



Nexus21NEO Command List History

Version	Description	Released Date	Modified by
1.0	First Release	2026-06-30	Hovey Tam

Serial port protocol. Baud rate: 115200, Data bits: 8, Stop bits:1, Check bit: 0
TCP/IP Port: 8000

No.	Command	Description	Parameters
1.1	power on	Power on the device	---
1.2	power off	Power off the device	
1.3	get power	Get current power status	
1.4	reboot	Reboot the device	

No.	Command	Description	Parameters
2.1	set admin password [apwd]	Set admin login password	apwd=Max 16 characters
2.2	get admin password	Get admin login password	upwd=Max 16 characters
2.3	set user password [upwd]	Set user login password	
2.4	get user password	Get user login password	

No.	Command	Description	Parameters
3.1	?	Get the list of all commands	btn=[0:Unlocked; 1:Locked] Default:0
3.2	help	Get the list of all commands	hdmi=[0:Off; 1:On] Default:1
3.3	status	Get device current status	stbtime=[0:Never; 1:5min; 2:10min; 3:15min; 4:30min; 5: 60min] Default:3
3.4	get version	Get firmware version	usbc=[0:All USB-C Input; 1:USB-C input 1]
3.5	reset	Reset system settings to default Note: Type "yes" to confirm, "no" to discard	usbnet=[0:Off; 1:On] Default:1 gpio=[0:All GPIOs; 1:GPIO 1; 2:GPIO 2; 3:GPIO 3; 4:GPIO 4]
3.6	reset all	Reset system and network settings to default Note: Type "yes" to confirm, "no" to discard	iolv=[1:Input-Normal High 5V; 2:Input-Normal Low 0V; 3:Output High 5V; 4:Output Low 0V] Default:1
3.7	set front button [btn]	Set front button lock	baud=[1:4800; 2:9600; 3:19200; 4:38400; 5:57600; 6:115200] Default:6
3.8	get front button	Get front button lock status	event=[0:Off; 1:On] Default:1
3.9	set hdmi power saving [hdmi]	Set HDMI power saving status	
3.10	get hdmi power saving	Get HDMI power saving status	
3.11	set auto standby time [stbtime]	Set auto standby time when input signal is off	
3.12	get auto standby time	Get auto standby time	
3.13	set usbc [usbc] access network [usbnet]	Set USB-C port access network function	
3.14	get usbc [usbc] access network	Get USB-C port access network function	
3.15	set gpio [gpio] value [iolv]	Set GPIO function and trigger level	
3.16	get gpio [gpio]	Get GPIO function and trigger level	
3.17	set baud [baud]	Set system control RS-232 baud rate	
3.18	get baud	Get system control RS-232 baud rate	
3.19	get temp	Get device internal temperature	
3.20	get uptime	Get device running time	
3.21	set auto event report [event]	Set auto event report status	
3.22	get auto event report	Get auto event report status	

No.	Command	Description	Parameters
4.1	set input [input] name [inname]	Set the input name	input=[1:USB-C IN1; 2:HDMI IN2]
4.2	get input [in] name	Get the input name	inname=Max 16 characters
4.3	get input [in] connected	Get the input cable connected status	in=[0:All inputs; 1:USB-C IN1; 2:HDMI IN2]
4.4	set input [in] edid [edid]	Set the input EDID	edid=[1:Auto(Copy HDMI Out 1);
4.5	get input [in] edid	Get the input EDID	2:4K2K60_444, Audio 2CH PCM;
4.6	set user edid [uedid] <[udata]>	Set the user defined EDID	3:4K2K60_444, Audio 5.1CH DTS/DOLBY;
4.7	get edid data [edata]	Get the EDID data	4:4K2K60_444, Audio 7.1CH DTS/DOLBY/HD;
4.8	set input [in] hdcv [inhdcv]	Set the input HDCP status	5:4K2K30_444, Audio 2CH PCM;
4.9	get input [in] hdcv	Get the input HDCP status	6:4K2K30_444, Audio 5.1CH DTS/DOLBY;
			7:4K2K30_444, Audio 7.1CH DTS/DOLBY/HD;
			8:1080P60_444, Audio 2CH PCM;
			9:1080P60_444, Audio 5.1CH DTS/DOLBY;
			10:1080P60_444, Audio 7.1CH DTS/DOLBY/HD;
			11:720P60_444, Audio 2CH PCM;
			12:1920x1200, Audio 2CH PCM;
			13:1680x1050, Audio 2CH PCM;
			14:1600x1200, Audio 2CH PCM;
			15:1440x900, Audio 2CH PCM;
			16:1360x768, Audio 2CH PCM;
			17:1280x1024, Audio 2CH PCM;
			18:1024x768, Audio 2CH PCM;
			19:User Defined 1;
			20:User Defined 2]
			Default:1
			uedid=[1:User defined 1; 2:User defined 2]
			udata=[256 bytes EDID data]
			edata=[1:USB-C IN1; 2:HDMI IN2; 3:HDMI OUT;
			4:User defined 1; 5:User defined 2]
			inhdcv=[0:Off; 1:On] Default:1

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Output Setting

No.	Command	Description	Parameters
5.1	set output [output] name [outname]	Set the output name	output=[1:HDMI OUT]
5.2	get output [out] name	Get the output name	outname=Max 16 characters
5.3	get output [out] connected	Get the output cable connected status	out=[0:All outputs; 1:HDMI OUT]
5.4	set output [out] hddp [outhddp]	Set the output HDCP mode	outhddp=[1:Auto-Follow Sink; 2:Force HDCP1.4; 3:Force HDCP2.2; 4:Signal Management] Default:1
5.5	get output [out] hddp	Get the output HDCP mode	
5.6	set output [out] video [vmode]	Set the output Video mode	vmode=[1:Auto(Auto downscale to display's capability); 2:Bypass; 3:Force 1080P; 4:Internal pattern] Default:1
5.7	get output [out] video	Get the output Video mode	
5.8	set output [out] signal [osignal]	Set the output Signal status	osignal=[1:On; 2:Off; 3:AVMute(BlackScreen)] Default:1
5.9	get output [out] signal	Get the output Signal status	
5.10	set pattern [patres] [pattern]	Set the internal pattern output format	patres=[1:4K60Hz; 2:4K50Hz; 3:4K25Hz; 4:4K24Hz 5:1080P60Hz; 6:480P60Hz; 7:576P50Hz]
5.11	get pattern	Get the internal pattern output format	pattern=[1:Black; 2:Checkboard; 3:Strip; 4:Red; 5:Green; 6:Blue; 7:White; 8:Ramp; 9:Red ramp; 10:Green ramp; 11:Blue ramp;12:PRBS]
5.12	set welcome screen [welcome]	Set welcome screen status	welcome=[0:Off; 1:On] Default:1
5.13	get welcome screen	Get welcome screen status	nosig=[0:Off; 1:On] Default:1
5.14	set no signal screen [nosig]	Set no signal screen status	
5.15	get no signal screen	Get no signal screen status	
5.16	set image display	Show welcome screen image	
5.17	set image clear	Turn off welcome screen image	

Video Setting

No.	Command	Description	Parameters
6.1	set output [vout] from [vin]	Set the output from the input	vout=[0:All inputs; 1:HDMI OUT]
6.2	get output [vout] from	Get the output from which input(s)	vin=[1:USB-C IN1; 2:HDMI IN2]
6.3	set output [vout] auto switch [autosw]	Set the output auto switch status	autosw=[0:Off; 1:On] Default:1
6.4	get output [vout] auto switch	Get the output auto switch status	
6.5	set output auto switch mode [swmode]	Set the output auto switch detection mode	swmode=[1:Input signal; 2:Source 5V] Default:1
6.6	get output auto switch mode	Get the output auto switch detection mode	fallbk=[1:Next input; 2:Previous input; 3:USB-C IN1; 4:HDMI IN2] Default:1
6.7	set output [vout] fallback input [fallbk]	Set the output's fallback input source	
6.8	get output [vout] fallback input	Get the output's fallback input source	

Audio Setting

No.	Command	Description	Parameters
7.1	set analog audio input [aembed]	Set analog audio input embedded to the input	aembed=[0:Off; 1:USB-C IN1; 2:HDMI IN2] Default:0
7.2	get analog audio input	Get analog audio input embedded status	uastatus=[0:Off; 1:On] Default:0
7.3	set analog audio input to usb [uastatus]	Set analog audio input embedded to USB audio status	aout=[1:HDMI OUT; 2:USB Audio] Default:1
7.4	get analog audio input to usb	Get analog audio input embedded to USB audio status	gain=[0dB ~ -50dB] Default: 0dB
7.5	set analog audio output [aout]	Set analog audio deembedded from the output	incdb=[Any value within the difference between max. value and current value]
7.6	get analog audio output	Get analog audio deembedded status	decdb=[Any value within the difference between current value and min. value]
7.7	set analog audio gain [gain]	Set analog audio gain	amute=[0:Off; 1:On] Default:0
7.8	get analog audio gain	Get analog audio gain value	
7.9	set analog audio gain+	Increase analog audio gain by 1dB	
7.10	set analog audio gain+[incdb]	Increase analog audio gain by several dB	
7.11	set analog audio gain-	Decrease analog audio gain by 1dB	
7.12	set analog audio gain-[decdb]	Decrease analog audio gain by several dB	
7.13	set analog audio mute [amute]	Set analog audio mute status	
7.14	get analog audio mute	Get analog audio mute status	

USB Setting

No.	Command	Description	Parameters
8.1	get usb host [upwr] power	Get USB host power status	upwr=[0:All Hosts; 1:USB-C IN1; 2:USB HOST2]
8.2	set usb switch mode [uswmode]	Set USB switch mode	uswmode=[1:Follow video; 2:Manual switch; 3:Auto switch] Default:1
8.3	get usb switch mode	Get USB switch mode	uin=[1:USB-C IN1; 2:USB HOST2]
8.4	set usb manual switch [uin]	Set USB manual switch	udev=[0:All USB devices; 1:USB device 1; 2:USB device 2; 3:USB device 3]
8.5	get usb switch status	Get USB switch status	upwrmode=[1:Follow Host; 2:Force 5V output; 3: Disable 5V output] Default:1
8.6	set usb device [udev] power [upwrmode]	Set the USB device's power mode	
8.7	get usb device [udev] power	Get the USB device's power mode	

Display Control

No.	Command	Description	Parameters
9.1	set display [disp] power [dpwr]	Set display power status	disp=[0:All outputs; 1:HDMI OUT]
9.2	set display [disp] auto power feature [dauto]	Set the display auto power feature status	dpwr=[0:Off; 1:On]
9.3	get display [disp] auto power feature	Get the display auto power feature status	dauto=[0:Off; 1:On] Default:1
9.4	set display [disp] auto power on timer [ontim]	Set the display power on timer after startup	ontim=[0~1200sec] Default: 5sec
9.5	get display [disp] auto power on timer	Get the display power on timer value	offtim=[0~1200sec] Default: 5sec
9.6	set display [disp] auto power off timer [offtim]	Set the display power off timer after shut down	cec=[0:Off; 1:On]Default:1
9.7	get display [disp] auto power off timer	Get the display power on timer value	ir=[0:Off; 1:On] Default:0
9.8	set display [disp] control type [cec][ir][rs]	Set the display power control type status	rs=[0:Off; 1:On] Default:0
		Note: IR and RS-232 only can be used on one output port.	
9.9	get display [disp] control type	Get the display power control type status	

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RS-232 Setting

No.	Command	Description	Parameters
10.1	set serial setting [br]-[bit][pari][stop]	Set serial setting	br=[115200; 57600; 56000; 38400; 19200; 9600; 4800; 2400] Default:115200 bit=[7,8] Default:8 pari=[n:None; o:Odd; e:Even] Default:n stop=[1,2] Default:1 fmt=[HEX; ASCII] end=[Null; CR; LF; CR+LF] command=RS-232 command pwr=[on; off] command1=RS-232 power on/off command delay=[0~1200sec] command2=RS-232 power on/off command Note: [delay] and [command2] can be NULL
10.2	get serial setting	Get serial setting	
10.3	set serial [fmt] <[end]> <[command]>	Set serial general command	
10.4	set serial power [pwr] [fmt] <[end]> <[command1]> <[delay]> <[command2]>	Set serial power on/off control commands	
10.5	get serial power [pwr] command	Get serial power on/off control commands	

IR Setting

No.	Command	Description	Parameters
11.1	set ir power [irpwr]	Set IR power status	irpwr=[On; Off]

CEC Setting

No.	Command	Description	Parameters
12.1	set input [cecin] cec <[cincmd]>	Send CEC command to the input	cecin=[0:All inputs; 2:HDMI IN2] cincmd=[power on; power off; menu; select; up; down; left; right; exit; play; stop; pause; rewind; fast forward; previous; next; volume up; volume down; mute] custom=HEX Data cecout=[0:All outputs; 1:HDMI OUT1] coutcmd=[power on; power off; active source; image view on; text view on; volume up; volume down; mute]
12.2	set input [cecin] custom cec <[custom]>	Send custom CEC command to the input	
12.3	set output [cecout] cec <[coutcmd]>	Send CEC command to the output	
12.4	set output [cecout] custom cec <[custom]>	Send custom CEC command to the output	

Preset Setting

No.	Command	Description	Parameters
13.1	set preset save [preset]	Save current settings to the preset Note: All settings except network setting.	preset=[1~5] pname=Max 16 characters
13.2	set preset recall [preset]	Recall the preset	
13.3	set preset clear [preset]	Clear the preset	
13.4	set preset [preset] name [pname]	Set the preset's name	
13.5	get preset [preset] name	Get the preset's name	

Network Setting

No.	Command	Description	Parameters
14.1	get mac addr	Get network MAC address	ipmode=[0:static; 1:DHCP] **Please use "set net reboot" command or repower device to apply new config.** ip=[xxx.xxx.xxx.xxx] mask=[xxx.xxx.xxx.xxx] gw=[xxx.xxx.xxx.xxx] **Please use "set net reboot" command or repower device to apply new config.** **When DHCP is selected, device can't be configured IP, Subnet mask and Gateway. Please set DHCP off first.** tcp=[0:Off; 1:On] Default:1 tcpport=[1-65535] Default:8000 telnet=[0:Off; 1:On] Default:1 telnetport=[1-65535] Default:23 hostname=Max 32 characters
14.2	get ipconfig	Get the current IP configuration	
14.3	set ip mode [ipmode]	Set network IP mode	
14.4	get ip mode	Get network IP mode	
14.5	set ip addr [ip]	Set network IP address	
14.6	get ip addr	Get network IP address	
14.1	set subnet [mask]	Set network subnet mask	
14.8	get subnet	Get network subnet mask	
14.9	set gateway [gw]	Set network gateway	
14.10	get gateway	Get network gateway	
14.1	set tcp/ip [tcp]	Set network TCP/IP status	
14.1	get tcp/ip	Get network TCP/IP status	
14.1	set tcp/ip port [tcpport]	Set network TCP/IP port	
14.1	get tcp/ip port	Get network TCP/IP port	
14.2	set telnet [telnet]	Set network telnet status	
14.2	get telnet	Get network telnet status	
14.2	set telnet port [telnetport]	Set network telnet port	
14.2	get telnet port	Get network telnet port	
14.2	set net reboot	Reboot network modules	
14.20	set net hostname [hostname]	Set network hostname	
14.2	get net hostname	Get network hostname	
14.2	set net mode x	Set network working mode	
14.2	get net mode	Get network working mode	