

Software integration document

Product	NC30
FW Version	07
Date	2026-07-24

This document outlines the control command set supported by the NC30, which is designed for integration by third-party software developers. Below, you will find a comprehensive list of instructions available for use. Developers are encouraged to refer to this list when building or updating their software to ensure compatibility and functionality. Should you have any inquiries or require further assistance, please do not hesitate to contact our Field Application Engineer ([Technical Support ! AVer Global](#)).

CGI List for NDI Camera Control

CGI item name	URL	Command	Parameter Name	Parameter value	Description
Save Preset	/cgi-bin?	NdiCmdSendStorePreset	channel_number, preset_num		
Call Preset	/cgi-bin?	NdiCmdSendRecallPreset	channel_num, preset_num		
Pan/Tilt	/cgi-bin?	NdiCmdSendPnTSpeed	channel_num, PanSpeed, TiltSpeed		
Set Zoom	/cgi-bin?	NdiCmdSendZoomValue	channel_num, zoom_value		

Continuous Zoom In/Out	/cgi-bin?	NdiCmdSendZoomSpeed	channel_num, zoom_speed		
Set Focus Mode	/cgi-bin?	NdiCmdSendFocusValue	channel_num, focus_mode		
Focus In / Near	/cgi-bin?	NdiCmdSendFocusValue	channel_num, 0, 1		Near focus.
Focus Out / Far	/cgi-bin?	NdiCmdSendFocusValue	channel_num, 0, 0		Far focus.

CGI List for Box Communication

CGI item name	URL	Command	Parameter Name	Parameter value	Description
Start NDI Search	/cgi-bin/SetData=a=	ndi_search_start	extra_ips	[ip1],[ip2],[ip3]...	By adding extra_ips to specify particular URLs, you can find NDI devices in different domains (buffer limit is 256 bytes).
Stop NDI Search	/cgi-bin/SetData=a=	ndi_search_end			
Get NDI Search Result	/cgi-bin/GetData=a=	ndi_search			Returns the number, names, and IP addresses of NDI sources.

Get added device list	/cgi-bin?GetString=	uhost_add_list			Requires triggering a scan with OnePush=o first, then returns a JSON formatted list after waiting for 1 second.
(Set) Add device	/cgi-bin?SetString=	uhost_dev_add	json_string	Registers the device to the system. JSON string format requirement: - group_name, device_channel, ip_address must be entered correctly. - sn is for software use (recorded by	Example: <pre>{ "sn": 1, "did": 1, "device_name": "Camera A", "group_name": "Meeting Room", "device_channel": "TR211-0c74d8", "description": "Main camera", "online_status": 0, "ip_address": "192.168.1.100", "ptz_cam_view": 0, "res_width": 1920, "res_height": 1080 }</pre>

				FW only). • did maps to TrkBox_NdiRecv_ch#_ip channel index. • device_name & description are customizable strings. • online_status records connection status. • ptz_cam_view default 0	
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				(deprecated). • res_width/res_height record NDI stream resolution.	
(Set) Delete device	/cgi-bin/SetString=	uhost_dev_delete	sn	[sn value]	Deletes the device. The parameter requires sn , which corresponds to the sn field value inside the JSON data structure from the uhost_dev_add command.
Get NDI device thumbnail	/snapshot/snapshot?	decoder	ch	1~4	Recommended to fetch once per second.
Get	/snapshot/snap	get=<timestamp><frame>	timestamp	System timestamp,	Full syntax:

current NC30 thumbn ail	shot?	eNum>	mp, frameN um	preview sequence number	/snapshot/snapshot?get=<timestamp>< frameNum> where <timestamp> is system time and <frameNum> is preview sequence number.
Switch current video source	/cgi-bin?Set=	TrkBox_vout_ch<N> / TrkBox_vdisp_ch1 / TrkBox_vdisp_set	channel, source type, setup trigger	<N>, <source type>, <N+2>, 1	Switch video source consists of three CGI commands: 1) TrkBox_vout_ch<N>,3,<source type> 2) TrkBox_vdisp_ch1,3,<N+2>

					3) TrkBox_vdisp_set,3,1 (all support Dbus Get/Set). vdisp_set.
NDI stream connect / disconn ect	/cgi-bin?SetStri ng=	TrkBox_NdiRecv_ch1_ enable	value	0, 1	Set channel enable/disable (ch1~ch4), requiring correct IP/group/channel settings via uhost_dev_add.
Notify Device Status	(Get)	TrkBox_NdiRecv_ch1_ status			Active notification when device status (on/off) changes (ch1~ch4).

CGI List for Video & Audio

CGI item name	URL	Command	Parameter Name	Parameter value	Description
Video Output Resolution	/cgi-bin?Set=	vdo_res_ui	enum value	0 ~ 19	0=Auto, 1=3840x2160_60, 7=1080P_60, etc.
Encoder: HDMI Input Resolution	/cgi-bin?Get=	it6616_hdmi_ch1_res			Displayed at the top-left of the Live page.
Stream Video Output	/cgi-bin?Set=	vdo_net_stm_res	value		Dbus Get/Set
Bitrate	/cgi-bin?Set=	vdo_net_stm_bitrate	value		Dbus Get/Set
Encoding Type	/cgi-bin?Set=	vdo_net_stm_codec	value		Dbus Get/Set

Framerate	/cgi-bin?Set=	vdo_net_stm_fr	value		Dbus Get/Set
I-VOP Interval (S)	/cgi-bin?Set=	vdo_net_stm_intvl	value		Dbus Get/Set
Rate Control	/cgi-bin?Set=	vdo_net_stm_ratectrl	value		Dbus Get/Set
(Set) Operation mode	/cgi-bin?Set=	video_mode	mode	0, 1	1 = Decoder Mode, 0 = Encoder Mode.
Get) Operation mode	/cgi-bin?Get=	video_mode			
Maximum Input Resolution	/cgi-bin?Set=	TrkBox_max_input_res	value	0, 1	0 = 1080p/60, 1 = 2160p/60.
Input Source Select	/cgi-bin?Set=	ado_src			Decoder default: NDI, Encoder default: HDMI.

Analog Audio In	/cgi-bin?Set=	ado_ain	value	0, 1	0 = Line-In, 1 = MIC-In.
Audio Volume	/cgi-bin?Set=	ado_vol	value	0 ~ 10	Gain adjustment, default is 5.
Audio Delay	/cgi-bin?Set=	ado_delay	value	0 ~ 500	Lip-sync adjustment, in 50ms intervals.

CGI List for Network & NDI Settings

CGI item name	URL	Command	Parameter Name	Parameter value	Description
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DHCP	/cgi-bin?	net_mode			DBus Get/Set
Hostname	/cgi-bin?GetString=	net_hostname			
IP Address	/cgi-bin?GetString=	net_ipv4			Includes real_ipv4 and net2_ipv4
Netmask	/cgi-bin?GetString=	net_mask			Includes net2_mask
Gateway	/cgi-bin?GetString=	net_gateway			Includes net2_gateway
DNS	/cgi-bin?GetString=	net_dns			Includes net2_dns
Local Device Name	/cgi-bin?	ndi_machine_name			DBus GetString/SetString

Device Channel (Camera ID)	/cgi-bin?	ndi_camera_id			DBus GetString/SetString
Receive Group	/cgi-bin?	ndi_group			DBus GetString/SetString
Reliable UDP	/cgi-bin?	ndi_rudp_en		0 / 1	DBus Get/Set
Discovery Server	/cgi-bin?	ndi_discovery_en		0 / 1	DBus Get/Set
Discovery Server Address	/cgi-bin?	ndi_discovery_srv_ip			DBus GetString/SetString
Multicast Server	/cgi-bin?	ndi_multicast_en		0 / 1	DBus Get/Set
Multicast Server Mask	/cgi-bin?	ndi_multicast_mask			DBus GetString/SetString

Multicast Server Address	/cgi-bin?	ndi_multicast_prefix			DBus GetString/SetString
Multicast TTL	/cgi-bin?	ndi_multicast_ttl			DBus Get/Set

CGI List for System Settings

CGI item name	URL	Command	Parameter Name	Parameter value	Description
Model Name	/cgi-bin?GetString=	sys_name			
Serial Number	/cgi-bin?GetString=	sys_sn			
MAC Address	/cgi-bin?GetString=	net_mac			
Firmware Version	/cgi-bin?GetString=	sys_fw_version			

MCU Firmware Version	/cgi-bin?GetString=	sys_mcu_fw_version			
Anonymous Usage Data	/cgi-bin?	ga_user_event_trace_on		0 / 1	DBus Get/Set
Get System Date & Time	/cgi-bin?GetData=	sys_date_time			
Get Time Zone	/cgi-bin?Get=	sys_time_zone			
Set Time Zone	/cgi-bin?Set=	sys_time_zone	value		
NTP Switch	/cgi-bin?	sys_ntpd_enable			
Set NTP Server	/cgi-bin?SetString=	sys_ntpd_server			

Get Power Schedule	/cgi-bin?GetData=	sys_power_schedule			
Set Power Schedule	/cgi-bin?SetData=	sys_power_schedule	schedule		
Auto Reboot Switch	/cgi-bin?	sys_reboot_time_en			
Auto Reboot Time	/cgi-bin?	sys_reboot_time			
Factory Default	/cgi-bin?OnePush=	d			
Quick Setup Tour	/cgi-bin?	sys_setup_tour	value	0, 1	Get/Set
Reboot	/cgi-bin?OnePush=	!			