

iSwitch 2000-CTL

Web UI Configuration Guide

Version: V1.0.0

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1. OVERVIEW

This guide explains how to operate the **iSwitch 2000-CTL** Web UI to discover, route, configure, and maintain supported iSwitch encoders, decoders, and transceivers. Menu names and field availability depend on endpoint model, work mode, and firmware.

1.1 SCOPE AND SUPPORTED DEVICES

This release supports the four iSwitch 2000 product models listed below. The pages and settings presented by the controller depend on the selected model and, for transceivers, the current work mode.

Models	Type	Primary use
iSwitch-2000HC-T	Encoder	HDMI/USB-C source encoding and AV-over-IP transmission.
iSwitch-2000HC-R	Decoder	AV-over-IP reception, display output, and audio return.
iSwitch-2000H-TR	Transceiver	Selectable Transmitter or Receiver work mode.
iSwitch-2000U-TR	Transceiver	Selectable Transmitter or Receiver work mode for USB-over-IP.

1.2 CONVENTIONS AND SAFETY NOTES

- Names shown in bold or quotation marks refer to labels in the Web UI.
- Apply saves settings immediately. Apply & Reboot saves settings and restarts the selected device or controller.
- Changing routing can interrupt active video, audio, USB, serial, or IR sessions.
- Changing an IP address can make a device unreachable at its previous address.
- Factory Reset removes custom configuration. Firmware upgrades require the exact approved file and uninterrupted power and network access.

2. ACCESSING THE WEB UI

2.1 NETWORK CONNECTION

The **iSwitch-2000-CTL** has an **AV (PoE) port** for communication with iSwitch devices and a **CONTROL port** for management. Use the front-panel **LCD** to confirm the current IP addresses before connecting.

- Connect the controller AV (PoE) port to the AV network that contains the supported iSwitch devices.
- Connect the management computer to the same reachable network as the selected controller port.
- Configure the computer with a compatible IP address when the controller is using a static address.
- Open a current web browser and enter the controller IP address in the address bar.

Tip: The CONTROL port factory address is **192.168.11.243** with subnet mask **255.255.0.0**. The AV port may use **DHCP** or a static address according to deployment policy. Always use the address shown on the LCD if the installation has already been commissioned.

2.2 SIGN IN AND FIRST-LOGIN PASSWORD CHANGE

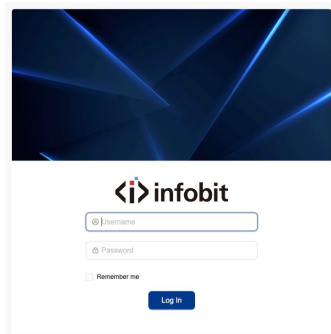


Figure 1. Controller sign-in page.

1. Enter admin in the Username field.
2. For a factory-default controller, enter admin in the Password field and select Log In.
3. At the mandatory first-login prompt, replace the default password with a new 8-24 characters administrator password that meets the on-screen requirements.
4. Record the new password using the organization's approved credential-management process, then sign in with the new password.

Security: The default admin/admin credentials are for initial access only. The Web UI requires a password change at first login. Do not reuse the default password or enable Remember me on a shared management computer.

2.3 WEB UI LAYOUT

Area	Purpose
Main	Routing and video-wall operation.
Device	Status, and batch configuration.
Controller	Controller firmware, configuration, network, security, time, branding, and administrator password.
Admin menu	Shows the current account and provides Log out.

The left navigation remains visible on every signed-in page. The page title appears at the top, followed by tabs or configuration panels. Disabled controls indicate that no suitable target is selected, that the current model does not support the function, or that a parent function must be enabled first.

3. ROUTING

Routing uses a matrix: source endpoints are shown on one axis and destination endpoints on the other. A colored intersection indicates the active association. Use search and page controls when the system contains more endpoints than fit in one view.

All Follows Video: When enabled, supported audio and control services follow the selected AV route. Disable this option only when the deployment requires an independent supported service route.

3.1 AV ROUTING

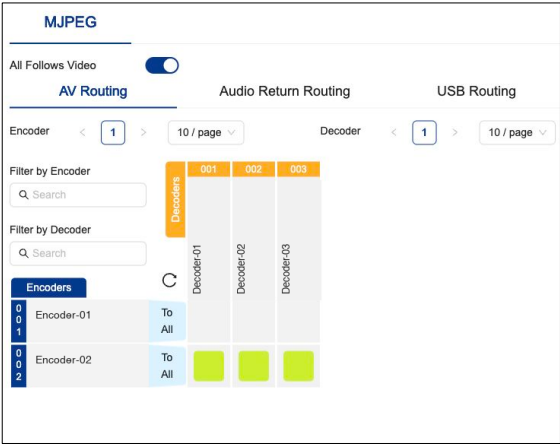


Figure 2. AV Routing matrix with anonymized endpoint names.

1. Open Main > Routing and select AV Routing.
2. Locate the encoder and decoder using the search boxes or page controls.
3. Select the cell at the encoder/decoder intersection. The cell changes color when the route is active.
4. To route one encoder to every compatible decoder shown by the controller, select To All on the encoder row.
5. Select an active cell again to remove the association.

Options & actions

- **All Follows Video:** When On, audio, USB, IR, and RS-232 follow the video route; turn it Off to route supported signal classes independently.
Available range: Off or On
Default: On
- **Signal class:** Selects which signal association the matrix represents.
Available range: Video and any supported independent classes exposed by the selected devices
Default: Video when independent routing is opened
- **Filter by Encoder:** Narrows source columns without changing routes.
Available range: All or filtered encoders
Default: All
- **Filter by Decoder:** Narrows destination rows without changing routes.

Available range: All or filtered decoders
Default: All

- **Route matrix cell:** Select the encoder/decoder intersection to create a route; select it again to remove the route.

Available range: Unassigned or assigned
Default: Current route; unassigned on a new system

- **To All:** Applies or removes one encoder route across all compatible decoder rows.

Available range: Unassigned or assigned to every compatible decoder
Default: Current route state

- **Action result:** A matrix-cell or To All selection changes the active route immediately.

3.2 AUDIO RETURN ROUTING

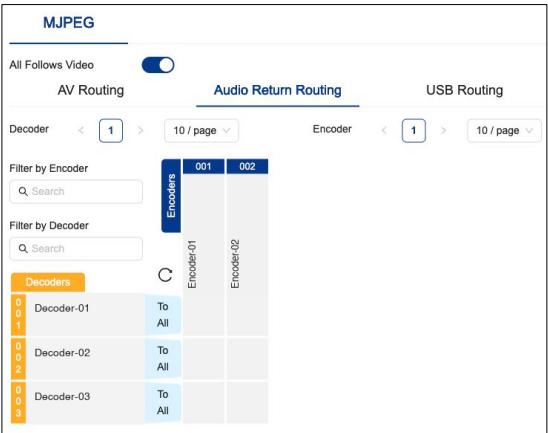


Figure 3. Audio Return Routing page.

Audio Return Routing sends a decoder's configured return-audio path back to a compatible encoder.

1. Select Audio Return Routing.
2. Locate the decoder row and the compatible encoder column.
3. Select their intersection to create the return route or use To All where appropriate.

Tip: Configure the decoder return source and HDMI eARC capability under Device > Status > Options > Audio before creating the route.

Options & actions

- **Route matrix cell:** Associates one decoder return source with one encoder.
Available range: Unassigned or assigned
Default: Current route; unassigned on a new system
- **To All:** Applies one decoder return source to every compatible encoder.
Available range: Unassigned or assigned to all compatible encoders
Default: Current route state
- **Action result:** Selecting a matrix cell creates or removes the return-audio route immediately.

3.3 USB ROUTING

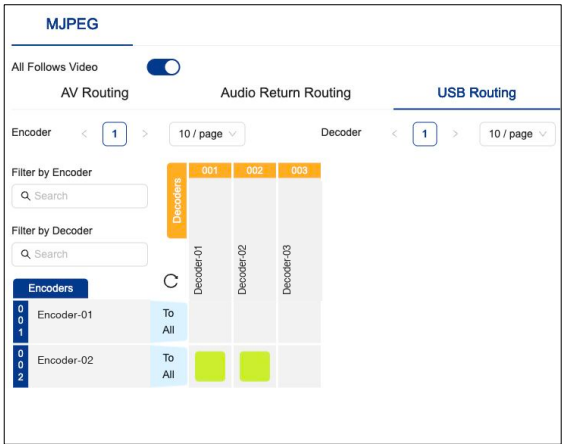


Figure 4. USB Routing page.

USB Routing associates the USB host side of a transmitter with the USB device side of a receiver. The route is independent when All Follows Video is disabled and the selected device combination supports USB-over-IP. The USB Routing tab is also presented when an iSwitch-2000U-TR is discovered.

1. Select USB Routing.
2. Locate the USB-capable encoder and decoder.
3. Select the intersection to establish the USB association.

***Tip:** If the association does not become active, confirm USB over IP is enabled under the endpoint Advanced options.*

Options & actions

- **USB route cell:** Connects one USB-capable encoder and decoder pair.
Available range: Unassigned or assigned
Default: Current route; unassigned on a new system
- **To All:** Applies the selected USB source across compatible targets when supported.
Available range: Available only where the endpoint model permits the association
Default: Not active
- **Action result:** Selecting or clearing a matrix cell updates the USB association immediately.

4. VIDEO WALL

The Video Wall page separates live source assignment from wall and layout setup. Two wall types are available: **Standard Video Wall** and **Mosaic Video Wall**.

4.1 ASSIGNING A SOURCE

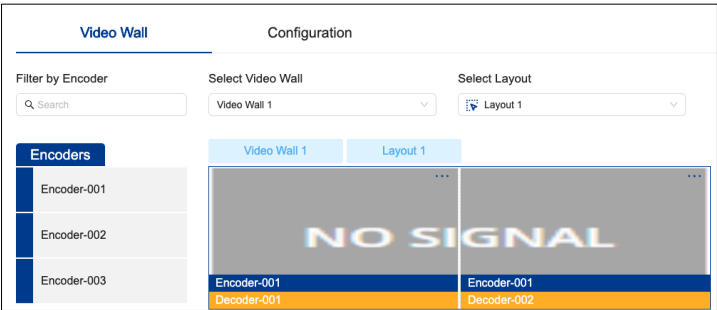


Figure 5. Video Wall tab with an example wall and layout.

1. Open Main > Video Wall and select the Video Wall tab.
2. Select the required video wall and layout.

3. Drag an encoder from the Encoders list to the required logical screen or combined region.
4. Select Apply. The assigned source is sent to the decoder or decoder group used by the layout.

Options & actions

- **Filter by Encoder:** Narrows the source list without changing the active wall.
Available range: All or one compatible encoder model
Default: All
- **Select Video Wall:** Chooses the destination wall.
Available range: One saved wall
Default: No wall selected or current UI selection
- **Select Layout:** Chooses the decoder arrangement or scene.
Available range: One layout saved under the selected wall
Default: No layout selected or current UI selection
- **Encoder assignment:** Defines the video source displayed by the wall.
Available range: One compatible discovered encoder
Default: Unassigned on a new layout
- **Action result:** Apply activates the selected encoder on the selected wall and layout.

4.2 STANDARD VIDEO WALL

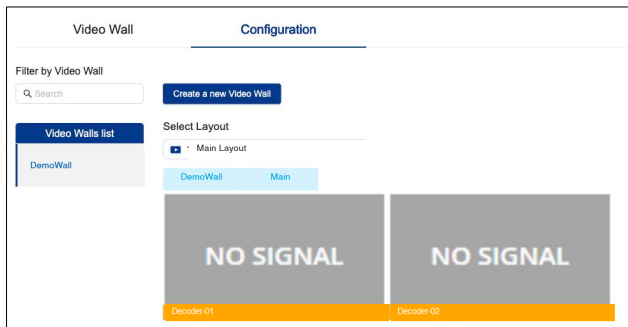


Figure 6. Video Wall configuration list.

Figure 7. Standard Video Wall configuration page.

Field or control	Description
Video Wall Name	Unique name used in the wall list.
VW / VH	Viewable width and height of one display, in millimetres.
Rows / Columns	Number of physical display rows and columns.
OW / OH	Outside display width and height, including bezel, in millimetres.
Create Layout	Creates a logical layout for the defined wall geometry.
Edit / Remove / Sort Layout	Maintains the layouts available for the wall.
Show OSD / Hide OSD	Shows or hides decoder identification on connected displays.
Save & Apply	Stores the wall and pushes the configuration to assigned decoders.

1. Open the Configuration tab and select Create a new Video Wall > Standard Video Wall.
2. Enter the wall name, display dimensions, and row/column count.
3. Create or select a layout, then drag compatible decoders from the Decoders list to their physical positions.
4. Select contiguous tiles and choose Combine to create each required logical display region.
5. Select Save & Apply, then return to the Video Wall tab to assign an encoder.

Options & actions

- **Video Wall Name:** Identifies the wall in the source-assignment list.
Available range: Non-empty name accepted by the Web UI; unique within the controller
Default: Blank
- **Rows:** Number of physical display rows.

Available range: Positive whole number within the controller layout limit

Default: Blank

- **Columns:** Number of physical display columns.

Available range: Positive whole number within the controller layout limit

Default: Blank

- **Layout/Scene Name:** Identifies one reusable wall arrangement.

Available range: Non-empty name accepted by the Web UI; unique within the wall

Default: Blank

- **Layout/Scene Type:** Selects the grid-layout behavior.

Available range: Standard Video Wall or another type explicitly exposed by the selected model

Default: Standard Video Wall

- **Decoder assignment:** Maps each physical display to a decoder.

Available range: Zero or one compatible decoder per physical tile

Default: Unassigned

- **Combine:** Combines selected physical tiles into one logical display area.

Available range: A contiguous rectangular tile selection

Default: No tiles selected

- **Show OSD / Hide OSD:** Displays or removes decoder identification overlays while commissioning.

Available range: Immediate action

Default: Not active

- **Action result:** Save stores the layout; Apply sends the saved geometry and decoder assignments to the wall.

4.3 MOSAIC VIDEO WALL

Video Wall

Configuration

Mosaic Video Wall

Video Wall Name

Video Wall Width

2000

mm

Video Wall Height

1000

mm

Display

+

1000

Filter by Decoder

Q Search

Decoders

Decoder-01

Decoder-02

Decoder-03

X

0

mm

Y

0

mm

Rotation

0°

Delete

Delete All

Figure 8. Mosaic Video Wall configuration page.

Field or control	Description
Video Wall Width / Height	Physical canvas size in millimetres.
Display +	Creates a display definition that can be placed on the canvas.
X / Y	Top-left display coordinate on the wall canvas.
Rotation	Display rotation used by the mosaic layout.
Delete / Delete All	Removes the selected display or all displays from the canvas.
Decoders	Compatible receivers available for assignment.

1. Select Create a new Video Wall > Mosaic Video Wall.
2. Enter the total wall width and height.
3. Use Display + to define every physical display, then drag each display to its required position on the canvas.
4. Confirm or refine each display's X/Y coordinate and rotation.
5. Drag a compatible decoder from the Decoders list onto each display, then select Save & Apply.
6. Return to the Video Wall tab, select the mosaic layout, assign an encoder, and select Apply.

Options & actions

- **Video Wall Width:** Physical width of the mosaic canvas.

Available range: Positive whole number in millimetres accepted by the Web UI
Default: Blank

- **Video Wall Height:** Physical height of the mosaic canvas.

Available range: Positive whole number in millimetres accepted by the Web UI
Default: Blank

- **Display Width / Height:** Physical size of the selected display.

Available range: Positive dimensions that fit within the wall canvas
Default: Blank

- **Display X / Y:** Positions the top-left corner of the display on the wall canvas.

Available range: Coordinates that keep the display within the canvas
Default: 0 / 0 for a newly added display

- **Rotation:** Sets the physical display orientation.

Available range: 0, 90, 180, or 270 degrees
Default: 0 degrees

- **Delete / Delete All:** Removes display definitions from the canvas.

Available range: Selected display or all displays
Default: Not active

- **Decoder assignment:** Maps the selected physical display to a decoder.

Available range: Zero or one compatible decoder per display
Default: Unassigned

- **Action result:** Save & Apply stores the canvas, display geometry, and decoder assignments.

5. DEVICE STATUS AND CONFIGURATION

Device > Status lists discovered endpoints and provides per-device Options. The controller shows only the tabs supported by the selected model and work mode.

5.1 SUPPORTED DEVICE ROLES

Model	Default presentation	Role-related behavior
iSwitch-2000HC-T	Encoder	Appears on encoder lists and provides source, EDID, and streaming settings.
iSwitch-2000HC-R	Decoder	Appears on decoder lists and provides output, audio-return, and display-image settings.
iSwitch-2000H-TR	Transceiver	Work Mode selects Transmitter or Receiver; IR settings are available on this platform.

Model	Default presentation	Role-related behavior
iSwitch-2000U-TR	Transceiver	Work Mode selects Transmitter or Receiver; available source/output tabs follow the selected role.

Work Mode: Changing a transceiver between Transmitter and Receiver can interrupt active routes and causes the device to move between encoder and decoder lists. Perform this change during a maintenance window.

Options Availability by Model

Defines which Options tabs are expected for each model and role.

iSwitch-2000HC-T	iSwitch-2000HC-R	iSwitch-2000H-TR	iSwitch-2000U-TR
Options	Options	Options	Options
Video	Video	Work Mode	Work Mode
Video Source	Audio	Video	Network
Audio	RS-232	Audio	Service Capability
RS-232	Network	RS-232	802.1x
Network	Service Capability	IR	Commands
Service Capability	Idle & Logo Images	Network	Advanced
802.1x	802.1x	Service Capability	
Commands	Commands	802.1x	
Advanced	Advanced	Commands	
		Advanced	

Figure 9. Options Availability by Model in the Web UI; left to right: iSwitch-2000HC-T, iSwitch-2000HC-R, iSwitch-2000H-TR, and iSwitch-2000U-TR.

Options & actions

- **iSwitch-2000HC-T:** Fixed encoder with HDMI/USB-C source controls.

Available range: Video, Video Source, Audio, RS-232, Network, Service Capability, 802.1x, Commands, Advanced

Default: Encoder role

- **iSwitch-2000HC-R:** Fixed decoder with display-output and image controls.

Available range: Video, Audio, RS-232, Network, Service Capability, Idle & Logo Images, 802.1x, Commands, Advanced

Default: Decoder role

- **iSwitch-2000H-TR:** HDMI transceiver; Work Mode selects Transmitter or Receiver.

Available range: Work Mode, role-specific Video and Audio, RS-232, IR, Network, Service Capability, 802.1x, Commands, Advanced

Default: Current commissioned role

- **iSwitch-2000U-TR:** USB/KM transceiver; Advanced exposes USB over IP and KM over IP.

Available range: Work Mode, Network, Service Capability, 802.1x, Commands, Advanced

Default: Current commissioned role

- **Action result:** Read-only reference; the live Web UI exposes only tabs supported by the selected model and role.

5.2 STATUS PAGES

ID	Hostname/Alias	IP Address	Firmware	Input Testing	HDCP	Connected RX	Video Preview	Order	Option
001	Encoder-001	192.0.2.101	v1.10.12	HDMI: 3840x2160 60Hz LPCM HDMI10 YCBCR...	No HDCP	Multiple		I	
002	Encoder-002	192.0.2.102	v1.10.9	---	No HDCP	---		I	
003	Encoder-003	192.0.2.103	v1.10.9	HDMI: 3840x2160 60Hz LPCM HDMI10 YCBCR...	No HDCP	---		I	

Total 3 Encoders (3 Online, 0 Offline)

Figure 10. Encoder Status page.

ID	Hostname/Alias	IP Address	Firmware	Output Testing	HDCP	Connected TX	Video Preview	Display Power	Order	Option
001	Decoder-001	192.0.2.101	v1.12.2	3840x2160 60Hz HDMI10 YCBCR 884 4:2:0	No HDCP	Encoder-001			I	
002	Decoder-002	192.0.2.102	v1.10.9	3840x2160 60Hz LPCM HDMI10 YCBCR 884 4:2:0	HDCP 2.3	Encoder-002			I	
003	Decoder-003	192.0.2.103	v1.10.9	---	---	---	---	---	I	

Total 3 Decoders (3 Online, 0 Offline)

Figure 11. Decoder Status page.

Status item	Encoder page	Decoder page
Identity	ID, Hostname/Alias, IP Address, Firmware	ID, Hostname/Alias, IP Address, Firmware

Status item	Encoder page	Decoder page
Signal	Input Timing and HDCP	Output Timing and HDCP
Association	Connected RX	Connected TX
Quick action	Video Preview when supported	Video Preview when supported; Display Power on/off
Order	Changes endpoint display order	Changes endpoint display order
Option	Opens encoder or transmitter settings	Opens decoder or receiver settings

Options & actions

- **Role tab:** Selects the endpoint list.
Available range: Encoders or Decoders
Default: Encoders
- **Search:** Filters the visible endpoint rows.
Available range: Partial device ID, hostname/alias, or IP text
Default: Blank
- **Reload:** Refreshes discovery and current status data.
Available range: Immediate action
Default: Not active
- **Identity and signal fields:** Includes ID, hostname/alias, IP, firmware, timing, HDCP, and connected endpoint.
Available range: Read-only current device values
Default: Current discovered values
- **Video Preview:** Opens a low-bandwidth monitoring view.
Available range: Available when Preview is enabled and supported
Default: Not active
- **Display Power:** Sends the configured display-power action.
Available range: On or Off action on decoder rows
Default: Current display state
- **Order:** Changes the endpoint display order.
Available range: Valid list position
Default: Current discovery order
- **Option:** Provides device-level configuration.
Available range: Opens the selected device's supported Options tabs
Default: Closed

- **Action result:** Search and role selection only filter the view; quick actions affect the selected endpoint.

5.3 SHARED DEVICE OPTIONS

These functions appear on multiple endpoint models. A model can hide controls that its hardware, work mode, or firmware does not support.

5.3.1 Work Mode

Changes a transceiver between source-side transmitter operation and destination-side receiver operation.

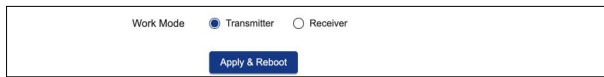


Figure 12. Work Mode in the Web UI.

Options & actions

- **Work Mode:** Controls the endpoint role and which role-specific tabs are visible.
Available range: Transmitter or Receiver
Default: Current commissioned role; Transmitter on the inspected encoder examples
- **Action result:** H-TR uses Apply & Reboot; U-TR uses Apply in the reference UI. The device moves between encoder and decoder lists.

Note: Changing Work Mode interrupts active routes and must be performed during a maintenance window.

5.3.2 RS-232 General

Controls serial transport behavior and proxy access.

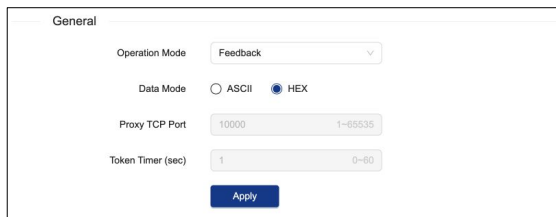


Figure 13. RS-232 General in the Web UI.

Options & actions

- **Operation Mode:** Feedback returns device data through the controller API; Passthrough relays serial data between associated encoder and decoder endpoints; Proxy bridges the endpoint serial port to a TCP listener.

Available range: Feedback, Passthrough, or Proxy

Default: Feedback

- **Data Mode:** Defines the representation used for serial data.

Available range: ASCII or HEX

Default: HEX

- **Proxy TCP Port:** TCP listener used by the serial proxy.

Available range: 1-65535

Default: 5001; active in Proxy mode

- **Token Timer:** Controls serial-session token retention.

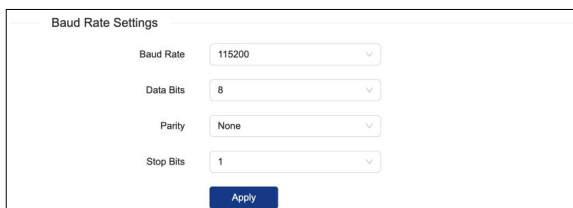
Available range: 0-60 seconds

Default: 1 second; active when required by the mode

- **Action result:** Apply writes the serial operating mode and proxy settings.

5.3.3 RS-232 Baud Rate Settings

Matches the endpoint UART framing to the connected serial device.



The image shows a web UI for RS-232 Baud Rate Settings. It is a light gray box with a title 'Baud Rate Settings' at the top left. Below the title are four rows, each with a label and a dropdown menu. The first row is 'Baud Rate' with a value of '115200'. The second row is 'Data Bits' with a value of '8'. The third row is 'Parity' with a value of 'None'. The fourth row is 'Stop Bits' with a value of '1'. At the bottom right of the box is a blue button with the text 'Apply'.

Figure 14. RS-232 Baud Rate Settings in the Web UI.

Options & actions

- **Baud Rate:** Must match the connected device.

Available range: Standard values exposed by the Web UI, including 2400, 4800, 9600, 19200, 38400, 57600, and 115200 baud

Default: 115200

- **Data Bits:** Number of payload bits per character.

Available range: 6, 7, or 8 where exposed

Default: 8

- **Parity:** Serial parity check.

Available range: None, Odd, or Even

Default: None

- **Stop Bits:** Number of stop bits per character.

Available range: 1 or 2 where exposed

Default: 1

- **Action result:** Action writes the complete serial framing configuration.

5.3.4 Network

Configures endpoint IP addressing and stream casting.



Figure 15. Network in the Web UI (1 of 3).

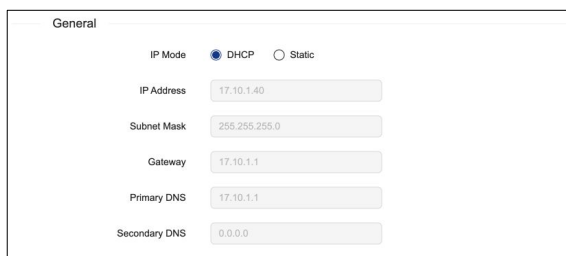


Figure 16. Network in the Web UI (2 of 3).



Figure 17. Network in the Web UI (3 of 3).

Options & actions

- **LAN Mode:** Switched places both physical LAN ports on the same internal switch and IP network; Bridged forwards traffic between the AV and secondary LAN sides while maintaining the endpoint's normal AV connection; Independent separates the physical interfaces so each operates on its own network and allows Dante traffic to be assigned independently to that network.

Available range: Switched, Bridged, or Independent where exposed

Default: Switched

- **IP Mode:** Selects automatic or manually assigned addressing.

Available range: DHCP or Static

Default: DHCP

- **IP Address:** Endpoint management and AV-network address.
Available range: Valid IPv4 address
Default: Current DHCP or deployment-specific value
- **Subnet Mask:** Endpoint subnet prefix.
Available range: Valid contiguous IPv4 subnet mask
Default: Current DHCP or deployment-specific value
- **Gateway:** Router used for off-subnet traffic.
Available range: Valid IPv4 address in the endpoint subnet or 0.0.0.0
Default: Current DHCP or deployment-specific value
- **Primary DNS:** Preferred resolver.
Available range: Valid IPv4 DNS server address or 0.0.0.0
Default: Current DHCP or deployment-specific value
- **Secondary DNS:** Fallback resolver.
Available range: Valid IPv4 DNS server address or 0.0.0.0
Default: 0.0.0.0 on inspected devices
- **Casting Mode:** Selects one-to-many multicast or point-to-point unicast transport.
Available range: Multicast or Unicast
Default: Multicast
- **Multicast Address Prefix:** First octet used when the controller derives multicast group addresses.
Available range: 224-239
Default: 234 on inspected HC/H-TR devices; inactive in Unicast mode
- **Action result:** Apply & Reboot writes network and casting settings and restarts the endpoint.

5.3.5 Service Capability

Enables endpoint management services.



Figure 18. Service Capability in the Web UI (1 of 2).



Figure 19. Service Capability in the Web UI (2 of 2).

Options & actions

- **SSH:** Enables secure command-line management.
Available range: Off or On
Default: On
- **Telnet:** Enables unencrypted Telnet management; disable when not required.
Available range: Off or On
Default: On
- **HTTPS:** Enables encrypted Web management on the endpoint.
Available range: Off or On
Default: Off
- **Action result:** Apply changes the selected service states.

5.3.6 802.1x

Configures endpoint port-based network authentication.

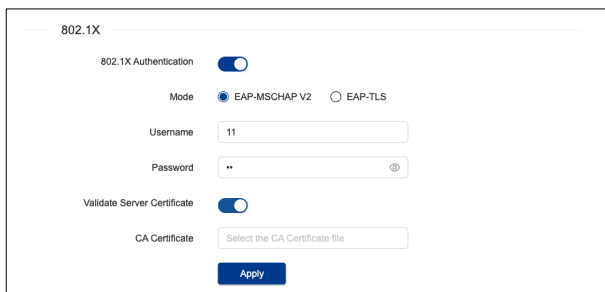


Figure 20. Endpoint 802.1X EAP-MSCHAP V2 settings with server-certificate validation enabled.

The screenshot shows a configuration window titled "802.1X". Inside, there is a section for "802.1X Authentication" with a toggle switch turned on. Below this, the "Mode" is set to "EAP-TLS" (selected with a radio button). There are input fields for "Username", "Client Certificate" (with a "Select the Client Certificate files" button), "Private Key File" (with a "Select the Private Key files" button), "Private Key Password" (with a password icon), and "CA Certificate" (with a "Select the CA Certificate file" button). A "Validate Server Certificate" toggle switch is also turned on. At the bottom right is an "Apply" button.

Figure 21. Endpoint 802.1X EAP-TLS settings with server-certificate validation enabled.

Options & actions

- 802.1X Authentication:** Enables the endpoint supplicant and activates credential controls.
Available range: Off or On
Default: Off
- Mode:** Selects password-based or certificate-based authentication.
Available range: EAP-MSCHAP V2 or EAP-TLS
Default: EAP-MSCHAP V2
- Username:** Identity presented to the authentication server in either authentication mode.
Available range: Identity accepted by the authentication server
Default: Blank
- Password:** Secret paired with Username for EAP-MSCHAP V2 authentication.
Available range: Credential accepted by the authentication server; EAP-MSCHAP V2 only
Default: Blank
- Client Certificate:** Selects the certificate used to identify the endpoint during EAP-TLS authentication.
Available range: Client certificate file accepted by the endpoint and authentication-server policy; EAP-TLS only
Default: No file selected
- Private Key File:** Selects the private key associated with Client Certificate.
Available range: Private-key file matching the selected client certificate; EAP-TLS only
Default: No file selected
- Private Key Password:** Unlocks the selected private-key file.

Available range: Password for the selected encrypted private key, or blank when the key is not password protected; EAP-TLS only

Default: Blank

- **Validate Server Certificate:** When On, validates the authentication server certificate and exposes CA Certificate.

Available range: Off or On

Default: Off

- **CA Certificate:** Selects the trusted CA used to validate the authentication server certificate.

Available range: CA certificate file trusted by the deployment and accepted by the endpoint

Default: No file selected; hidden while validation is Off

- **Action result:** Apply can immediately change network access; validate switch and authentication-server settings first.

5.3.7 Advanced and Device Configuration

Enables individual over-IP services and imports or exports endpoint configuration.

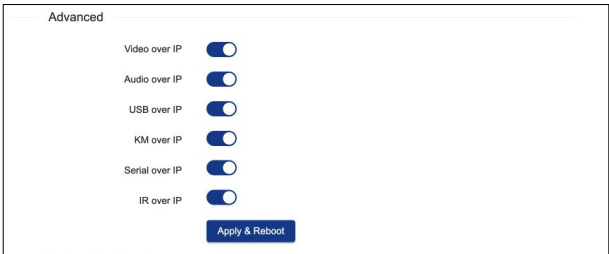


Figure 22. Advanced and Device Configuration in the Web UI (1 of 2).



Figure 23. Advanced and Device Configuration in the Web UI (2 of 2).

Options & actions

- **Video over IP:** Enables video transport.

Available range: Off or On where supported

Default: On on inspected HC/H-TR devices

- **Audio over IP:** Enables audio transport.

Available range: Off or On where supported

Default: On on inspected HC/H-TR devices

- **USB over IP:** Enables USB device/host transport.

Available range: Off or On where supported

Default: On

- **KM over IP:** Enables keyboard/mouse roaming or association transport.

Available range: Off or On where supported

Default: On

- **Serial over IP:** Enables RS-232 transport.

Available range: Off or On where supported

Default: On on inspected HC/H-TR devices

- **IR over IP:** Enables infrared transport.

Available range: Off or On where supported

Default: On on inspected HC/H-TR devices

- **Export Configurations:** Downloads a backup for the selected endpoint.

Available range: Read-only generated configuration file

Default: Current endpoint configuration

- **Import Configurations:** Restores settings from an approved file.

Available range: Compatible configuration file for the exact model and role

Default: No file selected

- **Action result:** Apply & Reboot restarts services. Export downloads the current configuration; Import applies a selected compatible file.

5.4 ENCODER OPTIONS

Tab	Functions
Work Mode	For a transceiver, selects Transmitter or Receiver.
Video	EDID input selection and file, monitor capability, HDCP capability, maximum streaming bit rate, and preview width/height/FPS/bandwidth.
Video Source	USB-C or HDMI input selection, switching mode and priority order, and USB-C charging where supported.
Audio	Analog direction, input mode and gain, output volume/mute, and optional Dante or AES67 Audio Addon settings.
RS-232	Operation mode, ASCII/HEX data mode, proxy TCP port, token timer, baud rate, data bits, parity, and stop bits.
Network	LAN mode, DHCP/static addressing, DNS, optional Dante/AES67 addressing, multicast/unicast casting, address prefix, and TTL.
Service Capability	SSH, Telnet, and HTTPS endpoint services.

Tab	Functions
802.1x	EAP-MSCHAP V2 or EAP-TLS network authentication and optional server-certificate validation.
Commands	Reset EDID, Find Me, Reboot, and Factory Reset.
Advanced	Video, audio, USB, KM, serial, and IR over IP switches; device configuration import/export.

Caution: Network, audio-addon, and Advanced changes can require a reboot. Factory Reset removes endpoint configuration and must not be used as a routine troubleshooting step.

5.4.1 Encoder Video - EDID

Selects which inputs receive the chosen EDID and manages uploaded EDID files.

Figure 24. Encoder Video - EDID in the Web UI.

Options & actions

- USB-C Input:** Targets the USB-C input for the selected EDID.
Available range: Unchecked or checked on HC-T
Default: Unchecked on inspected HC-T
- HDMI Input:** Targets the HDMI input for the selected EDID.
Available range: Unchecked or checked on HC-T; implicit HDMI target on H-TR
Default: Checked on inspected HC-T
- EDID File:** Defines advertised sink capabilities.
Available range: Built-in list or uploaded compatible EDID file
Default: Current device selection; no upload selected
- Monitor Name:** Displays the monitor identity stored in the EDID.
Available range: Read-only EDID value
Default: Current selected EDID value
- Support Features:** Displays supported color, HDR, and related capabilities.
Available range: Read-only EDID capability list

Default: Current selected EDID value

- **Preferred Timing:** Displays the preferred source timing.

Available range: Read-only EDID timing

Default: Current selected EDID value

- **Action result:** Apply writes the selected EDID to the checked inputs. Upload adds a compatible file; Remove deletes a removable uploaded entry.

5.4.2 Encoder Video - HDCP Capability

Advertises the HDCP version supported by each active input.



The screenshot shows a section titled 'HDCP Capability'. Inside, there are two rows. The first row is for 'USB-C IN' with a dropdown menu currently showing 'HDCP 2.3'. The second row is for 'HDMI IN' with a dropdown menu also showing 'HDCP 2.3'.

Figure 25. Encoder Video - HDCP Capability in the Web UI.

Options & actions

- **USB-C IN:** Sets the advertised USB-C input capability.

Available range: HDCP 2.3, HDCP 1.4, or None where USB-C is present

Default: HDCP 2.3

- **HDMI IN:** Sets the advertised HDMI input capability.

Available range: HDCP 2.3, HDCP 1.4, or None

Default: HDCP 2.3

- **Action result:** Changing a selection updates the selected input capability when the setting is applied.

5.4.3 Encoder Video - Streaming

Caps the maximum encoded video bit rate.



The screenshot shows a section titled 'Streaming'. It contains a label 'Maximum Bit Rate (kbps)' followed by a text input field containing the number '811000'. To the right of the input field, the range '100000-811000' is displayed. Below the input field is a blue button labeled 'Apply'.

Figure 26. Encoder Video - Streaming in the Web UI.

Options & actions

- **Maximum Bit Rate:** Use the lowest value that preserves the required picture quality and fits network capacity.

Available range: 100000-811000 kbps

Default: 811000 on HC-T and H-TR

- **Action result:** Apply changes the stream-rate ceiling.

5.4.4 Encoder Video - Preview

Provides a lower-bandwidth monitoring stream for the controller Web UI.

Preview

Enable

☒

Width

80~1280

Height

45~720

FPS

1~60

Bandwidth (kbps)

10~50000

Apply

Figure 27. Encoder Video - Preview in the Web UI.

Options & actions

- Enable:** Turns preview streaming on or off.
Available range: Off or On
Default: On
- Width:** Preview frame width.
Available range: 80-1280 pixels
Default: 960
- Height:** Preview frame height.
Available range: 45-720 pixels
Default: 540
- FPS:** Preview frame rate.
Available range: 1-60 frames per second
Default: 15
- Bandwidth:** Maximum preview-stream bandwidth.
Available range: 10-50000 kbps
Default: 8000
- Action result:** Apply starts, stops, or restarts the preview stream with the selected parameters.

5.4.5 Encoder Video Source - Auto Switch

Selects the active HDMI/USB-C source and controls automatic source switching.

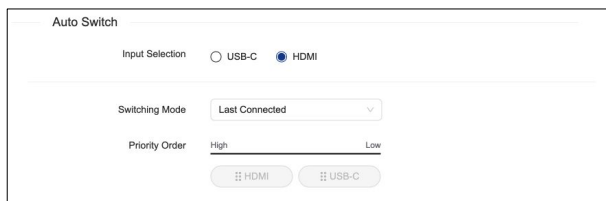


Figure 28. Encoder Video Source - Auto Switch in the Web UI.

Options & actions

- **Input Selection:** Selects the active physical input.
Available range: USB-C or HDMI
Default: HDMI
- **Switching Mode:** Last Connected selects the newest valid source; Priority follows the configured order; Manual retains the selected input.
Available range: Last Connected, Priority, or Manual
Default: Last Connected
- **Priority Order:** Defines fallback order when Switching Mode is Priority.
Available range: HDMI then USB-C, or USB-C then HDMI
Default: HDMI then USB-C
- **Action result:** Source and switching selections take effect according to the chosen switching mode.

5.4.6 Encoder Video Source - USB-C Charging

Enables power delivery from the encoder USB-C port.



Figure 29. Encoder Video Source - USB-C Charging in the Web UI.

Options & actions

- **Enable:** Allows the HC-T USB-C port to charge a connected source device only when the encoder is powered by a 20 V DC supply.
Available range: Off or On
Default: On
- **Action result:** Changing the switch can cause the connected source to renegotiate USB-C power.

5.4.7 Encoder Audio - Analog Audio

Defines whether the analog connector operates as an input or output.



Figure 30. Encoder Audio - Analog Audio in the Web UI.

Options & actions

- **Analog Audio Direction:** Input injects analog audio into the stream; Output extracts selected stream audio.
Available range: Input or Output
Default: Output
- **Action result:** Apply & Reboot changes the physical port direction and related audio controls.

5.4.8 Encoder Audio - Input and Output

Selects the audio input source and adjusts analog input and output levels.



Figure 31. Encoder Audio - Input and Output in the Web UI (1 of 2).

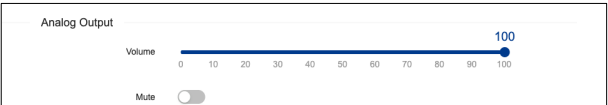


Figure 32. Encoder Audio - Input and Output in the Web UI (2 of 2).

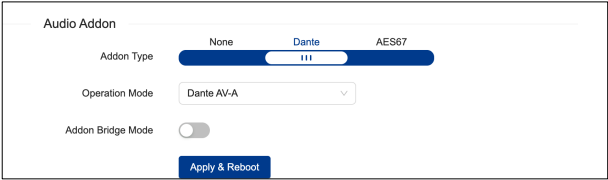
Options & actions

- **Audio Input Mode:** Auto follows the active digital source when valid and falls back according to the device implementation.
Available range: Auto, Digital, or Analog
Default: Auto
- **Analog Input Gain:** Sets analog input gain.
Available range: 0-100
Default: 100

- **Analog Output Volume:** Sets analog output level when the port operates as an output.
Available range: 0-100
Default: 100
- **Analog Output Mute:** Mutes the analog output without changing the configured level.
Available range: Off or On
Default: Off
- **Action result:** Apply & Reboot restarts audio services when required by direction or source changes.

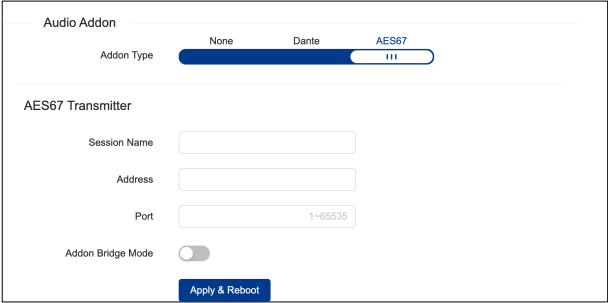
5.4.9 Encoder Audio - Audio Addon

Selects and configures the optional encoder network-audio service independently from the native AV-over-IP audio path.



The screenshot shows the 'Audio Addon' configuration window. At the top, there are three radio buttons for 'Addon Type': 'None', 'Dante' (which is selected and highlighted with a blue bar), and 'AES67'. Below this is a dropdown menu for 'Operation Mode' set to 'Dante AV-A'. Further down is a toggle switch for 'Addon Bridge Mode' which is currently turned off. At the bottom right is a blue button labeled 'Apply & Reboot'.

Figure 33. Encoder Audio Addon controls with Dante selected.



This screenshot shows the 'Audio Addon' configuration window with 'AES67' selected as the 'Addon Type'. The 'AES67 Transmitter' section is expanded, showing input fields for 'Session Name', 'Address', and 'Port' (which has a default value of '1-65535'). The 'Addon Bridge Mode' toggle switch is also present and turned off. The 'Apply & Reboot' button is at the bottom right.

Figure 34. Encoder Audio Addon controls with AES67 selected.

Options & actions

- **Addon Type:** None disables network-audio integration; Dante exposes Dante controls; AES67 exposes transmitter-session controls.
Available range: None, Dante, or AES67
Default: None

- **Operation Mode:** Dante AV-A participates in a Dante AV-A workflow; Audio Only limits the addon to network audio.
Available range: Dante AV-A or Audio Only; shown when Addon Type is Dante
Default: Dante AV-A
- **Session Name:** Identifies the AES67 transmitter session.
Available range: Non-empty AES67 session name accepted by the endpoint; shown when Addon Type is AES67
Default: Blank
- **Address:** Defines the multicast destination advertised for the AES67 stream.
Available range: Valid IPv4 multicast address accepted by the endpoint; shown when Addon Type is AES67
Default: Blank
- **Port:** Defines the UDP destination port used by the AES67 stream.
Available range: 1-65535; shown when Addon Type is AES67
Default: Blank
- **Addon Bridge Mode:** When On, bridges the addon audio path with the encoder's native audio path as supported by the selected addon type.
Available range: Off or On
Default: Off on the inspected encoder
- **Action result:** Apply & Reboot stores the selected addon mode and restarts the endpoint audio services.

5.4.10 Encoder Commands

Runs immediate maintenance and identification actions.



Figure 35. Encoder Commands in the Web UI (1 of 2).



Figure 36. Encoder Commands in the Web UI (2 of 2).

Options & actions

- **Reset EDID:** Restores the endpoint EDID configuration to its device default.

Available range: Immediate action where exposed

Default: Not active

- **Find Me:** Activates the endpoint identification indication.

Available range: Immediate identification action

Default: Not active

- **Reboot:** Restarts the selected endpoint.

Available range: Immediate restart action

Default: Not active

- **Factory Reset:** Erases commissioned endpoint settings and requires recommissioning.

Available range: Destructive immediate action

Default: Not active

- **Action result:** Each button runs immediately; Factory Reset is destructive and Reboot interrupts service.

5.5 DECODER OPTIONS

Tab	Functions
Work Mode	For a transceiver, selects Transmitter or Receiver.
Video	HDCP mode, output resolution, AV Mute, video-loss timer, display power on video loss, stretch, rotate/flip, debug OSD, and preview.
Audio	Audio source, analog output volume/mute, HDMI eARC capability, return source, and optional Dante or AES67 Audio Addon settings.
RS-232	Operation mode, data mode, proxy port, token timer, and serial-port parameters.
IR	IR direction for models that expose an IR tab, including iSwitch-2000H-TR.
Network	LAN mode, DHCP/static addressing, DNS, optional audio-network addressing, and streaming casting parameters.
Idle & Logo Images	Idle JPEG/JPG up to 3 MB and 1920x1080; boot-logo BMP using the on-screen format and size limits.
Service Capability	SSH, Telnet, and HTTPS endpoint services.
802.1x	EAP-MSCHAP V2 or EAP-TLS authentication.
Commands	Find Me, Reboot, and Factory Reset.
Advanced	Per-service AV-over-IP enables and device configuration import/export.

Audio Return: For ARC/eARC operation, enable HDMI eARC Capability where required and select the return source before creating the Audio Return route.

5.5.1 Decoder Video - General

Selects output HDCP behavior and HDMI output timing.



The screenshot shows a web UI panel titled "General". Inside, there are two settings: "HDCP Mode" with a dropdown menu currently showing "Follow Sink", and "Output Resolution" with a dropdown menu currently showing "Pass-Through".

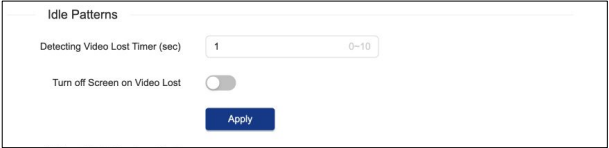
Figure 37. Decoder Video - General in the Web UI.

Options & actions

- **HDCP Mode:** Determines how the decoder advertises or enforces output HDCP capability.
Available range: Follow Sink, Follow Source, HDCP 2.3, or HDCP 1.4
Default: Follow Sink
- **Output Resolution:** AUTO follows display capability, Pass-Through follows source timing, and a fixed selection scales to that timing.
Available range: AUTO, Pass-Through, or a timing exposed by the selected decoder, up to 3840x2160@60 in the reference UI
Default: Pass-Through
- **Action result:** Apply changes the selected output behavior and timing.

5.5.2 Decoder Video - Idle Patterns

Controls how quickly video loss is declared and whether the display output is disabled after loss.



The screenshot shows a web UI panel titled "Idle Patterns". It contains a "Detecting Video Lost Timer (sec)" input field with the value "1" and a range indicator "0-10". Below it is a "Turn off Screen on Video Lost" toggle switch, which is currently turned off. At the bottom is a blue "Apply" button.

Figure 38. Decoder Video - Idle Patterns in the Web UI.

Options & actions

- **Detecting Video Lost Timer:** Delay before the decoder treats the active stream as lost.
Available range: 0-10 seconds
Default: 1 second
- **Turn off Screen on Video Lost:** When On, disables display output after the loss timer expires.
Available range: Off or On

Default: Off

- **Action result:** Apply writes the timer and display-off behavior.

5.5.3 Decoder Video - Video Wall Display Preferences

Controls scaling and orientation inside a video-wall region.



The screenshot shows a web interface titled "Video Wall Display Preferences". It contains two dropdown menus. The first, labeled "Stretch Type", has "Stretch" selected. The second, labeled "Rotate and Flip", has "0°" selected.

Figure 39. Decoder Video - Video Wall Display Preferences in the Web UI.

Options & actions

- **Stretch Type:** Fill crops as required, Stretch fills without preserving aspect ratio, and Fit preserves the complete image.

Available range: Fill, Stretch, or Fit

Default: Stretch

- **Rotate and Flip:** Rotates the rendered output to match display orientation.

Available range: 0, 90, 180, or 270 degrees in the reference UI

Default: 0 degrees

- **Action result:** The selected values affect the decoder's rendered wall output.

5.5.4 Decoder Video - Debug OSD

Displays stream-loss information over the idle state for diagnostics.



The screenshot shows a web interface titled "Debug OSD". It contains a toggle switch labeled "Show Info when Stream Lose", which is currently turned on (blue).

Figure 40. Decoder Video - Debug OSD in the Web UI.

Options & actions

- **Show Info when Stream Lose:** Shows diagnostic information when no valid stream is present.

Available range: Off or On

Default: On

- **Action result:** The switch changes the diagnostic overlay state.

5.5.5 Decoder Video - Preview

Provides a low-bandwidth view of the decoder output in the Web UI.

Preview

Enable ☒

Width 80~1280

Height 45~720

FPS 1~60

Bandwidth (kbps) 10~50000

Figure 41. Decoder Video - Preview in the Web UI.

Options & actions

- **Enable:** Turns decoder preview on or off.
Available range: Off or On
Default: On
- **Width:** Preview frame width.
Available range: 80-1280 pixels
Default: 960
- **Height:** Preview frame height.
Available range: 45-720 pixels
Default: 540
- **FPS:** Preview frame rate.
Available range: 1-60 frames per second
Default: 15
- **Bandwidth:** Maximum preview bandwidth.
Available range: 10-50000 kbps
Default: 8000
- **Action result:** Action starts, stops, or restarts the preview service.

5.5.6 Decoder Audio - Analog Output

Sets decoder analog output level and mute state.

Analog Output

Volume 0 10 20 30 40 50 60 70 80 90 100

Mute ☐

Figure 42. Decoder Audio - Analog Output in the Web UI.

Options & actions

- **Volume:** Sets the analog output level.

Available range: 0-100
Default: 100

- **Mute:** Mutes analog output without changing the stored level.
Available range: Off or On
Default: Off
- **Action result:** Apply & Reboot changes audio routing or add-on configuration when required.

5.5.7 Decoder Audio - Audio Return

Selects the physical return-audio source used by Audio Return Routing.



Figure 43. Decoder Audio - Audio Return in the Web UI.

Options & actions

- **HDMI eARC Capability:** Enable only when the attached display and endpoint both support ARC/eARC.
Available range: Off or On
Default: On
- **Source Select:** Selects the physical return-audio input.
Available range: HDMI or TOSLINK
Default: TOSLINK
- **Action result:** Apply & Reboot stores the return source and eARC capability.

5.5.8 Decoder Audio - Audio Addon

Selects and configures the optional decoder network-audio service independently from the native AV-over-IP audio path.

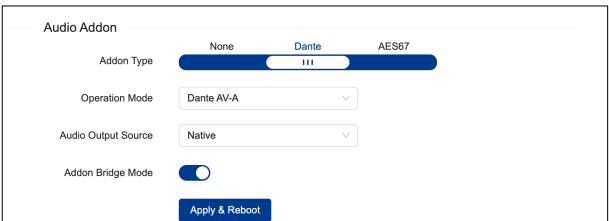


Figure 44. Decoder Audio Addon controls with Dante selected.

The screenshot shows the 'Audio Addon' configuration window. At the top, 'Add-on Type' is set to 'AES67' via a radio button selection (None, Dante, AES67). Below this, the 'AES67 Transmitter' section contains several fields: 'Session Name' (empty text box), 'Address' (empty text box), 'Port' (text box with '1-65535' as a hint), 'Audio Output Source' (dropdown menu set to 'Native'), and 'Add-on Bridge Mode' (toggle switch turned on). An 'Apply & Reboot' button is at the bottom right.

Figure 45. Decoder Audio Addon controls with AES67 selected.

Options & actions

- **Addon Type:** None disables network-audio integration; Dante exposes Dante controls; AES67 exposes transmitter-session controls.

Available range: None, Dante, or AES67

Default: None

- **Operation Mode:** Dante AV-A participates in a Dante AV-A workflow; Audio Only limits the addon to network audio.

Available range: Dante AV-A or Audio Only; shown when Addon Type is Dante

Default: Dante AV-A

- **Session Name:** Identifies the AES67 transmitter session.

Available range: Non-empty AES67 session name accepted by the endpoint; shown when Addon Type is AES67

Default: Blank

- **Address:** Defines the multicast destination advertised for the AES67 stream.

Available range: Valid IPv4 multicast address accepted by the endpoint; shown when Addon Type is AES67

Default: Blank

- **Port:** Defines the UDP destination port used by the AES67 stream.

Available range: 1-65535; shown when Addon Type is AES67

Default: Blank

- **Audio Output Source:** Selects the audio path sent to the decoder's physical audio output.

Available range: Native or another source exposed by the decoder

Default: Native

- **Addon Bridge Mode:** When On, bridges the addon audio path with the decoder's native audio path as supported by the selected addon type.

Available range: Off or On

Default: On the inspected decoder

- **Action result:** Apply & Reboot stores the selected addon mode and restarts the endpoint audio services.

5.5.9 Decoder Idle Pattern Image

Uploads the image shown when no active video stream is available.

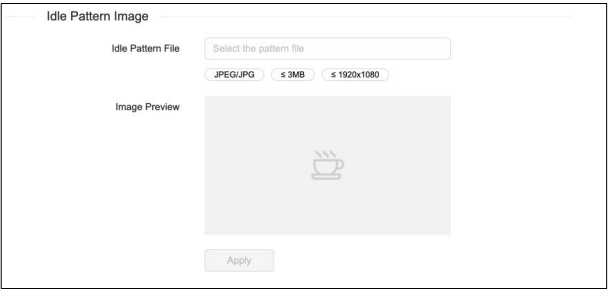


Figure 46. Decoder Idle Pattern Image in the Web UI.

Options & actions

- **Idle Pattern File:** Selects a compatible idle image.
Available range: JPEG or JPG, maximum 3 MB, maximum 1920x1080
Default: No file selected; current stored image remains active
- **Image Preview:** Confirms the selected image before upload.
Available range: Read-only selected-image preview
Default: Empty until a file is selected
- **Action result:** Apply becomes available after a valid file is selected and uploads the image.

5.5.10 Decoder Boot Logo Image

Uploads the logo shown while the decoder starts.

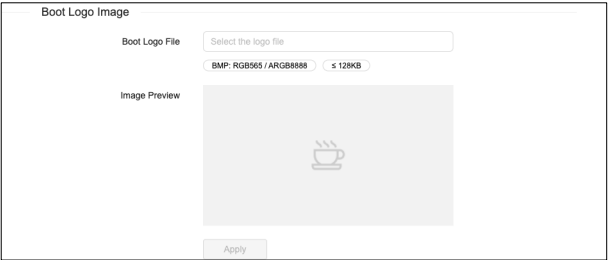


Figure 47. Decoder Boot Logo Image in the Web UI.

Options & actions

- **Boot Logo File:** Selects a compatible boot image.
Available range: BMP using RGB565 or ARGB8888, maximum 128 KB
Default: No file selected; current stored logo remains active
- **Image Preview:** Confirms the selected image before upload.
Available range: Read-only selected-image preview
Default: Empty until a file is selected
- **Action result:** Apply becomes available after a valid file is selected and uploads the image.

5.5.11 Decoder Commands

Runs immediate output, diagnostic, identification, and maintenance actions.



Figure 48. Decoder Commands in the Web UI.

Options & actions

- **Show OSD:** Displays the decoder identification OSD.
Available range: Immediate action
Default: Not active
- **Hide OSD:** Removes the decoder identification OSD.
Available range: Immediate action
Default: Not active
- **Export EDID:** Downloads EDID information read from the attached display.
Available range: Immediate download action
Default: Not active
- **CEC Get Values:** Reads supported or current CEC-related values from the sink path.
Available range: Immediate diagnostic action
Default: Not active

- **Find Me:** Activates the endpoint identification indication.
Available range: Immediate identification action
Default: Not active
- **Reboot:** Restarts the selected endpoint.
Available range: Immediate restart action
Default: Not active
- **Factory Reset:** Erases commissioned settings and requires recommissioning.
Available range: Destructive immediate action
Default: Not active
- **Action result:** Each button acts immediately; Factory Reset is destructive and Reboot interrupts service.

5.6 TRANSCEIVER-SPECIFIC OPTIONS

These functions describe controls that are specific to the HDMI transceiver or the USB/KM transceiver and do not appear on every fixed encoder or decoder.

5.6.1 iSwitch-2000H-TR IR

Sets the physical infrared port direction for the selected transceiver role.



The image shows a web interface for the iSwitch-2000H-TR IR. It features a 'General' tab at the top. Below the tab, there is a label 'IR Direction' followed by a dropdown menu. The dropdown menu is currently set to 'Input'.

Figure 49. iSwitch-2000H-TR IR in the Web UI.

Options & actions

- **IR Direction:** Input receives infrared commands into the IP stream; Output emits commands received from the network.
Available range: Input or Output
Default: Input in Receiver mode; Output in Transmitter mode
- **Action result:** The selected direction is stored for the endpoint.

5.6.2 iSwitch-2000U-TR Network Differences

Documents the reduced network settings used by the USB/KM transceiver.

General

IP Mode ☒ DHCP ☐ Static

IP Address

Subnet Mask

Gateway

Primary DNS

Secondary DNS

Figure 50. iSwitch-2000U-TR Network Differences in the Web UI (1 of 2).

Streaming

Casting Mode ☐ Multicast ☒ Unicast

Multicast Address Prefix

Figure 51. iSwitch-2000U-TR Network Differences in the Web UI (2 of 2).

Options & actions

- **LAN Mode:** U-TR presents only the General and Streaming areas.
Available range: Not exposed on the inspected U-TR
Default: Not applicable
- **IP Mode:** Selects automatic or manual addressing.
Available range: DHCP or Static
Default: DHCP
- **Casting Mode:** Selects multicast or point-to-point transport.
Available range: Multicast or Unicast
Default: Unicast on the inspected U-TR
- **Multicast Address Prefix:** Sets the multicast address first octet.
Available range: 224-239 when Multicast is selected
Default: Inactive in Unicast mode
- **Action result:** Apply & Reboot writes the IP and casting configuration.

5.6.3 iSwitch-2000U-TR Advanced

Enables U-TR USB and keyboard/mouse transport and manages configuration files.

Advanced

USB over IP ☒

KM over IP ☒

Figure 52. iSwitch-2000U-TR Advanced in the Web UI (1 of 2).



Figure 53. iSwitch-2000U-TR Advanced in the Web UI (2 of 2).

Options & actions

- **USB over IP:** Enables USB transport.
Available range: Off or On
Default: On
- **KM over IP:** Enables keyboard/mouse transport.
Available range: Off or On
Default: On
- **Export Configurations:** Downloads a backup.
Available range: Generated device configuration file
Default: Current configuration
- **Import Configurations:** Restores an approved configuration.
Available range: Compatible U-TR configuration file
Default: No file selected
- **Action result:** Apply & Reboot restarts the selected services. Import and Export operate on the device configuration.

6. BATCH CONFIGURATION

Batch Configuration applies one compatible setting set to multiple endpoints. Select only devices of the intended role and model family. Fields remain disabled until at least one compatible target is selected.

6.1 SELECTING BATCH TARGETS

1. Open Device > Batch Configuration.
2. Select Decoders or Encoders and optionally filter by model.
3. Select the required endpoints. The Checked devices count updates.
4. Open the required configuration tab, enter only the settings intended for every selected target, and review reboot impact before applying.

6.1.1 Target Selection

Defines the endpoint role, model filter, and exact devices affected by the active batch function.

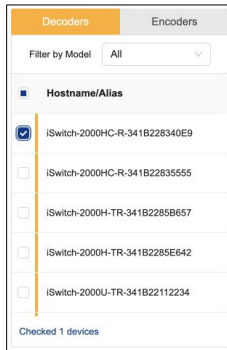


Figure 54. Target Selection in the Web UI.

Options & actions

- **Role:** Switches the target list and exposes role-compatible functions.
Available range: Decoders or Encoders
- **Filter by Model:** Narrows the endpoint list without selecting devices.
Available range: All or one discovered model
- **Device selection:** Only checked endpoints receive the batch operation.
Available range: One or more compatible endpoints
- **Action result:** Selection alone makes no device change. The active configuration function determines the action.

6.2 BATCH - IP ADDRESS

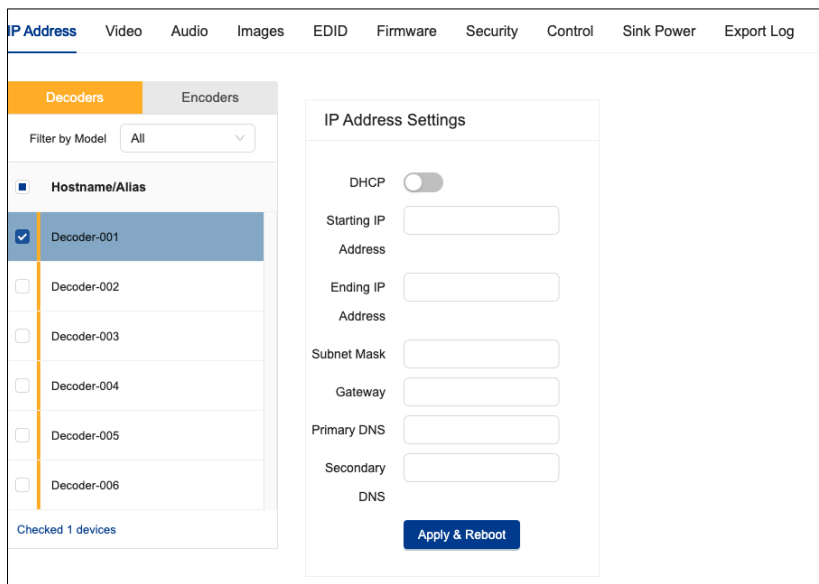


Figure 55. Batch IP Address page.

Field	Description
DHCP	Enables automatic addressing for selected devices.
Starting / Ending IP Address	Defines the static allocation range. Provide at least as many unique addresses as selected devices.
Subnet Mask / Gateway	Defines the target network.
Primary / Secondary DNS	Defines resolver addresses where required.
Apply & Reboot	Writes the addresses and restarts the selected devices.

Caution: The controller does not guarantee that an entered range is unused. Duplicate or out-of-subnet addresses can make endpoints unreachable. Record the new range before selecting Apply & Reboot.

6.2.1 IP Address Settings

Assigns DHCP or a sequential static IPv4 range to selected endpoints.

Figure 56. IP Address Settings in the Web UI.

Options & actions

- **DHCP:** When enabled, endpoints obtain addresses from DHCP and static range fields are not used.
Available range: Off or On
- **Starting IP Address:** First address in the sequential allocation range.
Available range: Valid IPv4 unicast address
- **Ending IP Address:** Last permitted address in the range.
Available range: Valid IPv4 address in the same subnet; not lower than the starting address
- **Subnet Mask:** Must match the target AV network.
Available range: Valid contiguous IPv4 subnet mask
- **Gateway:** Router used for off-subnet traffic.
Available range: Valid IPv4 address in the endpoint subnet or blank
- **Primary DNS:** Preferred resolver.
Available range: Valid IPv4 DNS server address or blank
- **Secondary DNS:** Fallback resolver.
Available range: Valid IPv4 DNS server address or blank
- **Action result:** Apply & Reboot writes the network configuration and restarts every selected endpoint.

Note: Provide at least as many unique addresses as selected devices. Record the new range before applying because connectivity is interrupted during reboot.

6.3 BATCH - VIDEO

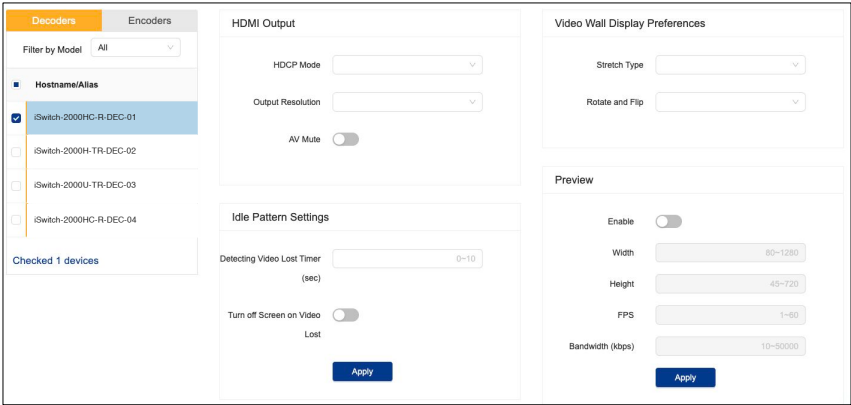


Figure 57. Batch Video page for decoders.

Decoder batch settings include HDCP mode, output resolution, AV Mute, video-loss behavior, video-wall stretch and rotation preferences, and preview parameters. Encoder batch video settings include HDCP input capability, preview, USB-C charging where supported, and maximum streaming bit rate.

6.3.1 HDMI Output

Controls decoder HDCP behavior and output timing.

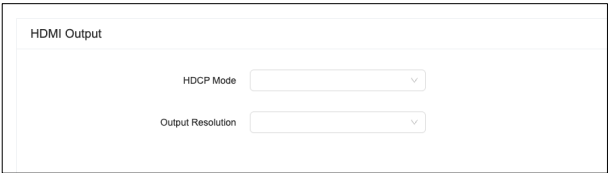


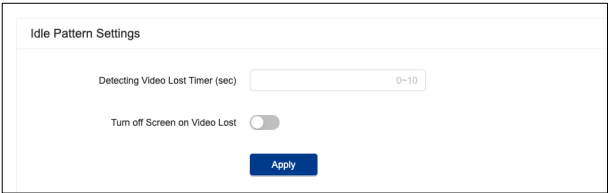
Figure 58. HDMI Output in the Web UI.

Options & actions

- HDCP Mode:** Selects the output HDCP policy. Use Auto or the display-compatible mode when available.
Available range: Values exposed by the selected model and firmware
- Output Resolution:** Sets the HDMI output timing. Choose a timing supported by every attached display.
Available range: Timings exposed by the selected decoder
- Action result:** Values are applied to the selected decoders; blank values leave the corresponding property unchanged.

6.3.2 Idle Pattern Settings

Controls the response when the active video stream is lost.



Idle Pattern Settings

Detecting Video Lost Timer (sec)

Turn off Screen on Video Lost ☐

Apply

Figure 59. Idle Pattern Settings in the Web UI.

Options & actions

- **Detecting Video Lost Timer:** Delay before the decoder treats the input stream as lost.
Available range: 0-10 seconds
- **Turn off Screen on Video Lost:** When enabled, disables the display output after the loss timer expires.
Available range: Off or On
- **Action result:** Apply writes the timer and screen-off behavior without changing unrelated video settings.

6.3.3 Video Wall Display Preferences

Defines how a decoder scales and orients content inside a video-wall region.



Video Wall Display Preferences

Stretch Type

Rotate and Flip

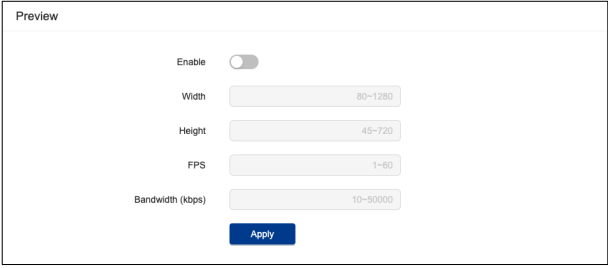
Figure 60. Video Wall Display Preferences in the Web UI.

Options & actions

- **Stretch Type:** Controls aspect-ratio preservation and canvas filling.
Available range: Fit, Fill, or Stretch
- **Rotate and Flip:** Rotates or mirrors the rendered image for the physical display orientation.
Available range: Orientation values exposed by the selected model
- **Action result:** Selections are applied to the chosen decoders; blank selections mean no change.

6.3.4 Preview

Enables a low-bandwidth preview stream used by the Web UI.



Preview

Enable ☐

Width

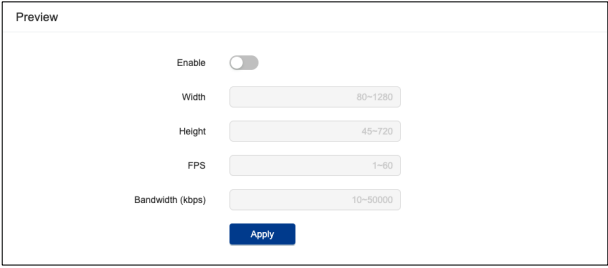
Height

FPS

Bandwidth (kbps)

Apply

Figure 61. Batch Preview controls for decoders.



Preview

Enable ☐

Width

Height

FPS

Bandwidth (kbps)

Apply

Figure 62. Batch Preview controls for encoders.

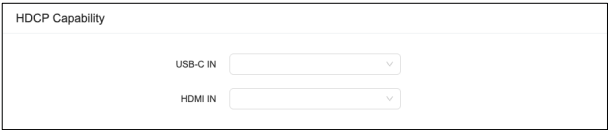
Options & actions

- **Enable:** Turns preview streaming on or off.
Available range: Off or On
- **Width:** Preview frame width.
Available range: 80-1280 pixels
- **Height:** Preview frame height.
Available range: 45-720 pixels
- **FPS:** Preview frame rate.
Available range: 1-60 frames per second
- **Bandwidth:** Maximum preview stream bandwidth.
Available range: 10-50000 kbps
- **Action result:** Apply restarts the preview service when necessary. Parameters are inactive while Enable is Off.

Note: Use the lowest resolution, frame rate, and bandwidth that still supports monitoring needs.

6.3.5 HDCP Capability

Advertises HDCP capability independently on available USB-C and HDMI inputs.



The screenshot shows a web interface titled "HDCP Capability". Below the title, there are two dropdown menus. The first is labeled "USB-C IN" and the second is labeled "HDMI IN". Both dropdown menus have a small downward arrow icon on the right side, indicating they are currently set to a default or selected value.

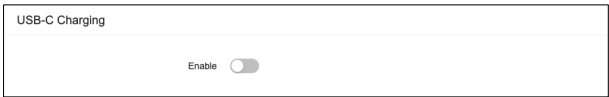
Figure 63. HDCP Capability in the Web UI.

Options & actions

- **USB-C IN:** Sets the HDCP capability advertised by the USB-C input when the model provides it.
Available range: HDCP 2.3, HDCP 1.4, or None
- **HDMI IN:** Sets the HDCP capability advertised by the HDMI input.
Available range: HDCP 2.3, HDCP 1.4, or None
- **Action result:** Changing a selection updates the advertised capability for that input on every compatible target.

6.3.6 USB-C Charging

Enables or disables power delivery from the encoder USB-C port.



The screenshot shows a web interface titled "USB-C Charging". Below the title, there is a toggle switch labeled "Enable". The toggle switch is currently in the "Off" position, indicated by a small circle on the left.

Figure 64. USB-C Charging in the Web UI.

Options & actions

- **Enable:** Allows charging only on models that support USB-C power delivery.
Available range: Off or On
- **Action result:** The selected endpoint may renegotiate USB-C power after the change.

6.3.7 Streaming

Caps the maximum encoded video bit rate.

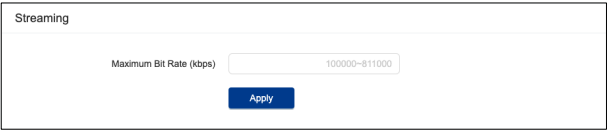
A screenshot of a web UI for streaming configuration. It features a title "Streaming" at the top. Below it, the text "Maximum Bit Rate (kbps)" is followed by a text input field containing "100000-811000". At the bottom center is a blue button labeled "Apply".

Figure 65. Streaming in the Web UI.

Options & actions

- **Maximum Bit Rate:** Upper stream bit-rate limit. Use the lowest value that preserves required image quality and fits network capacity.
Available range: 100000-811000 kbps
- **Action result:** Apply changes the stream rate limit for selected endpoints.

6.4 BATCH - AUDIO

A screenshot of a web UI for batch audio configuration, divided into two panels. The left panel, titled "Audio Return", contains a "Source Select" dropdown menu with "TOSLINK" selected and an "HDMI eARC Capability" toggle switch. The right panel, titled "Audio Addon", contains an "Addon Type" section with a horizontal bar showing "None" (100%), "Dolby", and "AES67". Below this is an "Apply & Reboot" button.

Figure 66. Batch Audio page.

Available audio fields depend on the selected role. Decoder targets can expose audio-return source, eARC capability, and audio-addon type. Encoder targets can expose analog direction, input mode and gain, output volume/mute, and audio-addon type. Apply & Reboot restarts targets when required by the selected audio function.

6.4.1 Audio Return

Selects the return-audio source and HDMI eARC capability.

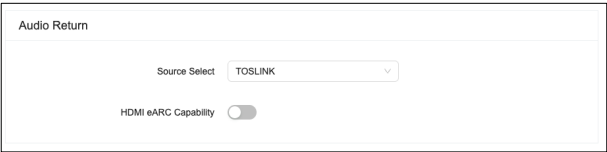
A screenshot of a web UI for audio return configuration. It features a title "Audio Return". Below it, the text "Source Select" is followed by a dropdown menu with "TOSLINK" selected. At the bottom is an "HDMI eARC Capability" toggle switch.

Figure 67. Audio Return in the Web UI.

Options & actions

- **Source Select:** Defines the physical or logical return-audio source.
Available range: TOSLINK or HDMI

- **HDMI eARC Capability:** Enables eARC only when the connected display and endpoint both support it.
Available range: Off or On
- **Action result:** The configured source is used by Audio Return Routing.

6.4.2 Audio Input

Selects the audio input mode used by the encoder.



Figure 68. Audio Input in the Web UI.

Options & actions

- **Audio Input Mode:** Selects embedded or external audio according to the endpoint hardware.
Available range: Auto, Digital, or Analog when exposed by the selected model
- **Action result:** The selected mode is applied to all compatible targets.

6.4.3 Analog Audio

Defines the direction of the bidirectional analog audio port.



Figure 69. Analog Audio in the Web UI.

Options & actions

- **Analog Audio Direction:** Configures the analog connector as a source or a sink.
Available range: Input or Output when exposed by the model
- **Action result:** Changing direction can interrupt the current analog audio path.

6.4.4 Audio Addon

Selects and configures the optional Dante or AES67 network-audio integration.

Figure 70. Batch Audio Addon controls with None selected.

Figure 71. Batch Audio Addon controls with Dante selected.

Figure 72. Batch Audio Addon controls with AES67 selected.

Options & actions

- **Addon Type:** Selects the licensed audio service. None disables network-audio integration.
Available range: None, Dante, or AES67
- **Operation Mode:** Dante AV-A carries synchronized AV-A audio; Audio Only exposes the add-on as an audio-only Dante endpoint.
Available range: Dante AV-A or Audio Only when exposed by the selected model
- **Addon Bridge Mode:** Bridges compatible audio between the iSwitch stream and the selected Dante or AES67 network-audio service.
Available range: Off or On
- **Action result:** Apply & Reboot restarts the endpoint to load the selected audio service.

6.5 BATCH - IMAGES

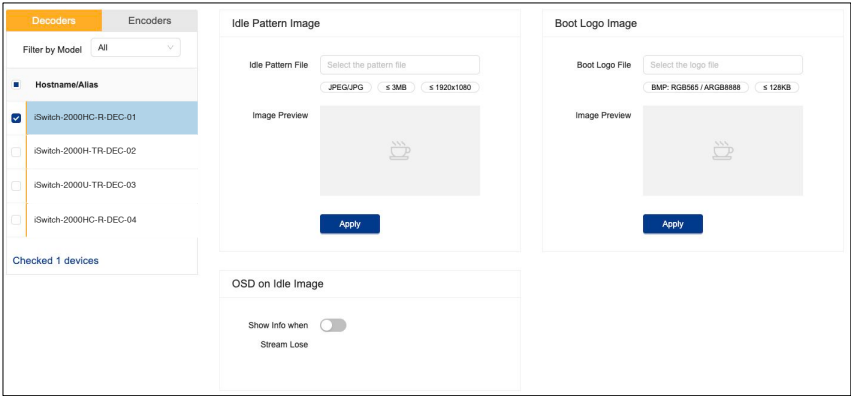


Figure 73. Batch Images page.

Image	Requirement and use
Idle Pattern	JPEG/JPG, up to 3 MB and 1920x1080; displayed when no valid stream is present.
OSD on Idle	Show Info when Stream Lose displays status information over the idle state.
Boot Logo	BMP using RGB565 or ARGB8888 and the on-screen 128 KB size limit.

6.5.1 Idle Pattern Image

Uploads the image displayed when no active video stream is available.

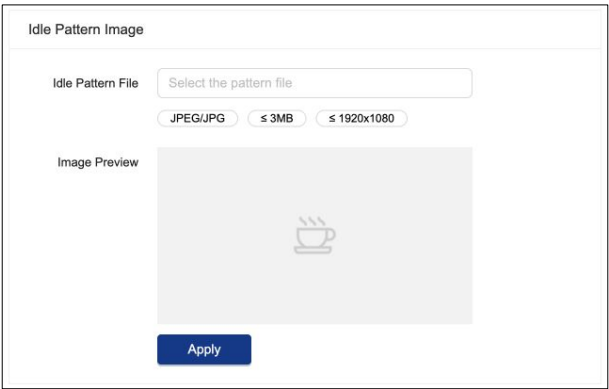


Figure 74. Idle Pattern Image in the Web UI.

Options & actions

- **Idle Pattern File:** Use a correctly sized image to avoid scaling artifacts.
Available range: JPEG or JPG, maximum 3 MB, maximum 1920x1080
- **Image Preview:** Shows the selected file before applying it.
Available range: Read-only preview
- **Action result:** Apply validates and transfers the selected file.

6.5.2 OSD on Idle Image

Controls whether stream-loss information is overlaid on the idle image.



Figure 75. OSD on Idle Image in the Web UI.

Options & actions

- **Show Info when Stream Lose:** When enabled, displays stream-loss information over the idle image.
Available range: Off or On
- **Action result:** The toggle changes the idle-screen overlay behavior.

6.5.3 Boot Logo Image

Uploads the logo shown while the endpoint starts.

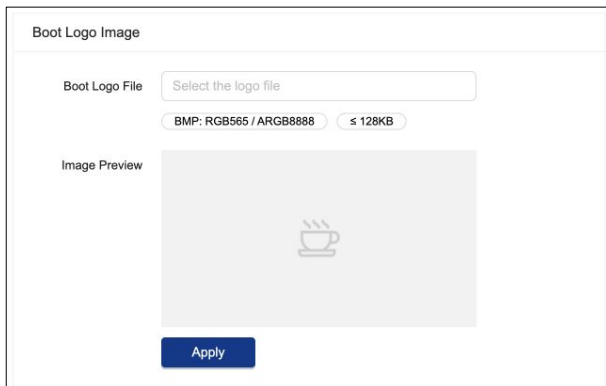


Figure 76. Boot Logo Image in the Web UI.

Options & actions

- **Boot Logo File:** Use a compact image that matches the endpoint boot-logo requirements.
Available range: BMP using RGB565 or ARGB8888, maximum 128 KB
- **Image Preview:** Shows the selected file before applying it.
Available range: Read-only preview
- **Action result:** Apply validates and stores the selected image.

6.6 BATCH - EDID

The screenshot shows the 'Batch EDID' page for encoder targets. On the left, there's a sidebar with 'Decoders' and 'Encoders' tabs. Under 'Encoders', there's a 'Filter by Model' dropdown set to 'All'. Below that, a list of devices is shown: 'iSwitch-2000U-TR-ENC-01' (checked) and 'iSwitch-2000HC-T-ENC-02' (unchecked). A 'Checked 1 devices' section is at the bottom of the sidebar. The main area is titled 'EDID'. It has two input selection boxes: 'USB-C Input' (unchecked) and 'HDMI Input' (checked). Below these is an 'EDID File' dropdown menu, followed by 'Upload' and 'Remove' buttons. An 'Apply' button is at the bottom. A summary section shows 'Monitor Name : N/A', 'Support Features : N/A', and 'Preferred Timing : N/A'.

Figure 77. Batch EDID page for encoder targets.

EDID is applicable to encoder inputs. Select USB-C Input and/or HDMI Input, choose an existing EDID or upload an approved EDID file, review the monitor capability summary, and select Apply. Remove becomes available only for removable uploaded entries.

6.6.1 EDID

Assigns a built-in or uploaded EDID to one or more physical inputs.

The screenshot shows the 'EDID' page in the web UI. It has two input selection boxes: 'USB-C Input' (unchecked) and 'HDMI Input' (checked). Below these is an 'EDID File' dropdown menu, followed by 'Upload' and 'Remove' buttons. An 'Apply' button is at the bottom. A summary section shows 'Monitor Name : N/A', 'Support Features : N/A', and 'Preferred Timing : N/A'.

Figure 78. EDID in the Web UI.

Options & actions

- **USB-C Input:** Targets the USB-C input when present.
Available range: Unselected or selected

- **HDMI Input:** Targets the HDMI input.
Available range: Unselected or selected
- **EDID File:** Choose a timing, color, HDR, and audio capability supported by the complete signal chain.
Available range: Built-in EDID list or an uploaded valid EDID binary
- **Monitor Name / Support Features / Preferred Timing:** Verifies the principal capabilities of the selected EDID.
Available range: Read-only EDID summary
- **Action result:** Apply changes input capability advertisement and can trigger a source re-handshake.

6.7 BATCH - FIRMWARE

Video Settings for Decoder

Upload the Firmware File:

Filter by version:

Hostname/Alias	Model	Current Version	Upgrade Version	Status	Progress
Decoder-001	iSwitch-2000HC-R	v1.0.1			

Figure 79. Batch Firmware page.

1. Select endpoints of the exact model for the firmware package.
2. Select Choose File and choose the approved firmware file.
3. Select Upload to iSwitch-2000 CTL.
4. Verify Model, Current Version, and Upgrade Version for every row.
5. Select Upgrade and monitor Status and Progress until every endpoint returns online.

Warning: Do not close the maintenance session, remove power, disconnect the network, or upgrade an incompatible model while progress is active.

6.7.1 Firmware Update

Uploads a firmware package to the controller and upgrades selected endpoints.

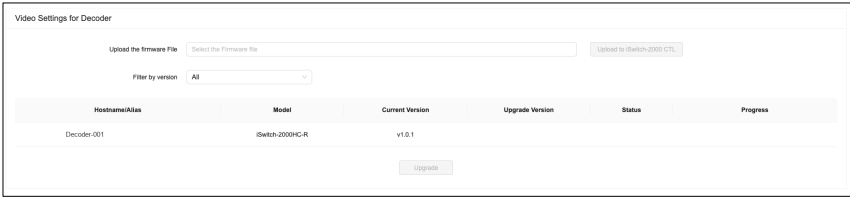


Figure 80. Firmware Update in the Web UI.

Options & actions

- **Firmware File:** Do not mix packages between models or roles.
Available range: Approved firmware package for the exact endpoint model
- **Filter by Version:** Narrows the displayed target rows.
Available range: All or one discovered current version
- **Upgrade Version:** Must be verified before selecting Upgrade.
Available range: Read-only package version
- **Status / Progress:** Monitor until every endpoint returns online.
Available range: Read-only update state
- **Action result:** Upload stores the package; Upgrade starts the endpoint update and reboot sequence.

Note: Maintain uninterrupted power and network connectivity throughout the update.

6.8 BATCH - SECURITY



Figure 81. Batch Security page.

Security provides batch control of Telnet, SSH, HTTPS, and 802.1X. Enabling 802.1X exposes EAP-MSCHAP V2 or EAP-TLS fields. Validate credentials, certificates, switch configuration, and fallback access before applying authentication to multiple endpoints.

6.8.1 API

Enables or disables Telnet and SSH management services.

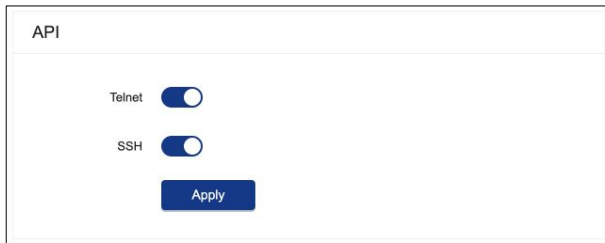


Figure 82. API in the Web UI.

Options & actions

- **Telnet:** Plain-text management service. Disable when not operationally required.
Available range: Off or On
- **SSH:** Encrypted command-line management service.
Available range: Off or On
- **Action result:** Apply changes the selected services on all targets.

6.8.2 HTTPS

Controls encrypted Web access on selected endpoints.

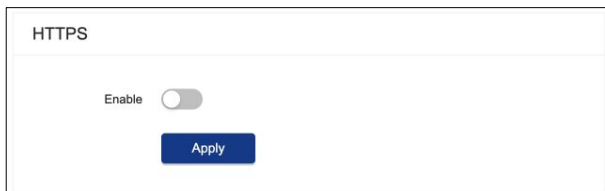


Figure 83. HTTPS in the Web UI.

Options & actions

- **Enable:** Enable where certificates and management policy support HTTPS.
Available range: Off or On
- **Action result:** Apply changes the HTTPS service state.

6.8.3 802.1X

Configures port-based network authentication.

802.1X

802.1X Authentication ☒

Mode ☒ EAP-MSCHAP V2 ☐ EAP-TLS

Username

Password

Validate Server Certificate ☒

CA Certificate

Figure 84. Batch 802.1X EAP-MSCHAP V2 settings with server-certificate validation enabled.

802.1X

802.1X Authentication ☒

Mode ☐ EAP-MSCHAP V2 ☒ EAP-TLS

Username

Client Certificate

Private Key File

Private Key Password

Validate Server Certificate ☒

CA Certificate

Figure 85. Batch 802.1X EAP-TLS settings with server-certificate validation enabled.

Options & actions

- 802.1X Authentication:** Enables supplicant authentication.
Available range: Off or On
- Mode:** Selects credential-based or certificate-based authentication.
Available range: EAP-MSCHAP V2 or EAP-TLS
- Username:** Identity presented to the authentication server in either authentication mode.
Available range: Identity accepted by the authentication server

- Password:** Secret paired with Username for EAP-MSCHAP V2 authentication.
Available range: Credential accepted by the authentication server; EAP-MSCHAP V2 only
- Client Certificate:** Selects the certificate used to identify each selected endpoint during EAP-TLS authentication.
Available range: Client certificate file accepted by the endpoint and authentication-server policy; EAP-TLS only
- Private Key File:** Selects the private key associated with Client Certificate.
Available range: Private-key file matching the selected client certificate; EAP-TLS only
- Private Key Password:** Unlocks the selected private-key file.
Available range: Password for the selected encrypted private key, or blank when the key is not password protected; EAP-TLS only
- Validate Server Certificate:** Enables authentication-server certificate validation and exposes the CA Certificate field.
Available range: Off or On
- CA Certificate:** Uploads the trusted certificate authority used to validate the authentication server.
Available range: CA certificate file trusted by the deployment and accepted by the endpoint
- Action result:** Apply can immediately affect network reachability. Validate switch and fallback access first.

6.9 BATCH - CONTROL

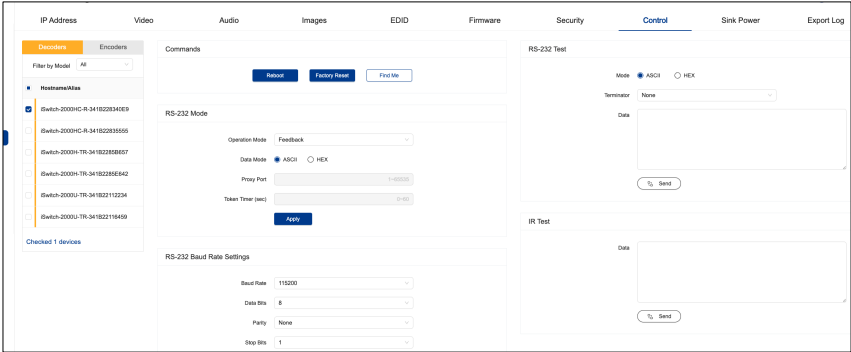


Figure 86. Batch Control page.

Area	Purpose
Commands	Reboot, Factory Reset, and Find Me for selected endpoints.
RS-232 Mode	Operation mode, ASCII/HEX data mode, proxy port, and token timer.

Area	Purpose
RS-232 Baud Rate	Baud rate, data bits, parity, and stop bits.
RS-232 Test	Sends an ASCII or HEX test command with the selected terminator.
IR Test	Sends an IR test data string where the selected devices support IR.

6.9.1 Commands

Runs immediate maintenance and identification commands.



Figure 87. Commands in the Web UI.

Options & actions

- **Reboot:** Restarts selected endpoints.
Available range: Immediate action
- **Factory Reset:** Erases endpoint configuration and returns factory settings.
Available range: Destructive immediate action
- **Find Me:** Activates the endpoint identification indication.
Available range: Immediate identification action
- **Action result:** Each button acts immediately after any confirmation shown by the UI.

6.9.2 RS-232 Mode

Defines serial-port operation and feedback transport.

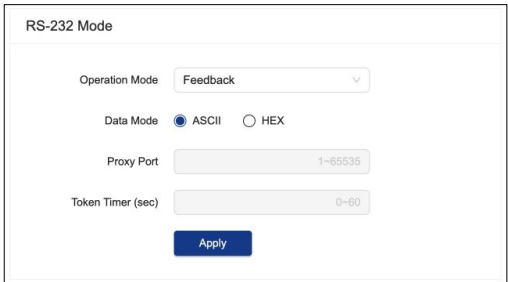


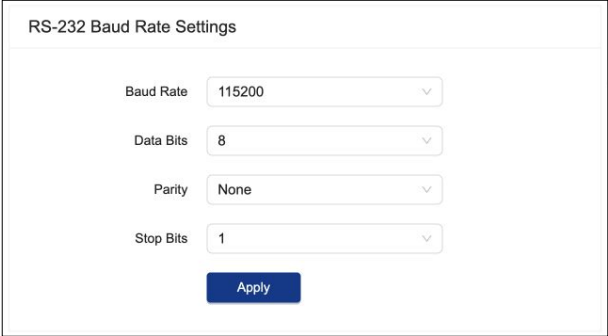
Figure 88. RS-232 Mode in the Web UI.

Options & actions

- **Operation Mode:** Selects how serial commands and feedback are transported.
Available range: Feedback, Passthrough, or Proxy
- **Data Mode:** Controls how serial payload text is interpreted.
Available range: ASCII or HEX
- **Proxy Port:** TCP proxy port used when required by the selected operation mode.
Available range: 1-65535
- **Token Timer:** Controls serial-session token retention.
Available range: 0-60 seconds
- **Action result:** Apply restarts or reinitializes the serial service when required.

6.9.3 RS-232 Baud Rate Settings

Matches the endpoint serial framing to the controlled device.



RS-232 Baud Rate Settings

Baud Rate: 115200

Data Bits: 8

Parity: None

Stop Bits: 1

Apply

Figure 89. RS-232 Baud Rate Settings in the Web UI.

Options & actions

- **Baud Rate:** Must exactly match the controlled device.
Available range: 2400, 4800, 9600, 19200, 38400, 57600, or 115200 baud
- **Data Bits:** Number of data bits per character.
Available range: 6, 7, or 8 bits
- **Parity:** Serial parity mode.
Available range: None, Odd, or Even
- **Stop Bits:** Number of stop bits per character.
Available range: 1 or 2 bits
- **Action result:** Apply writes the complete serial framing configuration.

6.9.4 RS-232 Test

Sends a one-time serial test payload without saving it as a power command.

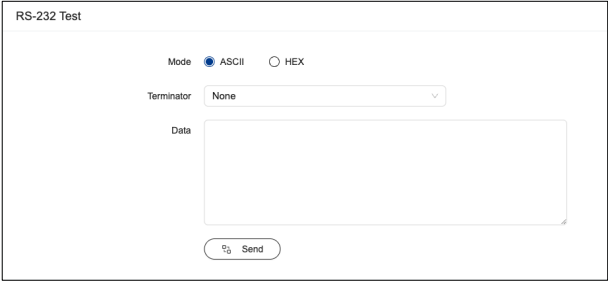


Figure 90. RS-232 Test in the Web UI.

Options & actions

- **Mode:** Defines payload encoding.
Available range: ASCII or HEX
- **Terminator:** Appends the selected line ending.
Available range: None, CR, LF, or CRLF
- **Data:** Command sent to the connected serial device.
Available range: Valid serial payload for the selected mode
- **Action result:** Send transmits the entered payload immediately.

6.9.5 IR Test

Sends a one-time IR test payload.



Figure 91. IR Test in the Web UI.

Options & actions

- **Data:** IR command sent through the endpoint IR output.
Available range: Valid IR code format accepted by the endpoint
- **Action result:** Send transmits the payload immediately.

6.10 BATCH - SINK POWER

DecodersEncoders

Filter by ModelAll

Hostname/Alias

☒iSwitch-2000HC-R-DEC-01

☐iSwitch-2000H-TR-DEC-02

☐iSwitch-2000U-TR-DEC-03

☐iSwitch-2000HC-R-DEC-04

Checked 1 devices

CEC

Enable☐

One Touch Play Command

% Send

Standby Command

% Send

Apply

RS-232

Enable☐

Mode☒ ASCII☐ HEX

Power On Command

% Send

Power Off Command

% Send

Apply

Figure 92. Batch Sink Power page.

Sink Power stores display power-on and power-off commands using CEC, RS-232, or IR. Enable only the required control method, enter the commands in the correct device-specific format, use Send to test them on a maintenance display, then select Apply.

6.10.1 CEC

Stores and tests display power commands using HDMI CEC.

CEC

Enable☐

One Touch Play Command

% Send

Standby Command

% Send

Apply

Figure 93. CEC in the Web UI.

Options & actions

- Enable:** Enables CEC sink-power control.
Available range: Off or On
- One Touch Play Command:** Power-on or active-source command entered as space-separated hexadecimal bytes.
Available range: Two-digit hexadecimal bytes separated by spaces

- **Standby Command:** Display standby command entered as space-separated hexadecimal bytes.
Available range: Two-digit hexadecimal bytes separated by spaces
- **Action result:** Send tests one command; Apply stores the enabled state and command values.

6.10.2 RS-232 Sink Power

Stores and tests serial power-on and power-off commands.

The screenshot shows a web UI for RS-232 Sink Power configuration. At the top, the title 'RS-232' is displayed. Below it, there is an 'Enable' toggle switch. Underneath, the 'Mode' is set to 'ASCII' with radio buttons for 'ASCII' and 'HEX'. There are two text input fields: 'Power On Command' and 'Power Off Command'. Each input field has a 'Send' button with a document icon. At the bottom, there is a blue 'Apply' button.

Figure 94. RS-232 Sink Power in the Web UI.

Options & actions

- **Enable:** Enables RS-232 display power control.
Available range: Off or On
- **Mode:** Defines the stored command encoding.
Available range: ASCII or HEX
- **Power On Command:** Command used to power the display on.
Available range: Valid serial payload
- **Power Off Command:** Command used to power the display off.
Available range: Valid serial payload
- **Action result:** Send tests one command; Apply stores all sink-power settings.

6.10.3 IR Sink Power

Stores and tests IR power commands.

Figure 95. IR Sink Power in the Web UI.

Options & actions

- Enable:** Enables IR display power control.
Available range: Off or On
- Power On Command:** IR code used to power the display on.
Available range: Valid IR code format accepted by the endpoint
- Power Off Command:** IR code used to power the display off.
Available range: Valid IR code format accepted by the endpoint
- Action result:** Send tests one command; Apply stores all sink-power settings.

6.11 BATCH - EXPORT LOG

Hostname/Alias	Model	Current Version	Status
Decoder-001	iSwitch-2000HC-R	v1.0.1	

Figure 96. Batch Export Log page.

1. Select the endpoints whose logs are required.
2. Optionally filter the table by firmware version.
3. Select Generate Logs and wait for Status to indicate completion.
4. Download an individual result or select Download All when it becomes available.

6.11.1 Log Download

Generates and downloads diagnostic logs for selected endpoints.

Hostname/Alias	Model	Current Version	Status
Decoder-001	iSwitch-2000HC-R	v1.0.1	

Figure 97. Log Download in the Web UI.

Options & actions

- **Filter by Version:** Narrows the log table.
Available range: All or one discovered firmware version
- **Status:** Shows completion or failure for each target.
Available range: Read-only generation state
- **Generate Logs:** Starts diagnostic-log collection for the selected endpoints.
Available range: Immediate action
- **Download All:** Downloads the collected log archive.
Available range: Available after successful generation
- **Action result:** Generate Logs starts collection; Download All becomes available after completion.

7. CONTROLLER

Controller pages configure the **iSwitch-2000-CTL** itself. Changes on these pages can affect access to the entire AV-over-IP system; export configuration and schedule a maintenance window before any rebooting change.

7.1 CONTROLLER - GENERAL

General

Firmware

Current Version: v1.6.10

Update the Firmware File:

Configuration

Import Configuration:

Export Configuration:

LED Screen

LED Display: ☒ IP & Version ☐ Off

Reboot & Reset

Log

Export System Log:

Figure 98. Controller General page.

Area	Function
Firmware	Shows Current Version and upgrades the controller.
Configuration	Imports a controller configuration or exports the current configuration.
LED Screen	Shows IP & Version on the LCD or turns the LCD display off.
Reboot & Reset	Reboots the controller or restores factory defaults.
Log	Exports the controller system log package.

Factory Reset: Reset to Factory removes controller configuration, routes, walls, groups, and management settings. Use only when a full recommissioning procedure is available.

7.1.1 Firmware

Displays the installed controller version and installs an approved controller firmware package.



Figure 99. Firmware in the Web UI.

Options & actions

- **Current Version:** Confirm the release before selecting a package.
Available range: Read-only installed version
Default: Current controller value
- **Firmware File:** Use only the exact package approved for this controller.
Available range: Approved iSwitch-2000-CTL firmware package
Default: No file selected
- **Action result:** Upgrade & Reboot installs the package and restarts the controller.

7.1.2 Configuration

Imports or exports the complete controller configuration.



Figure 100. Configuration in the Web UI.

Options & actions

- **Import Configuration:** Importing can replace routing, groups, network, and security settings.
Available range: Valid configuration file produced by a compatible controller release
Default: No file selected
- **Export Configuration:** Save a backup before maintenance or major changes.
Available range: Read-only generated file
Default: Current configuration

- **Action result:** Apply imports the selected file; export downloads the current configuration.

7.1.3 LED Screen

Controls what the controller front-panel display shows.



Figure 101. LED Screen in the Web UI.

Options & actions

- **LED Display:** Shows controller access information or disables the display.
Available range: IP & Version or Off
Default: IP & Version
- **Action result:** Apply changes the display mode immediately.

7.1.4 Reboot & Reset

Restarts the controller or returns it to factory configuration.



Figure 102. Reboot & Reset in the Web UI.

Options & actions

- **Reboot:** Restarts the controller while retaining configuration.
Available range: Immediate action
Default: Not active
- **Reset to Factory:** Erases commissioned settings and requires recommissioning.
Available range: Destructive immediate action
Default: Not active
- **Action result:** Both actions interrupt service; Reset to Factory is destructive.

7.1.5 Log

Exports the controller system log for diagnostics.



Figure 103. Log in the Web UI.

Options & actions

- **Export System Log:** Collect before rebooting when troubleshooting an active fault.
Available range: Generated diagnostic archive
Default: Current controller log package
- **Action result:** Export downloads the current log package without changing configuration.

7.2 CONTROLLER - NETWORK

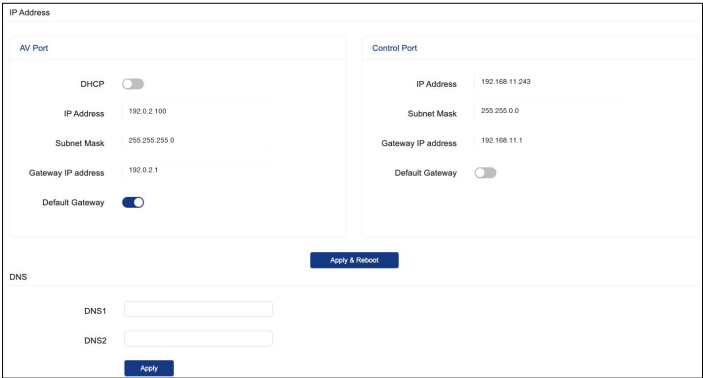


Figure 104. Controller IP Address and DNS settings with example values.

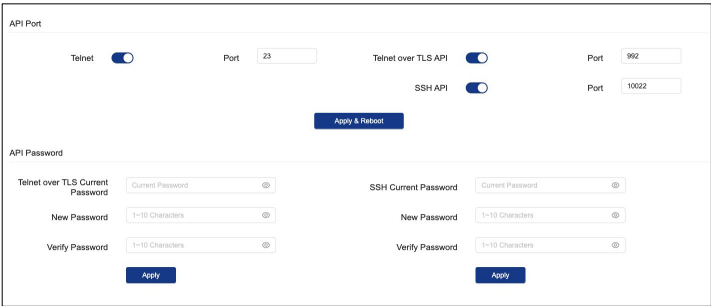


Figure 105. Controller API Port and API Password settings.

Area	Settings
AV Port	DHCP/static IP address, subnet mask, gateway, and Default Gateway selection.
Control Port	Static IP address, subnet mask, gateway, and Default Gateway selection.
DNS	DNS1 and DNS2 resolver addresses.
API Port	Telnet, Telnet over TLS API, and SSH API enables and port numbers.
API Password	Current, new, and verification passwords for Telnet over TLS and SSH APIs.

Gateway: Only one controller interface should provide the default gateway. Applying an IP change reboots the controller; reconnect the browser using the new address.

7.2.1 IP Address

Configures the controller AV and Control network interfaces and default-gateway ownership.

Figure 106. IP Address in the Web UI.

Options & actions

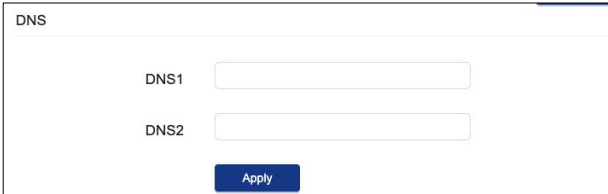
- AV Port DHCP:** When enabled, AV address fields are supplied by DHCP.
Available range: Off or On
Default: On
- AV Port IP Address:** Address used on the AV network.
Available range: Valid IPv4 unicast address
Default: DHCP or deployment-specific
- AV Port Subnet Mask:** AV network prefix.
Available range: Valid contiguous IPv4 subnet mask
Default: Deployment-specific
- AV Port Gateway:** AV interface router.
Available range: Valid IPv4 address in the AV subnet or 0.0.0.0
Default: Deployment-specific

- **AV Port Default Gateway:** Selects the AV interface as the controller default route.
Available range: Off or On
Default: Off
- **Control Port IP Address:** Address used for Web and API management.
Available range: Valid IPv4 unicast address
Default: Deployment-specific
- **Control Port Subnet Mask:** Control network prefix.
Available range: Valid contiguous IPv4 subnet mask
Default: Deployment-specific
- **Control Port Gateway:** Control interface router.
Available range: Valid IPv4 address in the Control subnet or 0.0.0.0
Default: Deployment-specific
- **Control Port Default Gateway:** Selects the Control interface as the controller default route.
Available range: Off or On
Default: On
- **Action result:** Apply & Reboot writes the interface settings and restarts the controller.

Note: Only one interface should normally own the default gateway.

7.2.2 DNS

Configures hostname resolution for NTP and other domain-based services.



The screenshot shows a web form for DNS configuration. At the top, the word 'DNS' is displayed. Below it, there are two text input fields. The first field is labeled 'DNS1' and the second is labeled 'DNS2'. Both fields are currently empty. Below these fields is a blue button with the text 'Apply' in white.

Figure 107. DNS in the Web UI.

Options & actions

- **DNS1:** Preferred resolver.
Available range: Valid IPv4 DNS server address
Default: Blank / deployment-specific
- **DNS2:** Fallback resolver.
Available range: Valid IPv4 DNS server address or blank
Default: Blank / deployment-specific

- **Action result:** Apply updates resolver addresses without changing interface addressing.

7.2.3 API Port

Enables APIs and assigns their TCP ports.

The screenshot shows a configuration page titled 'API Port'. It contains four main settings: 'Telnet' with a toggle switch turned 'On', 'Port' with a text input containing '23', 'Telnet over TLS API' with a toggle switch turned 'On', and 'SSH API' with a toggle switch turned 'On'. To the right of these are two additional 'Port' labels with text inputs containing '992' and '10022'. At the bottom center is a blue button labeled 'Apply & Reboot'.

Figure 108. API Port in the Web UI.

Options & actions

- **Telnet:** Enables plain-text Telnet API access.
Available range: Off or On
Default: On
- **Telnet Port:** TCP listener for Telnet.
Available range: 1-65535; avoid conflicts with other services
Default: 23
- **Telnet over TLS API:** Enables encrypted Telnet-style API access.
Available range: Off or On
Default: On
- **Telnet over TLS Port:** TCP listener for the TLS API.
Available range: 1-65535; avoid conflicts
Default: 992
- **SSH API:** Enables SSH API access.
Available range: Off or On
Default: On
- **SSH Port:** TCP listener for SSH API access.
Available range: 1-65535; avoid conflicts
Default: 10022
- **Action result:** Apply & Reboot restarts the affected services and controller.

7.2.4 API Password

Changes the API passwords independently for TLS and SSH services.

API Password

Telnnet over TLS Current Password

New Password

Verify Password

Figure 109. API Password in the Web UI (1 of 2).

SSH Current Password

New Password

Verify Password

Figure 110. API Password in the Web UI (2 of 2).

Options & actions

- Current Password:** Required before a password can be changed.
Available range: Existing password
Default: Blank
- New Password:** Use a unique value permitted by site security policy.
Available range: 1-10 characters as shown by the reference UI
Default: Blank
- Verify Password:** Prevents typing errors.
Available range: Must exactly match New Password
Default: Blank
- Action result:** Apply changes only the password set in that row.

7.3 CONTROLLER - ADVANCED

NTP

Date

2026-07-26

Time

03:39:08

Time Zone

+00:00 Etc/UTC

Enable NTP

☒

NTP Server

0.pool.ntp.org

Sync Now

If the NTP address is a domain address, please ensure that DNS & Gateway is configured correctly.

Apply & Reboot

Customize

Web Logo

Upload

Reset to default

Resolution ≤ 285x83

png only File Size ≤ 128KB

Login Image

Upload

Reset to default

700x333 png

only File Size ≤ 1.5MB

Figure 111. NTP and Customize areas on the Advanced page.

Area	Settings
Service	SSH and HTTPS service enables. Apply & Reboot is required.
802.1x	EAP-MSCHAP V2 or EAP-TLS credentials and optional server-certificate validation.
NTP	Date, time, time zone, Enable NTP, NTP Server, Sync Now, and Apply & Reboot.
Customize - Web Logo	PNG only; resolution up to 285x83 and file size up to 128 KB.
Customize - Login Image	700x333 PNG; file size up to 1.5 MB.

NTP: If NTP Server is a domain name, configure a working DNS server and gateway first. Select Sync Now to test reachability before committing a rebooting change.

7.3.1 Service

Enables encrypted controller management services.

Service

SSH

☒

HTTPS

☒

Apply & Reboot

Figure 112. Service in the Web UI.

79

Options & actions

- **SSH:** Enables secure shell management.
Available range: Off or On
Default: On
- **HTTPS:** Enables encrypted Web UI access.
Available range: Off or On
Default: On
- **Action result:** Apply & Reboot restarts the controller and selected services.

7.3.2 802.1x

Configures controller port-based network authentication.

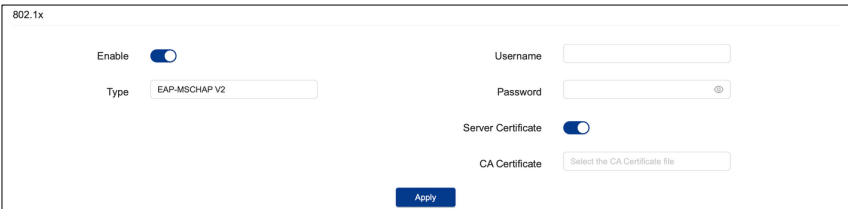


Figure 113. 802.1X EAP-MSCHAP V2 settings with server-certificate validation enabled.

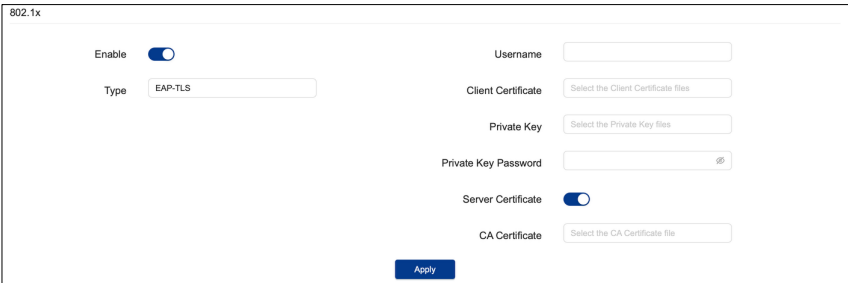


Figure 114. 802.1X EAP-TLS settings with server-certificate validation enabled.

Options & actions

- **Enable:** Enables the controller 802.1X supplicant.
Available range: Off or On
Default: Off
- **Type:** Selects the authentication method.
Available range: EAP-MSCHAP V2 or another type exposed by the release
Default: EAP-MSCHAP V2

- **Username:** Identity presented to the authentication server in either authentication mode.
Available range: Identity accepted by the authentication server
- **Password:** Secret paired with Username for EAP-MSCHAP V2 authentication.
Available range: Credential accepted by the authentication server; EAP-MSCHAP V2 only
- **Client Certificate:** Selects the certificate used to identify each selected endpoint during EAP-TLS authentication.
Available range: Client certificate file accepted by the endpoint and authentication-server policy; EAP-TLS only
- **Private Key File:** Selects the private key associated with Client Certificate.
Available range: Private-key file matching the selected client certificate; EAP-TLS only
- **Private Key Password:** Unlocks the selected private-key file.
Available range: Password for the selected encrypted private key, or blank when the key is not password protected; EAP-TLS only
- **Validate Server Certificate:** Enables authentication-server certificate validation and exposes the CA Certificate field.
Available range: Off or On
- **CA Certificate:** Uploads the trusted certificate authority used to validate the authentication server.
Available range: CA certificate file trusted by the deployment
- **Action result:** Apply can immediately affect reachability. Validate switch configuration and fallback access first.

7.3.3 NTP

Maintains controller date and time using an NTP server.

The screenshot shows a web-based configuration interface for NTP. It features several input fields: 'Date' with a calendar icon, 'Time' with a clock icon, and 'Time Zone' with a dropdown menu. A toggle switch labeled 'Enable NTP' is set to 'On'. Below the toggle is the 'NTP Server' field, which contains the text '0.pool.ntp.org' and a small green dot indicating a successful connection or status. To the right of the NTP Server field is a blue button labeled 'Sync Now'. At the bottom of the form, there is a blue text message that reads: 'If the NTP address is a domain address, please ensure that DNS & Gateway is configured correctly.' and a blue button labeled 'Apply & Reboot'.

Figure 115. NTP in the Web UI.

Options & actions

- **Date:** Displayed controller date.
Available range: Read-only YYYY-MM-DD
Default: Current controller date (read-only)
- **Time:** Displayed controller time.
Available range: Read-only HH:MM:SS
Default: Current controller time (read-only)
- **Time Zone:** Controls local-time presentation.
Available range: Time zones exposed by the Web UI
Default: +00:00 Etc/UTC
- **Enable NTP:** Enables periodic synchronization.
Available range: Off or On
Default: On
- **NTP Server:** Requires working DNS and gateway when a domain name is used.
Available range: Valid IPv4 address or resolvable domain name
Default: 0.pool.ntp.org
- **Action result:** Sync Now performs an immediate synchronization; Apply & Reboot stores the configuration.

7.3.4 Customize

Replaces or restores the Web UI logo and login image.



Figure 116. Customize in the Web UI.

Options & actions

- **Web Logo:** Header and login branding image.
Available range: PNG, maximum 285x83, maximum 128 KB
Default: Default logo
- **Login Image:** Image displayed on the sign-in page.
Available range: PNG, exactly 700x333, maximum 1.5 MB
Default: Default login image
- **Action result:** Upload stores the selected image; Reset to default restores the factory asset.

7.4 USER MANAGEMENT AND LOGOUT

Admin Password

Current Password

Current Password

New Password

8~24 Characters

Verify Password

8~24 Characters

Apply & Logout

Figure 117. Administrator password page.

1. Open Controller > User Management.
2. Enter the Current Password.
3. Enter and verify a new password of 8-24 characters that meets the on-screen policy.
4. Select Apply & Logout, then sign in with the new password.
5. For a normal logout without changing the password, open the Admin menu and select Log out.

7.4.1 Admin Password

Changes the administrator password.

Admin Password

Current Password

Current Password

New Password

8~24 Characters

Verify Password

8~24 Characters

Apply & Logout

Figure 118. Admin Password in the Web UI.

Options & actions

- **Current Password:** Required to authorize the change.
Available range: Existing administrator password
Default: Blank
- **New Password:** Use a unique credential stored in approved secure documentation.
Available range: 8-24 characters plus any on-screen complexity requirements
Default: Blank

- Verify Password:** Prevents typing errors.
Available range: Must exactly match New Password
Default: Blank
- Action result:** Apply & Logout saves the password and ends the current session.

7.4.2 Session Expiration

Limits total session duration and idle time independently.

Figure 119. Session Expiration in the Web UI.

Options & actions

- Session Maximum Lifetime:** Absolute session limit even while the user remains active.
Available range: Disabled, 2 Hours, 4 Hours, 8 Hours, 12 Hours, 1 Day, or 7 Days
Default: 2 Hours
- Session Inactivity Timeout:** Logs the user out after the selected period without activity.
Available range: Disabled, 15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, 8 Hours, 12 Hours, or 1 Day
Default: 15 Minutes
- Action result:** Apply saves the two timeout policies for future and active sessions as implemented by the release.

Note: Use an inactivity timeout that balances operational work with the site's security policy.

8. APPENDIX A - SUPPORTED MODELS

Model	Encoder role	Decoder role	Special role-related UI
iSwitch-2000HC-T	Yes	No	Video Source, EDID, HDMI/USB-C source controls.
iSwitch-2000HC-R	No	Yes	Output video, audio return, idle image, boot logo.
iSwitch-2000H-TR	When Work Mode = Transmitter	When Work Mode = Receiver	Work Mode and IR.

Model	Encoder role	Decoder role	Special role-related UI
iSwitch-2000U-TR	When Work Mode = Transmitter	When Work Mode = Receiver	Work Mode; tabs depend on selected role.

Availability: A feature can also depend on endpoint firmware, licensed audio add-on, physical ports, and the current role. The live Web UI is authoritative for the selected device.

9. APPENDIX B - PORTS AND INITIAL ACCESS

Item	Initial or standard value	Notes
Web UI username	admin	Factory-default administrator account.
Web UI password	admin	Must be changed at first login.
CONTROL port IP	192.168.11.243	Factory address; verify the LCD on a commissioned unit.
CONTROL subnet mask	255.255.0.0	Factory value.
Telnet port	23	Configurable under Controller > Network.
Telnet over TLS API port	992	Configurable under Controller > Network.
SSH API port	10022	Configurable under Controller > Network.
Web administrator password length	8-24 characters	Follow all on-screen password requirements.

Important: Deployment values can differ from factory values. Record commissioned addresses and credentials in the site's secure documentation rather than writing them into this guide.