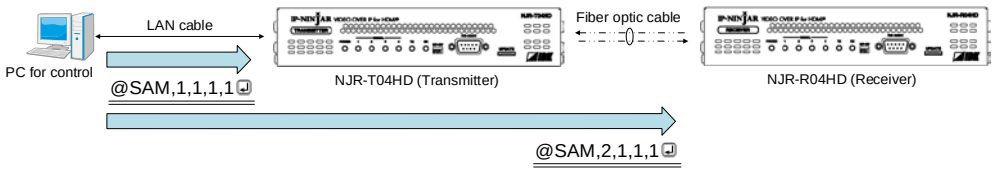
Parameter input formats are common for each setting.
If a command is input from the RS-232C connector of NJR-T04HD / NJR-R04HD or from the LAN connector using the IP-NINJAR Configurator (Software for setting IP-NINJAR), “1” (fixed) is specified to “ch” (channel) because only one NJR-T04HD / NJR-R04HD can be controlled.
If a command is input from the NJR-CTB, any channel can be specified because multiple NJR-T04HD / NJR-R04HD devices that are connected over a network switch can be controlled.

Example: The command for setting mute of digital audio output

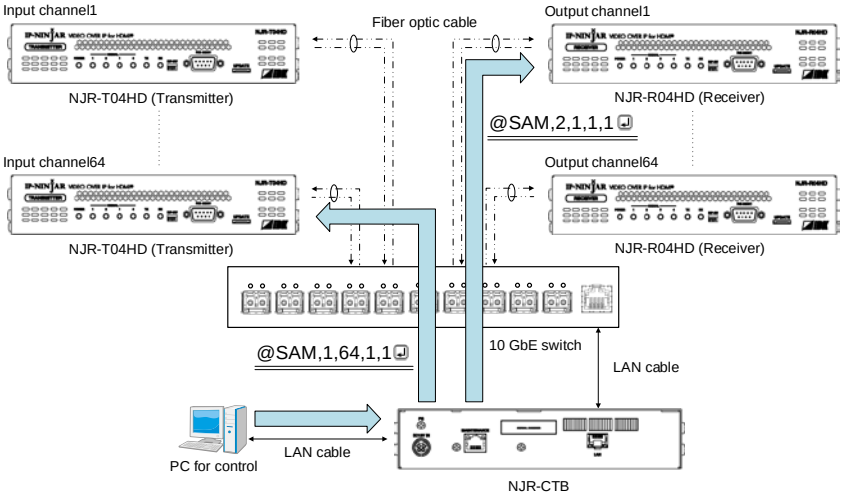
@GAM / @SAM	**Audio output mute**	
Function	Getting	Setting
Format	@GAM, device, ch, port ↵	@SAM, device, ch, port, mute ↵
Return value	@GAM, device, ch, port, mute_1 (, mute_2, mute_3, mute_4) ↵	@SAM, device, ch, port, mute ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of NJR-T04HD/NJR-R04HD or from IP-NINJAR Configurator (Software for setting IP-NINJAR) through LAN, the value is “1” (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	mute_1 to mute_4, mute: Audio mute 0 = Mute OFF [Default], 1 = Mute ON	



[Fig. 4.1] Command input from RS-232C



[Fig. 4.2] Command input from IP-NINJAR Configurator



[Fig. 4.3] Command input from NJR-CTB

4.5 Command availability per operation mode

Some setting commands are available depend on the operation mode (video combination 4K mode1, video combination 4K mode2, or SD/HD mode) to be enabled.

[Table 4.4] Command availability (NJR-T04HD)

Y: Supported, C: Supported but with condisions, N: Not supported

Command		NJR-T04HD		
		Video combination 4K mode 1	Video combination 4K mode 0	SD/HD mode
		@SSY=1	@SSY=0	@SSY=0 or 1
		@SVT=0	@SVT=0	@SVT=1 / 2 / 3 / 4
Position, size, and masking				
@SOT	Output resolution	N	N	N
@SUM	Aspect ration of sink device	N	N	N
@SAP	Aspect ratio	N	Y	Y
@SOV	Overscan	N	Y	Y
@SNP	Position	N	Y	Y
@SPS	Moving display position	N	N	N
@SNS	Size	N	Y	Y
@SNM	Masking	N	Y	Y
@IAS	Automatic sizing	N	Y	Y
@SBC	Background color	N	N	Y
@STP	Test pattern	N	N	Y
@SVW	Number of videowall displays	N	N	N
@SWA	Videowall enabled/disabled and coordinate grid	N	N	N
@SBE	Bezel	N	N	N
@SWD	Frame delay	N	N	N
Image quality				
@SBR	Brightness	Y	Y	Y
@SCO	Contrast	Y	Y	Y
@SHU	Hue	Y	Y	Y
@SST	Saturation	Y	Y	Y
@SFL	Sharpness	Y	Y	Y
@SGM	Gamma	Y	Y	Y
@IDC	Default color	Y	Y	Y
Input settings				
@SDT	No-signal-input monitoring time	Y	Y	Y
@SHE	HDCP input enabled/disabled	Y	Y	Y

[Table 4.5] Command availability (cont'd) (NJR-T04HD) (cont'd)

Command		NJR-T04HD		
		Video combination 4K mode 1	Video combination 4K mode 0	SD/HD mode
		@SSY=1	@SSY=0	@SSY=0 or 1
		@SVT=0	@SVT=0	@SVT=1 / 2 / 3 / 4
Output settings				
@SEQ	Output equalizer	N	N	N
@SDM	Output mode	N	N	N
@HAU	HDCP re-encryption	N	N	N
@SUY	Synchronous signal output when no video signal is input	N	N	N
@SBO	Output video when no video signal is not input	N	N	Y
@SDC	Deep Color	N	N	N
@SVT	Video output type	Y	Y	Y
@SMT	Matrix switch	Y	Y	N
@SSK	Master synchronous signal	N	N	N
@SDL	Frame delay	N	N	N
Audio				
@SAM	Digital audio output mute	Y	Y	Y
@SSL	Audio level	Y	Y	Y
@SAS	Audio input for 4K video combination	Y	Y	N
@SLO	Lip sync	N	N	N
@SAT	Test tone output	Y	Y	Y
@SAC	Test tone level / frequency	Y	Y	Y
EDID				
@SVF	EDID resolution	Y	Y	Y
@SWX	Selecting WXGA mode	Y	Y	Y
Telop setting				
@STO	Telop setting	N	N	N
@STB	Telop background color	N	N	N
@STC	Telop font color	N	N	N
@SFS	Telop font size	N	N	N
@STA	Telop display position	N	N	N
@STN	Telop	N	N	N
Other setting				
@SSY	Connected device mode	Y	Y	Y
Information				
@GSS	I/O status	Y	Y	Y
@GES	Monitor's EDID	Y	Y	Y
@GIV	Version	Y	Y	Y

[Table 4.6] Command availability (NJR-R04HD)

Command		NJR-R04HD		
		Video combination 4K mode 1	Video combination 4K mode 0	SD/HD mode
		@SSY=1	@SSY=0	@SSY=0 or 1
		Transmitter: NJR-T01UHD or NJR-T04HD (@SVT=0)	Transmitter: NJR-T04HD (@SVT=0)	When SD/HD resolution is input
Position, size, and masking				
@SOT	Output resolution	Y	Y	Y
@SUM	Aspect ration of sink device	Y	Y	Y
@SAP	Aspect ratio	N	N	N
@SOV	Overscan	N	N	N
@SNP	Position	Y	Y	Y
@SPS	Moving display position	Y	Y	Y
@SNS	Size	Y	Y	Y
@SNM	Masking	Y	Y	Y
@IAS	Automatic sizing	Y	Y	Y
@SBC	Background color	Y	Y	Y
@STP	Test pattern	Y	Y	Y
@SVW	Number of videowall displays	Y	Y	Y
@SWA	Videowall enabled/disabled and coordinate grid	Y	Y	Y
@SBE	Bezel	Y	Y	Y
@SWD	Frame delay	Y	Y	Y
Image quality				
@SBR	Brightness	Y	Y	Y
@SCO	Contrast	Y	Y	Y
@SHU	Hue	Y	Y	Y
@SST	Saturation	Y	Y	Y
@SFL	Sharpness	Y	Y	Y
@SGM	Gamma	Y	Y	Y
@IDC	Default color	Y	Y	Y
Input settings				
@SDT	No-signal-input monitoring time	N	N	N
@SHE	HDCP input enabled/disabled	N	N	N

[Table 4.7] Command availability (cont'd) (NJR-R04HD) (cont'd)

Commad		NJR-R04HD		
		Video combination 4K mode 1	Video combination 4K mode 0	SD/HD mode
		@SSY=1	@SSY=0	@SSY=0 or 1
		Transmitter: NJR-T01UHD or NJR-T04HD (@SVT=0)	Transmitter: NJR-T04HD (@SVT=0)	When SD/HD resolution is input
Output settings				
@SEQ	Output equalizer	Y	Y	Y
@SDM	Output mode	Y	Y	Y
@HAU	HDCP re-encryption	Y	Y	Y
@SUY	Synchronous signal output when no video signal is input	Y	Y	Y
@SBO	Output video when no video signal is not input	Y	Y	Y
@SDC	Deep Color	Y	Y	Y
@SVT	Video output type	N	N	N
@SMT	Matrix switch	C*	Y	N
@SSK	Master synchronous signal	Y	Y	Y
@SDL	Frame delay	Y	Y	Y
Audio				
@SAM	Digital audio output mute	Y	Y	Y
@SSL	Audio level	Y	Y	Y
@SAS	Audio input for 4K video combination	N	N	N
@SLO	Lip sync	Y	Y	Y
@SAT	Test tone output	Y	Y	Y
@SAC	Test tone level / frequency	Y	Y	Y
EDID				
@SVF	EDID resolution	N	N	N
@SWX	Selecting WXGA mode	N	N	N
Telop setting				
@STO	Telop setting	Y	Y	Y
@STB	Telop background color	Y	Y	Y
@STC	Telop font color	Y	Y	Y
@SFS	Telop font size	Y	Y	Y
@STA	Telop display position	Y	Y	Y
@STN	Telop	Y	Y	Y
Other setting				
@SSY	Connected device mode	Y	Y	Y
Information				
@GSS	I/O status	Y	Y	Y
@GES	Monitor's EDID	Y	Y	Y
@GIV	Version	Y	Y	Y

* Available only if NJR-T04HD is used.

4.6 Details of commands

4.6.1 Error status

@ERR	**Error status**	
Format	Return value only.	
Return value	@ERR, error ↵	
Parameter	error: Error status 1 = Erroneous parameter format or value 2 = Undefined command or wrong format 3 = Currently cannot be used. 99 = Error other than errors above	
Example	@GAM ↵ @ERR,1 ↵	Sending @GAM command. Parameter error
Remarks	—	

4.6.2 Position, size, and masking

@GOT / @SOT	**Output resolution**	
Function	Getting	Setting
Format	@GOT, device, ch, port ↵	@SOT, device, ch, port, resolution ↵
Return value	@GOT, device, ch, port, resolution_1 (, resolution_2, resolution_3, resolution_4) ↵	@SOT, device, ch, port, resolution ↵
Parameter	device: Model "2" fixed.	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	resolution_1 to resolution_4, resolution: Output resolution 0 = AUTO [Default], 1 = VGA@60 (640x480), 2 = SVGA@60 (800x600), 3 = XGA@60 (1024x768), 4 = WXGA@60 (1280x768), 5 = WXGA@60 (1280x800), 6 = Quad-VGA@60 (1280x960), 7 = SXGA@60 (1280x1024), 8 = WXGA@60 (1360x768), 9 = WXGA@60 (1366x768), 10 = SXGA+@60 (1400x1050), 11 = WXGA+@60 (1440x900), 12 = WXGA++@60 (1600x900), 13 = UXGA@60 (1600x1200), 14 = WSXGA+@60 (1680x1050), 15 = VESAHD@60 (1920x1080), 16 = WUXGA@60 (1920x1200), 17 = QWXGA@60 (2048x1152), 18 = 480i@59.94 (720x480), 19 = 480p@59.94 (720x480), 20 = 576i@50 (720x576), 21 = 576p@50 (720x576), 22 = 720p@50 (1280x720), 23 = 720p@59.94 (1280x720), 24 = 720p@60 (1280x720), 25 = 1080i@50 (1920x1080), 26 = 1080i@59.94 (1920x1080), 27 = 1080i@60 (1920x1080), 28 = 1080p@50 (1920x1080), 29 = 1080p@59.94 (1920x1080), 30 = 1080p@60 (1920x1080)	
Example	@GOT,2,1,1 ↵ @GOT,2,1,1,30 ↵	Getting the output resolution of channel1 OUT1. 1080p@60 (1920x1080).
	@SOT,2,1,1,30 ↵ @SOT,2,1,1,30 ↵	Setting the output resolution of channel1 OUT1 to "1080p@60 (1920x1080)". Completed normally.

@GOT / @SOT	**Output resolution (cont'd)**
Remarks	The NJR-T04HD does not support this command. For NJR-R04HD, OUT1 setting will be applied under the following conditions. ・If the NJR-T01UHD is used and 4K video is input, signals are output at the same resolution from 4 outputs. ・If the NJR-T04HD is used and "**@GVT / @SVT Video output type**" is set to "0", signals are output at the same resolution from 4 outputs under the following conditions. - If "**@GSY / @SSY Connected device mode**" is set to "1". - If "**@GSY / @SSY Connected device mode**" is set to "0" and display mode of "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "0". ・If the display mode of "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "1", signals are output at the same resolution from 4 outputs.

@GTD	**Actual output resolution**	
Function	Getting	
Format	@GTD, device, ch, port ↵	
Return value	@GTD, device, ch, port, resolution_1 (,resolution_2, resolution_3, resolution_4) ↵	
Parameter	device: Model "2" fixed.	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	resolution_1 to resolution_4: Actual output resolution 1 = VGA@60 (640x480), 2 = SVGA@60 (800x600), 3 = XGA@60 (1024x768), 4 = WXGA@60 (1280x768), 5 = WXGA@60 (1280x800), 6 = Quad-VGA@60 (1280x960), 7 = SXGA@60 (1280x1024), 8 = WXGA@60 (1360x768), 9 = WXGA@60 (1366x768), 10 = SXGA+@60 (1400x1050), 11 = WXGA+@60 (1440x900), 12 = WXGA++@60 (1600x900), 13 = UXGA@60 (1600x1200), 14 = WSXGA+@60 (1680x1050), 15 = VESAHD@60 (1920x1080), 16 = WUXGA@60 (1920x1200), 17 = QWXGA@60 (2048x1152), 18 = 480i@59.94 (720x480), 19 = 480p@59.94 (720x480), 20 = 576i@50 (720x576), 21 = 576p@50 (720x576), 22 = 720p@50 (1280x720), 23 = 720p@59.94 (1280x720), 24 = 720p@60 (1280x720), 25 = 1080i@50 (1920x1080), 26 = 1080i@59.94 (1920x1080), 27 = 1080i@60 (1920x1080), 28 = 1080p@50 (1920x1080), 29 = 1080p@59.94 (1920x1080) [Default], 30 = 1080p@60 (1920x1080)	
Example	@GTD,2,1,1 ↵ @GTD,2,1,1,30 ↵	Getting the actual output resolution of channel1 OUT1. 1080p@60 (1920x1080).
Remarks	The NJR-T04HD does not support this command. For NJR-R04HD, if "**@GOT / @SOT Output resolution**" is set to "0", the actual output resolution is returned. If it is set to the value other than "0", the set output resolution is returned.	

<table>
<tr><th>@GUM / @SUM</th><th colspan="2">Aspect ration of sink device</th></tr>
<tr><td>Function</td><td>Getting</td><td>Setting</td></tr>
<tr><td>Format</td><td>@GUM, device, ch, port ↵</td><td>@SUM, device, ch, port, aspect ↵</td></tr>
<tr><td>Return value</td><td>@GUM, device, ch, port, aspect_1 (, aspect_2, aspect_3, aspect_4) ↵</td><td>@SUM, device, ch, port, aspect ↵</td></tr>
<tr><td rowspan="4">Parameter</td><td colspan="2">device: Model
“2” fixed.</td></tr>
<tr><td colspan="2">ch: Output channel
1 to 512 = Output channel1 to Output channel512
If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td colspan="2">port: Output connector
0 = All outputs, 1 = OUT1 to 4 = OUT4</td></tr>
<tr><td colspan="2">aspect_1 to aspect_4, aspect: Aspect ratio of sink device
0 = RESOLUTION [Default], 1 = 4:3, 2 = 5:4,
3 = 5:3, 4 = 16:9, 5 = 16:10</td></tr>
<tr><td rowspan="2">Example</td><td>@GUM,2,1,1 ↵

@GUM,2,1,1,5 ↵</td><td>Getting the aspect ratio of the sink device connected to channel1 OUT1.
16:10.</td></tr>
<tr><td>@SUM,2,1,1,5 ↵

@SUM,2,1,1,5 ↵</td><td>Connecting the channel1 OUT1 to 16:10 sink device.
Completed normally.</td></tr>
<tr><td>Remarks</td><td colspan="2">The NJR-T04HD does not support this command.
For NJR-R04HD, OUT1 setting will be applied under the following conditions.
・If “@GWA / @SWA Videowall enabled/disabled and coordinate grid” is set to “1”, the same setting will be applied.
Each output can be set separately in the following conditions. However, the smallest aspect ratio will be applied if the input video is reduced.
・If the NJR-T01UHD is used and 4K video is input.
・If the NJR-T04HD is used, “@GVT / @SVT Video output type” is set to “0”, and under one of the following conditions.
- “@GSY / @SSY Connected device mode” is set to “1”
- “@GSY / @SSY Connected device mode” is set to “0” and display mode of “@GWA / @SWA Videowall enabled/disabled and coordinate grid” is set to “0”</td></tr>
</table>

<table>
<tr><th>@GAP / @SAP</th><th colspan="2">Aspect ratio</th></tr>
<tr><td>Function</td><td>Getting</td><td>Setting</td></tr>
<tr><td>Format</td><td>@GAP, device, ch, port ↵</td><td>@SAP, device, ch, port, aspect ↵</td></tr>
<tr><td>Return value</td><td>@GAP, device, ch, port, aspect_1 (, aspect_2, aspect_3, aspect_4) ↵</td><td>@SAP, device, ch, port, aspect ↵</td></tr>
<tr><td rowspan="4">Parameter</td><td colspan="2">device: Model
“1” fixed.</td></tr>
<tr><td colspan="2">ch: Input channel
1 to 512 = Input channel1 to Input channel512
If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td colspan="2">port: Input connector
0 = All inputs, 1 = IN1 to 4 = IN4</td></tr>
<tr><td colspan="2">aspect_1 to aspect_4, aspect: Aspect ratio
0 = AUTO-1 [Default], 1 = AUTO-2,
2 = 4:3, 3 = 16:9, 4 = 14:9,
5 = 16:9 LETTER BOX, 6 = 14:9 LETTER BOX, 7 = 4:3 SIDE PANEL,
8 = 14:9 SIDE PANEL, 9 = FULL, 10 = THROUGH</td></tr>
<tr><td rowspan="2">Example</td><td>@GAP,1,1,1 ↵

@GAP,1,1,1,2 ↵</td><td>Getting the aspect ratio of channel1 IN1.
4:3.</td></tr>
<tr><td>@SAP,1,1,1,2 ↵

@SAP,1,1,1,2 ↵</td><td>Setting the aspect ratio of channel1 IN1 to 4:3.
Completed normally.</td></tr>
<tr><td>Remarks</td><td colspan="2">For NJR-T04HD, this setting command cannot be used if “@GSY / @SSY Connected device mode” is set to “1” and “@GVT / @SVT Video output type” is set to “0”.
The NJR-R04HD does not support this command.</td></tr>
</table>

@GOV / @SOV	**Overscan**	
Function	Getting	Setting
Format	@GOV, device, ch, port ↵	@SOV, device, ch, port, overscan ↵
Return value	@GOV, device, ch, port, overscan_1 (, overscan_2, overscan_3, overscan_4) ↵	@SOV, device, ch, port, overscan ↵
Parameter	device: Model "1" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Input connector 0 = All inputs, 1 = IN1 to 4 = IN4	
	overscan_1 to overscan_4, overscan: Overscan 100% to 115% [Default] SDTV: 105%, HDTV or PC: 100%	
Example	@GOV,1,1,1 ↵ @GOV,1,1,1,100 ↵	Getting the overscan of channel1 IN1. 100%.
	@SOV,1,1,1,100 ↵ @SOV,1,1,1,100 ↵	Setting the overscan of channel1 IN1 to 100%. Completed normally.
Remarks	For NJR-T04HD, this setting command cannot be used if "**@GSY / @SSY Connected device mode**" is set to "1" and "**@GVT / @SVT Video output type**" is set to "0". The NJR-R04HD does not support this command.	

<table>
<tr><th>@GNP / @SNP</th><th colspan="2">Position</th></tr>
<tr><td>Function</td><td>Getting</td><td>Setting</td></tr>
<tr><td>Format</td><td>@GNP, device, ch, port ↵</td><td>@SNP, device, ch, port, h_position, v_position ↵</td></tr>
<tr><td>Return value</td><td>@GNP, device, ch, port, h_position_1, v_position_1 (, h_position_2, v_position_2, h_position_3, v_position_3, h_position_4, v_position_4) ↵</td><td>@SNP, device, ch, port, h_position, v_position ↵</td></tr>
<tr><td>Parameter</td><td colspan="2">device: Model
1 = NJR-T04HD, 2 = NJR-R04HD</td></tr>
<tr><td></td><td colspan="2">ch: Channel
1 to 512 = Channel1 to Channel512
If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td></td><td colspan="2">port: Input connector / Output connector
0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4</td></tr>
<tr><td></td><td colspan="2">h_position_1 to h_position_4, h_position: Horizontal position
[NJR-T04HD]
If “@GSY / @SSY Connected device mode” is set to “0” and “@GVT / @SVT Video output type” is set to “0”:
-Horizontal size to +1920 [Default] 0
If “@GVT / @SVT Video output type” is set to “1” to “4”:
For the input resolution of the input that is selected in “@GVT / @SVT Video output type”,
-Horizontal size to +Horizontal input resolution [Default] 0
[NJR-R04HD]
-Horizontal size to +Horizontal output resolution [Default] 0</td></tr>
<tr><td></td><td colspan="2">v_position_1 to v_position_4, v_position: Vertical position
[NJR-T04HD]
If “@GSY / @SSY Connected device mode” is set to “0” and “@GVT / @SVT Video output type” is set to “0”:
-Vertical size to +1080 [Default] 0
If “@GVT / @SVT Video output type” is set to “1” to “4”:
For the input resolution of the input that is selected in “@GVT / @SVT Video output type”,
-Vertical size to +Vertical input resolution [Default] 0
[NJR-R04HD]
-Vertical size to +Vertical output resolution [Default] 0</td></tr>
<tr><td>Example</td><td>@GNP,2,1,1 ↵

@GNP,2,1,1,-50,20 ↵</td><td>Getting the position of NJR-R04HD channel1 IN1.
Horizontal position: -50
Vertical position: +20.</td></tr>
<tr><td></td><td>@SNP,2,1,1,-50,20 ↵

@SNP,2,1,1,-50,20 ↵</td><td>Setting the NJR-R04HD channel1 IN1’s horizontal position to -50, vertical position to +20.
Completed normally.</td></tr>
<tr><td>Remarks</td><td colspan="2">For NJR-T04HD, this setting command cannot be used if “@GSY / @SSY Connected device mode” is set to “1” and “@GVT / @SVT Video output type” is set to “0”.</td></tr>
</table>

@SPS	**Moving display position**	
Function	Setting	
Format	@SPS, device, ch, port, h_move, v_move ↵	
Return value	@SPS, device, ch, port, h_move, v_move ↵	
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	h_move: Variable horizontal position -(Horizontal size+Horizontal output resolution) to Horizontal size+Horizontal output resolution	
	v_move: Variable vertical position -(Vertical size +Vertical output resolution) to Vertical size+Vertical output resolution	
Example	@SPS,2,1,0,200,0 ↵ @SPS,2,1,0,200,0 ↵	Moving the video position of NJR-R04HD channel1's all outputs to 200 pixels to the right. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

<table>
<tr><th>@GNS / @SNS</th><th colspan="2">Size</th></tr>
<tr><td>Function</td><td>Getting</td><td>Setting</td></tr>
<tr><td>Format</td><td>@GNS, device, ch, port ↵</td><td>@SNS, device, ch, port, h_size, v_size ↵</td></tr>
<tr><td>Return value</td><td>@GNS, device, ch, port, h_size_1, v_size_1 (, h_size_2, v_size_2, h_size_3, v_size_3, h_size_4, v_size_4) ↵</td><td>@SNS, device, ch, port, h_size, v_size ↵</td></tr>
<tr><td>Parameter</td><td colspan="2">device: Model
1 = NJR-T04HD, 2 = NJR-R04HD</td></tr>
<tr><td></td><td colspan="2">ch: Channel
1 to 512 = Channel1 to Channel512
If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td></td><td colspan="2">port: Input connector / Output connector
0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4</td></tr>
<tr><td></td><td colspan="2">h_size_1 to h_size_4, h_size: Horizontal size
[NJR-T04HD]
If “@GSY / @SSY Connected device mode” is set to “0” and “@GVT / @SVT Video output type” is set to “0”:
1920 ÷4 to 1920×4 [Default] 1920
If “@GVT / @SVT Video output type” is set to “1” to “4”:
For the input resolution of the input that is selected in “@GVT / @SVT Video output type”,
Horizontal input resolution ÷4 to +Horizontal input resolution×4 [Default] Horizontal input resolution
[NJR-R04HD]
Horizontal output resolution ÷6 to Horizontal output resolution×6 [Default] Horizontal output resolution</td></tr>
<tr><td></td><td colspan="2">v_size_1 to v_size_4, v_size: Vertical size
[NJR-T04HD]
If “@GSY / @SSY Connected device mode” is set to “0” and “@GVT / @SVT Video output type” is set to “0”:
1080 ÷4 to 1080×4 [Default] 1080
If “@GVT / @SVT Video output type” is set to “1” to “4”:
For the input resolution of the input that is selected in “@GVT / @SVT Video output type”,
Vertical input resolution ÷4 to +Vertical input resolution×4 [Default] Vertical input resolution
[NJR-R04HD]
Vertical output resolution ÷6 to Vertical output resolution×6 [Default] Vertical output resolution</td></tr>
<tr><td>Example</td><td>@GNS,2,1,1 ↵

@GNS,2,1,1,1920,1080 ↵</td><td>Getting the size of NJR-R04HD channel1 IN1.
Horizontal size: 1920, Vertical size: 1080</td></tr>
<tr><td></td><td>@SNS,2,1,1,1920,1080 ↵

@SNS,2,1,1,1920,1080 ↵</td><td>Setting the horizontal size of NJR-R04HD channel1 IN1 to 1920, vertical size to 1080.
Completed normally.</td></tr>
</table>

@GNS / @SNS	**Size (cont'd)**
Remarks	For NJR-T04HD, this setting command cannot be used if "**@GSY / @SSY Connected device mode**" is set to "1" and "**@GVT / @SVT Video output type**" is set to "0". The NJR-R04HD does not support this command. For the response of the getting command of NJR-T04HD, if "**@GSY / @SSY Connected device mode**" is set to "0" and "**@GVT / @SVT Video output type**" is set to "0", the display size for 1920x1080 will be returned. If "**@GSY / @SSY Connected device mode**" is set to "1" and "**@GVT / @SVT Video output type**" is set to "0", 1920 for horizontal and vertical 1080 for vertical will be returned for four inputs / outputs. If "**@GVT / @SVT Video output type**" is set to "1" to "4", the display size for the input resolution selected in "**@GVT / @SVT Video output type**" will be returned. For NJR-R04HD, OUT1 setting will be applied under the following conditions. ・If "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "1", the same setting will be applied. Each output can be set separately in the following conditions. However, the smallest aspect ratio will be applied if the input video is reduced. ・If the NJR-T01UHD is used and 4K video is input. ・If the NJR-T04HD is used, "**@GVT / @SVT Video output type**" is set to "0", - "**@GSY / @SSY Connected device mode**" is set to "1". - "**@GSY / @SSY Connected device mode**" is set to "0" and display mode of "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "0".

@GNM / @SNM	**Masking**	
Function	Getting	Setting
Format	@GNM, device, ch, port ↵	@SNM, device, ch, port, left, right, top, bottom ↵
Return value	@GNM, device, ch, port, left, right, top, bottom ↵	@SNM, device, ch, port, left, right, top, bottom ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	left: Lef side masking [NJR-T04HD] Horizontal position (0 or larger) to right saide masking [Default] 0 [NJR-R04HD] If the display mode of “**@GWA / @SWA Videowall enabled/disabled and coordinate grid**” is set to “0” or “2” : Horizontal position (0 or larger) to right side masking [Default] 0 If the display mode of “**@GWA / @SWA Videowall enabled/disabled and coordinate grid**” is set to “1”: 0 to right masking [Default] 0	
	right: Right side masking [NJR-T04HD] If “**@GSY / @SSY Connected device mode**” is set to “0” and “**@GVT / @SVT Video output type**” is set to “0”: Left side masking to Horizontal position+horizontal size (1920 smaller) [Default] 1920 If “**@GVT / @SVT Video output type**” is set to “1” to “4”: Left side masking to horizontal position+horizontal size (Horizontal input resolution or smaller of the input that is selected in “**@GVT / @SVT Video output type**”) [Default] Horizontal input resolution [NJR-R04HD] If the display mode of “**@GWA / @SWA Videowall enabled/disabled and coordinate grid**” is set to “0” or “2”: Ledt side masking to Horizontal position+Horizontal size (horizontal output resolution or smaller) [Default] Horizontal output resolution If the display mode of “**@GWA / @SWA Videowall enabled/disabled and coordinate grid**” is set to “1”: Left side masking to horizontal size [Default] horizontal size	

<table>
<tr><th>@GNM / @SNM</th><th colspan="2">Masking (cont'd)</th></tr>
<tr><td>Parameter</td><td colspan="2">top: Top side masking
[NJR-T04HD]
Vertical position (0 or larger) to bottom side masking [Default] 0
[NJR-R04HD]
If the display mode of "@GWA / @SWA Videowall enabled/disabled and coordinate grid" is set to "0" or "2":
Vertical position (0 or larger) to bottom side masking [Default] 0
If the display mode of "@GWA / @SWA Videowall enabled/disabled and coordinate grid" is set to "1":
0 to bottom side masking [Default] 0</td></tr>
<tr><td></td><td colspan="2">bottom: Bottom side masking
[NJR-T04HD]
If "@GSY / @SSY Connected device mode" is set to "0" and "@GVT / @SVT Video output type" is set to "0":
Top saide masking to Vertical position+verrtical saize (1080 smaller)
[Default] 1080
If "@GVT / @SVT Video output type" is set to "1" to "4":
Top side masking to Vertical position+vertical size (Vertical input resolution or smaller of the input that is selected in "@GVT / @SVT Video output type")
[Default] Vertical input resolution
[NJR-R04HD]
If the display mode of "@GWA / @SWA Videowall enabled/disabled and coordinate grid" is set to "0" or "2":
Top side masking to Vertical position+vertical size (Horizontal output resolution smaller) [Default] Vertical output resolution
If the display mode of "@GWA / @SWA Videowall enabled/disabled and coordinate grid" is set to "1":
Top side masking to vertical size [Default] Vertical size</td></tr>
<tr><td>Example</td><td>@GNM,2,1,1 ↵

@GNM,2,1,1,0,1920,0,1080 ↵</td><td>Getting the masking of NJR-R04HD channel1 IN1.
Left: 0, right: 1920, top: 0, bottom: 1080</td></tr>
<tr><td></td><td>@SNM,2,1,1,0,1920,0,1080 ↵

@SNM,2,1,1,0,1920,0,1080 ↵</td><td>Setting the masking of NJR-R04HD channel1 IN1 to 0 for left, 1920 for right, 0 for top, 1080 for bottom.
Completed normally.</td></tr>
<tr><td>Remarks</td><td colspan="2">For NJR-T04HD, this setting command cannot be used if "@GSY / @SSY Connected device mode" is set to "1" and "@GVT / @SVT Video output type" is set to "0".</td></tr>
</table>

@IAS	**Automatic sizing**	
Function	Setting	
Format	@IAS, device, ch, port ↵	
Return value	@IAS, device, ch, port ↵	
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
Example	@IAS,1,1,1 ↵ @IAS,1,1,1 ↵	Initializing the following settings in order to display images input from NJR-T04HD channel1 IN1 on the full screen: **@GAP / @SAP Aspect ratio** **@GOV / @SOV Overscan** **@GNP / @SNP Position** **@GNS / @SNS Size** **@GNM / @SNM Masking** Completed normally.
	@IAS,2,1,1 ↵ @IAS,2,1,1 ↵	Initializing the following settings in order to display images output from NJR-R04HD channel1 IN1 on the full screen: **@GNP / @SNP Position** **@GNS / @SNS Size** **@GNM / @SNM Masking** Completed normally.
Remarks	For NJR-T04HD, this setting command cannot be used if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0”.	

@GBC / @SBC	**Background color**	
Function	Getting	Setting
Format	@GBC, device, ch, port ↵	@SBC, device, ch, port, red, green, blue ↵
Return value	@GBC, device, ch, port, red, green, blue ↵	@SBC, device, ch, port, red, green, blue ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Output connector 0 = All outputs (for setting only), 1 = OUT1 to 4 = OUT4	
	red : Background color (Red) green : Background color (Green) blue : Background color (Blue) 0 to 255 [Default] 0 (Black)	
Example	@GBC,2,1,1 ↵ @GBC,2,1,1,128,128,128 ↵	Getting the background color of channel1 OUT1. RGB: 128 (Gray)
	@SBC,2,1,1,128,128,128 ↵ @SBC,2,1,1,128,128,128 ↵	Setting the background color of channel1 OUT1 to 128 (Gary) for all RGB. Completed normally.
Remarks	For NJR-T04HD, this setting command cannot be used if “**@GVT / @SVT Video output type**” is set to “0”.	

<table>
<tr><th>@GTP / @STP</th><th colspan="2">Test pattern</th></tr>
<tr><td>Function</td><td>Getting</td><td>Setting</td></tr>
<tr><td>Format</td><td>@GTP, device, ch, port ↵</td><td>@STP, device, ch, port, pattern, scroll ↵</td></tr>
<tr><td>Return value</td><td>@GTP, device, ch, port, pattern_1, scroll_1 (, pattern_2, scroll_2, pattern_3, scroll_3, pattern_4, scroll_4) ↵</td><td>@STP, device, ch, port, pattern, scroll ↵</td></tr>
<tr><td rowspan="5">Parameter</td><td colspan="2">device: Model
1 = NJR-T04HD, 2 = NJR-R04HD</td></tr>
<tr><td colspan="2">ch: Output channel
1 to 512 = Output channel1 to Output channel512
NJR-T04HD / If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td colspan="2">port: Output connector
0 = All outputs, 1 = OUT1 to 4 = OUT4</td></tr>
<tr><td colspan="2">pattern_1 to pattern_4, pattern: Test pattern
0 = OFF [Default], 1 = VERTICAL COLOR BAR,
2 = HORIZONTAL COLOR BAR, 3 = VERTICAL GRAY SCALE,
4 = HORIZONTAL GRAY SCALE, 5 = VERTICAL RAMP,
6 = HORIZONTAL RAMP, 7 = 100% WHITE RASTER,
8 = 50% WHITE RASTER, 9 = 100% RED RASTER,
10 = 100% GREEN RASTER, 11 = 100% BLUE RASTER,
12 = CROSS HATCH, 13 = OUTPUT FRAME,
14 = VERTICAL STRIPE, 15 = HORIZONTAL STRIPE,
16 = VERTICAL ZEBRA, 17 = HORIZONTAL ZEBRA
Test pattern numbers 1 to 6, 16 and 17 can be scrolled.</td></tr>
<tr><td colspan="2">scroll_1 to scroll_4, scroll: Scrolling
0 = OFF [Default],
1 = 3 pixels/1 frame to 10 = 30 pixels/1 frame
The number of pixels to be scrolled per frame = the set value × 3</td></tr>
<tr><td rowspan="2">Example</td><td>@GTP,2,1,1 ↵

@GTP,2,1,1,3,1 ↵</td><td>Getting the test pattern output setting of channel1 OUT1.
VERTICAL GRAY SCALE at 3 pixels/frame scrolling.</td></tr>
<tr><td>@STP,2,1,1,3,1 ↵

@STP,2,1,1,3,1 ↵</td><td>Displaying VERTICAL GRAY SCALE on channel1 OUT1 at 3 pixels/1 frame scrolling.
Completed normally.</td></tr>
<tr><td>Remarks</td><td colspan="2">For NJR-T04HD, this setting command cannot be used if “@GVT / @SVT Video output type” is set to “0”.</td></tr>
</table>

@GVW / @SVW	**Number of videowall displays**	
Function	Getting	Setting
Format	@GVW, device, ch, reserved ↵	@SVW, device, ch, reserved, h_divide, v_divide ↵
Return value	@GVW, device, ch, reserved, h_divide, v_divide ↵	@SVW, device, ch, reserved, h_divide, v_divide ↵
Parameter	device: Model "2" fixed.	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	reserved: Reservation "1" fixed.	
	h_divide: The number of horizontal divides If "**@GWD / @SWD Frame delay**" is set to "0": 1 to 2 [Default] 2 If "**@GWD / @SWD Frame delay**" is set to "1": 1 to 5 [Default] 2 If it is set to 1×1, videowall is disabled and the video is distributed to each output.	
	v_divide: The number of vertical divides If "**@GWD / @SWD Frame delay**" is set to "0": 1 to 2 [Default] 2 If "**@GWD / @SWD Frame delay**" is set to "1": 1 to 5 [Default] 2 If it is set to 1×1, videowall is disabled and the video is distributed to each output.	
Example	@GVW,2,1,1 ↵ @GVW,2,1,1,2,2 ↵	Getting the number of divides of channel1 videowall. The number of horizontal divides: 2 The number of vertical divides: 2
	@SVW,2,1,1,2,1 ↵ @SVW,2,1,1,2,1 ↵	Setting the numberof divides to the number of channel1 videowall. horizontal divides: 2, The number of vertical divides: 1. Completed normally.
Remarks	The NJR-T04HD does not support this command. For NJR-R04HD, if the number of divisions is chaned, the address will be set as follows automatically and the following settings will be initialized. "**@GNP / @SNP Position**", "**@GNS / @SNS Size**", "**@GNM / @SNM Masking**", and "**@GDL / @SDL Frame delay**" ・OUT1: Horizontal address = 0, Vertical address = 0 ・OUT2: Horizontal address = 1, Vertical address = 0 ・OUT3: Horizontal address = 0, Vertical address = 1 ・OUT4: Horizontal address = 1, Vertical address = 1	

@GWA / @SWA	**Videowall enabled/disabled and coordinate grid**	
Function	Getting	Setting
Format	@GWA, device, ch, port ↵	@SWA, device, ch, port, 2k_mode, 4k_t04_mode, 4k_t01_mode, h_address, v_address ↵
Return value	@GWA, device, ch, port, 2k_mode_1, 4k_t04_mode_1, 4k_t01_mode_1, h_address_1, v_address_1 (,2k_mode_2, 4k_t04_mode_2, 4k_t01_mode_2, h_address_2, v_address_2,・・・) ↵	@SWA, device, ch, port, 2k_mode, 4k_t04_mode, 4k_t01_mode, h_address, v_address ↵
Parameter	device: Model "2" fixed.	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	2k_mode_1 to 2k_mode_4, 2k_mode: Display mode other than 4K video 0 = Distributing [Default] 1 = Videowall	
	4k_t04_mode_1 to 4k_t04_mode_4, 4k_t04_mode: Display mode of 4K video from NJR-T04HD 0 = Distributing [Default] 1 = Videowall 2 = Dividing into four	
	4k_t01_mode_1 to 4k_t01_mode_4, 4k_t01_mode: Display mode of 4K video from NJR-T01UHD 0 = Distributing [Default] 1 = Videowall	
	h_address_1 to h_address_4, h_address: Horizontal address -1 to (The number of divides -1 of videowall) [Default] OUT1: 0, OUT2: 1, OUT3: 0, OUT4: 1 If "-1" is specified for either horizontal address or vertical address, only the display mode will be switched without changing the address.	
	v_address_1 to v_address_4, v_address: Vertical address -1 to (The number of divides -1 of videowall) [Default] OUT1: 0, OUT2: 0, OUT3: 1, OUT4: 1 If "-1" is specified for either horizontal address or vertical address, only the display mode will be switched without changing the address.	

@GWA / @SWA	**Videowall enabled/disabled and coordinate grid (cont'd)**	
Example	@GWA,2,1,1 ↵ @GWA,2,1,1,1,2,1,0,0 ↵	Getting the display mode and address of channel1 OUT1. For modes other than 4K video: videowall; 4K video from NJR-T04HD: dividing into four; 4K video from NJR-T01UHD: horizontal address is 0 and vertical address is 0.
	@SWA,2,1,2,1,1,1,-1,-1 ↵ @SWA,2,1,2,1,1,1,-1,-1 ↵	Setting the display mode of channel1 OUT2 to videowall. (Not changing the horizontal and vertical address.) Completed normally.
Remarks	The NJR-T04HD does not support this command. NJR-R04HD can be used under the following setting conditions. ・If the 4K video is input, the display mode of each output cannot be set individually. ・For modes other than 4K video, since videowall uses the sync signal of OUT1, enable OUT1 if using videowall. If changing address, the following settings will be initialized: "**@GNP / @SNP Position**", "**@GNS / @SNS Size**", "**@GNM / @SNM Masking**", "**@GDL / @SDL Frame delay**"	

@GBE / @SBE	**Bezel**	
Function	Getting	Setting
Format	@GBE, device, ch, reserved ↵	@SBE, device, ch, reserved, left, right, top, bottom ↵
Return value	@GBE, device, ch, reserved, left, right, top, bottom ↵	@SBE, device, ch, reserved, left, right, top, bottom ↵
Parameter	device: Model "2" fixed.	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	reserved: Reservation "1" fixed.	
	left: Left bezel 0 to 200 [Default] 0	
	right: Right bezel 0 to 200 [Default] 0	
	top: Top bezel 0 to 200 [Default] 0	
	bottom: Bottom bezel 0 to 200 [Default] 0	
Example	@GBE,2,1,1 ↵ @GBE,2,1,1,10,10,10,10 ↵	Getting the bezel setting of channel1. 10 pixels for left, right, top and bottom
	@SBE,2,1,1,20,20,20,20 ↵ @SBE,2,1,1,20,20,20,20 ↵	Setting the channel1 of left, right, top and bottom to 20 pixels. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GWD / @SWD	**Frame delay**	
Function	Getting	Setting
Format	@GWD, device, ch, reserved ↵	@SWD, device, ch, reserved, delaymode ↵
Return value	@GWD, device, ch, reserved, delaymode ↵	@SWD, device, ch, reserved, delaymode ↵
Parameter	device: Model "2" fixed.	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	reserved: Reservation "1" fixed.	
	delaymode: frame delay setting mode 0 = Normal mode [Default] 0, 1 = Expand mode	
Example	@GWD,2,1,1 ↵ @GWD,2,1,1,0 ↵	Getting the channel1's frame delay setting mode in videowall. Normal mode.
	@SWD,2,1,1,1 ↵ @SWD,2,1,1,1 ↵	Setting the channel1's frame delay setting mode in videowall to expand mode. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

4.6.3 Image quality

@GBR / @SBR	**Brightness**	
Function	Getting	Setting
Format	@GBR, device, ch, port ↵	@SBR, device, ch, port, bright ↵
Return value	@GBR, device, ch, port, bright_1 (, bright_2, bright_3, bright_4) ↵	@SBR, device, ch, port, bright ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	bright_1 to bright_4, bright: Brightness 80 to 120 [Default] 100	
Example	@GBR,1,1,1 ↵ @GBR,1,1,1,100 ↵	Getting the brightness of NJR-T04HD channel1 IN1. 100%
	@SBR,1,1,1,100 ↵ @SBR,1,1,1,100 ↵	Setting the brightness of NJR-T04HD channel1 IN1 to 100%. Completed normally.
Remarks	For NJR-T04HD, only setting commands for all outputs are valid if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0” or if “**@GVT / @SVT Video output type**” is set to “1” to “4”.	

@GCO / @SCO	**Contrast**	
Function	Getting	Setting
Format	@GCO, device, ch, port ↵	@SCO, device, ch, port, red, green, blue ↵
Return value	@GCO, device, ch, port, red, green, blue ↵	@SCO, device, ch, port, red, green, blue ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs (for setting only), 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	red : Contrast (Red) green : Contrast (Grenn) blue : Contrast (Blue) 0 to 200 [Default] 100	
Example	@GCO,1,1,1 ↵ @GCO,1,1,1,105,100,95 ↵	Getting the contrast of NJR-T04HD channel1 IN1. Red: 105%, Green: 100%, Blue: 95%
	@SCO,1,1,1,105,100,95 ↵ @SCO,1,1,1,105,100,95 ↵	Setting the contrast of NJR-T04HD of channel1 IN1 to 105% for red, 100% for Green, 95% for blue. Completed normally.
Remarks	For NJR-T04HD, only setting commands for all outputs are valid if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0” or if “**@GVT / @SVT Video output type**” is set to “1” to “4”.	

@GHU / @SHU	**Hue**	
Function	Getting	Setting
Format	@GHU, device, ch, port ↵	@SHU, device, ch, port, hue ↵
Return value	@GHU, device, ch, port, hue_1 (, hue_2, hue_3, hue_4) ↵	@SHU, device, ch, port, hue ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	hue_1 to hue_4, hue: Hue 0 to 359 [Default] 0	
Example	@GHU,1,1,1 ↵ @GHU,1,1,1,0 ↵	Getting the hue of NJR-T04HD channel1 IN1. 0°.
	@SHU,1,1,1,0 ↵ @SHU,1,1,1,0 ↵	Setting the hue of NJR-T04HD channel1 IN1 to 0°. Completed normally.
Remarks	For NJR-T04HD, only setting commands for all outputs are valid if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0” or if “**@GVT / @SVT Video output type**” is set to “1” to “4”.	

@GST / @SST	**Saturation**	
Function	Getting	Setting
Format	@GST, device, ch, port ↵	@SST, device, ch, port, saturation ↵
Return value	@GST, device, ch, port, saturation_1 (, saturation_2, saturation_3, saturation_4) ↵	@SST, device, ch, port, saturation ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	saturation_1 to saturation_4, saturation: Saturation 0 to 200 [Default] 100	
Example	@GST,1,1,1 ↵ @GST,1,1,1,100 ↵	Getting the saturation of NJR-T04HD channel1 IN1. 100%.
	@SST,1,1,1,100 ↵ @SST,1,1,1,100 ↵	Setting the saturation of NJR-T04HD channel1 IN1 to 100%. Completed normally.
Remarks	For NJR-T04HD, only setting commands for all outputs are valid if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0” or if “**@GVT / @SVT Video output type**” is set to “1” to “4”. For NJR-R04HD, setting of OUT1 will be applied and the same saturation is applied to 4 outputs if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0”.	

@GFL / @SFL	**Sharpness**	
Function	Getting	Setting
Format	@GFL, device, ch, port ↵	@SFL, device, ch, port, sharp ↵
Return value	@GFL, device, ch, port, sharp_1 (, sharp_2, sharp_3, sharp_4) ↵	@SFL, device, ch, port, sharp ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	sharp_1 to sharp_4, sharp: sharpness −5 to +15 [Default] ±0	
Example	@GFL,1,1,1 ↵ @GFL,1,1,1,5 ↵	Getting the sharpness of NJR-T04HD channel1 IN1. +5.
	@SFL,1,1,1,5 ↵ @SFL,1,1,1,5 ↵	Setting the sharpness of NJR-T04HD channel1 IN1 to +5. Completed normally.
Remarks	For NJR-T04HD, only setting commands for all outputs are valid if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0” or if “**@GVT / @SVT Video output type**” is set to “1” to “4”.	

@GGM / @SGM	**Gamma**	
Function	Getting	Setting
Format	@GGM, device, ch, port ↵	@SGM, device, ch, port, gamma ↵
Return value	@GGM, device, ch, port, gamma_1 (, gamma_2, gamma_3, gamma_4) ↵	@SGM, device, ch, port, gamma ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	gamma_1 to gamma_4, gamma: Gamma 1 = 0.1 to 30 = 3.0 [Default] 10 = 1.0	
Example	@GGM,1,1,1 ↵ @GGM,1,1,1,10 ↵	Getting the gamma of NJR-T04HD channel1 IN1. 10.
	@SGM,1,1,1,10 ↵ @SGM,1,1,1,10 ↵	Setting the gamma of NJR-T04HD channel1 IN1 to 10. Completed normally.
Remarks	For NJR-T04HD, only setting commands for all outputs are valid if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0” or if “**@GVT / @SVT Video output type**” is set to “1” to “4”.	

@IDC	**Default color**	
Function	Setting	
Format	@IDC, device, ch, port ↵	
Return value	@IDC, device, ch, port ↵	
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
Example	@IDC,1,1,1 ↵ @IDC,1,1,1 ↵	Initialize the following settings of NJR-T04HD channel1 IN1: **@GBR / @SBR Brightness** **@GCO / @SCO Contrast** **@GHU / @SHU Hue** **@GST / @SST Saturation** **@GFL / @SFL Sharpness** **@GGM / @SGM Gamma** Completed normally.
Remarks	For NJR-T04HD, only setting commands for all outputs are valid if “**@GSY / @SSY Connected device mode**” is set to “1” and “**@GVT / @SVT Video output type**” is set to “0” or if “**@GVT / @SVT Video output type**” is set to “1” to “4”.	

4.6.4 Input settings

@GDT / @SDT	**No-signal-input monitoring time**	
Function	Getting	Setting
Format	@GDT, device, ch, port ↵	@SDT, device, ch, port, time ↵
Return value	@GDT, device, ch, port, time_1 (, time_2, time_3, time_4) ↵	@SDT, device, ch, port, time ↵
Parameter	device: Model "1" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Input connector 0 = All inputs, 1 = IN1 to 4 = IN4	
	time_1 to time_4, time: No-signal-input monitoring 0 = OFF, 2000 = 2 sec. to 15000 = 15 sec. [Default] 10000 = 10 sec. Set the value by 1000 ms. If you set a value other than 0 for the lower 3 digits, these values will be rounded down. (For example, if you set it to 2955, the monitoring time is set to 2000 ms.)	
Example	@GDT,1,1,1 ↵ @GDT,1,1,1,6000 ↵	Getting the no-signal-input monitoring time of channel1 IN1. 6000 ms. (6 sec.).
	@SDT,1,1,1,6000 ↵ @SDT,1,1,1,6000 ↵	Setting the no-signal-input monitoring time of channel1 IN1 to 6000 ms. (6 sec.). Completed normally.
Remarks	The NJR-R04HD does not support this command.	

@GHE / @SHE	**HDCP input enabled/disabled**	
Function	Getting	Setting
Format	@GHE, device, ch, port ↵	@SHE, device, ch, port, hdcp ↵
Return value	@GHE, device, ch, port, hdcp_1 (, hdcp_2, hdcp_3, hdcp_4) ↵	@SHE, device, ch, port, hdcp ↵
Parameter	device: Model "1" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Input connector 0 = All inputs, 1 = IN1 to 4 = IN4	
	hdcp_1 to hdcp_4, hdcp: HDCP input enabled/disabled 0 = DISABLE, 1 = ENABLE [Default]	
Example	@GHE,1,1,1 ↵ @GHE,1,1,1,0 ↵	Getting the HDCP input status of channel1 IN1. HDCP input disabled.
	@SHE,1,1,1,0 ↵ @SHE,1,1,1,0 ↵	Disabling HDCP input of channel1 IN. Completed normally.
Remarks	The NJR-R04HD does not support this command.	

4.6.5 Output settings

@GEQ / @SEQ	**Output equalizer**	
Function	Getting	Setting
Format	@GEQ, device, ch, port ↵	@SEQ, device, ch, port, level ↵
Return value	@GEQ, device, ch, port, level_1 (, level_2, level_3, level_4) ↵	@SEQ, device, ch, port, level ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	level_1 to level_4, level: Equalization level 0 = OFF [Default], 1 = LOW, 2 = MIDDLE, 3 = HIGH	
Example	@GEQ,2,1,1 ↵ @GEQ,2,1,1,3 ↵	Getting the output equalizer of channel1 OUT1. HIGH.
	@SEQ,2,1,1,3 ↵ @SEQ,2,1,1,3 ↵	Setting the output equalizer of channel1 OUT1 to HIGH. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GDM / @SDM	**Output mode**	
Function	Getting	Setting
Format	@GDM, device, ch, port ↵	@SDM, device, ch, port, mode ↵
Return value	@GDM, device, ch, port, mode_1 (, mode_2, mode_3, mode_4) ↵	@SDM, device, ch, port, mode ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	mode_1 to mode_4, mode: Output mode 1 = DVI output, 2 = RGB output, 3 = YCbCr4:2:2 output, 4 = YCbCr4:4:4 output [Default]	
Example	@GDM,2,1,1 ↵ @GDM,2,1,1,2 ↵	Getting the output mode of channel1 OUT1. RGB output.
	@SDM,2,1,1,2 ↵ @SDM,2,1,1,2 ↵	Setting the output mode of channel1 OUT1 to RGB output. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@HAU	**HDCP re-encryption**	
Function	Setting	
Format	@HAU, device, ch, port ↵	
Return value	@HAU, device, ch, port ↵	
Parameter	device: Model "2" fixed.	
	ch: Output channel 1 to 512 = Output channel1 to Output channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
Example	@HAU,2,1,1 ↵ @HAU,2,1,1 ↵	Re-encrypts HDCP of the sink device connected to channel1 OUT1. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GUY / @SUY	**Synchronous signal output when no video signal is input**	
Function	Getting	Setting
Format	@GUY, device, ch, port ↵	@SUY, device, ch, port, sync ↵
Return value	@GUY, device, ch, port, sync_1 (, sync_2, sync_3, sync_4) ↵	@SUY, device, ch, port, sync ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	sync_1 to sync_4, sync: Synchronous signal output 0 = Not output, 1 = Output [Default]	
Example	@GUY,2,1,1 ↵ @GUY,2,1,1,1 ↵	Getting the synchronous signal output of channel1 OUT1. Synchronous signal is output.
	@SUY,2,1,1,1 ↵ @SUY,2,1,1,1 ↵	Setting the channel1 OUT1 to "1" (synchronous signal is output even if video signal is not input). Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GBO / @SBO	**Output video when no video signal is not input**	
Function	Getting	Setting
Format	@GBO, device, ch, port ↵	@SBO, device, ch, port, video ↵
Return value	@GBO, device, ch, port, video_1 (, video_2, video_3, video_4) ↵	@SBO, device, ch, port, video ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	video_1 to video_4, video: Output video when no video signal is not input 0 = Black screen, 1 = Blue screen [Default], 2 = Background color	
Example	@GBO,2,1,1 ↵ @GBO,2,1,1,1 ↵	Getting the output video when no video signal is input of channel1 OUT1. Blue screen is output.
	@SBO,2,1,1,1 ↵ @SBO,2,1,1,1 ↵	Setting the channel1 OUT1 to output blue screen when no video signal is input. Completed normally.
Remarks	For NJR-T04HD, the setting command cannot be used and it will be set to "black screen" automatically if "**@GVT / @SVT Video output type**" is set to "0".	

@GDC / @SDC	**Deep Color**	
Function	Getting	Setting
Format	@GDC, device, ch, port ↵	@SDC, device, ch, port, color ↵
Return value	@GDC, device, ch, port, color_1 (, color_2, color_3, color_4) ↵	@SDC, device, ch, port, color ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	color_1 to color_4, color: Color depth 0 = 24-BIT COLOR [Default], 1 = 30-BIT COLOR	
Example	@GDC,2,1,1 ↵ @GDC,2,1,1,0 ↵	Getting the deep color of channel1 OUT1. 24-BIT COLOR.
	@SDC,2,1,1,0 ↵ @SDC,2,1,1,0 ↵	Setting the of channel1 OUT1 to 24-BIT COLOR. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GVT / @SVT	**Video output type**	
Function	Getting	Setting
Format	@GVT, device, ch, reserved ↵	@SVT, device, ch, reserved, type ↵
Return value	@GVT, device, ch, reserved, type ↵	@SVT, device, ch, reserved, type ↵
Parameter	device: Model "1" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	reserved: Reservation "1" fixed.	
	type: Video type 0 = 4K video combination of IN1 to IN4 [Default], 1 = Input video of IN1 to Input video of IN4	
Example	@GVT,1,1,1 ↵ @GVT,1,1,1,0 ↵	Getting the video type of channel1. 4K video combination of IN1 to IN4.
	@SVT,1,1,1,0 ↵ @SVT,1,1,1,0 ↵	Setting the channel1 to output 4K video combination of IN1 to IN4. Completed normally.
Remarks	For NJR-T04HD, if "**@GSY / @SSY Connected device mode**" is change to "1" and "**@GVT / @SVT Video output type**" is change to "0", the following settings will be initialized: "**@GAP / @SAP Aspect ratio**", "**@GOV / @SOV Overscan**", "**@GNP / @SNP Position**", "**@GNS / @SNS Size**", and "**@GNM / @SNM Masking**". If "**@GVT / @SVT Video output type**" is change to "0", "**@GTP / @STP Test pattern**" is set to "OFF" and "**@GBO / @SBO Output video when no video signal is not input**" is set to "black screen". The NJR-R04HD does not support this command.	

@GMT / @SMT	**Matrix switch**	
Function	Getting	Setting
Format	@GMT, device, ch, port ↵	@SMT, device, ch, port, in_num ↵
Return value	@GMT, device, ch, port, in_num_1 (, in_num_2, in_num_3, in_num_4) ↵	@SMT, device, ch, port, in_num ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	in_num_1 to in_num_4, in_num: Input number assigned to output connectors 1 = Input number1 to Input number4 [Default] OUT1: Input number1, OUT2: Input number2, OUT3: Input number3, OUT4: Input number4	
Example	@GMT,2,1,1 ↵ @GMT,2,1,1,1 ↵	Getting the input number assigned to channel1 OUT1. Input number1.
	@SMT,2,1,1,1 ↵ @SMT,2,1,1,1 ↵	Setting the input number1 to output to channel 1 OUT1. Completed normally.
Remarks	For NJR-T04HD, this command is available only if “**@GVT / @SVT Video output type**” is set to “0”. For NJR-R04HD, this command is available only if the NJR-T04HD is used, “**@GVT / @SVT Video output type**” is set to “0”, and display mode of “**@GWA / @SWA Videowall enabled/disabled and coordinate grid**” is set to “2”.	

@GSK / @SSK	**Master synchronous signal**	
Function	Getting	Setting
Format	@GSK, device, ch, reserved ↵	@SSK, device, ch, reserved, sync ↵
Return value	@GSK, device, ch, reserved, sync ↵	@SSK, device, ch, reserved, sync ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	reserved: Reservation "1" fixed.	
	sync: Master synchronous signal 0 = Automatic detection [Default], 1 = Internal synchronous signal / external synchronous signal (master), 2 = External synchronous signal (slave)	
Example	@GSK,2,1,1 ↵ @GSK,2,1,1,1 ↵	Getting the master synchronous signal of channel1. Internal synchronous signal / external synchronous signal (master).
	@SSK,2,1,1,1 ↵ @SSK,2,1,1,1 ↵	Setting the master synchronous signal of channel1 to internal synchronous signal / external synchronous signal (master). Completed normally.
Remarks	The NJR-T04HD does not support this command. For NJR-R04HD, up to 5x5 synchronization is available in videowall configuration. Up to two vertical rows can be synchronized using frame delay simultaneously.	

@GDL / @SDL	**Frame delay**	
Function	Getting	Setting
Format	@GDL, device, ch, port ↵	@SDL, device, ch, port, delay ↵
Return value	@GDL, device, ch, port, delay_1 (, delay_2, delay_3, delay_4) ↵	@SDL, device, ch, port, delay ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	delay_1 to delay_4, delay: Frame delay amount 0 = No frame delay, 1 = 1 frame delay, 2 = 2 frames delay If the display mode of "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "0" or "2": [Default] 0 If the display mode of "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "1" and "**@GWD / @SWD Frame delay**" is set to "0": [Default] OUT1 and OUT2: 0, OUT3 and OUT4: 1 If the display mode of "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "1" and "**@GWD / @SWD Frame delay**" is set to "1": [Default] 1	
Example	@GDL,2,1,1 ↵ @GDL,2,1,1,1 ↵	Getting the frame delay amount of channel1 OUT1. 1 frame delay.
	@SDL,2,1,1,1 ↵ @SDL,2,1,1,1 ↵	Setting the frame delay amount of channel1 OUT to 1 frame. Completed normally.
Remarks	The NJR-T04HD does not support this command. For NJR-R04HD, if the display mode of "**@GWA / @SWA Videowall enabled/disabled and coordinate grid**" is set to "1" and "**@GWD / @SWD Frame delay**" is set to "1", be sure to set to the same value of "1" or more.	

4.6.6 Audio

@GAM / @SAM	**Digital audio output mute**	
Function	Getting	Setting
Format	@GAM, device, ch, port ↵	@SAM, device, ch, port, mute ↵
Return value	@GAM, device, ch, port, mute_1 (, mute_2, mute_3, mute_4) ↵	@SAM, device, ch, port, mute ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	mute_1 to mute_4, mute: Audio mute 0 = Mute OFF [Default], 1 = Mute ON	
Example	@GAM,1,1,1 ↵ @GAM,1,1,1,0 ↵	Getting the audio mute of NJR-T04HD channel1 OUT1. Mute OFF.
	@SAM,1,1,1,0 ↵ @SAM,1,1,1,0 ↵	Setting the audio mute of NJR-T04HD channel1 OUT1 to OFF. Completed normally.
Remarks	—	

@GSL / @SSL	**Audio level**	
Function	Getting	Setting
Format	@GSL, device, ch, port ↵	@SSL, device, ch, port, level ↵
Return value	@GSL, device, ch, port, level_1 (, level_2, level_3, level_4) ↵	@SSL, device, ch, port, level ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Input connector / Output connector 0 = All inputs / All outputs, 1 = IN1 / OUT1 to 4 = IN4 / OUT4	
	level_1 to level_4, level: Audio level −60 to ±10 [Default] ±0	
Example	@GSL,1,1,1 ↵ @GSL,1,1,1,0 ↵	Getting the audio level of NJR-T04HD channel1 IN1. ±0 dB.
	@SSL,1,1,1,0 ↵ @SSL,1,1,1,0 ↵	Setting the audio level of NJR-T04HD channel1 IN1 to ±0 dB. Completed normally.
Remarks	−	

@GAS / @SAS	**Audio input for 4K video combination**	
Function	Getting	Setting
Format	@GAS, device, ch, reserved ↵	@SAS, device, ch, reserved, audio ↵
Return value	@GAS, device, ch, reserved, audio ↵	@SAS, device, ch, reserved, audio ↵
Parameter	device: Model "1" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	reserved: Reservation "1" fixed.	
	audio: Selecting audio input 0 = Two channels from all INs (all of IN1 to IN4) [Default], 1 to 4 = Audio from IN1 to IN4	
Example	@GAS,1,1,1 ↵ @GAS,1,1,1,1 ↵	Getting the selected audio input for 4K video combination of channel1. IN1.
	@SAS,1,1,1,1 ↵ @SAS,1,1,1,1 ↵	Setting the channel1 to output to the IN1 audio for 4K video combination. Completed normally.
Remarks	For NJR-T04HD, this setting command cannot be used if "**@GVT / @SVT Video output type**" is set to "1" to "4". The NJR-R04HD does not support this command.	

@GLO / @SLO	**Lip sync**	
Function	Getting	Setting
Format	@GLO, device, ch, port ↵	@SLO, device, ch, port, delay ↵
Return value	@GLO, device, ch, port, delay_1 (, delay_2, delay_3, delay_4) ↵	@SLO, device, ch, port, delay ↵
Parameter	device: Model "2" fixed.	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Input number 0 = All inputs, 1 = Input number 1 to 4 = Input number 4	
	delay_1 to delay_4, delay: Lip sync 0 to 160 [Default] 0	
Example	@GLO,1,1,1 ↵ @GLO,1,1,1,0 ↵	Getting the lip sync of channel1 input number1. 0 ms.
	@SLO,1,1,1,32 ↵ @SLO,1,1,1,32 ↵	Setting the lip sync of channel1 input number1 to 32 ms. Completed normally.
Remarks	The NJR-T04HD does not support this command. For NJR-R04HD, the delay amount of four outputs are the same. ・NJR-T01UHD is used. ・If the NJR-T04HD, "**@GVT / @SVT Video output type**" is set to "1" to "4". ・If the NJR-T04HD, "**@GVT / @SVT Video output type**" is set to "0" and "**@GAS / @SAS Audio input for 4K video combination**" is set to "1" to "4".	

@GAT / @SAT	**Test tone output**	
Function	Getting	Setting
Format	@GAT, device, ch, port ↵	@SAT, device, ch, port, test ↵
Return value	@GAT, device, ch, port, test_1 (, test_2, test_3, test_4) ↵	@SAT, device, ch, port, test ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4 For NJR-T04HD, “1” fixed.	
	test_1 to test_4, test: Test tone ON / OFF 0 = OFF [Default], 1 = ON	
Example	@GAT,2,1,1 ↵ @GAT,2,1,1,1 ↵	Getting the test tone output of NJR-R04HD channel1 OUT1. Outputting test tone
	@SAT,2,1,1,1 ↵ @SAT,2,1,1,1 ↵	Setting the NJR-R04HD channel1 OUT1 to output a test tone. Completed normally.
Remarks	—	

<table>
<tr><th>@GAC / @SAC</th><th colspan="2">Test tone level / frequency</th></tr>
<tr><td>Function</td><td>Getting</td><td>Setting</td></tr>
<tr><td>Format</td><td>@GAC, device, ch, reserved ↵</td><td>@SAC, device, ch, reserved, level, hfreq, lfreq, ch_1, ch_2, ch_3, ch_4, ch_5, ch_6, ch_7, ch_8 ↵</td></tr>
<tr><td>Return value</td><td>@GAC, device, ch, reserved, level, hfreq, lfreq, ch_1, ch_2, ch_3, ch_4, ch_5, ch_6, ch_7, ch_8 ↵</td><td>@SAC, device, ch, reserved, level, hfreq, lfreq, ch_1, ch_2, ch_3, ch_4, ch_5, ch_6, ch_7, ch_8 ↵</td></tr>
<tr><td rowspan="7">Parameter</td><td colspan="2">device: Model
1 = NJR-T04HD, 2 = NJR-R04HD</td></tr>
<tr><td colspan="2">ch: Channel
1 to 512 = Channel1 to Channel512
If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td colspan="2">reserved: Reservation
“1” fixed.</td></tr>
<tr><td colspan="2">level: Level of test tone
0 = -20 dBFS [Default], 1 = ±0 dBFS</td></tr>
<tr><td colspan="2">hfreq: HIGH frequency of test tone
0 = 400 Hz, 1 = 1 kHz [Default]</td></tr>
<tr><td colspan="2">lfreq: LOW frequency of test tone
0 = 30 Hz, 1 = 80 Hz [Default]</td></tr>
<tr><td colspan="2">ch_1 to ch_8: ON / OFF and frequency for each audio channel
0 = OFF, 1 = LOW, 2 = HIGH
[Default] ch_1, ch_2, ch_4, ch_5, ch_6, ch_7, ch_8: HIGH
ch_3: LOW</td></tr>
<tr><td rowspan="2">Example</td><td>@GAC,2,1,1 ↵

@GAC,2,1,1,0,1,1,2,2,1,2,2,2,2,2 ↵</td><td>Getting the test tone level and frequency of NJR-R04HD channel1
・Level: -20 dBFS
・HIGH frequency: 1 kHz
・LOW frequency: 80 Hz
・ch_1, ch_2, ch_4 to ch_8: HIGH
・ch_3: LOW</td></tr>
<tr><td>@SAC,2,1,1,0,1,1,2,2,1,2,2,2,2,2 ↵

@SAC,2,1,1,0,1,1,2,2,1,2,2,2,2,2 ↵</td><td>Setting the test tone level and frequency of NJR-R04HD channel1 to as follows:
・Level: -20 dBFS
・HIGH frequency: 1 kHz
・LOW frequency: 80 Hz
・ch_1, ch_2, ch_4 to ch_8: HIGH
・ch_3: LOW
Completed normally.</td></tr>
<tr><td>Remarks</td><td colspan="2">－</td></tr>
</table>

4.6.7 EDID

@GVF / @SVF	**EDID resolution**	
Function	Getting	Setting
Format	@GVF, device, ch, port ↵	@SVF, device, ch, port, resolution ↵
Return value	@GVF, device, ch, port, resolution_1 (, resolution_2, resolution_3, resolution_4) ↵	@SVF, device, ch, port, resolution ↵
Parameter	device: Model "1" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Input connector 0 = All inputs, 1 = IN1 to 4 = IN4	
	resolution_1 to resolution_4, resolution: EDID resolution 5 = 1080p@50 / 59.94 / 60 (1920x1080), [Default] 6 = 720p@50 / 59.94 / 60 (1280x720), 7 = 1080i@50 / 59.94 / 60 (1920x1080), 10 = SVGA (800x600), 11 = XGA (1024x768), 13 = WXGA (1280x768), 14 = WXGA (1280x800), 15 = Quad-VGA (1280x960), 16 = SXGA (1280x1024), 17 = WXGA (1360x768/1366x768), 18 = SXGA+ (1400x1050), 19 = WXGA+ (1440x900), 20 = WXGA++ (1600x900), 21 = UXGA (1600x1200), 22 = WSXGA (1680x1050), 24 = WUXGA (1920x1200), 25 = QWXGA (2048x1152)	
Example	@GVF,1,1,1 ↵ @GVF,1,1,1,24 ↵	Getting the EDID resolution of channel1 IN1. WUXGA.
	@SVF,1,1,1,24 ↵ @SVF,1,1,1,24 ↵	Setting the EDID resolution of channel1 IN1 to "WUXGA". Completed normally.
Remarks	For NJR-T04HD, select the EDID of 1360x768 and 1366x768 in "**@GWX / @SWX Selecting WXGA mode**". The NJR-R04HD does not support this command.	

@GWX / @SWX	**Selecting WXGA mode**	
Function	Getting	Setting
Format	@GWX, device, ch, port ↵	@SWX, device, ch, port, mode ↵
Return value	@GWX, device, ch, port, mode_1 (, mode_2, mode_3, mode_4) ↵	@SWX, device, ch, port, mode ↵
Parameter	device: Model "1" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-T04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Input connector 0 = All inputs, 1 = IN1 to 4 = IN4	
	mode_1 to mode_4, mode: Selecting WXGA mode 0 = 1360x768 [Default], 1 = 1366x768	
Example	@GWX,1,1,1 ↵ @GWX,1,1,1,0 ↵	Getting the WXGA mode of channel1 IN1. 1360x768.
	@SWX,1,1,1,0 ↵ @SWX,1,1,1,0 ↵	Setting the WXGA mode of channel1 IN1 to "1360x768". Completed normally.
Remarks	The NJR-R04HD does not support this command.	

4.6.8 Telop settings

@GTO / @STO	**Telop setting**	
Function	Getting	Setting
Format	@GTO, device, ch, port ↵	@STO, device, ch, port, out_telop, in_telop ↵
Return value	@GTO, device, ch, port, out_telop, in_telop ↵	@STO, device, ch, port, out_telop, in_telop ↵
Parameter	device: Model "2" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	out_telop: Output number 0 = OFF [Default], 1 = ON	
	in_telop: Input number 0 = OFF [Default], 1 = ON	
Example	@GTO,2,1,1 ↵ @GTO,2,1,1,0,1 ↵	Getting the telop setting of channel1 OUT1. Output number: Not displayed Input number: Displayed
	@STO,2,1,1,1,0 ↵ @STO,2,1,1,1,0 ↵	The output number is not displayed on the telop of channel1 OUT1, and the input number is displayed. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GTB / @STB	**Telop background color**	
Function	Getting	Setting
Format	@GTB, device, ch, port ↵	@STB, device, ch, port, red, green, blue, transparent ↵
Return value	@GTB, device, ch, port, red, green, blue, transparent ↵	@STB, device, ch, port, red, green, blue, transparent ↵
Parameter	device: Model "2" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	red : Background color (Red) green : Background color (Green) blue : Background color (Blue) 0 to 255 [Default] 0	
	transparent: 0 = OFF [Default], 1 = ON	
Example	@GTB,2,1,1 ↵ @GTB,2,1,1,255,0,0,0 ↵	Getting the telop background color of channel1 OUT1. R=255, G=0, B=0 (Background color is red), transparent OFF.
	@STB,2,1,1,0,255,0,0 ↵ @STB,2,1,1,0,255,0,0 ↵	Setting the telop background color of channel1 OUT1 to R=0, G=255, B=0 (Background color is Green), transparent OFF. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GTC / @STC	**Telop font color**	
Function	Getting	Setting
Format	@GTC, device, ch, port ↵	@STC, device, ch, port, red, green, blue ↵
Return value	@GTC, device, ch, port, red, green, blue ↵	@STC, device, ch, port, red, green, blue ↵
Parameter	device: Model "2" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	red, green, blue : 0 to 255 [Default] 255	
Example	@GTC,2,1,1 ↵ @GTC,2,1,1,0,0,0 ↵	Getting the telop font color of channel1 OUT1. R=0, G=0, B=0 (Font color is black).
	@STC,2,1,1,255,255,255 ↵ @STC,2,1,1,255,255,255 ↵	Setting the telop font color of channel1 OUT1 to R=255, G=255 and B=255 (Background color is white). Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GFS / @SFS	**Telop font size**	
Function	Getting	Setting
Format	@GFS, device, ch, port ↵	@SFS, device, ch, port, size ↵
Return value	@GFS, device, ch, port, size ↵	@SFS, device, ch, port, size ↵
Parameter	device: Model "2" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	size: Telop font size 0 = 12x12, 1 = 24x24 [Default]	
Example	@GFS,2,1,1 ↵ @GFS,2,1,1,1 ↵	Getting the telop font size of channel1 OUT1. 24x24.
	@SFS,2,1,1,0 ↵ @SFS,2,1,1,0 ↵	Setting the telop font size of channel1 OUT1 to 12x12. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GTA / @STA	**Telop display position**	
Function	Getting	Setting
Format	@GTA, device, ch, port ↵	@STA, device, ch, port, position ↵
Return value	@GTA, device, ch, port, position ↵	@STA, device, ch, port, position ↵
Parameter	device: Model "2" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 0 = All outputs, 1 = OUT1 to 4 = OUT4	
	position: Display position 0 = TOP-LEFT [Default], 1 = TOP-CENTER, 2 = TOP-RIGHT, 3 = BOTTOM-LEFT, 4 = BOTTOM-CENTER , 5 = BOTTOM-RIGHT	
Example	@GTA,2,1,1 ↵ @GTA,2,1,1,0 ↵	Getting the telop display position of channel1 OUT1. TOP-LEFT.
	@STA,2,1,1,2 ↵ @STA,2,1,1,2 ↵	Setting the telop display position of channel1 OUT1 to TOP-RIGHT. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

@GTN / @STN	**Telop contents**	
Function	Getting	Setting
Format	@GTN, device, ch, port, type ↵	@STN, device, ch, port, type, telop ↵
Return value	@GTN, device, ch, port, type, telop ↵	@STN, device, ch, port, type, telop ↵
Parameter	device: Model "2" fixed.	
	ch: Input channel 1 to 512 = Input channel1 to Input channel512 If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, "1" is set (fixed).	
	port: Output connector 1 = OUT1 to 4 = OUT4	
	type: 0 = Input number and output number (for getting command only), 1 = Input number, 2 = Output number	
	telop: Contents to be displayed Up to 10 characters of 20 to 7D except 2C and 2F from ASCII codes. [Default] Input number = IN1 to IN4, Output number = OUT1 to OUT4	
Example	@GTN,2,1,1,1 ↵ @GTN,2,1,1,1,IN1 ↵	Getting the telop contents of input number of channel1 OUT1. "IN1"
	@STN,2,1,1,2,OUT1 ↵ @STN,2,1,1,2,OUT1 ↵	"OUT1" is displayed as the telop of the output number of channel1 OUT 1. Completed normally.
Remarks	The NJR-T04HD does not support this command.	

4.6.9 RS-232C settings

@GCTB / @SCTB	**RS-232C communication setting**	
Function	Getting	Setting
Format	@GCTB, device, ch, reserved ↵	@SCTB, device, ch, reserved, baudrate, databit, stopbit, parity ↵
Return value	@GCTB, device, ch, reserved, baudrate, databit, stopbit, parity ↵	@SCTB, device, ch, reserved, baudrate, databit, stopbit, parity ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512	
	reserved: Reservation "1" fixed.	
	baudrate: Baud rate 0 = 4800 bps, 1 = 9600 bps [Default], 2 = 19200 bps, 3 = 38400 bps, 4 = 57600 bps, 5 = 115200 bps	
	databit: Data bit length 7 = 7 bit, 8 = 8 bit [Default]	
	stopbit: Stop bit 1 = 1 bit [Default], 2 = 2 bit	
	parity: Parity check 0 = NONE [Default], 1 = ODD, 2 = EVEN	
Example	@GCTB,1,1,1 ↵ @GCTB,1,1,1,4,8,1,0 ↵	Getting the RS-232C communication setting of NJR-T04HD channel1. ・Baud rate: 57600 bps ・Data bit length: 8 bit ・Stop bit: 1 bit ・Parity check: NONE
	@SCTB,1,1,1,4,8,1,0 ↵ @SCTB,1,1,1,4,8,1,0 ↵	Setting the RS-232C communication setting of NJR-T04HD channel1 as follows: ・Baud rate: 57600 bps ・Data bit length: 8 bit ・Stop bit: 1 bit ・Parity check: NONE Completed normally.
Remarks	This command can be input only via the NJR-CTB command server.	

4.6.10 LAN settings

@GIP / @SIP	**LAN setting**	
Function	Getting	Setting
Format	@GIP, device, ch, reserved ↵	@SIP, device, ch, reserved, mode, ip, mask, gateway ↵
Return value	@GIP, device, ch, reserved, mode, ip, mask, gateway ↵	@SIP, device, ch, reserved, mode, ip, mask, gateway ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512	
	reserved: Reservation "1" fixed.	
	mode: Mode 0 = DHCP [Default], 1 = static After "DHCP" is set, parameters will be invalid.	
	ip: IP address 0 to 255 = 8 bits (decimal) x 4 pairs [Default] Automatic	
	mask: Subnet mask 0 to 255 = 8 bits (decimal) x 4 pairs [Default] Automatic	
	gateway: Default gateway 0 to 255 = 8 bits (decimal) x 4 pairs [Default] Automatic	
Example	@GIP,1,1,1 ↵ @GIP,1,1,1,1,192.168.3.2,255.255.255.0,192.168.3.254 ↵	Getting the LAN setting of NJR-T04HD channel1. ・Mode: Static ・IP address: 192.168.3.2 ・Subnet mask: 255.255.255.0 ・Default gateway: 192.168.3.254
	@SIP,1,1,1,1,192.168.3.2,255.255.255.0,192.168.3.254 ↵ @SIP,1,1,1,1,192.168.3.2,255.255.255.0,192.168.3.254 ↵	Setting the LAN of NJR-T04HD channel1 as follows: ・Mode: Static ・IP address: 192.168.3.2 ・Subnet mask: 255.255.255.0 ・Default gateway: 192.168.3.254 Completed normally.
Remarks	This command can be input only via the NJR-CTB command server. If the LAN setting is changed, the communication may be disabled. Change the environmental settings based on the NJR settings.	

@GMC	**MAC address**	
Function	Getting	
Format	@GMC, device, ch, reserved ↵	
Return value	@GMC, device, ch, reserved, mac ↵	
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512	
	reserved: Reservation "1" fixed.	
	mac: MAC address 00 to FF = 8 bits (Hex) x 6 pairs	
Example	@GMC,1,1,1 ↵ @GMC,1,1,1, D88039A6D9DF ↵	Getting the MAC address of NJR-T04HD channel1. D8:80:39:A6:D9:DF.
Remarks	This command can be input only via the NJR-CTB command server.	

4.6.11 Other settings

@GSY / @SSY	**Connected device mode**	
Function	Getting	Setting
Format	@GSY, device, ch, reserved ↵	@SSY, device, ch, reserved, type ↵
Return value	@GSY, device, ch, reserved, type ↵	@SSY, device, ch, reserved, type ↵
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	reserved: Reservation “1” fixed.	
	type: Devices to be connected 0 = Only NJR-T04HD and NJR-R04HD [Default], 1 = Including NJR-T01UHD or NJR-R01UHD If connecting one NJR-T01UHD and one NJR-R04HD or connecting one NJR-T04HD and one NJR-R01UHD, set this parameter to “1”.	
Example	@GSY,1,1,1 ↵ @GSY,1,1,1,0 ↵	Getting the connected devices. Only NJR-T04HD and NJR-R04HD
	@SSY,1,1,1,1 ↵ @SSY,1,1,1,1 ↵	Including NJR-T01UHD or NJR-R01UHD. Completed normally.
Remarks	If connecting multiple IP-NINJAR products via a network switch, you do not need to set this command. The NJR-CTB sets available devices on the network automatically. For NJR-T04HD, If “**@GSY / @SSY Connected device mode**” is change to “1” and “**@GVT / @SVT Video output type**” is change to “0”, the following settings will be initialized: “**@GAP / @SAP Aspect ratio**”, “**@GOV / @SOV Overscan**”, “**@GNP / @SNP Position**”, “**@GNS / @SNS Size**”, and “**@GNM / @SNM Masking**”. If “**@GSY / @SSY Connected device mode**” is change to “1”, the following settings will be initialized: “**@GBR / @SBR Brightness**”, “**@GCO / @SCO Contrast**”, “**@GHU / @SHU Hue**”, “**@GST / @SST Saturation**”, “**@GFL / @SFL Sharpness**”, and “**@GGM / @SGM Gamma**”.	

@CLRC	**Initialization**	
Function	Setting	
Format	@CLRC, device, ch, reserved ↵	
Return value	@CLRC, device, ch, reserved ↵	
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 0 = All channels, 1 to 512 = Channel1 to Channel512	
	reserved: Reservation "1" fixed.	
Example	@CLRC,1,1,1 ↵ @CLRC,1,1,1 ↵	Initializing the settings of NJR-T04HD channel1. Completed normally.
Remarks	This command can be input only via the NJR-CTB command server. Settings of "**4.6.2 Position, size, and masking**" to "**4.6.11 Other setting**" are initialized.	

@RBTC	**Reboot**	
Function	Setting	
Format	@RBTC, device, ch, reserved ↵	
Return value	@RBTC, device, ch, reserved ↵	
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 0 = All channels, 1 to 512 = Channel1 to Channel512	
	reserved: Reservation "1" fixed.	
Example	@RBTC,1,1,1 ↵ @RBTC,1,1,1 ↵	Rebooting the NJR-T04HD channel1. Completed normally.
Remarks	This command can be input only via the NJR-CTB command server.	

4.6.12 Information

<table>
<tr><th>@GSS</th><th>I/O status</th></tr>
<tr><td>Function</td><td>Getting</td></tr>
<tr><td>Format</td><td>@GSS, device, ch, port, mode ↵</td></tr>
<tr><td>Return value</td><td>@GSS, device, ch, port, mode, status_1 (, status_2, status_3･･･) ↵</td></tr>
<tr><td rowspan="4">Parameter</td><td>device: Model
1 = NJR-T04HD, 2 = NJR-R04HD</td></tr>
<tr><td>ch: Channel
1 to 512 = Channel1 to Channel512
If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td>port: Input connector / Output connector
1 = IN1 / OUT1 to 4 = IN4 / OUT4</td></tr>
<tr><td>mode: Target status
For NJR-T04HD:
0 = All of 1 to 4,
1 = Input signal type*1,
2 = Video input signal format*2,
3 = Audio input signal format*3,
4 = with/without HDCP input*4
For NJR-R04HD:
10 = All 11 to 13,
11 = HDCP authentication status*5,
12 = Output signal type*6,
13 = Error code*7</td></tr>
<tr><td colspan="2">status_1 to status_4: Status

*1 For input signal type, one of the following values is returned.
<table>
<tr><th>Value</th><th>Input signal type</th></tr>
<tr><td>H24</td><td>HDMI signal is input. Color depth: 24</td></tr>
<tr><td>D</td><td>DVI signal is input.</td></tr>
<tr><td>N</td><td>No signal is input.</td></tr>
</table>
*2 For format of video input signal
<table>
<tr><th>Value</th><th>Format of video input signal</th></tr>
<tr><td>1080i 59.94Hz</td><td>SDTV / HDTV signal is input, which returns the format type and vertical synchronous frequency.</td></tr>
<tr><td>800 x 600 60.00Hz</td><td>Signal having VESA resolution is input, and [Horizontal resolution x Vertical resolution] and vertical synchronous frequency are returned.</td></tr>
<tr><td>NO SIGNAL</td><td>No signal is input.</td></tr>
</table></td></tr>
</table>

@GSS	I/O status (cont'd)
Parameter	

*3 For format of audio input signal

Value	Format of audio input signal
LINEAR PCM 48kHz	Linear PCM signal is input, which returns the sampling frequency.
LINEAR PCM 48kHz (MULTI CHANNEL)	Multi channel linear PCM signal is input, which returns the sampling frequency.
COMPRESSED AUDIO	Compressed audio signal (such as Dolby Digital and DTS) is input (Because the NJR-T04HD does not recognize detailed formats, "COMPRESSED AUDIO" is sent to all compressed audios).
NO AUDIO	No signal is input.

*4 For HDCP presence, one of the following values is returned.

Value	Input signal type
HDCP 1.4 ON	Signal with HDCP 1.4 is input.
HDCP OFF	Signal without HDCP is input.
NO SIGNAL	No signal is input.

*5 For HDCP authentication, one of the following values is returned.

Value	HDCP authentication
HDCP 1.4 SUPPORT	Authenticated with HDCP 1.4.
HDCP NOT SUPPORT	Non-HDCP-compliant device is connected.
HDCP ERROR	Device with HDCP is connected, but the authentication failed.
HDCP CHECK NOW	Connection status of sink device was changed, and the status is being checked.
UNCONNECTED	No sink device is connected.

*6 For output signal type, one of the following values is returned.

Value	Output signal type
Hxx	HDMI signal is output. xx stands for the color depth, 24 or 30.
D	DVI signal is output.
N	No sink device is connected.

<table>
<tr><td>@GSS</td><td colspan="2">I/O status (cont'd)</td></tr>
<tr><td>Parameter</td><td colspan="2">*7 For status of the HDMI output connector, one of the codes below will be returned in the following order: video output / audio output.
<table>
<tr><th>Error code</th><th>Video output status</th><th>Audio output status</th></tr>
<tr><td>0</td><td>Video is output correctly.</td><td>Video is output correctly.</td></tr>
<tr><td>1</td><td>－</td><td>“@GAM / @SAM Digital audio output mute” is set to “ON”.</td></tr>
<tr><td>2</td><td colspan="2">No source device is connected.</td></tr>
<tr><td>3</td><td>No video signal is input.</td><td>No video signal is input.</td></tr>
<tr><td>4</td><td colspan="2">Video output or audio output of the source device is muted.</td></tr>
<tr><td>5</td><td colspan="2">Signal with HDCP is input but the sink device does not support HDCP.</td></tr>
<tr><td>6</td><td colspan="2">The source device does not output the needed information (packets) for outputting video or audio.</td></tr>
<tr><td>7</td><td>Signal that is not supported by NJR-T04HD or NJR-R04HD is input.</td><td>Signal that is not supported by NJR-T04HD or NJR-R04HD is input.</td></tr>
<tr><td>9</td><td>－</td><td>The connected sink device: “@GDM / @SDM Output mode” is set to “DVI output” or does not support audio.</td></tr>
<tr><td>B</td><td colspan="2">No sink device is connected.</td></tr>
<tr><td>C</td><td colspan="2">HDCP is being authenticated.</td></tr>
<tr><td>D</td><td colspan="2">HDCP authentication failed.</td></tr>
</table></td></tr>
<tr><td>Example</td><td>@GSS,1,1,1,0 ↵

@GSS,1,1,1,0,H24,1080p 60Hz, LINEAR PCM 48kHz, HDCP 1.4 ON ↵</td><td>Getting all input statuses of NJR-T04HD chennel1 OUT1.
・Input signal type: 24-BIT COLOR HDMI signal
・Video input signal: 1080p 60Hz
・Audio input signal: LINEAR PCM 48kHz
・HDCP: 1.4</td></tr>
<tr><td></td><td>@GSS,2,1,1,10 ↵

@GSS,2,1,1,10,HDCP 1.4 SUPPORT, H30,00 ↵</td><td>Getting all output statuses of NJR-R04HD channel1 OUT1.
・HDCP authentication: HDCP 1.4
・Output signal type: 30-BIT COLOR HDMI signal
・Error code: Video and audio are output correctly.</td></tr>
<tr><td>Remarks</td><td colspan="2">－</td></tr>
</table>

<table>
<tr><td>@GES</td><td>Monitor’s EDID</td></tr>
<tr><td>Function</td><td>Getting</td></tr>
<tr><td>Format</td><td>@GES, device, ch, port, mode ↵</td></tr>
<tr><td>Return value</td><td>@GES, device, ch, port, mode, status_1 (, status_2, status_3･･･) ↵</td></tr>
<tr><td rowspan="4">Parameter</td><td>device: Model
“2” fixed.</td></tr>
<tr><td>ch: Output channel
1 to 512 = Output channel1 to Output channel512
If a command is input from the RS-232C connector of the NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).</td></tr>
<tr><td>port: Output connector
1 = OUT1 to 4 = OUT4</td></tr>
<tr><td>mode: Status to be gotten
0 = All of 1 to 4,
1 = Monitor name*1,
2 = Resolution and dot clock*2,
3 = HDMI support status, sampling structure, and color depth*3,
4 = Audio support status, sampling frequency, bit length, the number of channels, and compressed audio support status*4</td></tr>
<tr><td></td><td>status_1 to status_4: Status

*1 For monitor name:
<table>
<tr><th>Example</th><th>Monitor name</th></tr>
<tr><td>MSD-5402</td><td>A sink device named “MSD-5402” is connected.</td></tr>
<tr><td>EDID READ ERROR</td><td>EDID loading fails.</td></tr>
<tr><td>UNCONNECTED</td><td>No sink device is connected.</td></tr>
</table>
*2 For resolution and dot clock:
<table>
<tr><th>Example</th><th>Resolution/Dot clock</th></tr>
<tr><td>1920x1080
148.50MHz</td><td>A sink device supporting 1920x1080 (resolution) and 148.50 MHz (dot clock) is connected.</td></tr>
</table>
*For 3 HDMI support status, sampling frequency, and color depth:
<table>
<tr><th>Example</th><th>Input signal type</th></tr>
<tr><td>DVI</td><td>A sink device that does not support HDMI signal is connected.</td></tr>
<tr><td>HDMI-RGB/YCbCr422/YCbCr444-24/30BIT COLOR</td><td>A sink device supporting HDMI signal is connected. Supported sampling structure (RGB, YCbCr 4:2:2, YCbCr 4:4:4, YCbCr4:2:0) and color depth (24, 30, 36) are returned.</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>@GES</td><td colspan="2">Monitor’s EDID (cont’d)</td></tr>
<tr><td>Parameter</td><td colspan="2">*4 For audio support, sampling frequency, bit length, the number of channels, and compressed audio:
<table>
<tr><th>Example</th><th>Input signal type</th></tr>
<tr><td>AUDIO NOT SUPPORT</td><td>A sink device that does not support audio signal is connected.</td></tr>
<tr><td>LINEAR PCM-32/44.1/48kHz-16/20/24BIT-8CHANNEL</td><td>A sink device supporting audio signal is connected. Supported sampling frequency (32, 44.1, 48, 88.2, 96, 176.4, 192), the number of bits (16, 20, 24), the number of channels (1 to 8), and compressed audio support status are returned.</td></tr>
</table></td></tr>
<tr><td>Example</td><td>@GES,2,1,1,0 ↵

@GES,2,1,1,0,MSD-702,
1920x1080 148.50MHz,DVI,AUDIO NOT SUPPORT ↵</td><td>Getting the sink device connected to channel1 OUT1.
・Monitor name: MSD-702
・Resolution: 1920x1080
・Dot clock: 148.50MHz
・HDMI: Not supported
・Audio: Not supported</td></tr>
<tr><td>Remarks</td><td colspan="2">The NJR-T04HD does not support this command.</td></tr>
</table>

@GIV	**Version**	
Function	Getting	
Format	@GIV, device, ch, reserved↵	
Return value	@GIV, device, ch, reserved, id, ver ↵	
Parameter	device: Model 1 = NJR-T04HD, 2 = NJR-R04HD	
	ch: Channel 1 to 512 = Channel1 to Channel512 If a command is input from the RS-232C connector of the NJR-T04HD / NJR-R04HD or the IP-NINJAR Configurator, “1” is set (fixed).	
	reserved: Reservation “1” fixed.	
	id: Model number	
	ver: Firmware version	
Example	@GIV,1,1,1 ↵ @GIV,1,1,1,NJR-T04HD,1.10 ↵	Getting the product information of NJR-T04HD channel1. ・Model: NJR-T04HD ・Firmware version: 1.10
Remarks	—	

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