PRISM

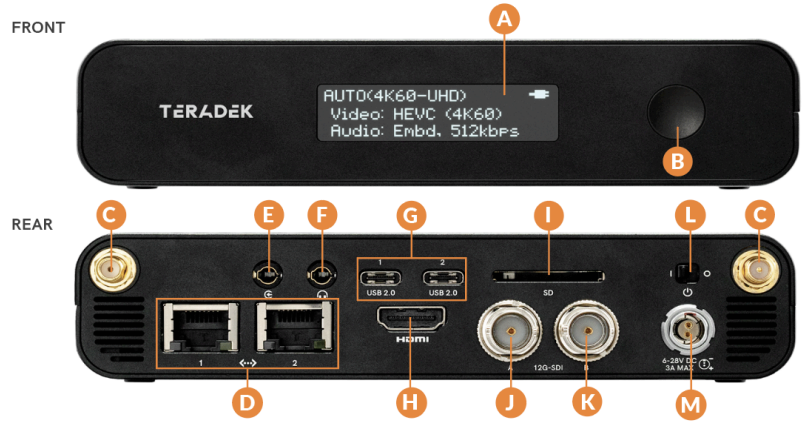
Table of Contents

Prism Flex Quick Start Guide

With flexible I/O and a compact, low-power design, Prism Flex easily fits into any workflow. Prism Flex is perfect for placement on a table top, camera-top, or wedged between your video switcher and audio mixer. Prism Flex can encode or decode up to 4Kp60 video with stunning 10-bit 4:2:2 image fidelity. The Prism platform supports many common streaming protocols such as MPEG-TS, RTSP/RTP, RTMPS, and SRT, and can be connected to Teradek's Core Cloud Platform for even more flexibility.

TABLE OF CONTENTS

PHYSICAL PROPERTIES - ENCODER OR DECODER



A: OLED display
B: Menu button
C: RP-SMA connectors
D: Dual Ethernet ports
E: Mic/Line stereo TRRS input
F: Headphone TRRS output
G: USB modem ports
H: HDMI input (output on decoder)
I: SD card slot (encoder only)
J: SDI output
K: SDI input (output on decoder)
L: On/Off switch
M: Power input

WHAT'S INCLUDED

- 1x Prism Flex Encoder/Decoder
- 1x 12G-SDI BNC to BNC - 18in Cable
- 1x 2pin Connector to 30W AC Adapter (Int) - 6ft Cable
- 2x Antenna 2dBi WIFI 2.4/5.8GHz

POWER AND CONNECT

1. **Encoder:** Turn your video source on, then connect the HDMI or SDI input **(J)** from your video source to Prism Flex's input connector.

Decoder: Turn your monitor on, then connect the HDMI or SDI output **(K)** from your Prism Flex to the monitor's input connector**.**

2. Attach the two Wi-Fi antennas to the RP-SMA connectors **(C)**.

3. Connect power to Prism Flex using the included A/C adapter.

4. Turn the Power switch on the back **(L)** to the ON position.

MENU BUTTON OPERATION (B)

Use Prism Flex's Menu button to navigate the status screens, go live, switch your configurable settings, and perform a factory reset.

PRESS BUTTON: Cycle through the status screens

LONG-PRESS BUTTON:

- **Main screen** - Perform factory reset
- **WiFi screen** - Switch from AP to Client mode
- **Ethernet screens** - Switch from DHCP to Static mode
- **Stream mode screen** - Go Live/Begin Streaming
- **Audio Input screen** - Switch from Embedded, analog, or Mixed

GET ONLINE

Use Prism Flex's web UI to connect Prism to a network and get online.

Connect to a WiFi Network

Prism Flex supports two wireless (Wi-Fi) modes; **Access Point (AP) Mode** (for bonding multiple cellular devices for increased bandwidth) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router). **NOTE: You must connect to the web UI in order to switch to Client Mode or to a different network.**

1. Connect your phone or laptop to Prism Flex's network, **Prism-855 XXXXX** (**XXXXX** represents the last five digits of Prism's serial number).

2. Enter the default IP address **172.16.1.1 i**n your web browser to access the web UI.

3. **To switch to Client Mode:** From the web UI, navigate to the **Network Settings** and select **WiFi**.

4. Select **Client** as the WiFi Mode

5. Click the **WiFi scan** tab, select an available network, then enter the password. Once connected, the display will list the network Prism Flex is connected to.

Connect via Ethernet

1. Connect one or both of Prism Flex's Ethernet ports to an Ethernet switch or router.

2. Press the menu button to navigate to the **Ethernet 1** or **2** screen and obtain the IP address.

3. Enter the IP address in your web browser's navigation bar to access the web UI.

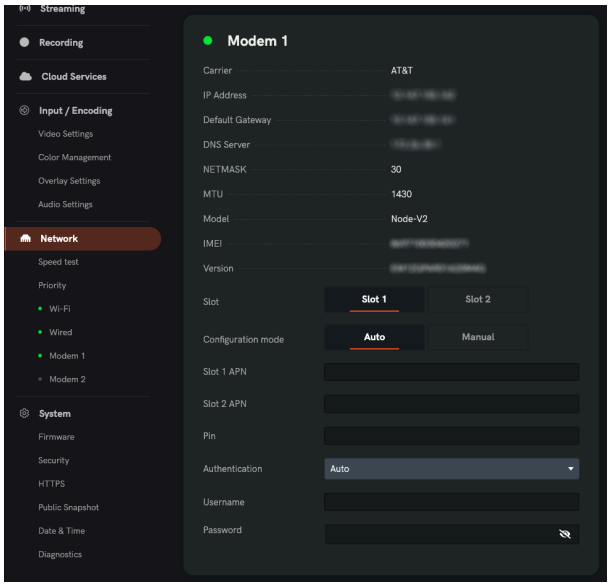
Connect via Node II or USB Modem

1. Attach a Node II or USB modem to one or both to Prism's USB-C ports (G) using a **4-pin to USB-C** connector cable, and/or a **USB to USB-C** adapter. The front panel will indicate that the modem has been detected and connected to the carrier.

2. If the modem is not detected, connect your computer to Prism Flex's AP network (see **Connect to a WiFi Network**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the modem from the **Network** menu.

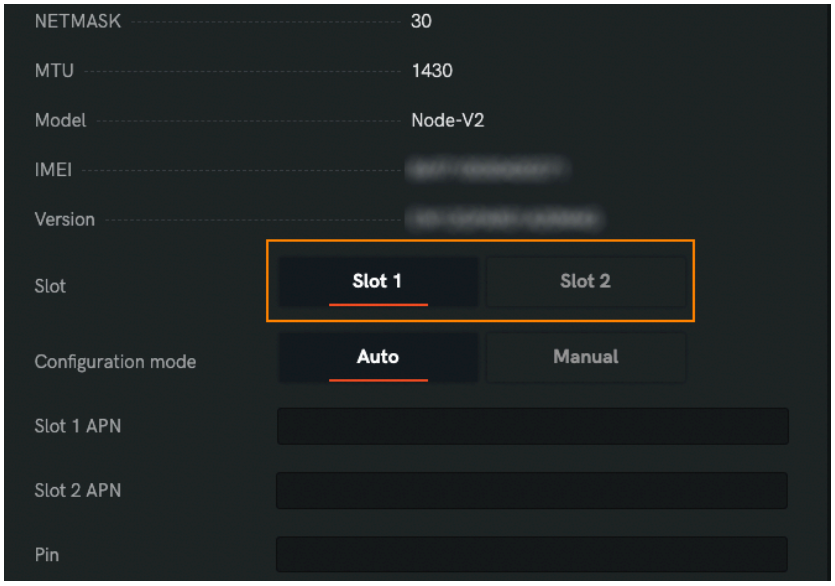
Configure Node II

1. Navigate to the **Network** menu and select the corresponding USB (Node II) modem.

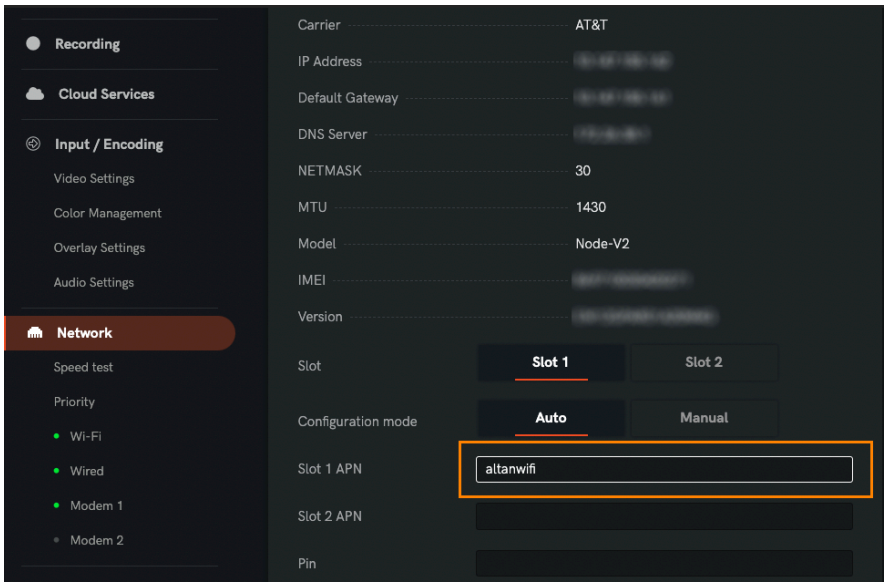


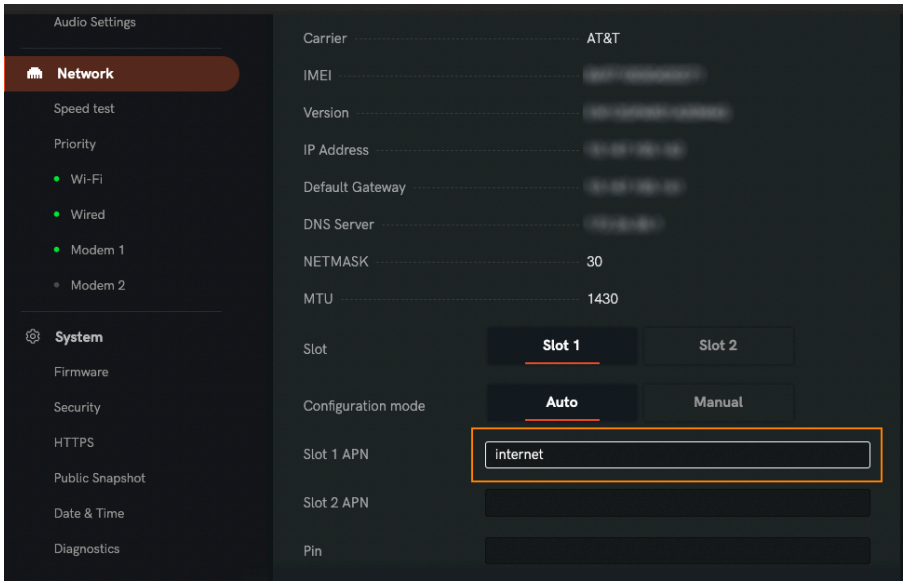
2. Select the slot with the SIM you will be using (**Slot 1 or Slot 2**).

> **NOTE:** Node II supports most provider's SIM card and can operate on most LTE/4G/3G data bands. With dual SIM slots, you can swap from one provider to another without needing to unplug the Node II. **Only one SIM card can be used at a time.**

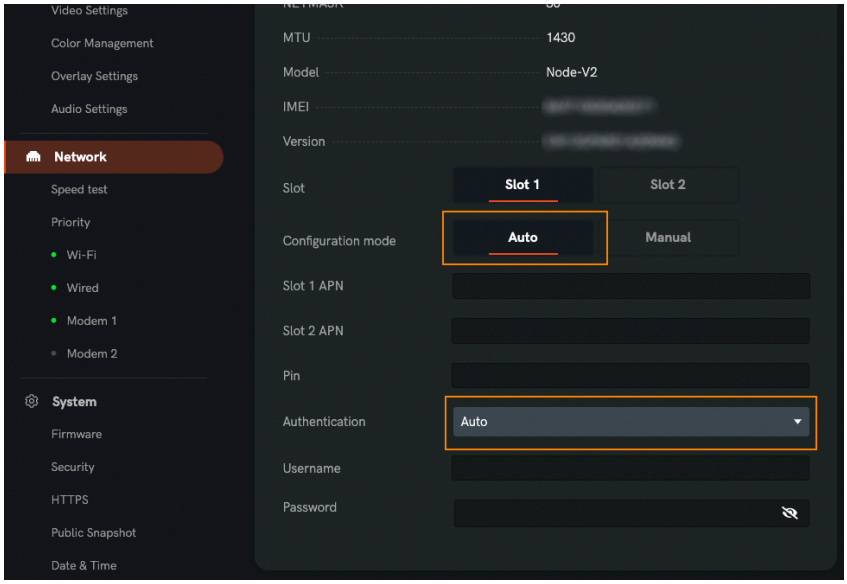


3. Enter **altanwifi** (for Telna SIM cards intended for use in the United States) or **internet** (for Telna SIM cards intended for use in Europe) into the selected slot's **APN** field (Slot 1 or 2).





4. Ensure that both **Configuration mode** and **Authentication method** are set to **Auto.**



ENCODER/DECODER CONFIGURATION

Configure your Prism Flex decoder to receive streams from a Prism Flex encoder.

NOTE: Prism Flex has several streaming modes available such as SRT, RTMP, YouTube, and Facebook Live. The following instructions describe how to configure your decoder/encoder using MPEG-TS mode as an example.

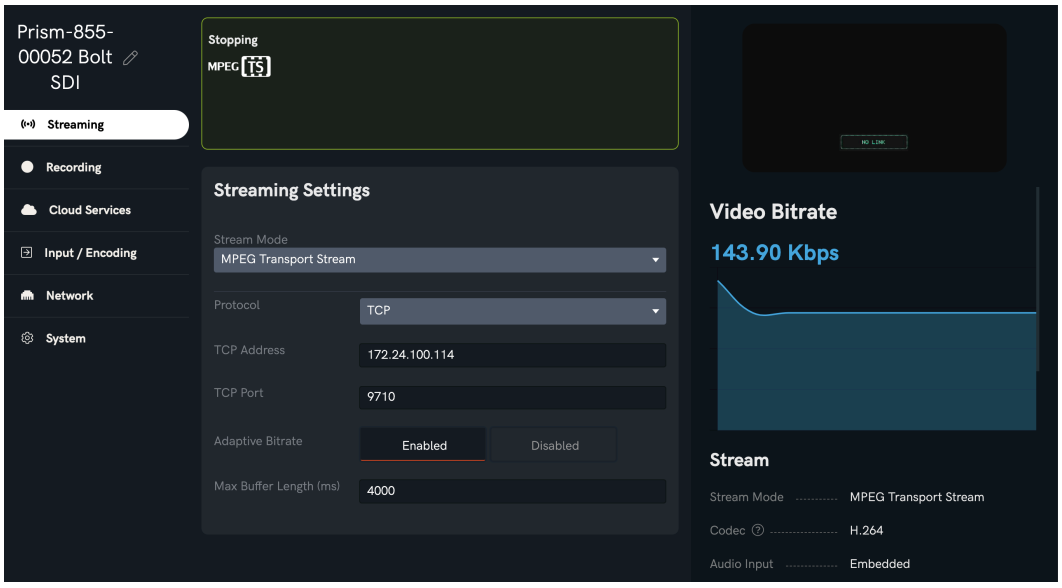
1. Connect to the Prism Flex encoder (see previous section) and open the encoder's web UI.

2. Open the Streaming menu, then select **MPEG-TS** as the streaming mode.

3. Select a protocol, then ensure the Prism decoder is configured to receive the stream using the correct protocol:

- TCP → TCP
- TCP Server → TCP Pull
- UDP → UDP
- Multicast → Multicast

Encoder Web UI



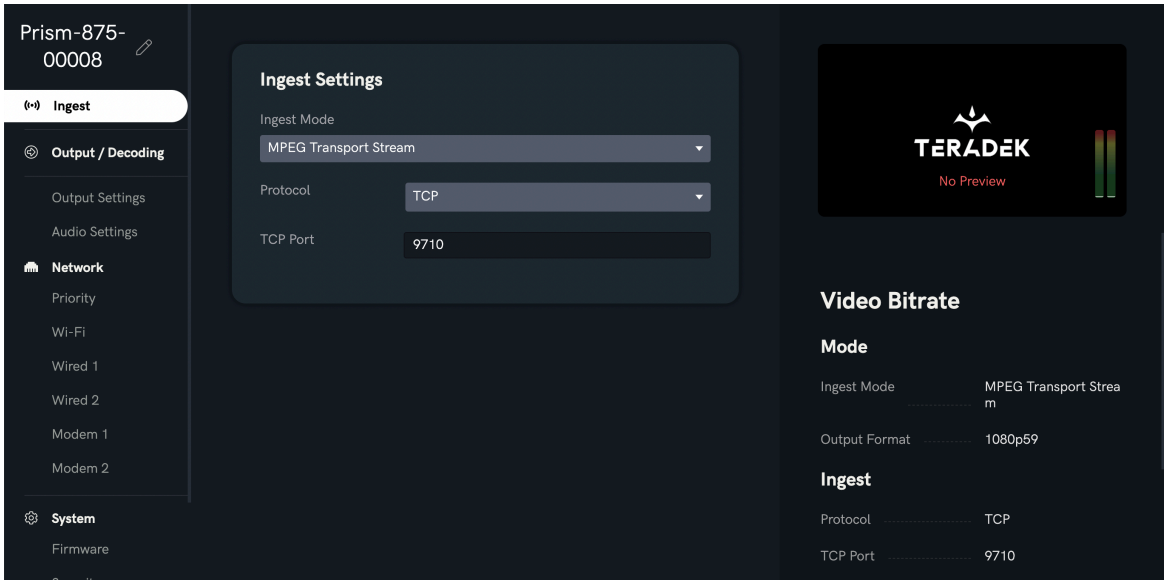
4. Enter the destination IP address, then confirm the port is set as the default 9710.

5. Connect to the Prism decoder (see previous section) and open the decoder's web UI.

6. Open the Ingest menu, then select **MPEG-TS** as the ingest mode.

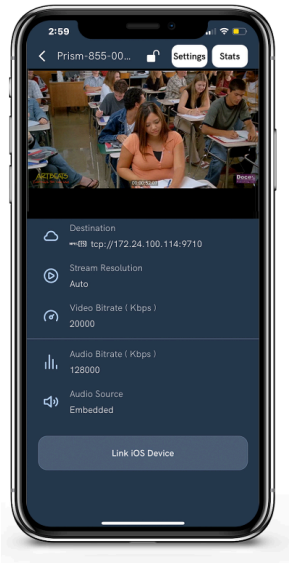
7. Enter the protocol, ensuring the selected protocol matches the Encoder's protocol configuration (see step 3). Confirm the port is set as the default 9710.

Decoder Web UI



PRISM APP

The Prism App allows you to remotely configure all of Prism Flex's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Prism App is available for iOS devices.



MAIN DISPLAY

• **Main Screen -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your livestream.

• **Link/Unlink iOS Device -** Tap the Link/Unlink iOS tab to enable/disable the use of your cellular phone's data as an Internet connection.

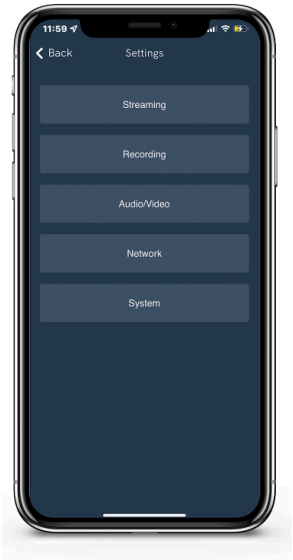
STATS

Tap the **Stats** button at the top of the screen to display Prism's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button to configure the following options:

- **Streaming** - Configure your streaming method and destination
- **Recording** - Enable recording and select a media storage option
- **Audio/Video** - Adjust the Video and Audio input settings
- **Network** - Choose a method of connecting to the Internet
- **System** - View the model and serial number of your device, or rename the Prism.



RECORDING

Prism Flex encoders support recording to an SD card, USB drive, or NFS. Each recording is saved with the same resolution and bitrate set in Prism Flex.

1. Insert a compatible SD card into the corresponding slot.
2. Enter the **Recording** menu, and select **Enabled**.
3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

RECORDING CONSIDERATIONS

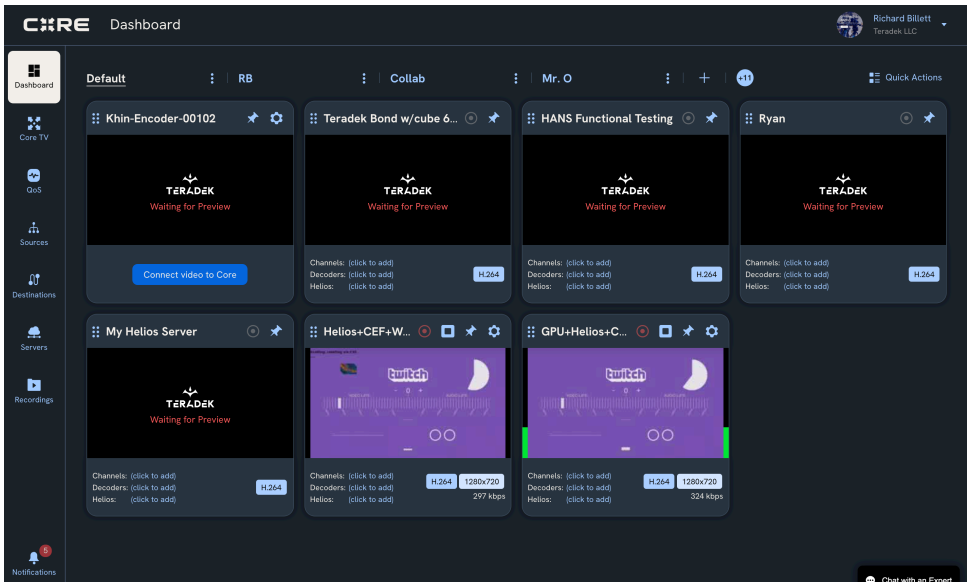
- Recordings are triggered manually or automatically. If **Auto-Record** is enabled in the **Recording Settings**, a new recording is automatically created when a broadcast starts.
- For best results, use Class 6 or higher SD cards.
- Media should be formatted using FAT32 or exFAT.
- If a broadcast is interrupted for connectivity reasons, recording will continue.
- New recordings are automatically started after the file size limit is reached.

CORE

Prism Flex can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can:

- Bond multiple Internet connections, increasing your broadcast's bandwidth and reliability.
- Remotely control Teradek encoders, decoders, and bonded systems from anywhere in the world.
- Stream to multiple destinations.
- Sync your recordings.

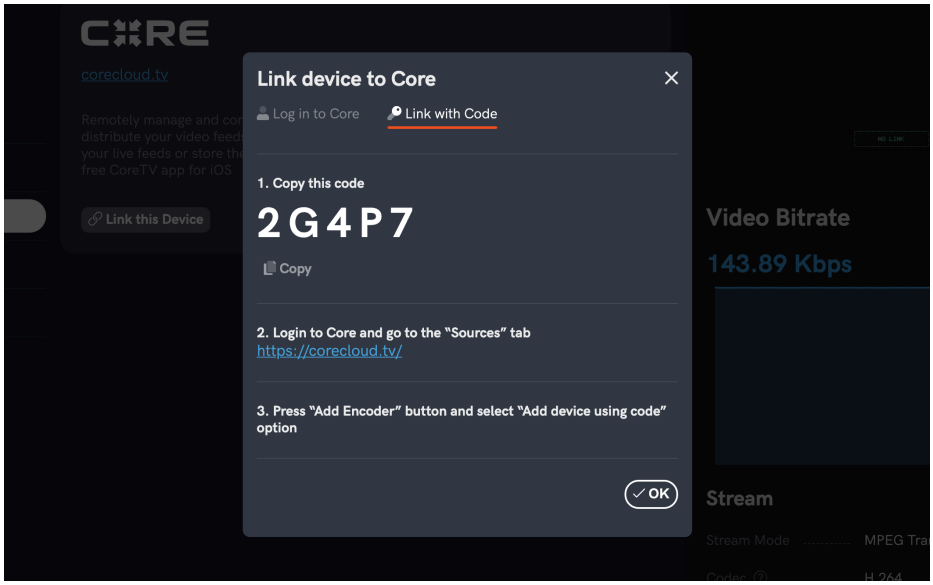
Visit https://corecloud.tv to learn more.



CONNECT PRISM FLEX TO CORE

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab.

2. **Log in to Core:** Enter your credentials to link Prism to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Prism, then follow the instructions provided.



3. Once a connection is established, you can configure Prism from either the Prism UI or Core dashboard.

OTHER RESOURCES

- **USER GUIDE ARTICLES: https://guide.teradek.com/m/109577**
- **PRISM FLEX QUICK START GUIDE PDF: https://teradek.com/pages/downloads#prism**
- **PRISM REFERENCE GUIDE PDF: https://teradek.com/pages/downloads#prism**

Prism Quick Start Guide

Prism 4K and Prism HD + are Teradek's premium encoder and decoder systems for broadcast, live production, and Pro AV applications. With room for up to nine codec cards in a 2U chassis (up to three codec cards in 1U chassis), Prism can encode or decode up to 4Kp60 video (1080p60 video for Prism HD+) with stunning 10-bit 4:2:2 image fidelity. Prism supports many common streaming protocols such as MPEG-TS, RTP, RTMPS, and SRT.

TABLE OF CONTENTS

PHYSICAL PROPERTIES

RACK SYSTEM 2RU

A: Encoder/Decoder cards (1-9)
B: Power button
C: Second power input (optional)
D: First power input
E: Genlink input
F: Dual Ethernet port
G: Encoder/Decoder Cards (rear)

RACK SYSTEM 1RU

A: Encoder/Decoder cards (front)
B: Power button
C: Power input
D: Dual Ethernet ports
E: Encoder/Decoder Cards (rear)

DUAL GIGABIT ETHERNET PORTS

Prism features two independent Ethernet ports (**Wired 1**, **Wired 2**). These two Ethernet ports connect to an internal switch inside the chassis (one per Ethernet port), allowing an encoder/decoder card to have two addressable ports as well as two different networks. For example, one port can connect to an internal network for configuration while the other port can connect to a separate network for streaming.

Internet routing is configured automatically, so either port can be used to stream out over a WAN. If both connections have Internet access, the **Wired 2** interface takes priority over **Wired 1**. Both interfaces can be configured for DHCP or static addresses independently of one another.

NOTE: Only use one Ethernet port at a time.

CARDS

WARNING: Prism contains sensitive electronic components that can be damaged by electrostatic discharge (ESD). When handling, care must be taken so that the device is not damaged. Damage due to inappropriate handling is not covered by the warranty.

A: Video input/output status
B: OLED display
C: Menu joystick
D: Reboot button
E: Encoder/Decoder status
F: 12G-SDI input (Encoder)
G: 12G-SDI output (Decoder)
H: Headphone/IFB input/output
I: Mic/Line stereo input/output

WHAT'S INCLUDED

PRISM CHASSIS

- 1x Prism Base Rack System (1RU or 2RU)
- 1x 12G-SDI BNC to BNC - 18in Cable

PRISM ENCODER/DECODER CARDS

- 1x Prism (4K or HD+) Encoder or Decoder Card
- 1x Audio/Video Backplate

POWER AND CONNECT

1. Connect SD/HD-SDI video sources to the BNC inputs that correspond to the installed encoder or decoder cards.

2. Connect SD/HD-SDI outputs via BNC cable to your monitor/switcher/router.

3. Connect one or both of Prism's 10/100/1000 Ethernet ports to a network switch or router using an Ethernet cable.

4. Connect power to Prism using the included IEC cable. Connect a second cable if your device includes a supplemental power supply (optional).

5. Press the **Power button** (**B**) to turn on the unit.

6. Using the menu joystick, navigate to the **Network Settings** menu on the front panel. Select a **Wired** interface, then verify that the IP Mode is set to **DHCP**. Once Prism is connected to a network, the front panel will display the current assigned or configured IP address for both Ethernet ports.

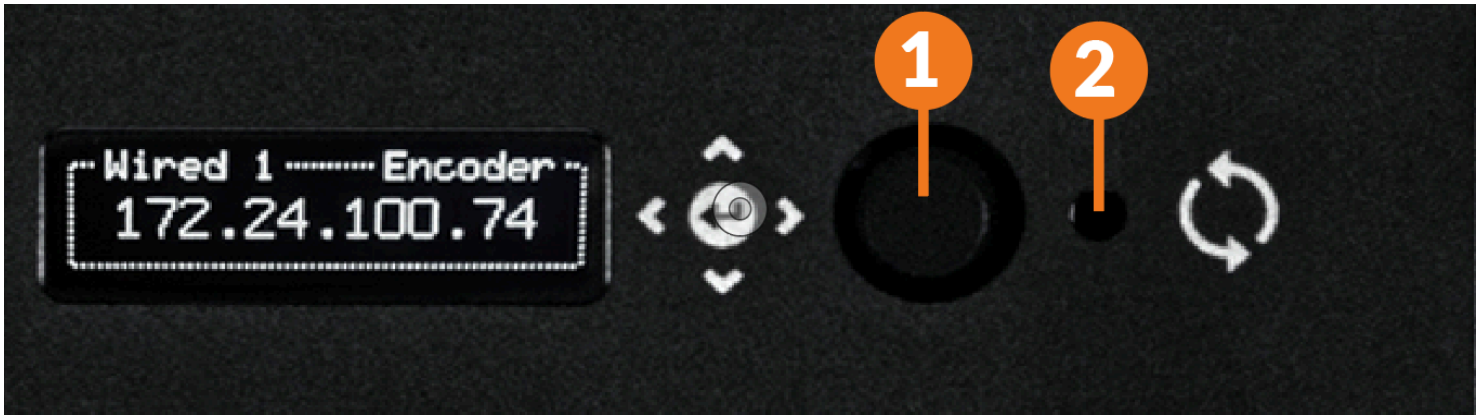
FRONT PANEL OPERATION

Use the Menu joystick to navigate the front panel interface, and the Reboot button to restart Prism.

1. MENU JOYSTICK:

- Press up, down - Cycle through status screens, navigate menus
- Press back - Return to the previous menu
- Press forward or in - Open selected menu

2. REBOOT BUTTON: Restart the encoder/decoder



GET ONLINE

Use the front panel interface or the web UI to configure Prism encoders and decoders.

Connect via Ethernet

1. Using the menu joystick, navigate to the **Network Settings** menu on the front panel. Select a **Wired** interface, then verify that the IP Mode is set to **DHCP**.

2. Once Prism is connected to a network, the front panel will display the current assigned or configured IP address for both Ethernet ports.

IP MODES
DHCP mode is the default setting. In DHCP mode, Prism cards will request an IP address and all other network configurations from the network's server. The IP address can be found by pressing the menu joystick until it's displayed on the front panel. When set to **Static** mode, you will need to manually configure the IP address and all other network configurations from either the front panel
or the Prism web UI.

Access the Web UI

After connecting Prism to a network, you can access the web UI and configure stream destinations, encoder parameters, and other settings.

1. Press down on the cards' **menu joystick** (**C**) to display Prism's IP address on the front panel.

2. Enter the IP address in your web browser's navigation bar, then enter the default login information.

3. Enter the default password "**admin**."

ENCODER/DECODER CONFIGURATION

Configure your Prism decoder to receive streams from a Prism encoder.

> **NOTE:** Prism has several streaming modes available such as SRT, RTMP, YouTube, and Facebook Live. The following instructions describe how to configure your decoder/encoder using MPEG-TS mode as an example.

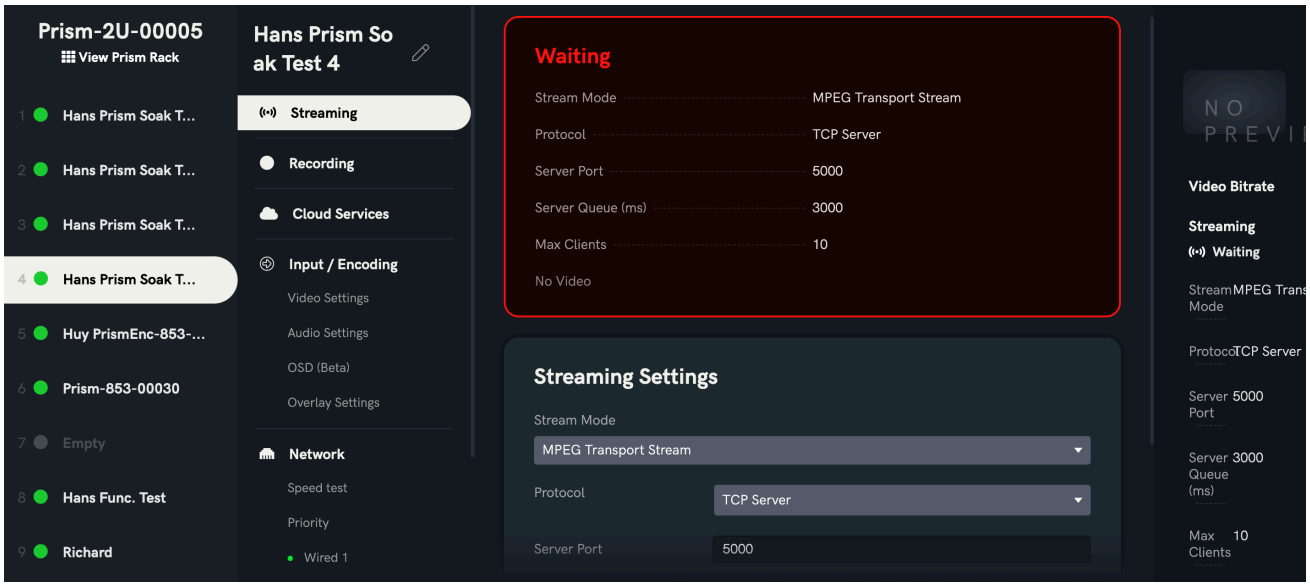
1. Connect to the Prism encoder (see previous section) and open the encoder's web UI.

2. Open the Streaming menu, then select **MPEG-TS** as the streaming mode.

3. Select a protocol, then ensure the Prism decoder is configured to receive the stream using the correct protocol:

- TCP → TCP
- TCP Server → TCP Pull
- UDP → UDP
- Multicast → Multicast

Encoder Web UI



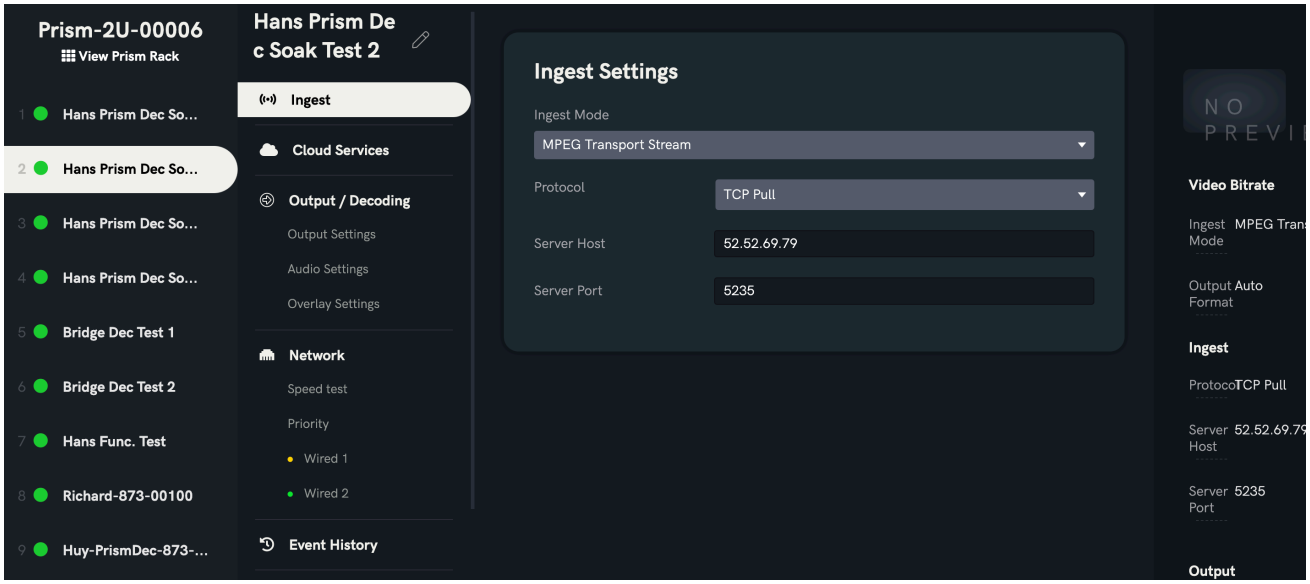
4. Enter the destination IP address, then confirm the port is set as the default 9710.

5. Connect to the Prism decoder (see previous section) and open the decoder's web UI.

6. Open the Ingest menu, then select **MPEG-TS** as the ingest mode.

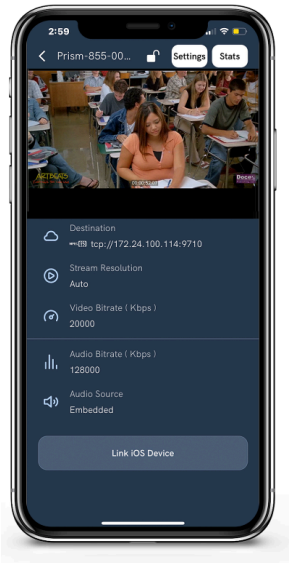
7. Enter the protocol, ensuring the selected protocol matches the Encoder's protocol configuration (see step 3). Confirm the port is set as the default 9710.

Decoder Web UI



PRISM APP

The Prism App allows you to remotely configure all of Prism's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Prism App is available for iOS devices.



MAIN DISPLAY

• **Main Screen -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your livestream.

• **Link/Unlink iOS Device -** Tap the Link/Unlink iOS tab to enable/disable the use of your cellular phone's data as an Internet connection.

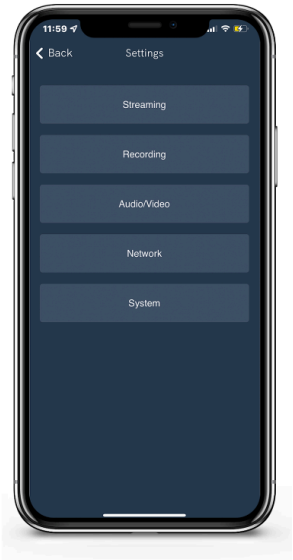
STATS

Tap the **Stats** button at the top of the screen to display Prism's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button to configure the following options:

- **Streaming** - Configure your streaming method and destination
- **Recording** - Enable recording and select a media storage option
- **Audio/Video** - Adjust the Video and Audio input settings
- **Network** - Choose a method of connecting to the Internet
- **System** - View the model and serial number of your device, or rename the Prism.

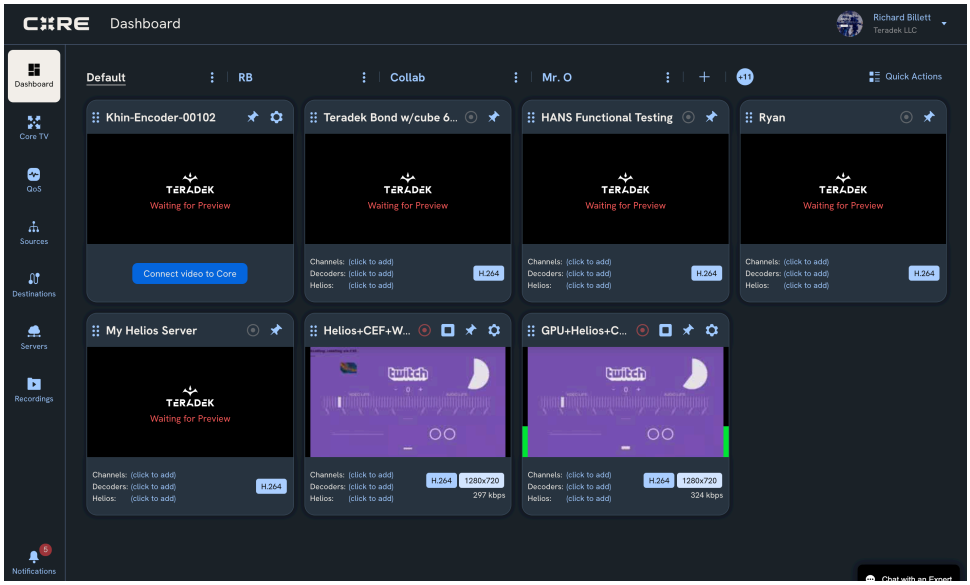


CORE

Prism can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can:

- Bond multiple Internet connections, increasing your broadcast's bandwidth and reliability.
- Remotely control Teradek encoders, decoders and bonded systems from anywhere in the world.
- Stream to multiple destinations.

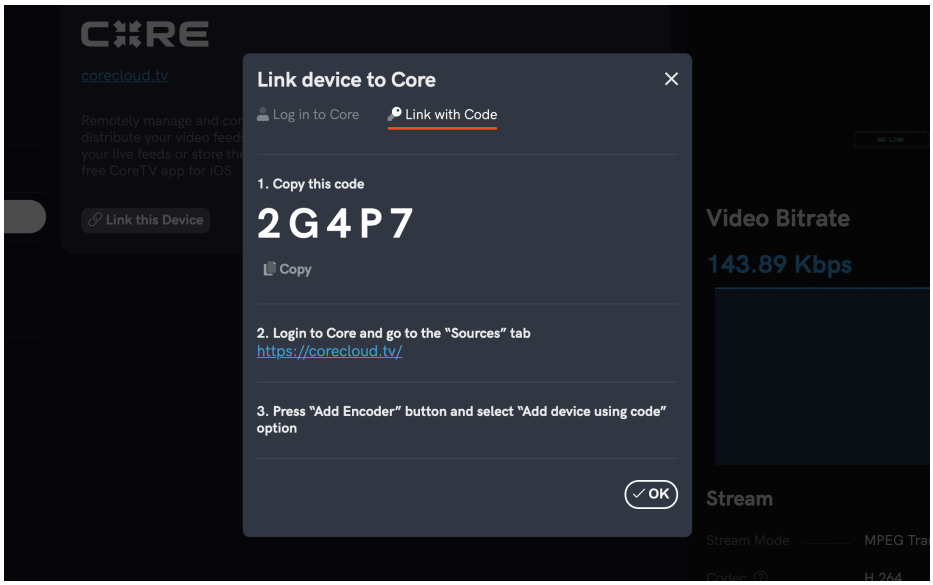
Visit https://corecloud.tv to learn more.



CONNECT PRISM TO CORE

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab.

2. **Log in to Core:** Enter your credentials to link Prism to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Prism, then follow the instructions provided.



3. Once a connection is established, you can configure Prism from either the Prism UI or Core dashboard.

OTHER RESOURCES

- **USER GUIDE ARTICLES: https://guide.teradek.com/m/109577**
- **PRISM QUICK START GUIDE PDF: https://teradek.com/pages/downloads#prism**
- **PRISM REFERENCE GUIDE PDF: https://teradek.com/pages/downloads#prism**

Prism Mobile Quick Start Guide

Prism Mobile is the lightest LTE-enabled camera-back video encoder on the market. With a flexible I/O and a compact, low-SWaP design, Prism Mobile easily fits into any workflow. Prism Mobile gives you 4K 10-bit HDR video transmission with integrated LTE network bonding for live coverage from any location. Prism Mobile is designed to seamlessly fit onto the back of your ENG or professional camera or placed directly on a table top. Prism Mobile can encode up to 4Kp60 video with stunning 10-bit 4:2:2 image fidelity paired with Stereo or 5.1 surround sound. The Prism platform supports many common streaming protocols such as MPEG-TS, RTSP/RTP, RTMPS, and SRT, and can be connected to Teradek's Core Cloud Platform for even more flexibility.

TABLE OF CONTENTS

PHYSICAL PROPERTIES

A: Menu button
B: OLED display
C: Navigation joystick
D: 5-pin USB port
E: Ethernet ports
F: USB Modem port
G: Mic/Line stereo TRRS input
H: Headphone TRRS output
I: HDMI input
J: SD card slot
K: SDI output
L: SDI input
M: On/Off switch
N: Power input
O: SIM slots (A1, A2, B1, B2)

WHAT'S INCLUDED

- **1x** Prism Mobile Encoder
- **1x** 2pin Connector to 30W AC Adapter (Int) - 6ft Cable
- **4x** SMA Antennas (Male)
- **4x** High-performance SMA Antennas (Male)
- **2x** SIM Card Holder

POWER AND CONNECT

1. Turn your video source on, then connect the HDMI or SDI video input to Prism Mobile's input connector **(J)**.

2. Attach four antennas to the SMA connectors **(C). NOTE: Prism Mobile only uses SMA antennas. Standard Wi-Fi (RP-SMA) antennas are not compatible and will not work with Prism Mobile.**
3. Connect power to Prism Mobile using the included A/C adapter, or if equipped with battery plate accessories, attach a compatible battery (Gold or V mount).
4. Turn the Power switch **(L)** to the ON position.
5. Insert a SIM card (two per Node II) into one of the Prism Mobile SIM card slots. **NOTE: Prism Mobile is equipped with two internal modems (A and B). Each modem supports two SIM cards (A1/A2, B1/B2). To use both modems together, insert a SIM card into one of each modems' SIM slots. (A1 + B1)**
6. If the SIM card is not detected, connect your computer to Prism's AP network (see **Connect to a WiFi Network**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the internal modem from the **Network** menu.

MENU BUTTON OPERATION (A)
Use Prism Mobile's Menu button to navigate the status screens.
Press Button: Cycle through the status screens

NAVIGATION JOYSTICK OPERATION (C) Use the Navigation Joystick to cycle back and forth through the status screens and/or switch your configurable settings.
Press Up or Down: Cycle through status screens and navigate menus
Press Forward: Edit Prism Mobile's configurable settings

- **Main screen** - Displays the current stream settings and resolution
- **WiFi screen** - Displays the current WiFi network and allows you to switch from AP to Client mode
- **Ethernet screens (1 and 2)** - Displays the current WiFi network and allows you to switch from DHCP to Static mode
- **Modem screens (A and B) -** Displays the carrier name and allows you to switch SIM cards
- **Firmware version:** Displays the device name and firmware version. Hold to perform a factory reset.
- **Recording screen:** Hold to enable or disable the recording function
- **Video/Encoder status screen:** Displays the video input, encoder mode, and current resolution. Hold to switch the encoder mode
- **Bitrate screen:** Displays the current bitrate. Press to edit the bitrate settings
- **Stream mode screen** - Go Live/Begin Streaming
- **Audio Input screen** - Displays the current Audio bitrate. Press to switch from Embedded, analog, or Mixed

GET ONLINE

Connect to a Wi-Fi Network

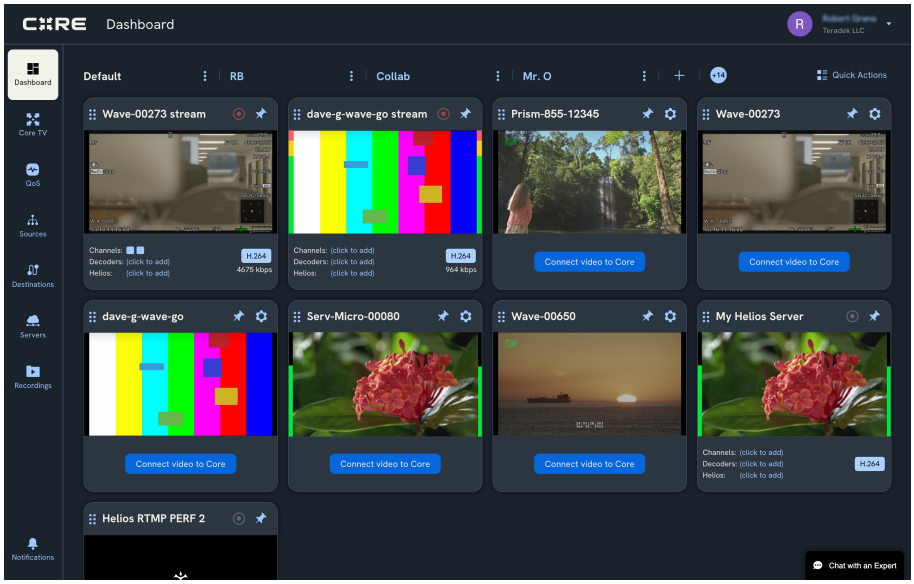
Prism Mobile supports two wireless (Wi-Fi) modes: **Access Point (AP) Mode** (default mode for bonding multiple cellular devices for increased bandwidth, and connecting directly to Prism Mobile) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router). Use the front panel's menu button and navigation joystick to switch to either Wi-Fi mode or a different network.

1. Press the menu button to navigate to the Wi-Fi status screen and switch to **Client Mode**.
2. Press the menu joystick twice in the direction indicated, then press and hold the menu joystick to switch to Client Mode.
3. Press and hold the menu joystick in the direction indicated to scan for available Wi-Fi networks.
4. Select an available network, then enter the password. Once connected, the display will list the network and corresponding IP address.

Connect via Ethernet

1. Connect one or both of Prism Mobile’s Ethernet ports to an Ethernet switch or router.
2. Press the menu button or navigation joystick to navigate to the **Ethernet 1** or **2** screen and obtain the IP address.
3. Enter the IP address in your web browser’s navigation bar to access the web UI.

CONNECTING TO CORE



Prism Mobile can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can:

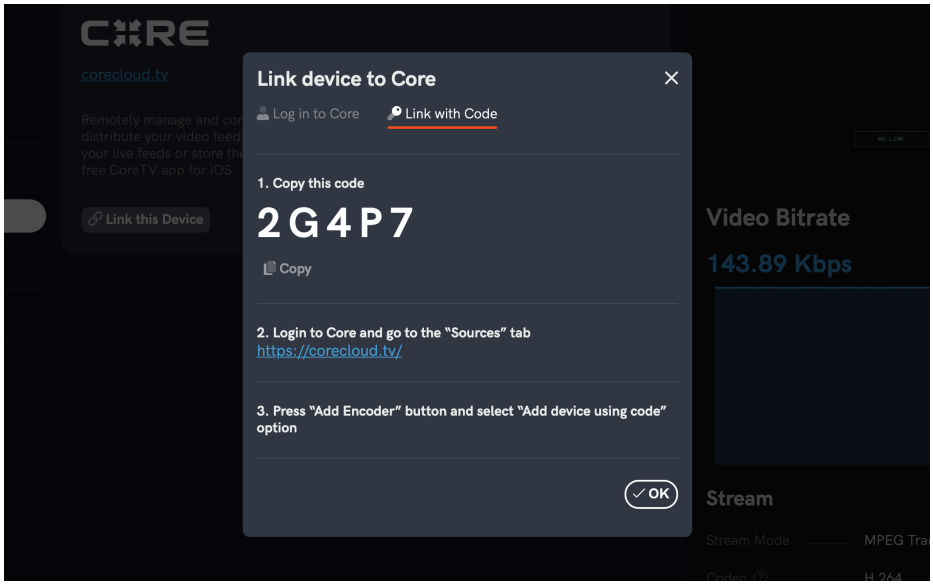
- Bond multiple Internet connections, increasing your broadcast's bandwidth and reliability.
- Remotely control Teradek encoders, decoders and bonded systems from anywhere in the world.
- Stream to multiple destinations.

Visit https://corecloud.tv to learn more.

Connect Prism Mobile to Core

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab in the **Core** section.

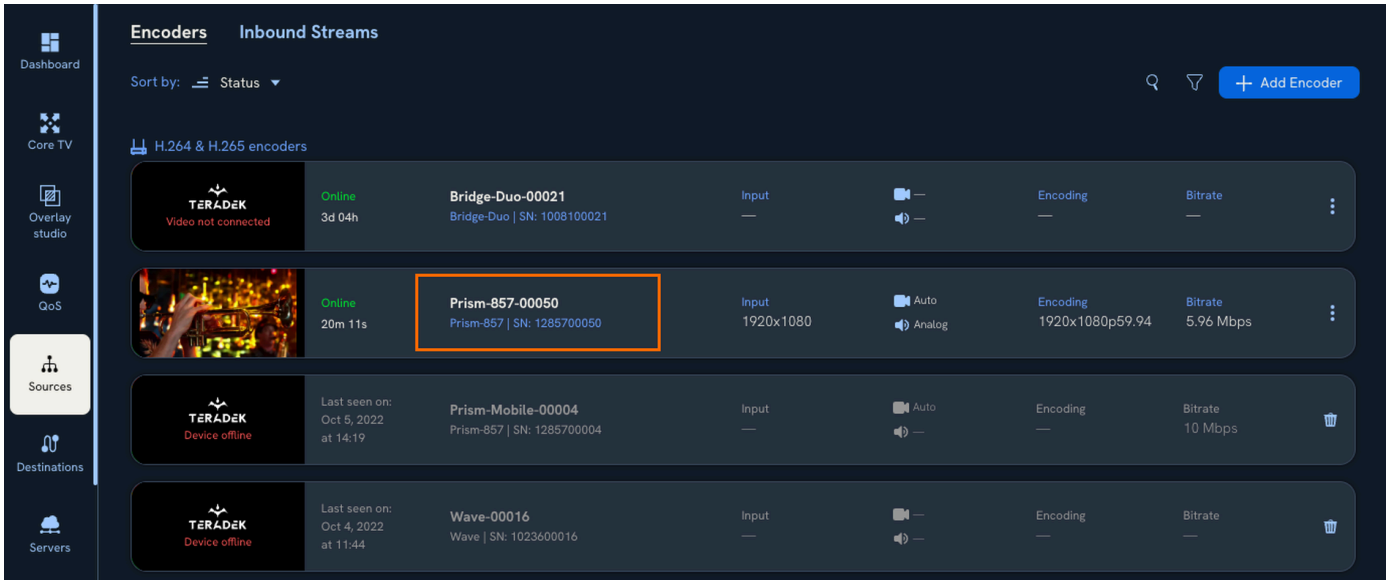
2. **Log in to Core:** Enter your credentials to link Prism to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Prism, then follow the instructions provided.



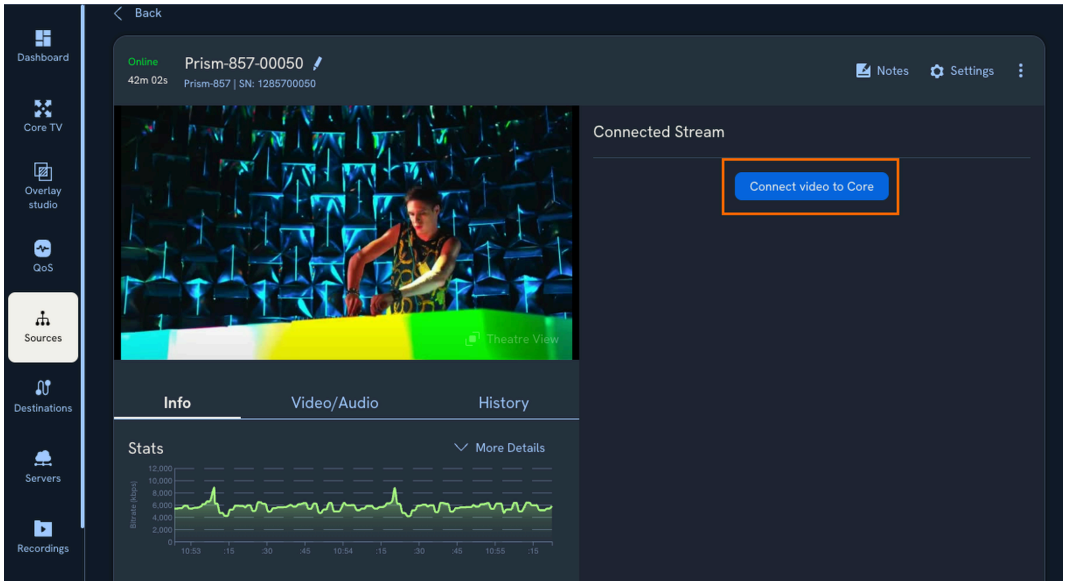
3. Once a connection is established and your Prism Mobile is listed under **Sources**, you can connect Prism Mobile to a server using the Core dashboard.

Connect to a Server

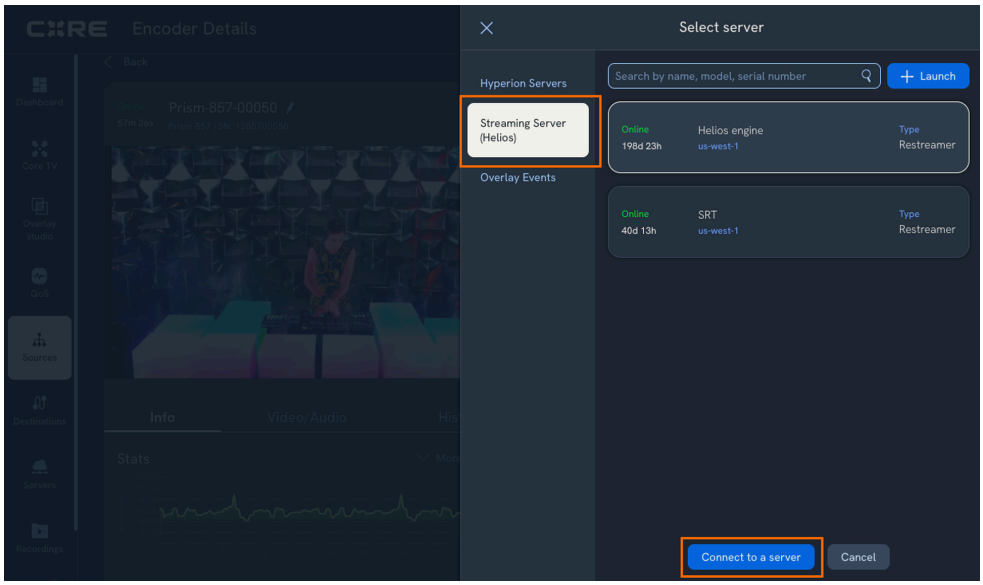
1. From the Sources tab, select your Prism Mobile by clicking on the name of the device.



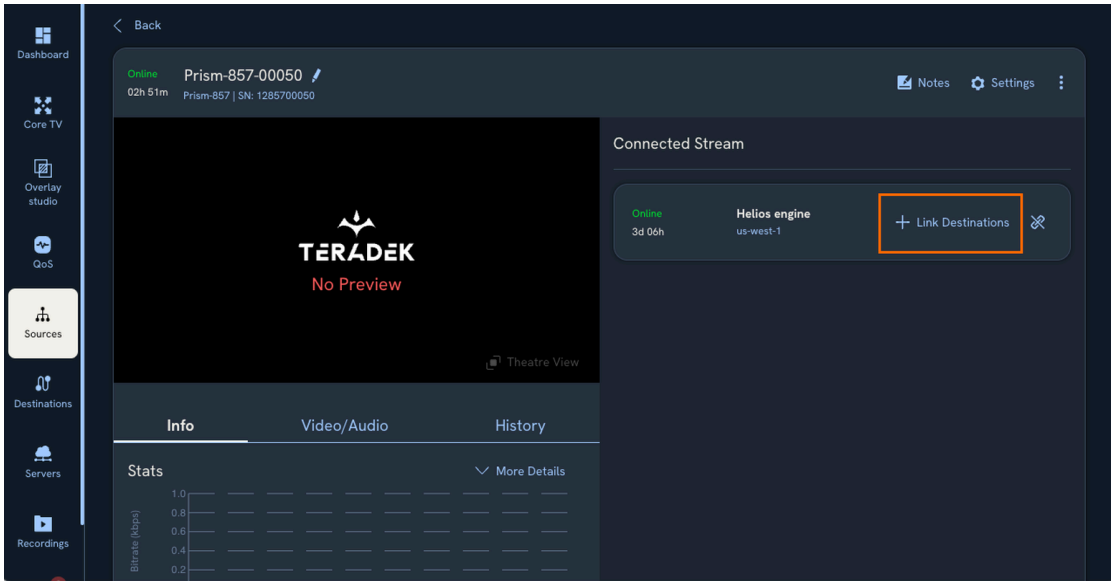
2. Click the **Connect video to Core** tab, then select **Streaming Server (Helios)**. If you haven't configured a server to your Core account, review **this tutorial** for steps on how to launch a new server.



3. Select a server, then click **Connect to a server**.



4. Under Connected Stream in the Encoder Details, click **+ Link Destination** to connect channels or decoders to stream to.

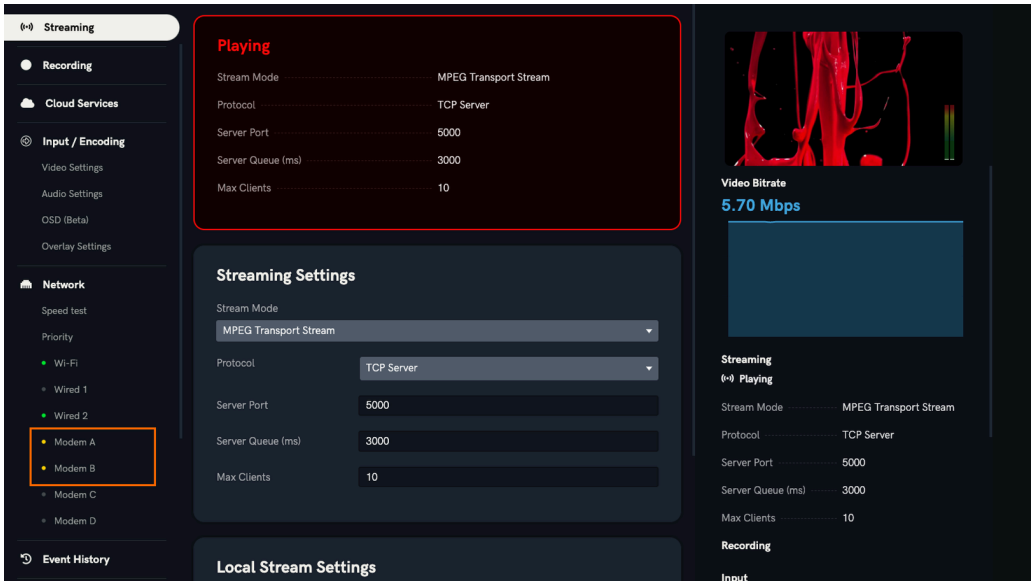


Connect via Cellular Modem

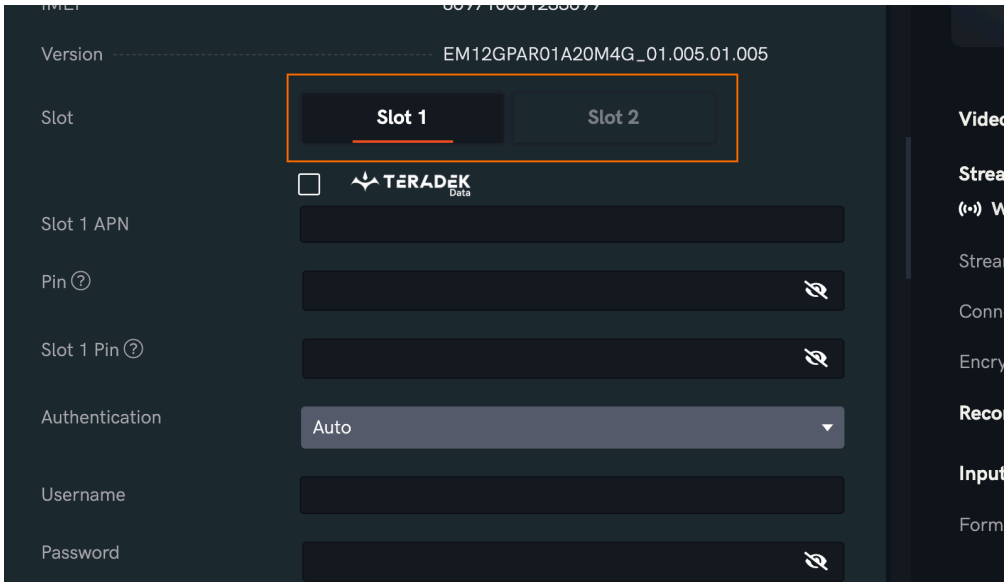
1. Insert a SIM card (two per Node II) into one of the Prism Mobile SIM card slots. Additionally, you can connect an external modem to either Prism Mobile USB port (G) using a **5-pin to USB** connector cable. The front panel will indicate that the SIM card and modem(s) have been detected and connected to the carrier.
2. If the SIM card is not detected, connect your computer to Prism's AP network (see **Connect to a WiFi Network**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the internal modem from the **Network** menu.

Configure SIM cards

1. Navigate to the **Network** menu and select the corresponding Modem.

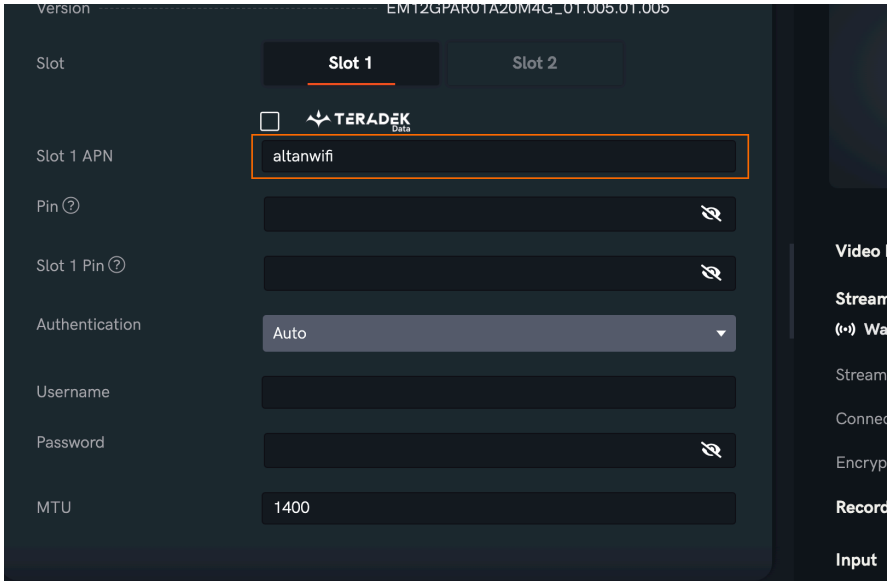


2. Select the slot with the SIM you'll use (**Slot 1 or Slot 2**). **NOTE: Most carriers' SIMs will auto-connect, requiring no additional configuration. Additional configuration is only required when entering an APN, PIN, or authentication type.**

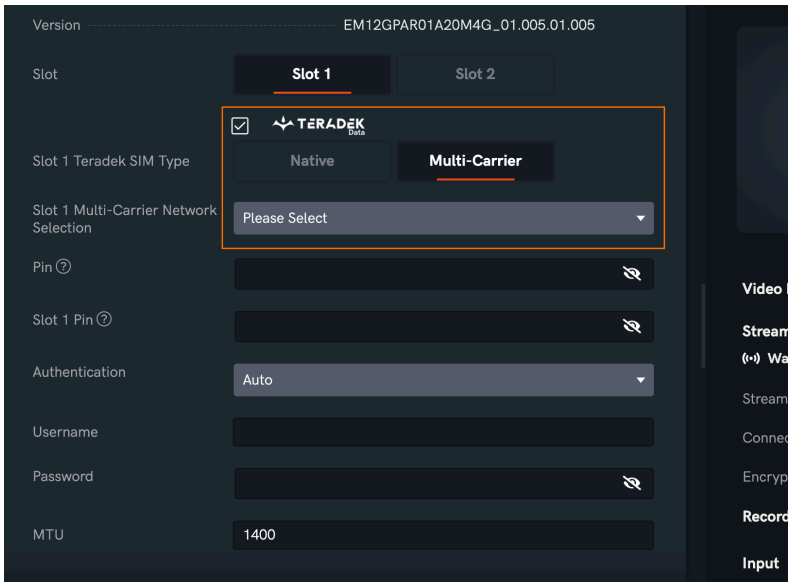


Node II supports most provider's SIM cards and can operate on most LTE/4G/3G data bands. With dual SIM slots, you can swap from one provider to another without needing to unplug the Node II. **Only one SIM card can be used at a time.**

3. **If using Telna SIM cards:** Enter **altanwifi** (for Telna SIM cards intended for use in the United States) or **internet** (for Telna SIM cards intended for use in Europe) in the selected slot's **APN** field (Slot 1 or 2). Ensure that the **Authentication method** is set to **Auto.**

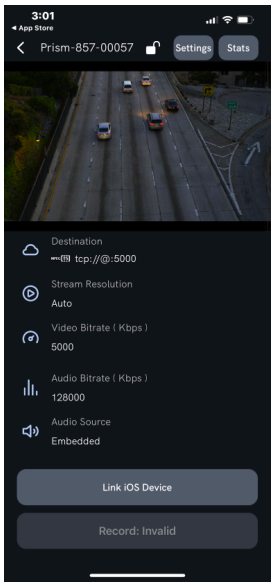


If using Teradek Data SIM cards: Click the **Teradek Data** checkbox, then select either **Native** or **Multi-Carrier.** For Multi-Carrier, select one of the available networks.



PRISM APP

The Prism App allows you to remotely configure all of Prism Mobile's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Prism App is available for iOS devices.



MAIN DISPLAY

• **Main Screen -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your live stream.

• **Link/Unlink iOS Device -** Tap the Link/Unlink iOS tab to enable/disable the use of your cellular phone's data as an Internet connection.

• **Start Recording -** Tap the Recording tab to enable/disable recording. **NOTE: In the Settings menu, recording must be enabled and a media storage option must be selected.**

STATS

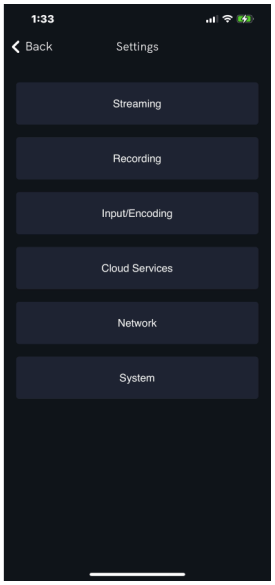
Tap the **Stats** button at the top of the screen to display Prism's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button to configure the following options:

- **Streaming** - Configure your streaming method and destination
- **Recording** - Enable recording and select a media storage option
- **Input/Encoding** - Adjust the Video, Audio and Overlay input settings

- **Cloud Services** -Select a Cloud service (Core, Frame.io, PIX, or Sony Ci) to log in to.
- **Network** - Choose a method of connecting to the Internet
- **System** - View your device's model and serial number, or rename the Prism.



RECORDING

Prism Mobile encoders support recording to an SD card or external USB hard drive. Each recording is saved with the same resolution and bitrate set in the Input / Encoding menu.

1. Insert a compatible SD card or drive into the corresponding slot.

2. Enter the **Recording** menu, and select **Enabled**.

3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

RECORDING CONSIDERATIONS

- Recordings are triggered manually or automatically. If **Auto-Record** is enabled in the **Recording Settings**, a new recording is automatically created when a broadcast starts.
- For best results, use Class 6 or higher SD cards.
- Media should be formatted using FAT32 or exFAT.
- If a broadcast is interrupted for connectivity reasons, recording will continue.
- New recordings are automatically started after the file size limit is reached.

OTHER RESOURCES

- **USER GUIDE ARTICLES: https://guide.teradek.com/m/109577**
- **PRISM MOBILE FIRMWARE AND GUIDE PDFs: https://teradek.com/pages/downloads#prism-mobile**
- **PRISM REFERENCE GUIDE PDF: https://teradek.com/pages/downloads#prism**

Prism Mobile Backpack Quick Start Guide

Supercharge your Prism Mobile with the Prism Mobile Backpack, our latest accessory that packs up to 4 additional high-performance Node 5G modems for unbeatable cellular connectivity in the field. That means you can stream over 6 cellular connections simultaneously for the ultimate on-the-go streaming experience.

TABLE OF CONTENTS

PHYSICAL PROPERTIES

Prism Mobile Backpack

1: Prism Mobile w/dual LTE modems
2: Node 5G modem **F**
3: Node 5G modem **G**
4: Node 5G modem **E**
5: Node 5G modem **D**
6: Cooling fan

Prism Mobile Encoder

A: Menu button	**F**: USB Modem port	**K**: SDI output
B: OLED display	**G**: Mic/Line Stereo TRRS input	**L**: SDI input
C: Navigation joystick	**H**: Headphone TRRS output	**M**: On/Off switch
D: 5-pin USB port	**I**: HDMI input	**N**: Power input
E: Ethernet ports	**J**: SD card slot	**O**: SIM slots (A1, A2, B1, B2)

Node 5G

A: Power indicator	**D:** 5-pin USB port	**G:** Long multi-band antennas
B: Network indicator	**E:** SMA connectors	**H:** Short multi-band antennas
C: SIM card cover/slot	**F:** 1/4″-20 threaded mounts	

WHAT'S INCLUDED

- **1x** Prism Mobile Encoder
- **4x** Node 5G Q 5G/LTE - Quectel Assembly
- **1x** PSU D-Type Charger with D Tap Cable for V and Gold Mount Battery

- **12x** Small SMA Antennas (Male)
- **12x** Large 5G Dipole SMA Antennas (Male)
- **4x** High-performance SMA Antennas (Male)
- **1x** SIM Card Holder
- **2x** Teradek Data eSIM Card

POWER AND CONNECT

1. Place each Node inside its corresponding compartment (if applicable) and connect it using the 5-pin USB connector.
2. Attach the Prism Mobile to the bonding module.
3. Connect the 5-pin USB cable from the red port on the module to the yellow 5-pin USB port on the Prism Mobile.
4. Turn your video source on, then connect the HDMI or SDI video input to Prism Mobile's input connector **(J)**.
5. Attach four antennas to the SMA connectors **(C). NOTE: Prism Mobile only uses SMA antennas. Standard Wi-Fi (RP-SMA) antennas are not compatible with Prism Mobile.**
6. Attach a compatible battery (Gold or V mount) to the Prism Mobile.
7. Turn the Power switch **(L)** to the ON position.
8. Insert a SIM card (two per Node II) into one of the two Prism Mobile SIM card slots. **NOTE: Prism Mobile is equipped with two internal modems (A and B). Each modem supports two SIM cards (A1/A2, B1/B2). To use both modems together, insert a SIM card into each modem's SIM slots. (A1 + B1).**
9. If the SIM card is not detected, connect your computer to Prism's AP network (see **Connect to a Network**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the internal modem from the **Network** menu.

MENU BUTTON OPERATION (A)
Use Prism Mobile's Menu button to navigate the status screens.
Press Button: Cycle through the status screens

NAVIGATION JOYSTICK OPERATION (C) Use the Navigation Joystick to cycle back and forth through the status screens and/or switch your configurable settings.
Press Up or Down: Cycle through status screens and navigate menus
Press Forward: Edit Prism Mobile's configurable settings

- **Main screen** - Displays the current stream settings and resolution
- **WiFi screen** - Displays the current WiFi network and allows you to switch from AP to Client mode

- **Ethernet screens (1 and 2)** - Displays the current WiFi network and allows you to switch from DHCP to Static mode
- **Modem screens (A and B) -** Displays the carrier name and allows you to switch SIM cards
- **Firmware version:** Displays the device name and firmware version. Hold to perform a factory reset.
- **Recording screen:** Hold to enable or disable the recording function
- **Video/Encoder status screen:** Displays the video input, encoder mode, and current resolution. Hold to switch the encoder mode
- **Bitrate screen:** Displays the current bitrate. Press to edit the bitrate settings
- **Stream mode screen** - Go Live/Begin Streaming
- **Audio Input screen** - Displays the current Audio bitrate. Press to switch from Embedded, analog, or Mixed

GET ONLINE

Connect to a Wi-Fi Network

Prism Mobile supports two wireless (Wi-Fi) modes: **Access Point (AP) Mode** (default mode for bonding multiple cellular devices for increased bandwidth, and connecting directly to Prism Mobile) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router). Use the front panel's menu button and navigation joystick to switch to either Wi-Fi mode or a different network.

1. Press the menu button to navigate to the Wi-Fi status screen and switch to **Client Mode**.

2. Press the menu joystick twice in the direction indicated, then press and hold the menu joystick to switch to Client Mode.
3. Press and hold the menu joystick in the direction indicated to scan for available Wi-Fi networks.
4. Select an available network, then enter the password. Once connected, the display will list the network and corresponding IP address.

Connect via Ethernet

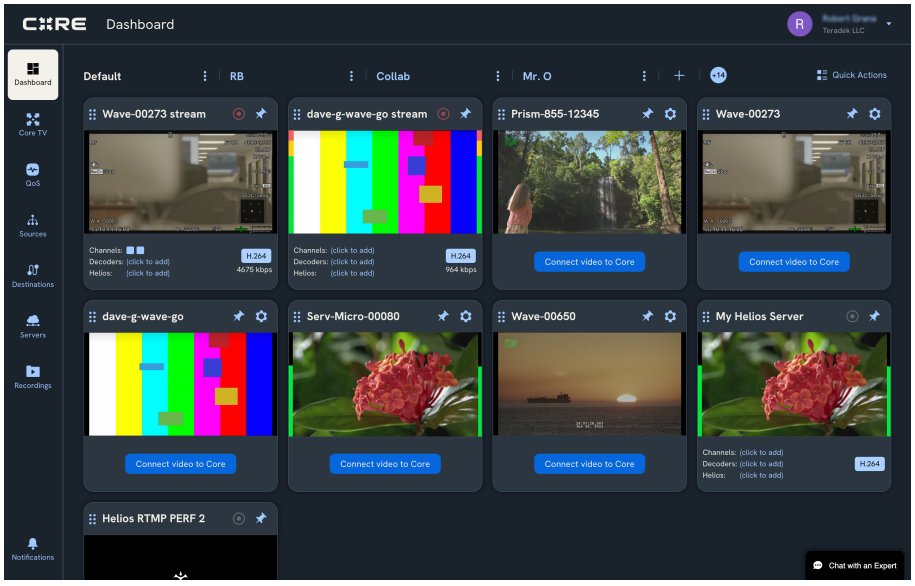
1. Connect one or both of Prism Mobile's Ethernet ports to an Ethernet switch or router.
2. Press the menu button or navigation joystick to navigate to the **Ethernet 1** or **2** screen and obtain the IP address.
3. Enter the IP address in your web browser's navigation bar to access the web UI.

Connecting to Core

Prism Mobile can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can:

- Bond multiple Internet connections, increasing your broadcast's bandwidth and reliability.
- Remotely control Teradek encoders, decoders and bonded systems from anywhere in the world.
- Stream to multiple destinations.

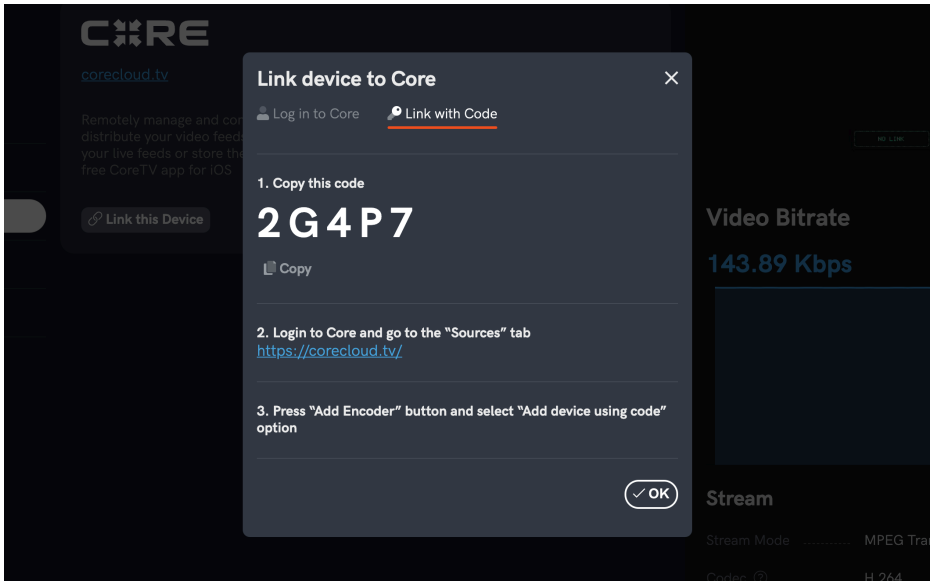
Visit https://corecloud.tv to learn more.



Connect Prism Mobile to Core

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab in the **Core** section.

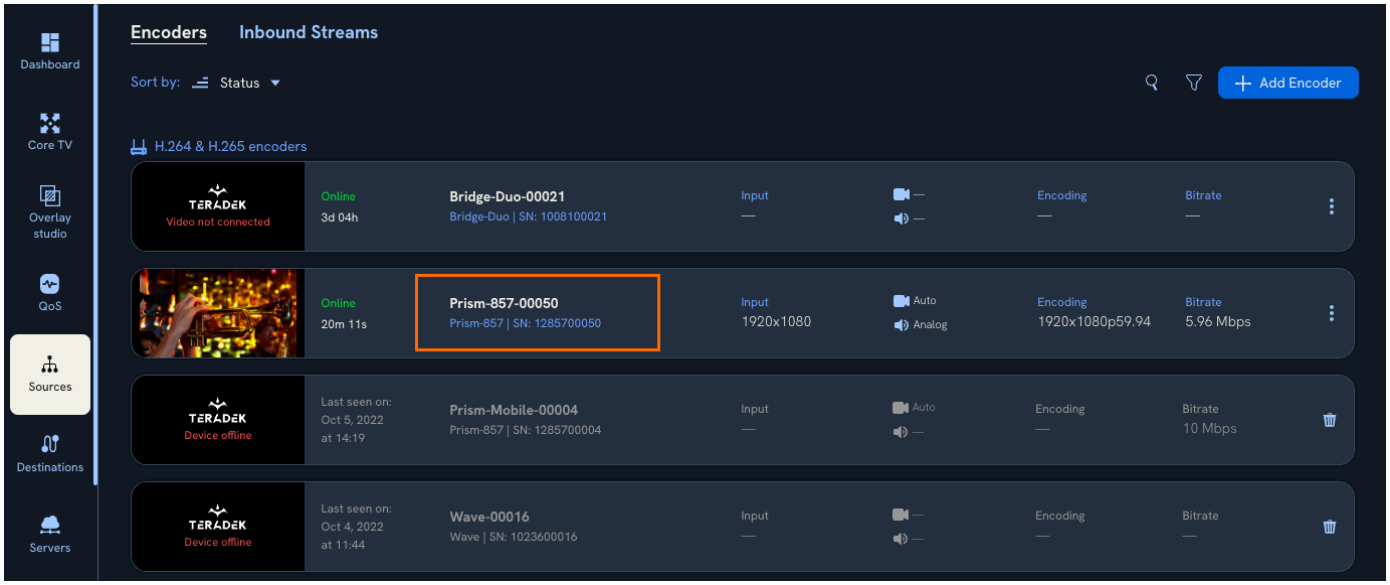
2. **Log in to Core:** Enter your credentials to link Prism to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Prism, then follow the instructions provided.



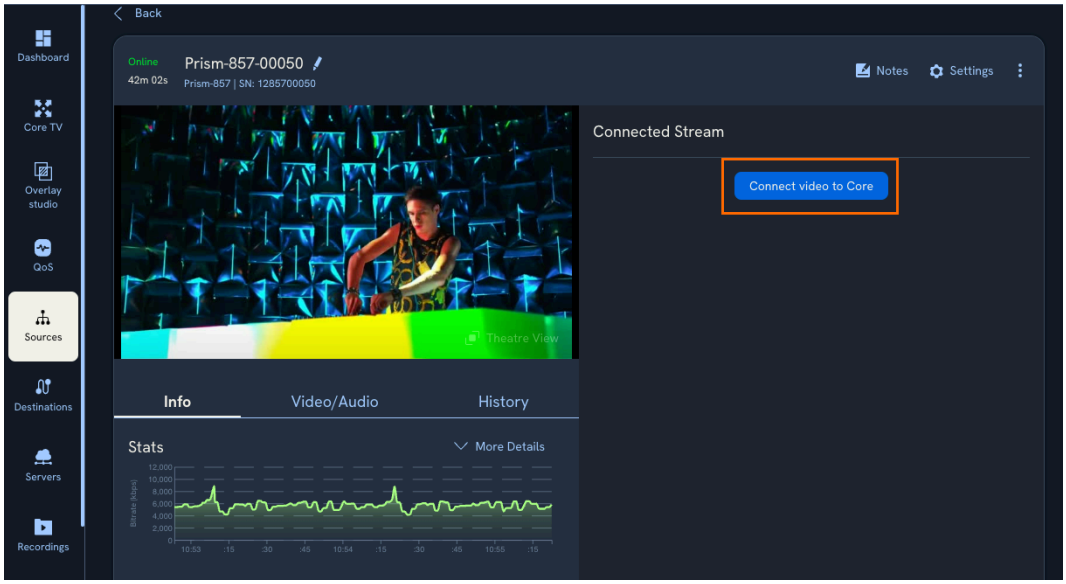
3. Once a connection is established and your Prism Mobile is listed under **Sources**, you can connect Prism Mobile to a server using the Core dashboard.

Connect to a server

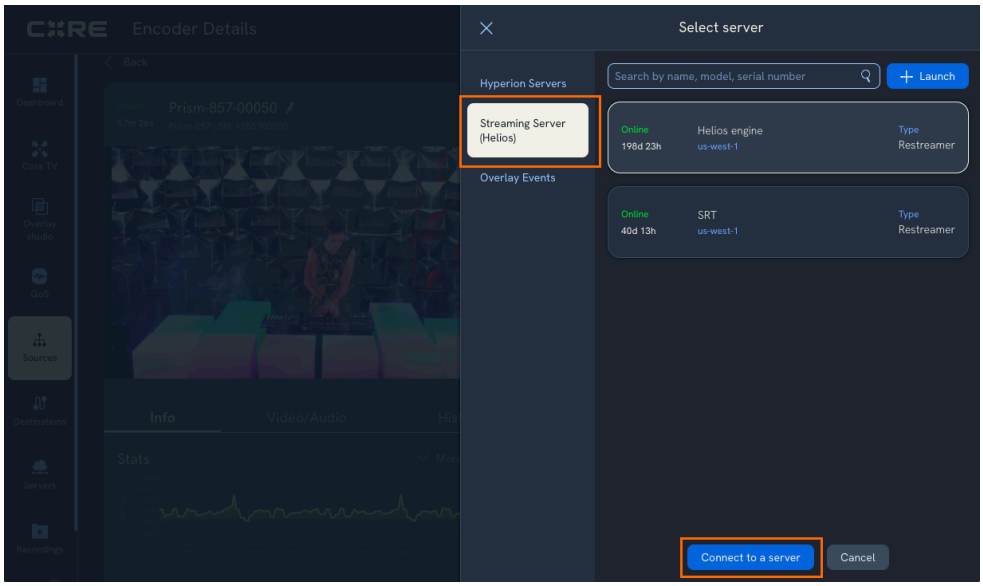
1. From the Sources tab, select your Prism Mobile by clicking on the name of the device.



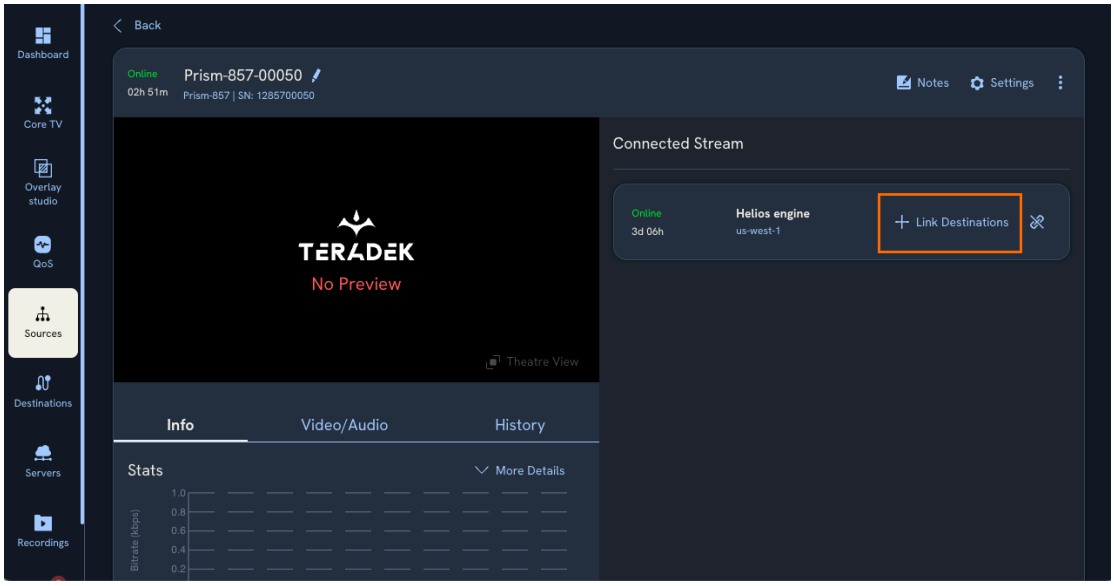
2. Click the **Connect video to Core** tab, then select **Streaming Server (Helios)**. If you haven't configured a server to your Core account, review **this tutorial** for steps on how to launch a new server.



3. Select a server, then click **Connect to a server**.



4. Under Connected Stream in the Encoder Details, click **+ Link Destination** to connect channels or decoders to stream to.

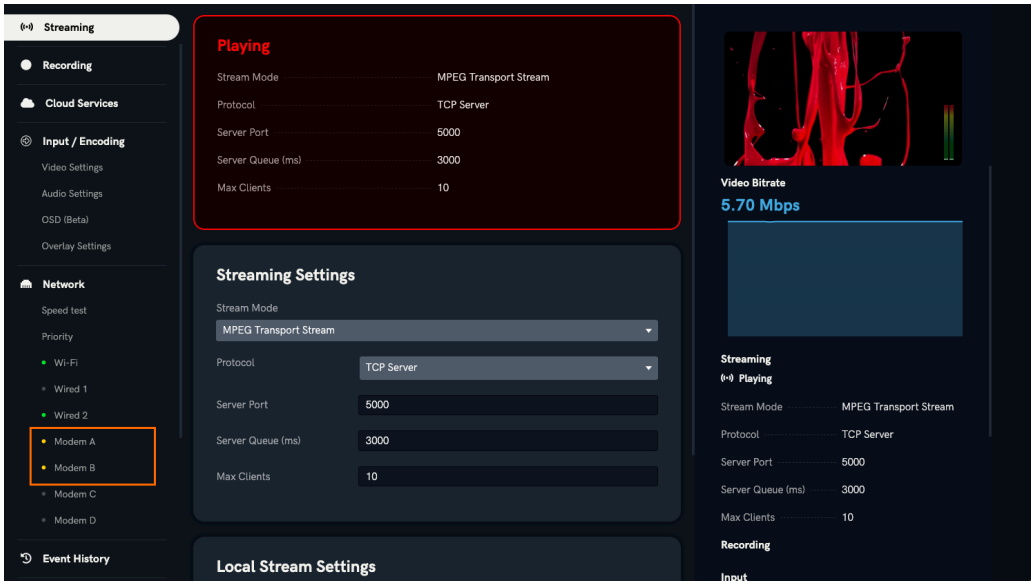


Connect via Cellular Modem

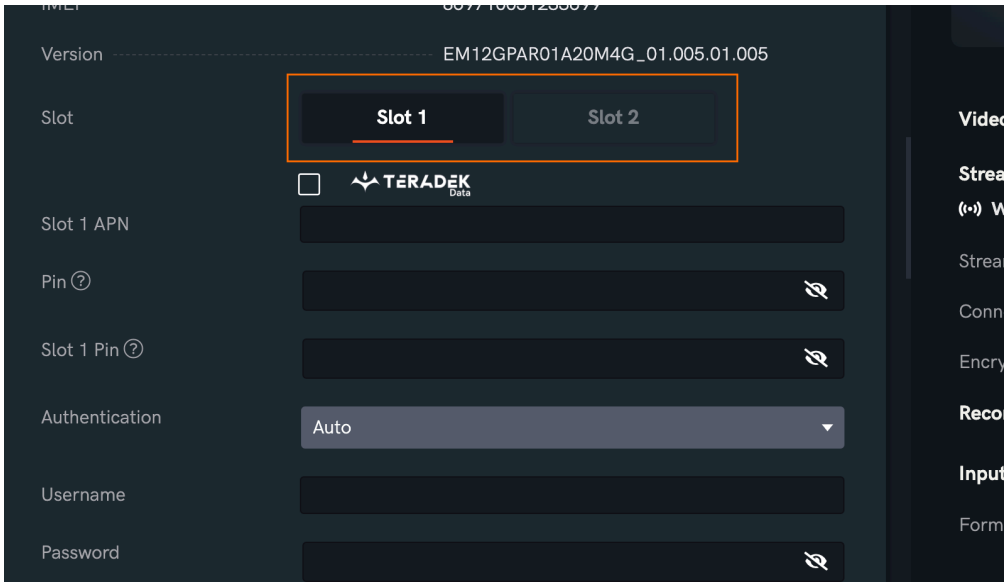
1. Insert a SIM card (two per Node II) into one of the Prism Mobile SIM card slots. Additionally, you can connect an external modem to either Prism Mobile USB port (G) using a **5-pin to USB** connector cable. The front panel will indicate that the SIM card and modem(s) have been detected and connected to the carrier.
2. If the SIM card is not detected, connect your computer to Prism's AP network (see **Connect to a WiFi Network**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the internal modem from the **Network** menu.

Configure SIM cards

1. Navigate to the **Network** menu and select the corresponding Modem.

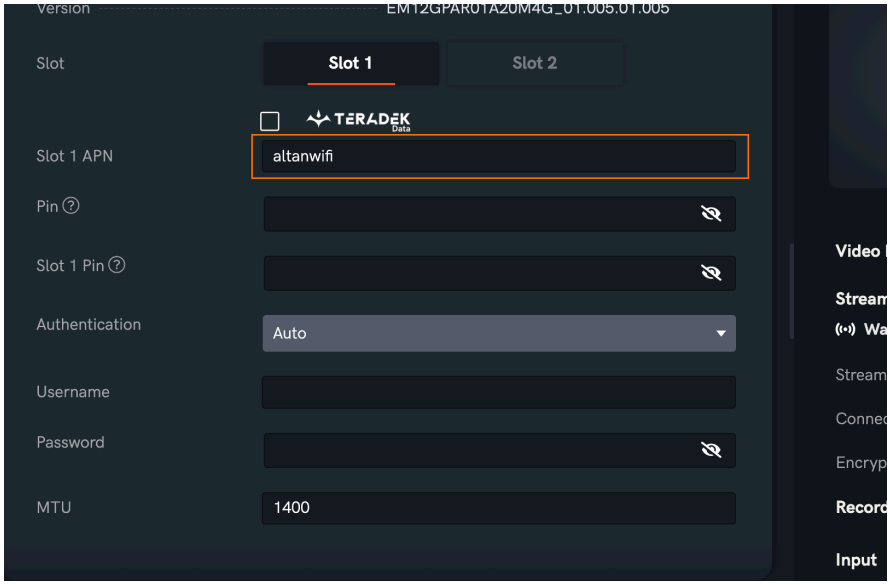


2. Select the slot with the SIM you will be using (**Slot 1 or Slot 2**). **NOTE: Most carriers' SIMs will auto-connect, requiring no additional configuration. Additional configuration is only required when you need to enter an APN, PIN, or authentication type.**

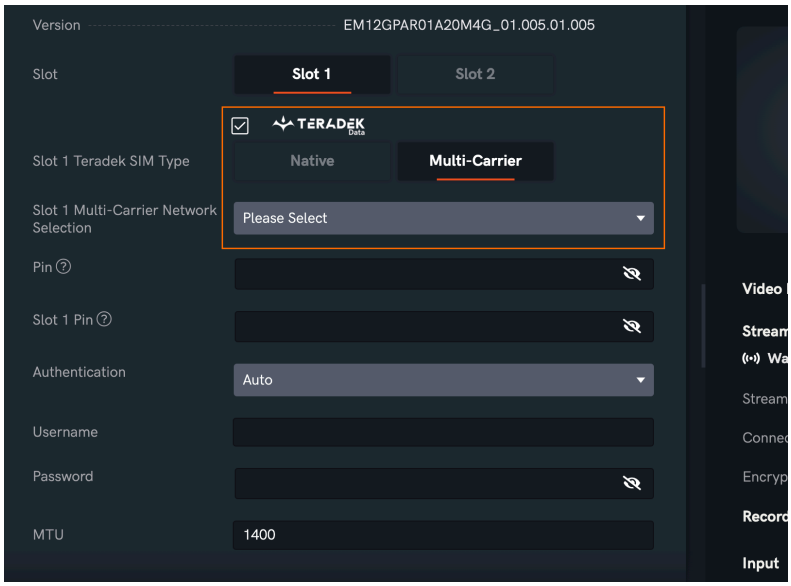


Node II supports most provider's SIM cards and can operate on most LTE/4G/3G data bands. With dual SIM slots, you can swap from one provider to another without needing to unplug the Node II. **Only one SIM card can be used at a time.**

3. **If using Telna SIM cards:** Enter **altanwifi** (for Telna SIM cards intended for use in the United States) or **internet** (for Telna SIM cards intended for use in Europe) in the selected slot's **APN** field (Slot 1 or 2). Ensure that the **Authentication method** is set to **Auto.**

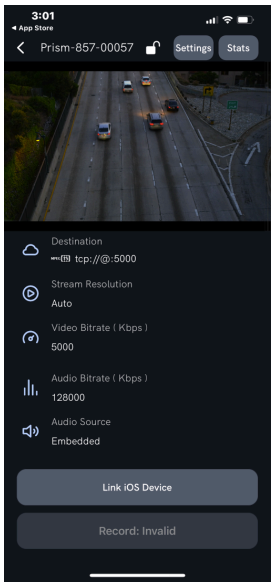


If using Teradek Data SIM cards: Click the **Teradek Data** checkbox, then select either **Native** or **Multi-Carrier.** For Multi-Carrier, select one of the available networks.



PRISM APP

The Prism App allows you to remotely configure all of Prism Mobile's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Prism App is available for iOS devices.



MAIN DISPLAY

• **Main Screen -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your live stream.

• **Link/Unlink iOS Device -** Tap the Link/Unlink iOS tab to enable/disable the use of your cellular phone's data as an Internet connection.

• **Start Recording -** Tap the Recording tab to enable/disable recording. **NOTE: In the Settings menu, recording must be enabled and a media storage option must be selected.**

STATS

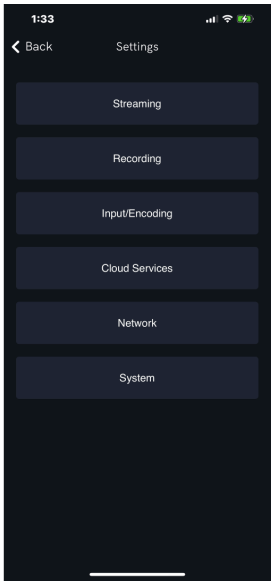
Tap the **Stats** button at the top of the screen to display Prism's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button to configure the following options:

- **Streaming** - Configure your streaming method and destination
- **Recording** - Enable recording and select a media storage option
- **Input/Encoding** - Adjust the Video, Audio and Overlay input settings

- **Cloud Services** -Select a Cloud service (Core, Frame.io, PIX, or Sony Ci) to log in to.
- **Network** - Choose a method of connecting to the Internet
- **System** - View your device's model and serial number, or rename the Prism.



RECORDING

Prism Mobile encoders support recording to an SD card or external USB hard drive. Each recording is saved with the same resolution and bitrate set in the Input / Encoding menu.

1. Insert a compatible SD card or drive into the corresponding slot.

2. Enter the **Recording** menu, and select **Enabled**.

3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

RECORDING CONSIDERATIONS

- Recordings are triggered manually or automatically. If **Auto-Record** is enabled in the **Recording Settings**, a new recording is automatically created when a broadcast starts.
- For best results, use Class 6 or higher SD cards.
- Media should be formatted using FAT32 or exFAT.
- If a broadcast is interrupted for connectivity reasons, recording will continue.
- New recordings are automatically started after the file size limit is reached.

OTHER RESOURCES

- **USER GUIDE ARTICLES: https://guide.teradek.com/m/109577**
- **PRISM MOBILE FIRMWARE AND GUIDE PDFs: https://teradek.com/pages/downloads#prism-mobile**
- **PRISM REFERENCE GUIDE PDF: https://teradek.com/pages/downloads#prism**

Guia de instalação rápida Prism Mobile

O Prism Mobile é o codificador de vídeo de câmera traseira habilitado para LTE mais leve do mercado. Com um I/O flexível e compacto e um design low-SWAP, o Prism Mobile facilmente se encaixa em qualquer fluxo de trabalho. Prism Mobile oferece uma transmissão de vídeo 4K 10-bit HDR integrada à ligação de rede LTE para uma cobertura ao vivo de qualquer local. Prism Mobile foi desenhado para se ajustar perfeitamente atrás do seu ENG, ou da sua câmera profissional ou para ser colocado diretamente sobre uma mesa. Prism Mobile pode codificar vídeos de até 4Kp60 com uma esplêndida 10-bit 4:2:2 fidelidade de imagem emparelhada com Stereo ou com 5.1 som surround. A plataforma Prisma suporta muitos protocolos de streaming comuns como MPE-G-TS, RTSP/RTP, RTMPS, e SRT, e pode ser conectada à Plataforma Teradek's Core Cloud para maior flexibilidade.

ÍNDICE

COMPONENTES FÍSICOS

A: Botão Menu
B: Ecrã OLED
C: Tecla de navegação
D: Porta USB 5-pinos
E: Porta Ethernet
F: Porta USB Modem
G: Entrada Mic/Line Stereo TRRS
H: Saída Fone de Ouvido
I: Saída HDMI
J: Slot cartão SD
K: Saída SDI
L: Entrada SDI
M: Botão On/Off (liga/desliga)
N: Entrada de energia
O: Entrada SIM (A1,A2,B1,B2)

O QUE ESTÁ INCLUÍDO

- **1x** Codificador Prism Mobile
- **1x** Conector 2 pinos para adaptador 30W AC (Int)- Cabo 6ft.
- **4x** Antenas SMA (macho)
- **4x** Antenas SMA alta performance (macho)
- **2x** Suportes de cartão SIM

LIGAR E CONECTAR

1. Ligue a sua fonte de vídeo, e em seguida conecte a entrada de vídeo HDMI ou SDI ao conector de entrada do Prism Mobile (**J**).
2. Conecte quatro antenas aos conectores SMA **(C). NOTA: O Prism Mobile usa apenas antenas SMA. As antenas Wi-Fi padrão (RP-SMA) não são compatíveis e não funcionarão com o Prism Mobile.**

3. Conecte a energia ao Prism Mobile usando o adaptador A/C incluído ou, se equipado com acessórios de placa de bateria, conecte uma bateria compatível (Gold ou V-mount).
4. Coloque o botão on/off (**L**) na posição ON.
5. Insira um cartão SIM (dois por Node II) em um dos slots de cartão SIM do Prism Mobile. **NOTE: O Prism Mobile está equipado com dois modems internos (A e B). Cada modem suporta dois cartões SIM (A1/A2, B1/B2). Para usar os dois modems juntos, insira um cartão SIM em um dos slots SIM de cada modem (A1 + B1).**
6. Se o cartão SIM não for detectado, conecte seu computador à rede AP do Prism (consulte **Conectar a uma rede WiFi**), e digite o endereço IP padrão 172.16.1.1 na barra de navegação para acessar a interface de usuário web e configurar o modem interno do menu **Network**.

MANUSEIO DO BOTÃO MENU (A)
Use o botão Menu do Prism Mobile para navegar pelas telas de status.
Pressione o botão: Percorra as telas de status.

MANUSEIO DA TECLA DE NAVEGAÇÃO (C) Use a tecla de navegação para alternar entre as telas de status e/ou alternar suas configurações ajustáveis.
Pressione para cima ou para baixo: Percorra as telas de status e navegue pelos menus.
Pressione Avançar: Edite as configurações ajustáveis do Prism Mobile.

- **Tela principal:** Exibe as configurações de transmissão atuais e resolução
- **Tela WiFi:** Exibe a rede WiFi atual e permite alternar do modo AP para o modo Cliente
- **Telas Ethernet (1 e 2):** Exibe a rede WiFi atual e permite alternar do modo DHCP para o modo Estático
- **Telas Modem (A e B):** Exibe o nome da operadora e permite trocar de cartão SIM
- **Versão do firmware:** Exibe o nome do dispositivo e a versão do firmware. Segure para restaurar para as configurações de fábrica.
- **Tela de gravação:** Segure para habilitar ou desabilitar a função de gravação
- **Tela de status do codificador/vídeo:** exibe a entrada de vídeo, o modo do codificador e a resolução atual. Segure para mudar o modo do codificador.
- **Tela de taxa de bits:** Exibe a taxa de bits atual. Pressione para editar as configurações de taxa de bits.
- **Tela do modo de transmissão:** Entrar ao vivo/Iniciar a transmissão
- **Tela de entrada de áudio:** Exibe a taxa de bits de áudio atual. Pressione para alternar entre Integrado, Analógico ou Misto

FICAR ONLINE

Conectar à rede Wi-Fi

O Prism Mobile oferece suporte para dois modos sem fio (Wi-Fi): **Modo Ponto de Acesso (AP)** (modo padrão para conectar vários dispositivos celulares para aumentar a largura de banda e conectar-se diretamente ao Prism Mobile) e **Modo Cliente** (para operação Wi-Fi normal e conexão com seu roteador local). Use o botão menu do painel frontal e a tecla de navegação para alternar entre o modo Wi-Fi ou uma rede diferente.

1. Pressione o botão menu para navegar até a tela de status do Wi-Fi e alterne para o **Modo Cliente**.
2. Pressione a tecla do menu duas vezes na direção indicada e, em seguida, pressione e segure a tecla do menu para alternar para o Modo Cliente.
3. Pressione e segure a tecla do menu na direção indicada para procurar redes Wi-Fi disponíveis.
4. Selecione uma rede disponível e digite a senha. Uma vez conectado, o visor listará a rede e o endereço IP correspondente.

Conectar via Ethernet

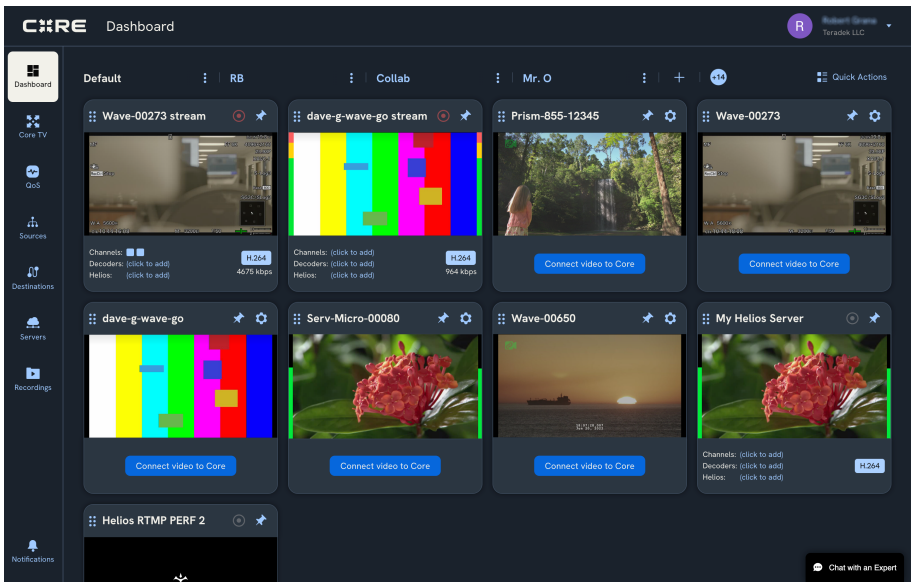
1. Conecte uma ou ambas as portas Ethernet do Prism Mobile a um switch ou roteador Ethernet.
2. Pressione o botão menu ou a tecla de navegação para navegar até a tela **Ethernet 1** ou **2** e obter o endereço IP.
3. Insira o endereço IP na barra de navegação do seu navegador para acessar a interface de usuário da web.

Conectando ao Core

O Prism Mobile pode ser acessado, configurado e controlado remotamente usando o serviço de gerenciamento e roteamento Core Cloud da Teradek. Com o Core, você pode:

- Utilizar várias conexões de Internet, aumentando a largura de banda e a confiabilidade de sua transmissão.
- Controlar remotamente codificadores, decodificadores e sistemas de ligação da Teradek de qualquer lugar do mundo.
- Transmitir para diversos destinos.

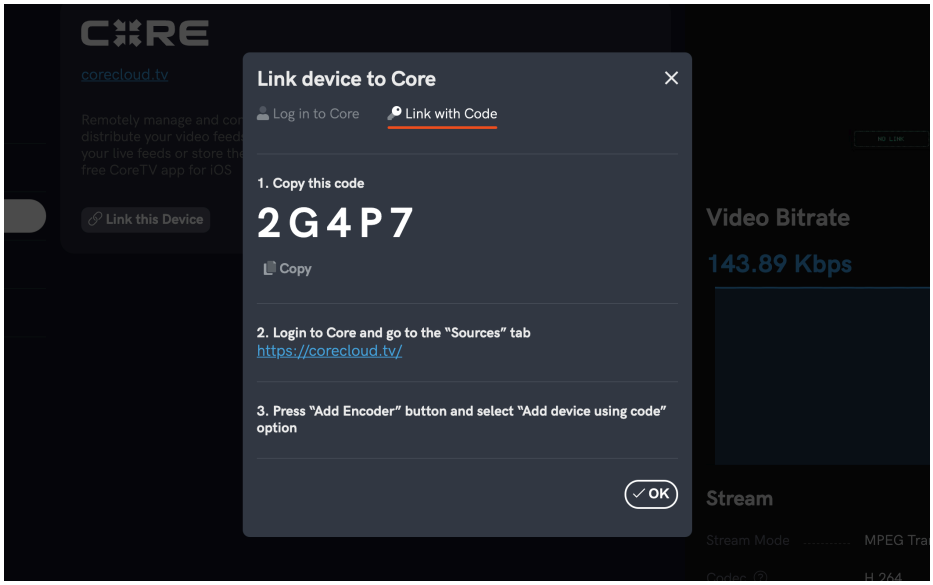
Visite https://corecloud.tv para saber mais.



Conectar o Prism Mobile ao Core

1. Na interface do usuário da web, selecione “**Cloud Services**” e clique na aba “**Link this Device**” na seção “**Core**”.

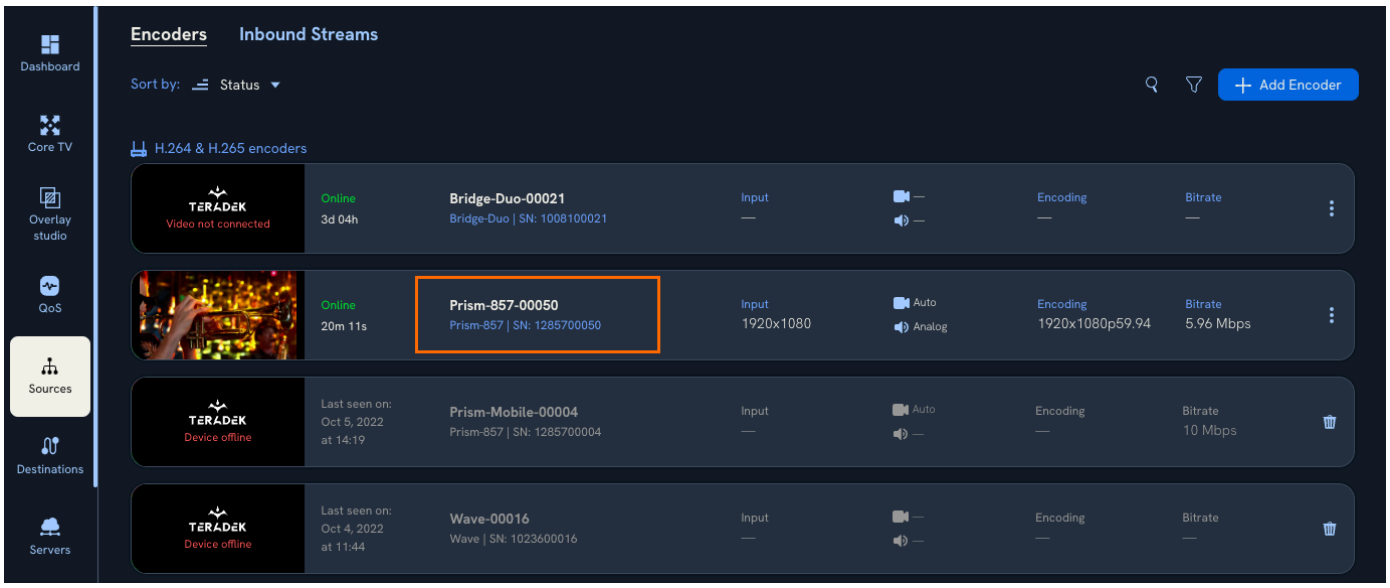
2. **Logar no Core:** insira suas credenciais para vincular o Prism à sua conta do Core e clique em Avançar (Next).
Vincular com Código: Copie o código de autorização gerado para o seu Prism e siga as instruções fornecidas.



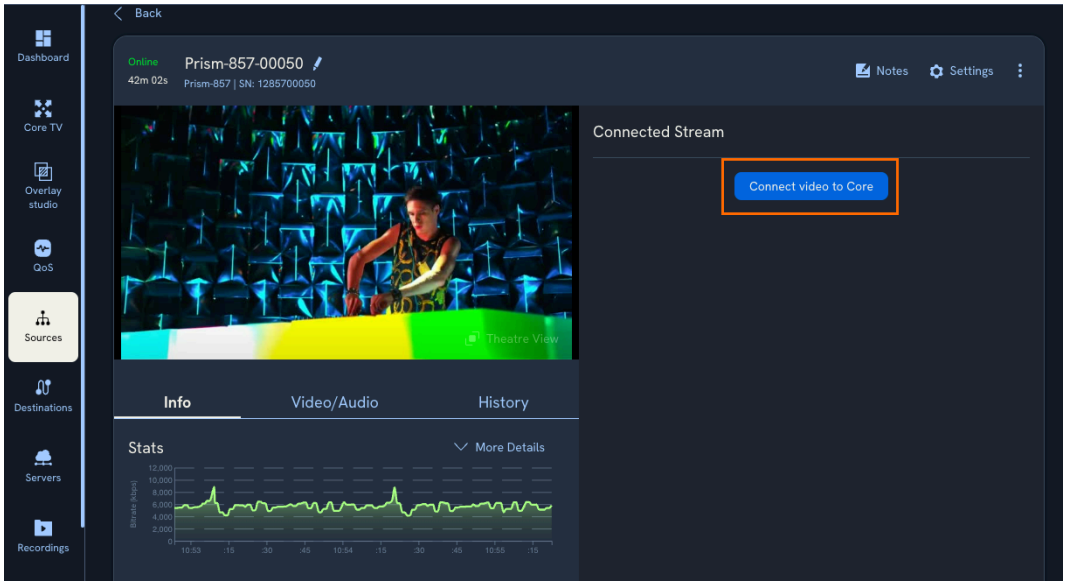
3. Depois que uma conexão for estabelecida e seu Prism Mobile estiver listado em “**Sources**”, você poderá conectar o Prism Mobile a um servidor usando o painel do Core.

Conectar a um servidor

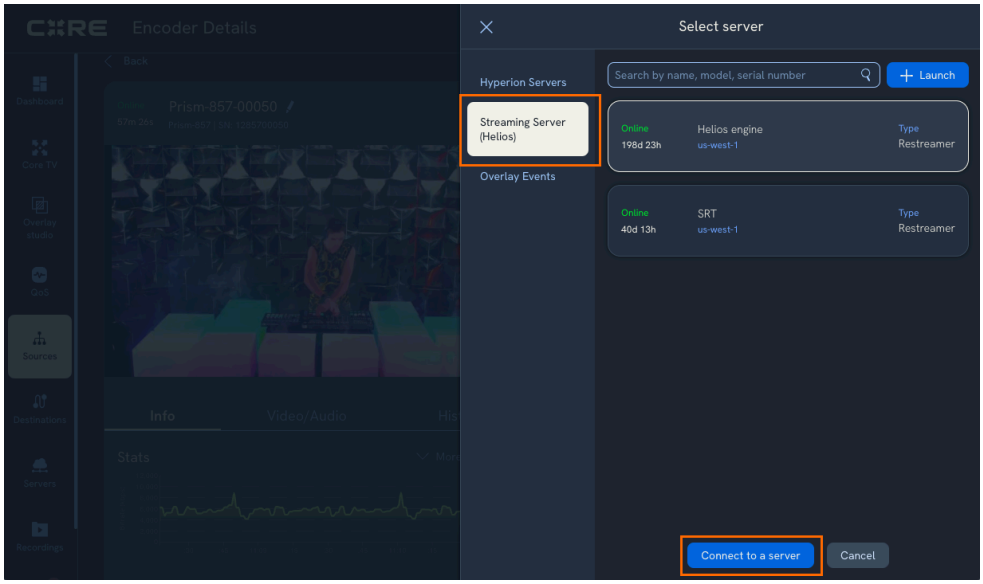
1. Na aba **Sources**, selecione seu Prism Mobile clicando no nome do dispositivo.



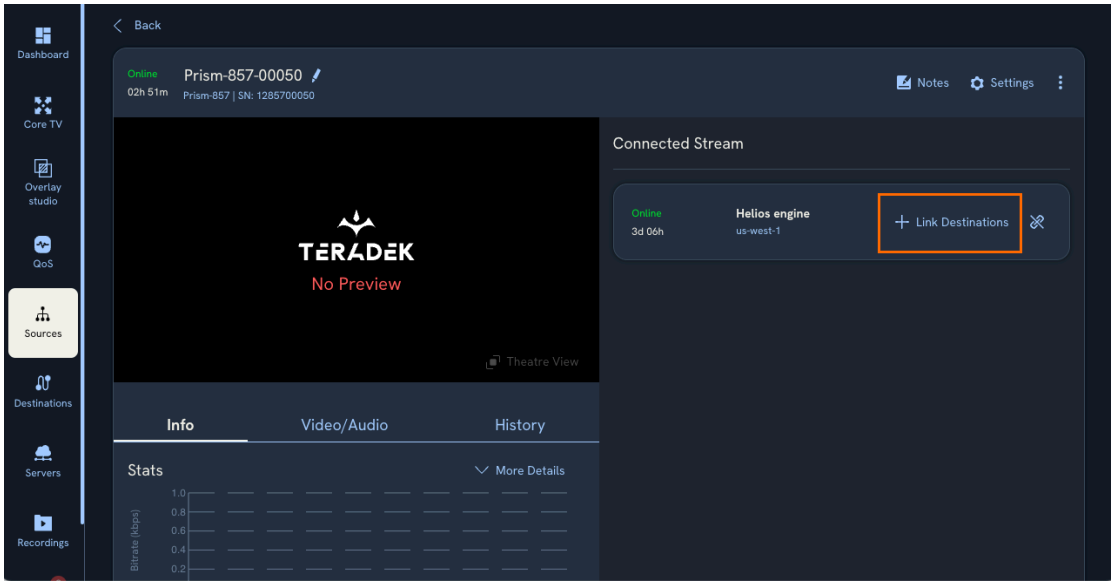
2. Clique na aba “**Connect video to Core**” e selecione **Streaming Server** (Helios). Se você não configurou um servidor para sua conta Core, revise **este tutorial** para obter as etapas sobre como iniciar um novo servidor.



3. Selecione um servidor e clique em **Connect to a server**.



4. Em Connected Stream em Encoder Details, clique em **+ Link Destination** para conectar canais ou decodificadores para quais transmitir.

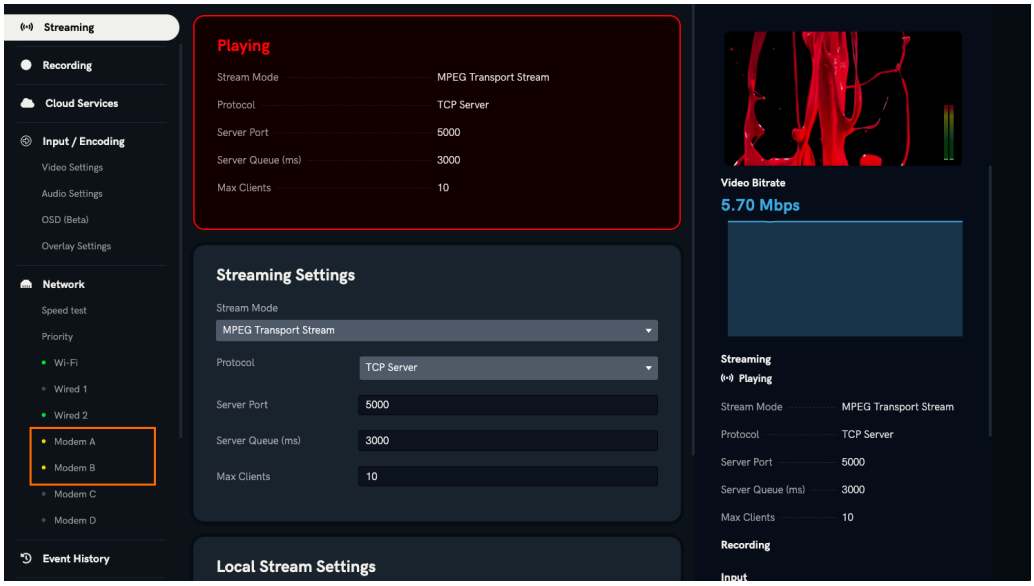


Conectar via Modem de Celular

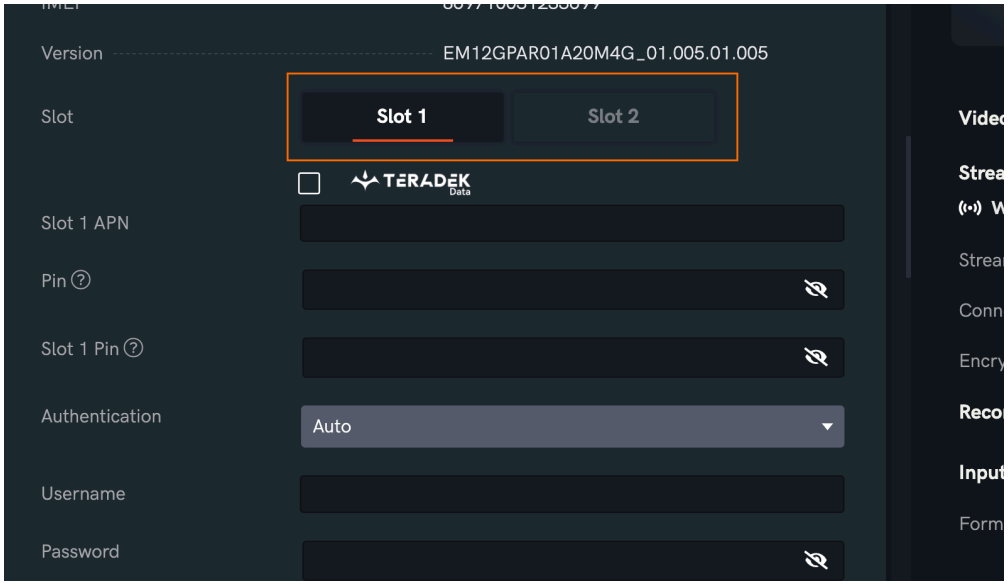
1. Insira um cartão SIM (dois por Node II) em um dos slots de cartão SIM do Prism Mobile. Além disso, você pode conectar um modem externo à porta Prism Mobile USB (G) usando um cabo conector de **5 pinos para USB**. O painel frontal indicará que o cartão SIM e o(s) modem(s) foram detectados e conectados à operadora.
2. Se o cartão SIM não for detectado, conecte seu computador à rede AP do Prism (consulte **Conectar a uma rede WiFi**) e digite o endereço IP padrão 172.16.1.1 na barra de navegação para acessar a interface do usuário da web e configurar o modem interno do menu **Network**.

Configurar cartões SIM

1. Navegue até o menu **Network** e selecione o Modem correspondente.



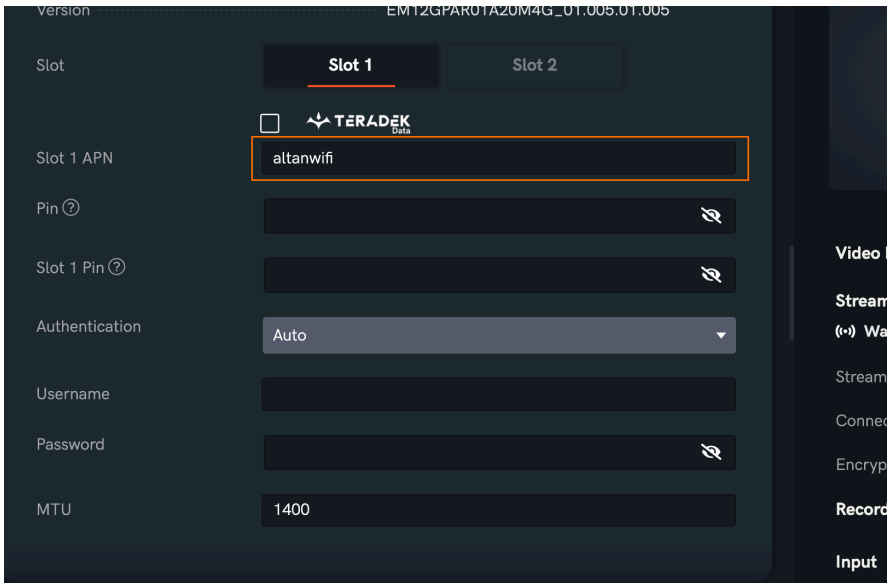
2. Selecione o slot com o SIM que você usará (**Slot 1 ou Slot 2**). **NOTA: Os SIMs da maioria das operadoras se conectarão automaticamente, sem necessidade de configuração adicional. A configuração adicional só é necessária quando você precisa inserir um APN, PIN ou algum tipo de autenticação.**



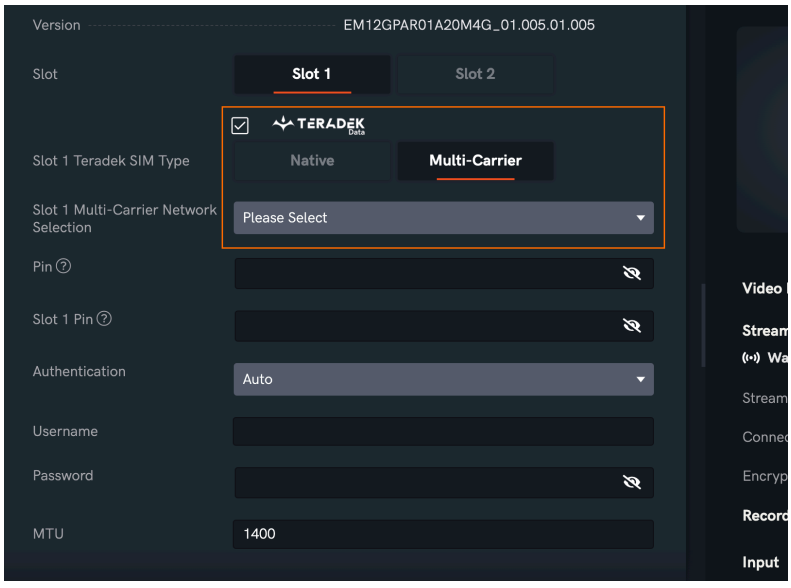
O Node II suporta a grande parte dos provedores de cartões SIM e podem operar na maioria das bandas LTE/4G/3G. Com slot duplo de SIM, você pode alternar de um provedor para o

outro sem a necessidade de desligar o Node II. **Apenas um cartão SIM pode ser usado por vez.**

3. **Se estiver usando cartões SIM Telna:** Digite **altanwifi** (para cartões SIM Telna destinados ao uso nos Estados Unidos) ou **internet** (para cartões SIM Telna destinados ao uso na Europa) no campo **APN** do slot selecionado (Slot 1 ou 2). Certifique-se de que o **método de autenticação** esteja definido como **Automático**.

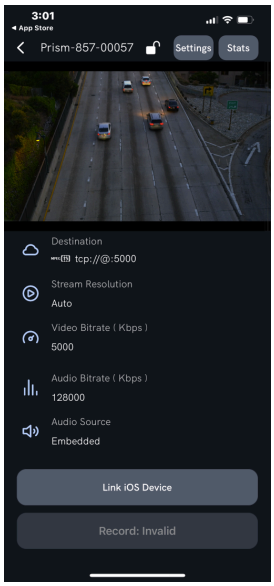


Se estiver usando cartões SIM Teradek Data: Clique na caixa de seleção **Teradek Data** e selecione **Native** ou **Multi- Carrier**. Para Multi-Carrier, selecione uma das redes disponíveis.



APLICATIVO PRISM

O aplicativo Prism permite que você configure todas as configurações do Prism Mobile remotamente enquanto monitora o destino da transmissão, a taxa de bit, o status da conexão e a resolução para garantir que você mantenha uma transmissão estável. O aplicativo Prism está disponível para aparelhos iOS.



TELA PRINCIPAL

• **Tela principal** - Exibe a visualização, o destino da transmissão, as taxas de bits de áudio e vídeo e a resolução da sua transmissão ao vivo.

• **Vincular/desvincular dispositivo iOS** - Toque na guia Vincular/desvincular iOS para ativar/desativar o uso dos dados do seu telefone celular como uma conexão com a Internet.

• **Iniciar gravação** - Toque na guia **Gravação** para ativar/desativar a gravação. **NOTA: No menu Configurações, a gravação deve ser habilitada e uma opção de armazenamento de mídia deve ser selecionada.**

ESTATÍSTICAS

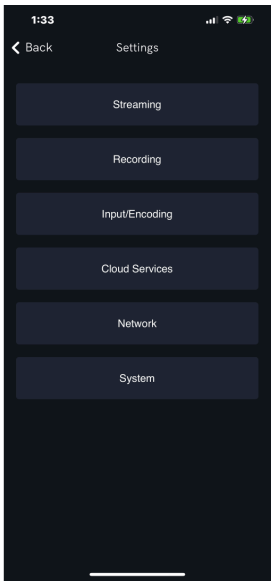
Toque no botão **Stats** na parte superior da tela para exibir o número de série do Prism, taxas de bits de áudio e vídeo atuais, tempo de execução, status de gravação, endereço IP e rede.

CONFIGURAÇÕES

Toque no botão **Configurações (Settings)** para configurar as seguintes opções:

- **Streaming** - Configure seu método e destino de streaming

- **Gravação (Recording)** - Ative a gravação e selecione uma opção de armazenamento de mídia.
- **Entrada/codificação (Input/Encoding)** - Ajuste as configurações de entrada de vídeo, áudio e sobreposição.
- **Serviços de nuvem (Cloud Services)** - Selecione um serviço de nuvem (Core, Frame.io, PIX ou Sony Ci) para fazer login.
- **Rede (Network)** - Escolha um método de conexão com a Internet.
- **Sistema (System)** - Visualize o modelo e o número de série do seu dispositivo ou renomeie o Prism.



GRAVAÇÃO

Os codificadores Prism Mobile suportam a gravação em um cartão SD ou disco rígido USB externo. Cada gravação é salva com a mesma resolução e taxa de bits definida no menu Entrada / Codificação.

1. Insira um cartão SD compatível ou uma unidade no slot correspondente.

2. Entre no menu **Gravação (Recording)** e selecione **Ativado (Enabled)**.

3. Crie um nome para a gravação, selecione um formato e ative a **gravação automática (Auto-Record)** (opcional).

CONSIDERAÇÕES SOBRE A GRAVAÇÃO

- As gravações são iniciadas manualmente ou automaticamente. Se o **Auto-Record** está habilitado nas **configurações de gravação (Recording Settings)**, uma nova gravação será criada quando a transmissão se iniciar.
- Para melhores resultados, use cartões SD classe 6 ou acima.

- A mídia deve ser formatada usando FAT32 ou exFAT.
- Se a transmissão for interrompida por razões de conectividade, a gravação continuará.
- Novas gravações são automaticamente iniciadas depois que o limite de tamanho de arquivo é alcançado.

OUTROS RECURSOS

- **ARTIGOS DE GUIA DO USÁRIO: https://guide.teradek.com/m/109577**
- **PRISM MOBILE FIRMWARE E GUIA EM PDF: https://teradek.com/pages/downloads#prism-mobile**
- **GUIA DE REFERÊNCIA DO PRISM EM PDF: https://teradek.com/pages/downloads#prism**

Prism Flex Mk II Quick Start Guide (2024)

With a flexible I/O and compact, low-SWaP design, Prism Flex Mk II easily fits into any workflow. Prism Flex Mk II is perfect for placement on a table top, camera-top, or wedged between your video switcher and audio mixer. Prism Flex Mk II can encode or decode up to 4Kp60 video with stunning 10-bit 4:2:2 image fidelity. The Prism platform supports many common streaming protocols such as TRT, SRT, MPEG-TS, RTSP/ RTP, and RTMP(S), and can be connected to Teradek's Core Cloud platform for even more flexibility.

TABLE OF CONTENTS

PHYSICAL PROPERTIES - ENCODER OR DECODER

A: Menu button
B: OLED display
C: Menu Navigation buttons
D: RP-SMA connectors
E: 5-pin USB port
F: Ethernet ports
G: USB port
H: Mic/Line stereo input
I: HDMI input (output on decoder)
J: Headphone output
K: SD card slot
L: 12G-SDI output
M: 12G-SDI input
N: On/Off switch
O: Power input

WHAT'S INCLUDED

- 1x Prism Flex Mk II Encoder/Decoder
- 1x 12G-SDI BNC to BNC - 18in Cable
- 1x 2pin Connector to 30W AC Adapter (Int) - 6ft Cable
- 2x Antenna 2dBi WIFI 2.4/5.8GHz

POWER AND CONNECT

1. **Encoder:** Turn your video source on, then connect the HDMI (**I**) or SDI input **(M)** from your video source to Prism Flex's input connector.

Decoder: Turn your monitor on, then connect connect the HDMI (**I**) or SDI output **(L)** from your Prism Flex to the monitor's input connector**.**

2. Attach the two Wi-Fi antennas to the RP-SMA connectors **(D)**.

3. Connect power to Prism Flex using the included A/C adapter.

4. Turn the Power switch on the back **(N)** to the ON position.

MENU BUTTON OPERATION (A)
Use Prism Mobile's Menu button to navigate the status screens.
Press Button: Cycle through the status screens

NAVIGATION BUTTONS OPERATION (C) Use the Navigation Joystick to cycle back and forth through the status screens and/or switch your configurable settings.
Press Up or Down: Cycle through status screens and navigate menus
Press Forward: Edit Prism Mobile's configurable settings

- **Main screen** - Displays the current stream settings and resolution
- **WiFi screen** - Displays the current WiFi network and allows you to switch from AP to Client mode
- **Ethernet screens (1 and 2)** - Displays the current WiFi network and allows you to switch from DHCP to Static mode
- **Modem screens (A and B) -** Displays the carrier name and allows you to switch SIM cards
- **Firmware version:** Displays the device name and firmware version. Hold to perform a factory reset.
- **Recording screen:** Hold to enable or disable the recording function
- **Video/Encoder status screen:** Displays the video input, encoder mode, and current resolution. Hold to switch the encoder mode
- **Bitrate screen:** Displays the current bitrate. Press to edit the bitrate settings
- **Stream mode screen** - Go Live/Begin Streaming
- **Audio Input screen** - Displays the current Audio bitrate. Press to switch from Embedded, analog, or Mixed

GET ONLINE

Use Prism Flex's web UI to connect Prism to a network and get online.

Connect to a WiFi Network

Prism Flex supports two wireless (Wi-Fi) modes; **Access Point (AP) Mode** (for bonding multiple cellular devices for increased bandwidth) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router). **NOTE: Use the Menu Navigation buttons on the front panel to navigate to the Ethernet screen (1 or 2) and switch from DHCP to Static Mode or a different network.**

1. Connect your phone or laptop to Prism Flex's network, **Prism-855 XXXXX** (**XXXXX** represents the last five digits of Prism's serial number).

2. Enter the default IP address **172.16.1.1 i**n your web browser to access the web UI.

3. **To switch to Client Mode:** From the web UI, navigate to the **Network Settings** and select **WiFi**.

4. Select **Client** as the WiFi Mode.

5. Click the **WiFi scan** tab, select an available network, then enter the password. Once connected, the display will list the network Prism Flex is connected to.

Connect via Ethernet

1. Connect one or both of Prism Flex's Ethernet ports to an Ethernet switch or router.

2. Press the menu button to navigate to the **Ethernet 1** or **2** screen and obtain the IP address.

3. Enter the IP address in your web browser's navigation bar to access the web UI.

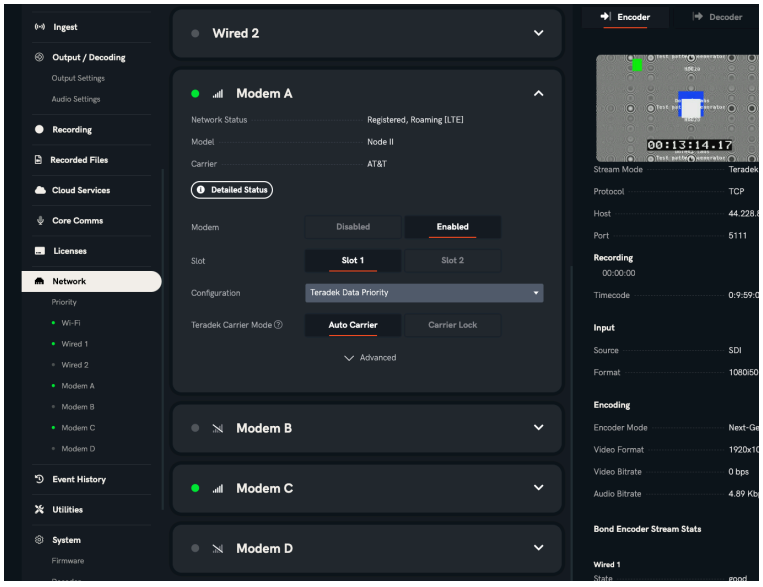
Connect via Node 5G or Node II

1. Attach a Node 5G or Node II to Prism's USB port (G) using a **5-pin to USB** connector cable, and/or attach another Node to Prism's 5-pin USB input (H) using a **5-pin to 5-pin** connector. The front panel will indicate that the modem has been detected and connected to the carrier.

2. If the modem is not detected, connect your computer to Prism Flex's AP network (see **Connect to a WiFi Network**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the modem from the **Network** menu.

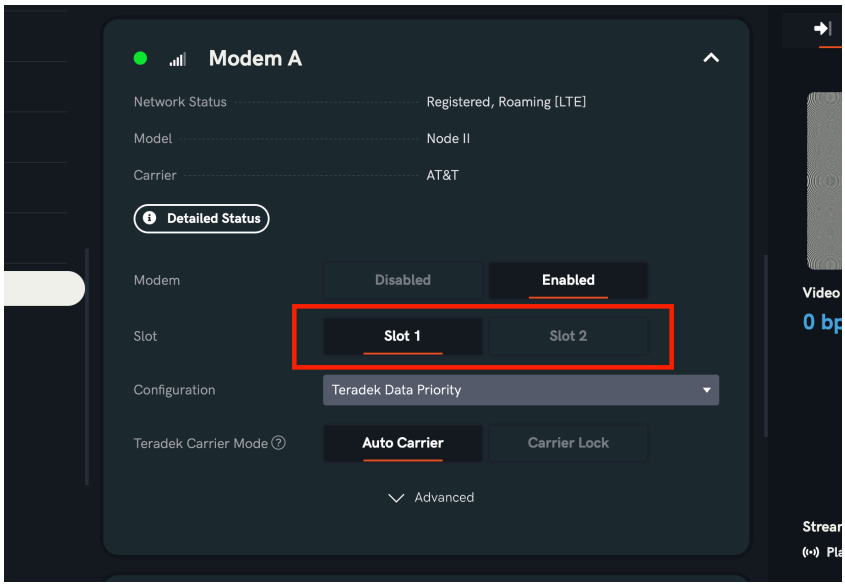
Configure Node 5G/Node II

1. Navigate to the **Network** menu and select the corresponding Node modem.

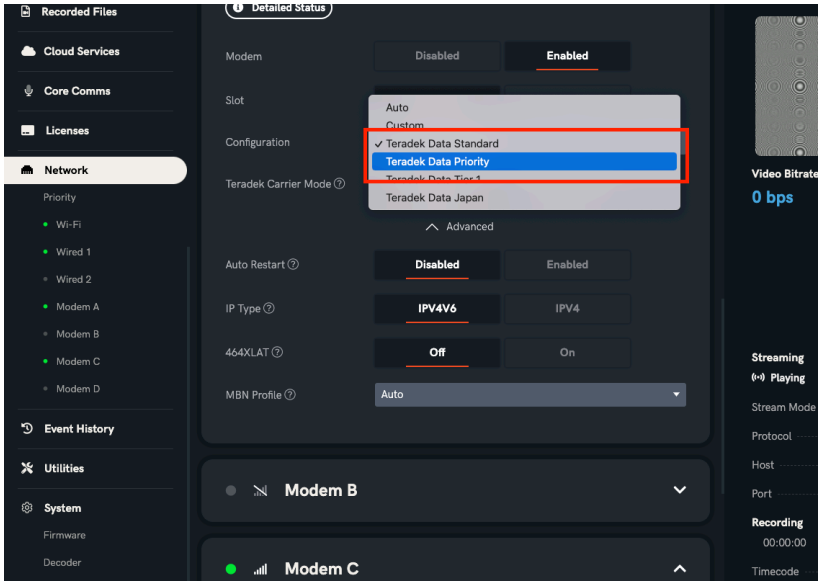


2. Select the slot with the SIM you will be using (**Slot 1 or Slot 2**).

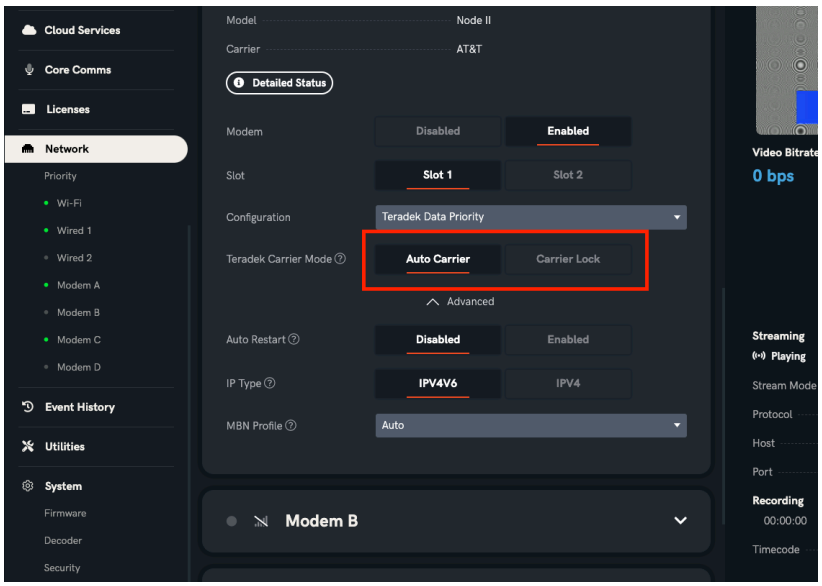
NOTE: Node 5G supports most providers' SIM cards and can operate on most LTE and 5G data bands. You can switch from your carrier's SIM (**Physical**) to Teradek Data (**eSIM**) without unplugging the Node 5G. Node II supports most provider's SIM cards and can operate on most LTE/4G/3G data bands. With dual SIM slots, you can switch from one provider to another without unplugging the Node II. **Only one SIM card can be used at a time.**



3. Select **Teradek Data Priority or Teradek Data Standard** (depending on your SIM and plan) from the **Configuration** drop-down menu.



4. Set the **Teradek Carrier Mode** to **Auto Carrier**. For Carrier Locking mode, click **here**.



5. Click **Save** when you're done.

ENCODER/DECODER CONFIGURATION

Configure your Prism Flex decoder to receive streams from a Prism Flex encoder.

> **NOTE:** Prism Flex has several streaming modes available such as **SRT**, **RTMP**, **YouTube**, **Facebook Live**, and now **TRT (Teradek Reliable Transport)**. The following instructions describe how to configure your decoder/encoder using **MPEG-TS** mode as an example.

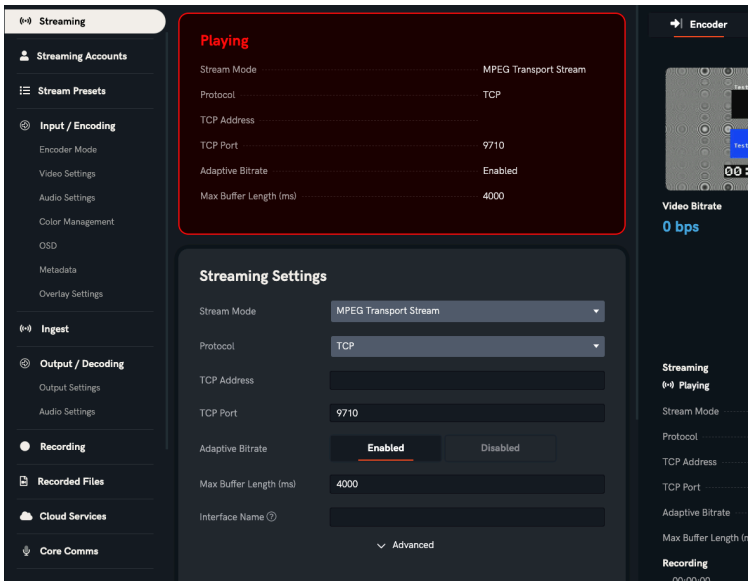
1. Connect to the Prism Flex encoder (see previous section) and open the encoder's web UI.

2. Open the Streaming menu, then select **MPEG-TS** as the streaming mode.

3. Select a protocol, then ensure the Prism decoder is configured to receive the stream using the correct protocol:

- TCP → TCP
- TCP Server → TCP Pull
- UDP → UDP
- Multicast → Multicast

Encoder Web UI



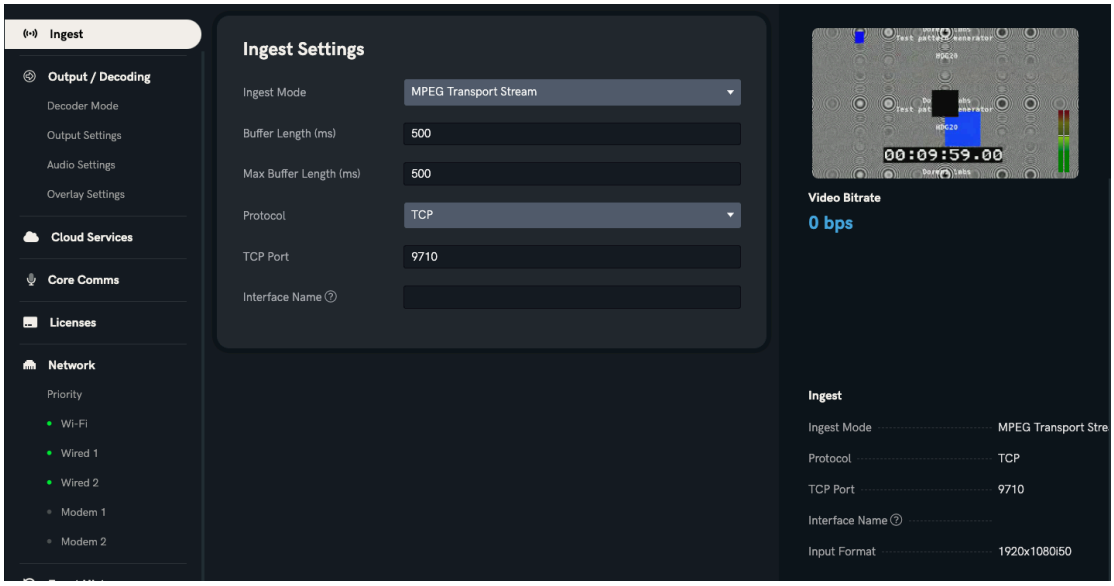
4. Enter the destination IP address, then confirm the port is set as the default 9710.

5. Connect to the Prism decoder (see previous section) and open the decoder's web UI.

6. Open the Ingest menu, then select **MPEG-TS** as the ingest mode.

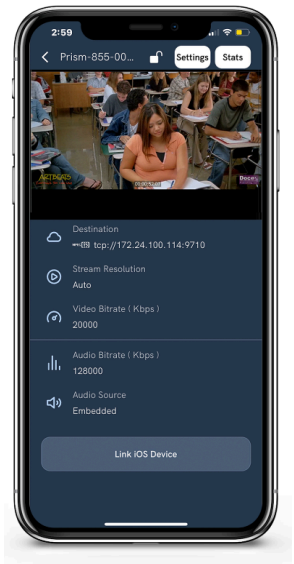
7. Enter the protocol, ensuring the selected protocol matches the Encoder's protocol configuration (see step 3). Confirm the port is set as the default 9710.

Decoder Web UI



PRISM APP

The Prism App allows you to remotely configure all of Prism Flex's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Prism App is available for iOS devices.



MAIN DISPLAY

• **Main Screen -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your livestream.

• **Link/Unlink iOS Device -** Tap the Link/Unlink iOS tab to enable/disable the use of your cellular phone's data as an Internet connection.

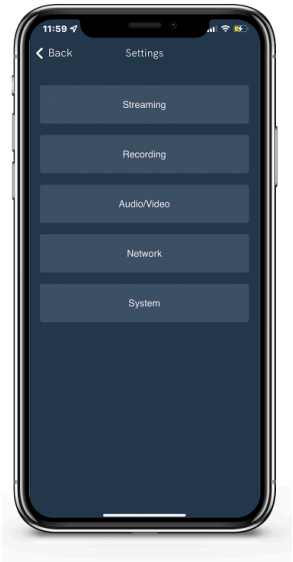
STATS

Tap the **Stats** button at the top of the screen to display Prism's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button to configure the following options:

- **Streaming** - Configure your streaming method and destination
- **Recording** - Enable recording and select a media storage option
- **Audio/Video** - Adjust the Video and Audio input settings
- **Network** - Choose a method of connecting to the Internet
- **System** - View the model and serial number of your device, or rename the Prism.



RECORDING

Prism Flex encoders support recording to an SD card, USB drive, or NFS. Each recording is saved with the same resolution and bitrate set in Prism Flex.

1. Insert a compatible SD card into the corresponding slot.

2. Enter the **Recording** menu, and select **Enabled**.

3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

RECORDING CONSIDERATIONS

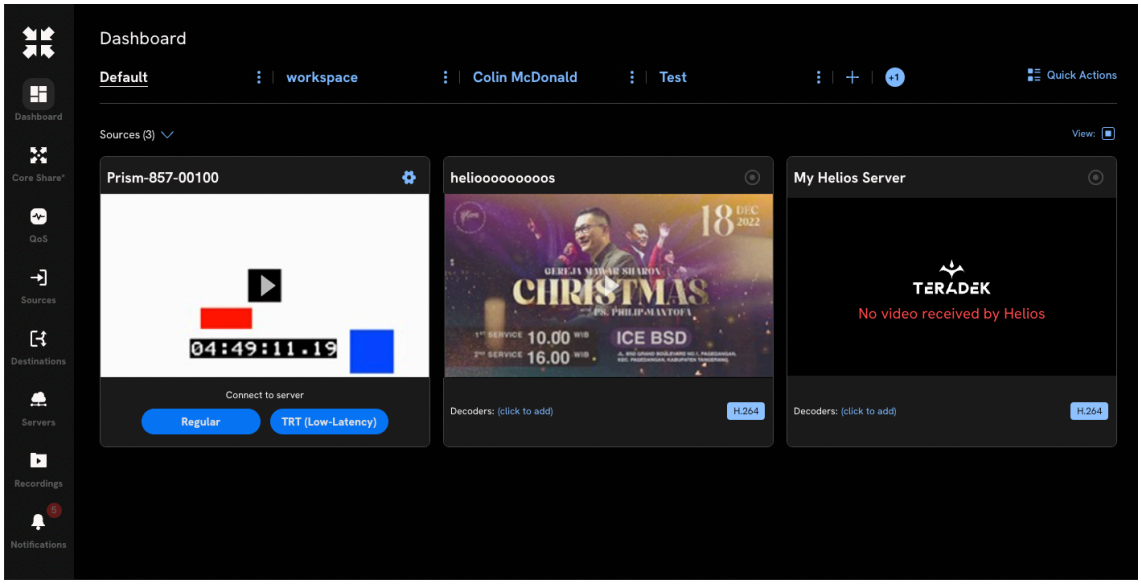
- Recordings are triggered manually or automatically. If **Auto-Record** is enabled in the **Recording Settings**, a new recording is automatically created when a broadcast starts.
- For best results, use Class 6 or higher SD cards.
- Media should be formatted using FAT32 or exFAT.
- If a broadcast is interrupted for connectivity reasons, recording will continue.
- New recordings are automatically started after the file size limit is reached.

CORE

Prism Flex can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can:

- Bond multiple Internet connections, increasing your broadcast's bandwidth and reliability.
- Remotely control Teradek encoders, decoders, and bonded systems from anywhere in the world.
- Stream to multiple destinations.
- Sync your recordings.

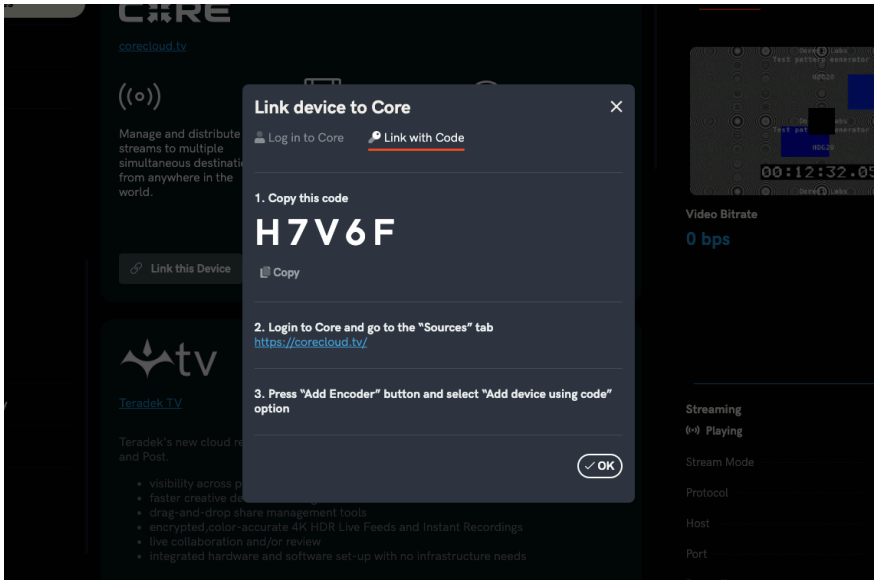
Visit https://corecloud.tv to learn more.



CONNECT PRISM FLEX TO CORE

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab.

2. **Log in to Core:** Enter your credentials to link Prism to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Prism, then follow the instructions provided.



3. Once a connection is established, you can configure Prism from either the Prism UI or Core dashboard.

OTHER RESOURCES

- **USER GUIDE ARTICLES: https://guide.teradek.com/m/109577**
- **PRISM REFERENCE GUIDE PDF: https://teradek.com/pages/downloads#prism**

Prism 1RU Chassis

A: Encoder/Decoder cards (front)
B: Power button
C: Second power input (optional-2RU only)
D: First power input
E: Gigabit Ethernet ports
F: Encoder/Decoder Cards (rear)

DUAL ETHERNET PORTS

Prism chassis features two independent Ethernet ports (**Wired 1**, **Wired 2**). These two Ethernet ports connect to an internal switch inside the chassis (one per Ethernet port), allowing an encoder/decoder card to have two addressable ports as well as two different networks. For example, one port can connect to an internal network for configuration while the other port can connect to a separate network for streaming.

Internet routing is configured automatically, so either port can be used to stream out over a WAN. If both connections have Internet access, the Wired 2 interface takes priority over Wired 1. Both interfaces can be configured for DHCP or static addresses independently of one another.

NOTE: Only use one Ethernet port at a time.

Prism 2RU Chassis

A: Encoder/Decoder cards (front)
B: Power button
C: Second power input (optional-2RU only)
D: First power input
E: Gigabit Ethernet ports
F: Encoder/Decoder Cards (rear)

DUAL ETHERNET PORTS

Prism chassis features two independent Ethernet ports (**Wired 1**, **Wired 2**). These two Ethernet ports connect to an internal switch inside the chassis (one per Ethernet port), allowing an encoder/decoder card to have two addressable ports as well as two different networks. For example, one port can connect to an internal network for configuration while the other port can connect to a separate network for streaming.

Internet routing is configured automatically, so either port can be used to stream out over a WAN. If both connections have Internet access, the Wired 2 interface takes priority over Wired 1. Both interfaces can be configured for DHCP or static addresses independently of one another.

NOTE: Only use one Ethernet port at a time.

Card Operation

Use the Menu joystick to navigate the front panel interface and the Reboot button to restart Prism.

A: Video input/output status
B: OLED display
C: Menu joystick
D: Reboot button
E: Encoder/Decoder status
F: 12G-SDI input (Decoder: output)
G: 12G-SDI output (Encoder: active looping output)
H: Headphone/IFB input/output
I: Mic/Line stereo input/output

MENU NAVIGATION BUTTON

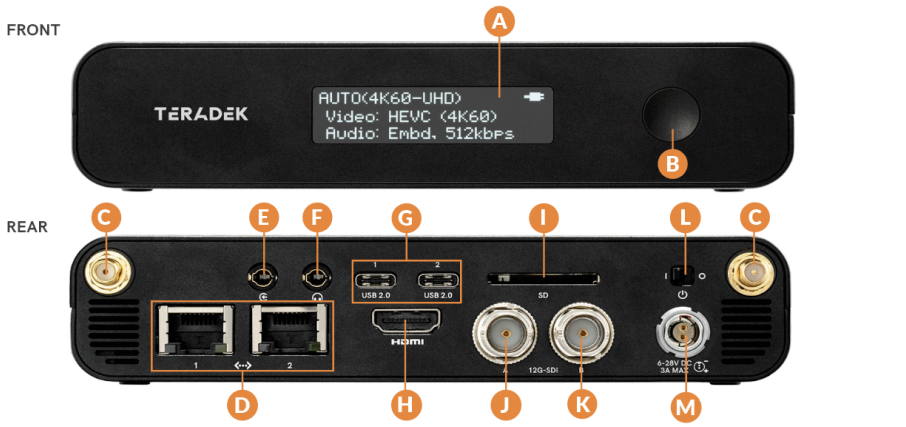
Use Prism Menu Navigation button to navigate the status screens, go live, switch your configurable settings, and perform a factory reset.

C: MENU JOYSTICK
Press Up or Down: Cycle through status screens, navigate menus
Press Back: Return to previous menu
Press Forward or In: Open selected menu

D: REBOOT BUTTON
Restart the encoder/decoder

WARNING:
Prism contains sensitive electronic components that can be damaged by electrostatic discharge (ESD). When handling, care must be taken so that the device is not damaged. Damage due to inappropriate handling is not covered by the warranty.

Prism Flex



A: OLED display
B: Menu button
C: RP-SMA connectors
D: Dual Ethernet ports
E: Mic/Line stereo TRRS input
F: Headphone TRRS output
G: USB modem ports
H: HDMI input (output on decoder)
I: SD card slot (encoder only)
J: SDI output
K: SDI input (output on decoder)
L: On/Off switch
M: Power input

MENU BUTTON OPERATION

Use Prism Flex's Menu button to navigate the status screens, go live, switch your configurable settings, and perform a factory reset.

PRESS BUTTON: Cycle through the status screens

LONG-PRESS BUTTON:

- **System screen** - Perform factory reset
- **WiFi screen** - Switch from AP to Client mode
- **Wired screen** - Switch from DHCP to Static mode
- **Stream mode screen** - Go Live/Begin Streaming
- **Audio Input screen** - Switch from Embedded, analog, or Mixed
- **Home screen** - Start/Stop recording

Prism Mobile

A: Menu button
B: OLED display
C: Navigation joystick
D: 5-pin USB port
E: Ethernet ports
F: USB Modem port
G: Mic/Line stereo TRRS input
H: Headphone TRRS output
I: HDMI input
J: SD card slot
K: SDI output
L: SDI input
M: On/Off switch
N: Power input
O: SIM slots (A1, A2, B1, B2)

MENU BUTTON/NAVIGATION JOYSTICK OPERATION

MENU BUTTON OPERATION (A)
Use Prism Mobile's Menu button to navigate the status screens.
Press Button: Cycle through the status screens

NAVIGATION JOYSTICK OPERATION (C) Use the Navigation Joystick to cycle back and forth through the status screens and/or switch your configurable settings.

Press Up or Down: Cycle through status screens and navigate menus
Press Forward: Edit Prism Mobile's configurable settings

- **Main screen** - Displays the current stream settings and resolution
- **WiFi screen** - Displays the current WiFi network and allows you to switch from AP to Client mode
- **Ethernet screens (1 and 2)** - Displays the current WiFi network and allows you to switch from DHCP to Static mode
- **Modem screens (A and B) -** Displays the carrier name and allows you to switch SIM cards
- **Firmware version:** Displays the device name and firmware version. Hold to perform a factory reset.
- **Recording screen:** Hold to enable or disable the recording function
- **Video/Encoder status screen:** Displays the video input, encoder mode, and current resolution. Hold to switch the encoder mode
- **Bitrate screen:** Displays the current bitrate. Press to edit the bitrate settings
- **Stream mode screen** - Go Live/Begin Streaming
- **Audio Input screen** - Displays the current Audio bitrate. Press to switch from Embedded, analog, or Mixed

STATUS OLED SCREEN

The Status OLED screen allows the user to see what function is active or inactive by the appearance of the screen (see below). The Status screen will display after 30 seconds of inactivity.

Dotted Outline: Disabled, or not configured

Solid Outline: Configured and on standby

Solid Box: Sending video data (video connected to a server in Core)

FUNCTIONS

- **CORE: Core**
  - Dotted line: Not Linked to Core
  - Solid line: Linked to Core
  - Solid white: Streaming to Core
- **WiFi: Wireless**
  - Dotted line:
    - Client Mode: Disabled
    - Access Point Mode: Disabled
  - Solid line:
    - Client Mode: Not Connected
    - Access Point Mode: N/A
  - Solid white:
    - Client Mode: Connected
    - Access Point Mode - Enabled
- **ETH1/2: Ethernet 1/2**
  - Dotted line: Disconnected
  - Solid line: Connected
  - Solid white: Streaming
- **MOD 1/2: Modem 1/2**
  - Dotted line: Diconnected / Disabled
  - Solid line: Connected and waiting
  - Solid white: Connected to a Network via Modem

- **STR: Streaming**
  - Dotted line: Not Configured
  - Solid line: Configured and waiting
  - Solid white: Streaming media
- **REC: Recording**
  - Dotted line: Recording Disabled
  - Solid line: Configured and waiting
  - Solid white: Recording to media

Debonding Decoder License

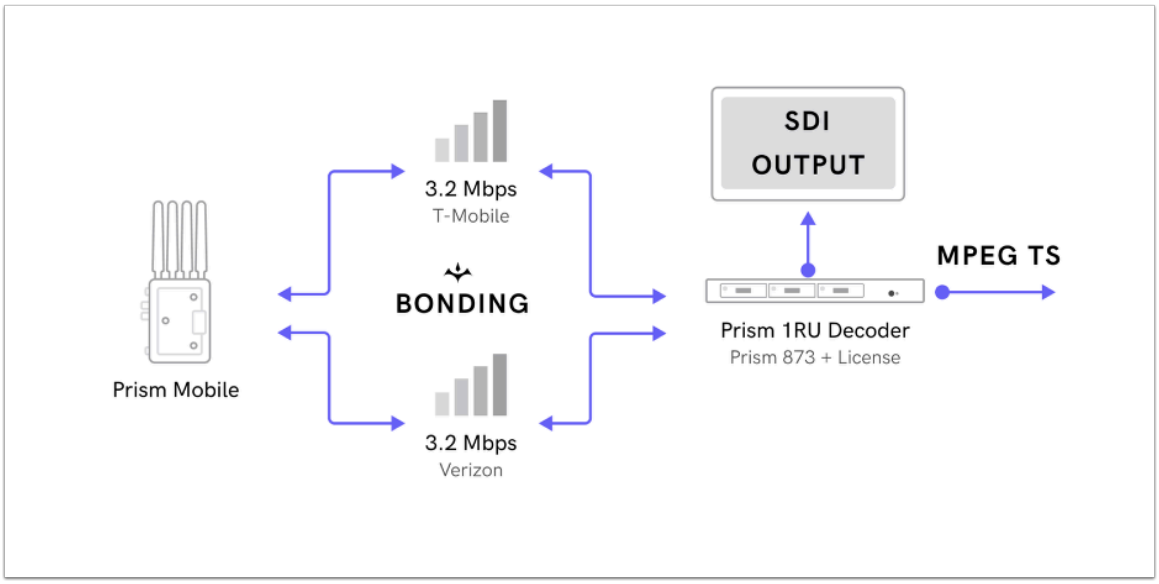
TABLE OF CONTENTS

What Does It Do?

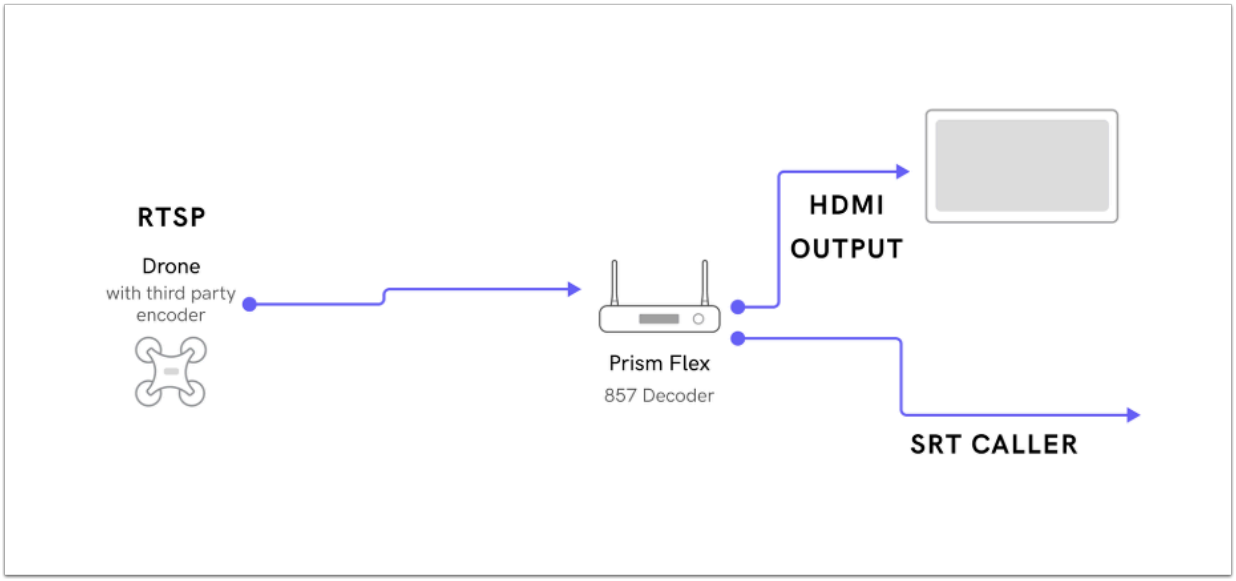
The Debonding Decoder license allows users to receive a stream via a built-in Hyperion server (used for Teradek Bonding Protocol), decode that stream to SDI or HDMI, and re-stream further on. It can also ingest generic streaming protocols to decode and send on.

What Is It Used For?

The license is primarily used when a cloud connection is unavailable or not desired.
For example, bonding across multiple connections from a roaming camera with a Prism Mobile back to a decoder in a small market TV station.



Additionally, there might be situations where one needs to ingest a third party encoding or PTZ stream and forward that stream onto a bigger platform over an internet connection.



Supported Input Protocols

The Debonding Decoder supports the following ingest types which will be passed onto the decoder

- Teradek Bonding Protocol (Most used)
- RTSP
- MPEG TS
- SRT
- RTMP

- HLS
- File ingest from SD card or NFS

Supported Output Protocols

The Debonding Decoder supports the following outbound types

- Teradek Bonding Protocol
- RTSP
- MPEG TS
- SRT
- RTMP
- HLS
- Airmix (TDS)

REQUIREMENTS

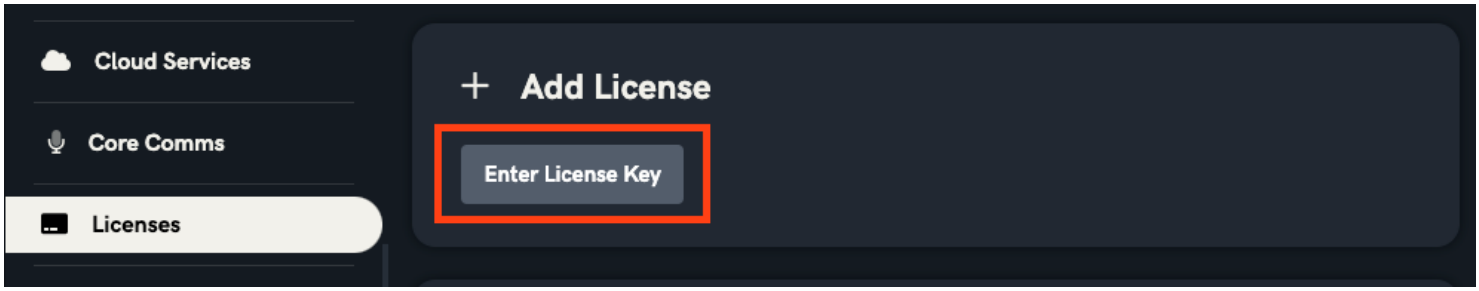
- Prism Flex Decoder or Prism RU Decoder
- Debonding Decoder License
- A navigable public IP or a firewall that supports port forwarding when used with the public internet.
- Teradek Bonding Protocol - port 5111 TCP/UDP. All others are declared in the configuration UI.

Contact your IT department for assistance with firewall configuration.

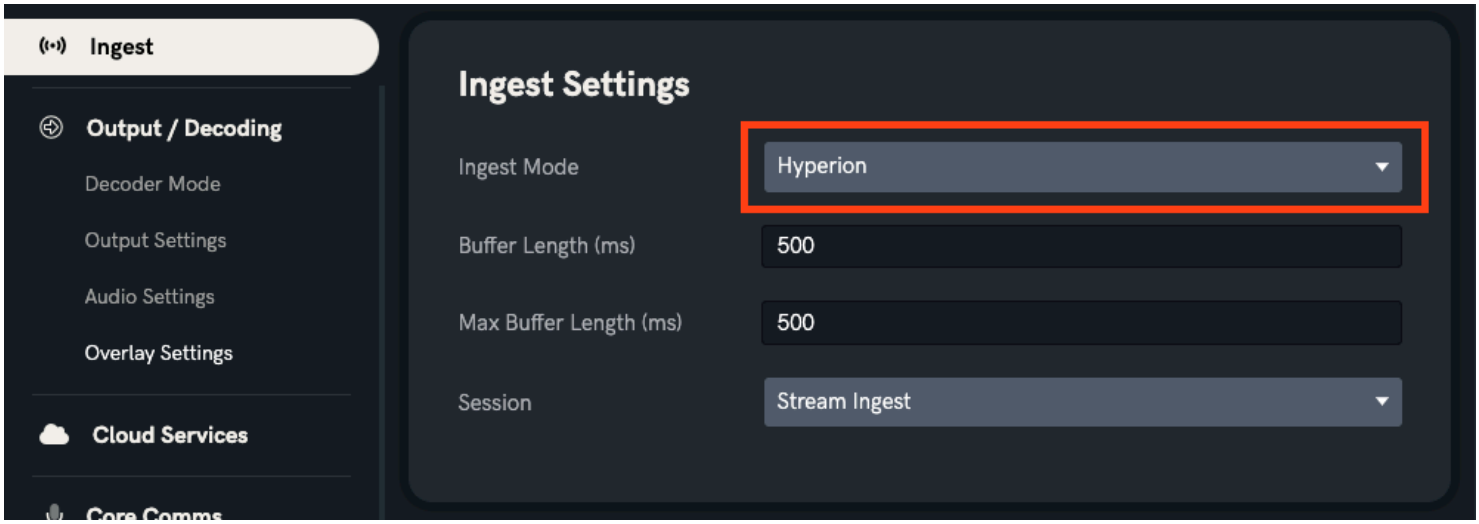
Setup the Debonding Decoder

This is the standard setup process for the Teradek Bonding Protocol over the public internet, assuming that your network requirements are in sync.

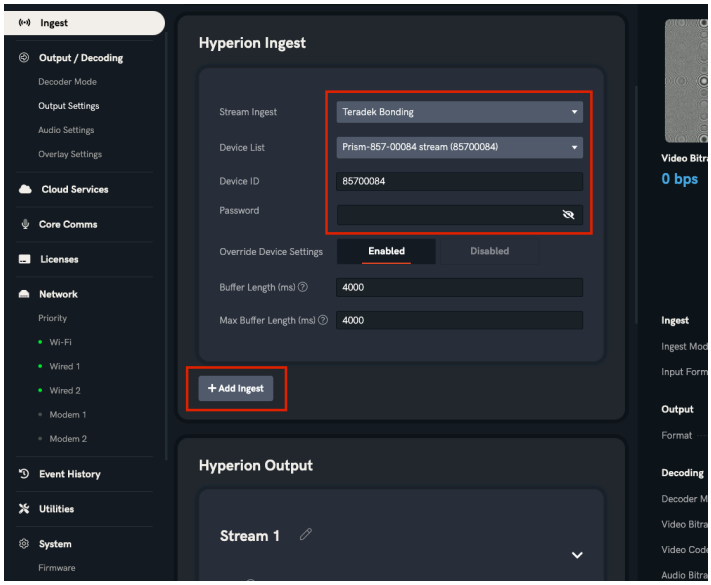
1. Navigate to the IP address of the Prism Flex or Prism RU decoder to open the decoder web UI.
2. From the decoder's web UI, open **Licenses** and click the **Enter License Key** tab to enter the Debonding Decoder license key. If you don't have a license, please contact lpsales@teradek.com.



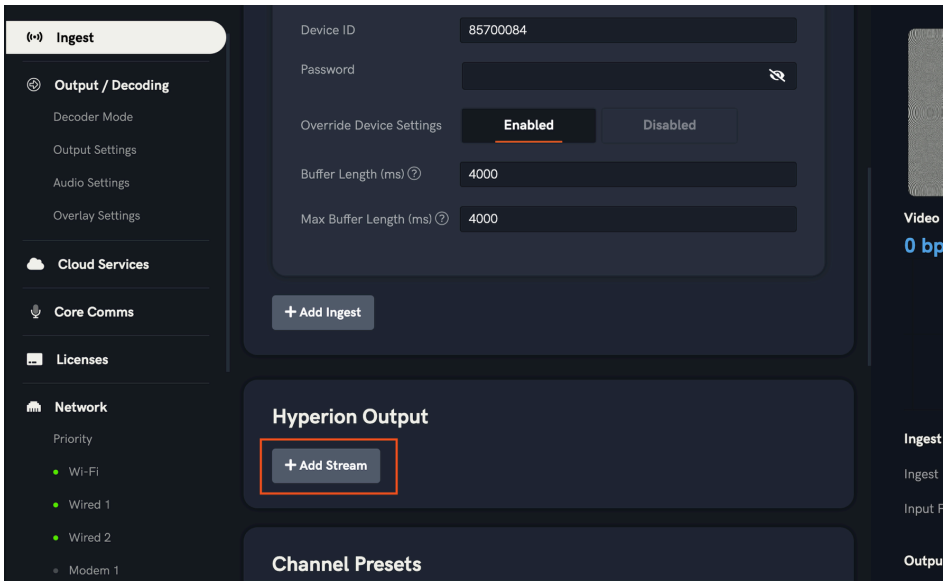
3. Open the **Ingest** tab above and set the **Ingest Mode** to **Hyperion**.



4. Scroll down and click **+ Add Ingest**, then choose **Teradek Bonding** from the **Stream Ingest** options. Next, configure the [Prism Encoder to transmit to the Debonding Decoder] (see below). Once the video signal is live, choose the encoder via its serial number from the **Device List** to set up the **Device ID**. If you have set a password on the encoder, enter it in the **Password** field. When done, click **Save** to complete the process.



5. To output the stream to a specific destination, click **+ Add Stream** under the **Hyperion Output** section.



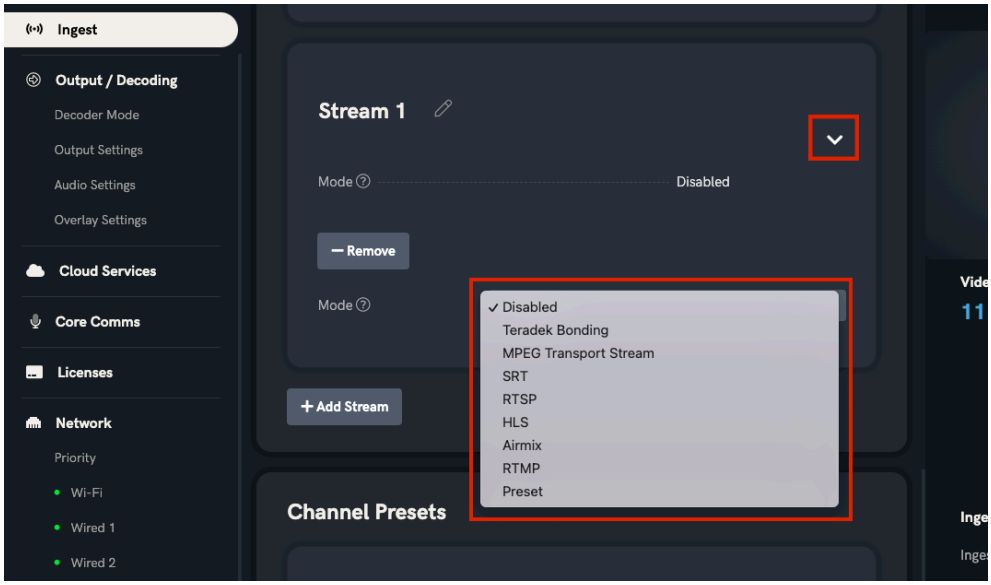
6. Click the Scroll-down icon and select a **Stream Mode**. Click **Save** when done.

STREAM OUTPUT MODES

- **Teradek Bonding** - Select this mode to stream to Core or another Hyperion Server (uncommon)
- **MPEG Transport Stream** - Prism sends video via a TCP or UDP protocol to a specified unicast or multicast address.

- **SRT** - Transmit high-quality, low-latency video over unreliable networks to a single destination IP address on a specific port. A port number and a passphrase (if encryption is enabled) are needed.
- **RTSP** - Prism sends video via a TCP or UDP protocol to a specified IP address. Ensure you have the correct port and stream name (stream1 is the default).
- **HLS** - Creates an HLS pull server that can be viewed in a web browser.
- **Airmix** - Stream to device using the Airmix app (port default is 2020). **NOTE: The Decoder and the device running Airmix must be on the same WiFi network.**
- **Preset** - Select a preconfigured Channel Preset from the Preset list below. **NOTE: You must first configure a preset and/or account (if outputting to a streaming platform) before selecting this option.**
    - **Preset Streaming Options:**
        - **MPEG Transport Stream**
        - **SRT**
        - **RTSP**
        - **RTMP**
        - **Streaming Platforms** - Facebook, Youtube, Vimeo, etc (you must first configure an account in the **Accounts** window below **Channel Presets**)

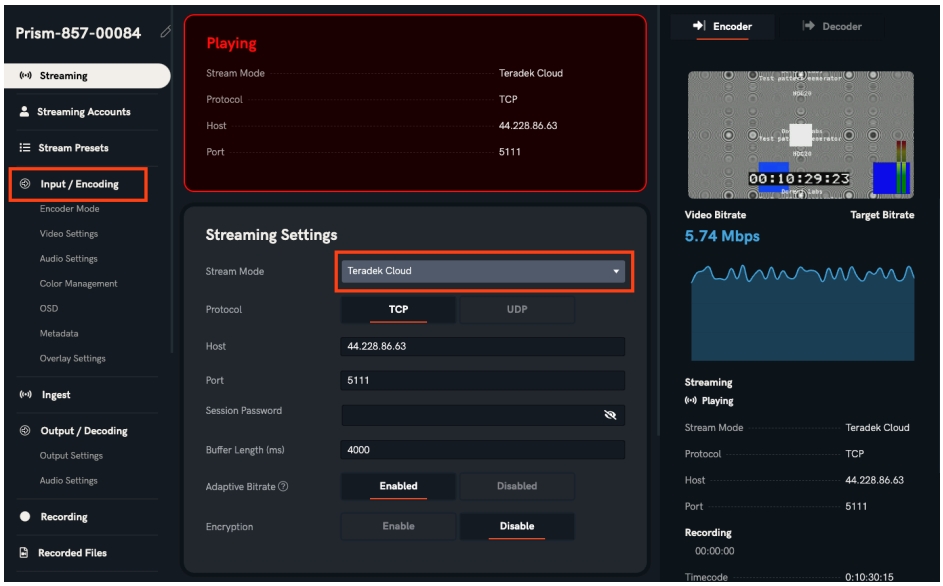
For information on different stream modes, click **here**.



7. Click **Save** when done.

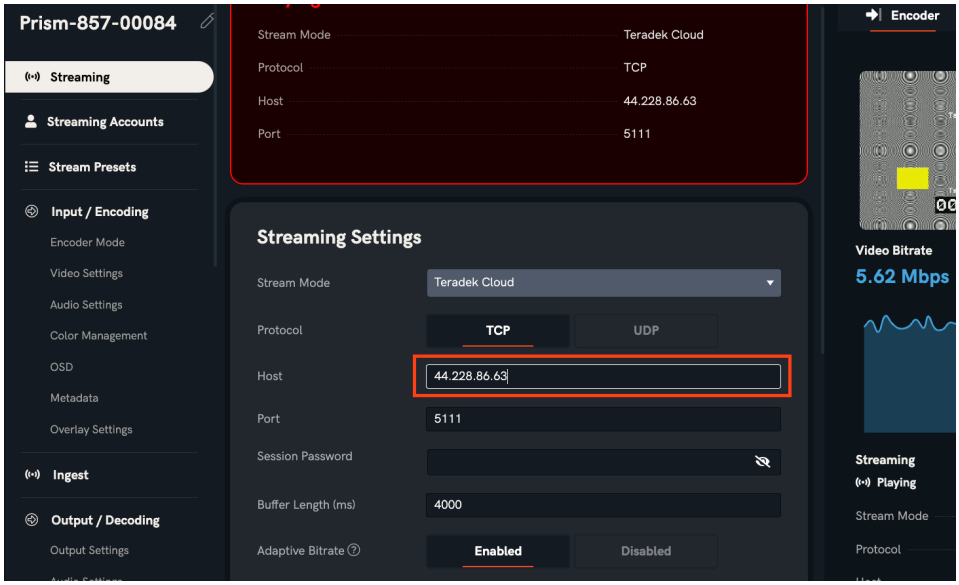
Setup the Encoder to Stream to the Debonding Decoder

1. From the encoder's web UI, open the **Input/Encoding** tab and set the **Stream Mode** to **Teradek Cloud**.



2. Enter the details

- **Host:** Public IP (whether port forwarded or not)
- **Port:** (Default 5111) or if your public port forwarded port
- **Session Password (Optional):** Must match on the Debonding Decoder, if used
- **Buffer length**: the amount of delay in the Debonding Decoder to allow multiple connections to arrive.
- **Adaptive Bitrate:** allows Teradek Bonding Protocol to adapt the bitrate of the stream to the entire network bond.
- **Encryption (Optional):** Encrypts Teradek Bonding Protocol with AES-128



3. Click **Save** and the encoder will start to stream video.

Card Installation (Prism1RU/2RU)

1. Attach the card's Video/Audio backplate to the back of any of the rack unit's card slots. Secure it in place with the included screws, but do not tighten.
2. Insert the encoder or decoder card through the front of the corresponding card slot. Secure the card by tightening the attached retractable screw.
3. Tighten the screws securing the Video/Audio backplate to the back of the rack unit.

Power and Connect

Prism 1RU/2RU

1. Connect 100-240v A/C power to the power input on Prism via the enclosed IEC cable. Connect a second cable if your device includes a supplemental power supply.
2. Connect one or both of Prism's 10/100/1000 Ethernet ports to a network switch or router using an Ethernet cable.
3. Connect SDI video sources to any input BNCs corresponding to installed encoder cards.
4. Connect SDI outputs via BNC cable to your monitor/switcher/router.
5. Using the menu joystick, navigate to the **Network Settings** menu on the front panel. Select a **Wired** interface, then verify that the IP Mode is set to **DHCP**.
6. Once Prism is connected to a network, the front panel will display the current assigned or configured IP address for both Ethernet ports.

Prism Flex

1. **Encoder:** Turn your video source on, then connect the HDMI or SDI input **(J)** from your video source to Prism Flex's input connector.
   Decoder: Turn your monitor on, then connect the HDMI or SDI output **(K)** from your Prism Flex to the monitor's input connector**.**
2. Attach the two Wi-Fi antennas to the RP-SMA connectors **(C)**.
3. Connect power to Prism Flex using the included A/C adapter.
4. Turn the Power switch on the back **(L)** to the ON position.

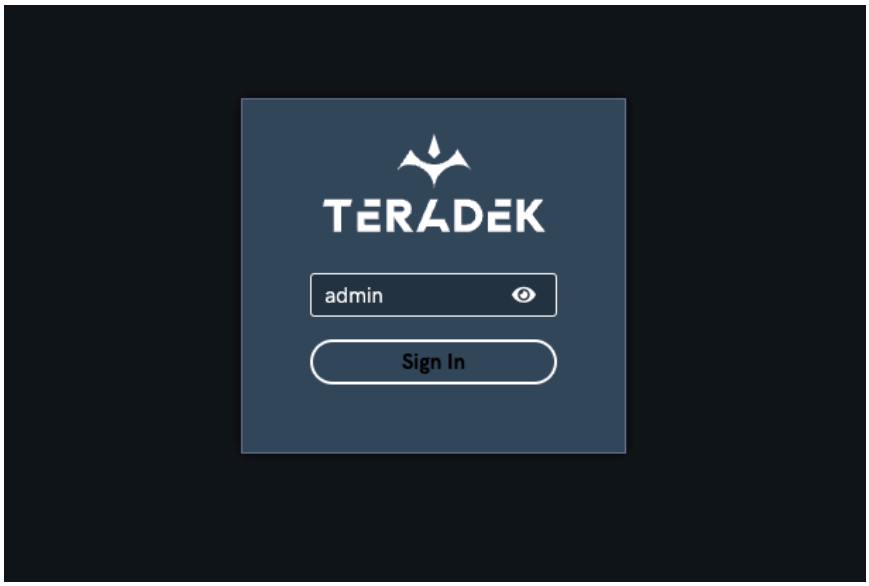
Prism Mobile

1. Turn your video source on, then connect the HDMI or SDI video input to Prism Mobile's input connector **(J)**.
2. Attach four antennas to the SMA connectors **(C). NOTE: Prism Mobile only uses SMA antennas. Standard Wi-Fi (RP-SMA) antennas are not compatible with Prism Mobile.**
3. Connect power to Prism Mobile using the included A/C adapter, or if equipped with battery plate accessories, attach a compatible battery (Gold or V mount).
4. Turn the Power switch **(L)** to the ON position.
5. Insert a SIM card (two per Node II) into one of the Prism Mobile SIM card slots. **NOTE: Prism Mobile is equipped with two internal modems (A and B). Each modem supports two SIM cards (A1/A2, B1/B2). To use both modems together, insert a SIM card into one or both modems' SIM slots.**
6. If the SIM card is not detected, connect your computer to Prism's AP network (see **WIRELESS NETWORK**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the internal modem from the **Network** menu.

Access the Web UI

Once Prism is connected to a network, you can access the web UI and configure stream destinations, encoder parameters, and other settings for each card.

1. **Prism 1RU/2RU**: Press ▼ on the card's menu joystick to display Prism's IP address on the front panel.
   Prism Flex/Mobile: Press the menu button to cycle through the menus to display Prism's IP address (Ethernet or WiFi).
2. Enter the IP address in your web browser's navigation bar.
3. If the **security password** feature is enabled, enter the password.



Connect to a Network

Prism 1RU/2RU allows you to connect to a network using an Ethernet connection, while **Prism Flex** can connect to a network using Wi-Fi, Ethernet, or a USB modem. Use the front panel interface or the web user interface (web UI) to connect Prism to a network.

WIRED (ETHERNET) NETWORK

1. Connect one or both of Prism's 10/100/1000 Ethernet ports to a network switch or router using an Ethernet cable.
2. **PRISM 1RU/2RU:** Press ▼ on the card's menu joystick to display Prism's IP address on the front panel.
   PRISM FLEX: Press the menu button to navigate to the **Ethernet 1** or **2** screen and obtain the IP address.
3. Enter the IP address in your web browser's navigation bar to access the web UI.

WIRELESS NETWORK (PRISM FLEX/MOBILE)

Prism Flex supports two wireless (Wi-Fi) modes; **Access Point (AP) Mode** (for bonding multiple cellular devices for increased bandwidth) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router).

Prism Flex

1. Connect your phone or laptop to Prism Flex's AP network, **Prism-855-XXXXX** (**XXXXX** represents the last five digits of Prism's serial number).
2. Enter the default IP address **172.16.1.1** in your web browser to access the web UI.
3. **To switch to Client Mode:** From the front panel, press the menu button to navigate to the Wi-Fi status screen. From the web UI, navigate to the **Network Settings** and select **WiFi**.
4. Select **Client** as the WiFi Mode.
5. Click the WiFi scan tab, select an available network, then enter the password. Once connected, the display will list the network Prism Flex is connected to.

Prism Mobile

1. Connect your phone or laptop to Prism Mobile's AP network, **Prism-857-XXXXX** (**XXXXX** represents the last five digits of your Prism Mobile's serial number), then enter the default IP address **172.16.1.1** in your web browser.
2. To switch to Client Mode, press the menu button to navigate to the Wi-Fi status screen.
3. Press the menu joystick twice in the direction indicated, then press and hold the menu joystick to switch to Client Mode.
4. Press and hold the menu joystick in the direction indicated to scan for available Wi-Fi networks.
5. Select an available network, then enter the password. Once connected, the display will list the network and corresponding IP address.

NODE II OR CELLULAR MODEM

Prism Flex

1. Attach a Node II or USB modem to one or both to Prism's USB-C ports using a **4-pin to USB-C** connector cable, and/or a **USB to USB-C** adapter. The front panel will indicate that the modem has been detected and connected to the carrier.
2. If the modem is not detected, connect your computer to Prism Flex's AP network (see **WIFI Network** instructions above), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the modem from the **Network** menu.

Prism Mobile

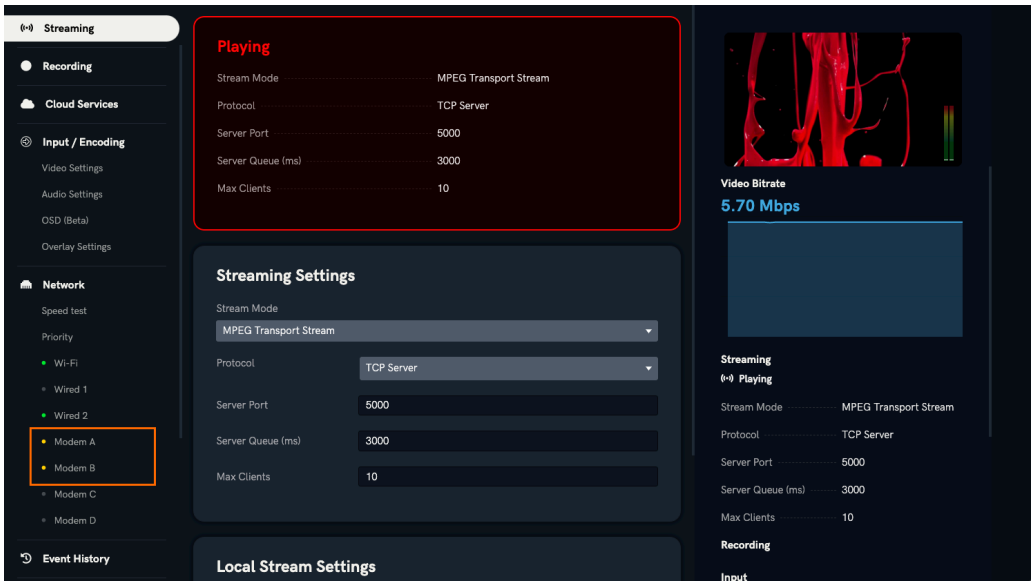
Prism Mobile is equipped with two internal modems (A and B). Each modem supports two SIM cards (A1/A2, B1/B2). To use both modems together, insert a SIM card into one or both modems' SIM slots.

1. Insert a SIM card (two per internal Node II) into one of the Prism Mobile SIM card slots. Additionally, you can connect an external modem to either Prism Mobile USB port (G) using a **5-pin to USB** connector cable. The front panel will indicate that the SIM card and modem(s) have been detected and connected to the carrier.

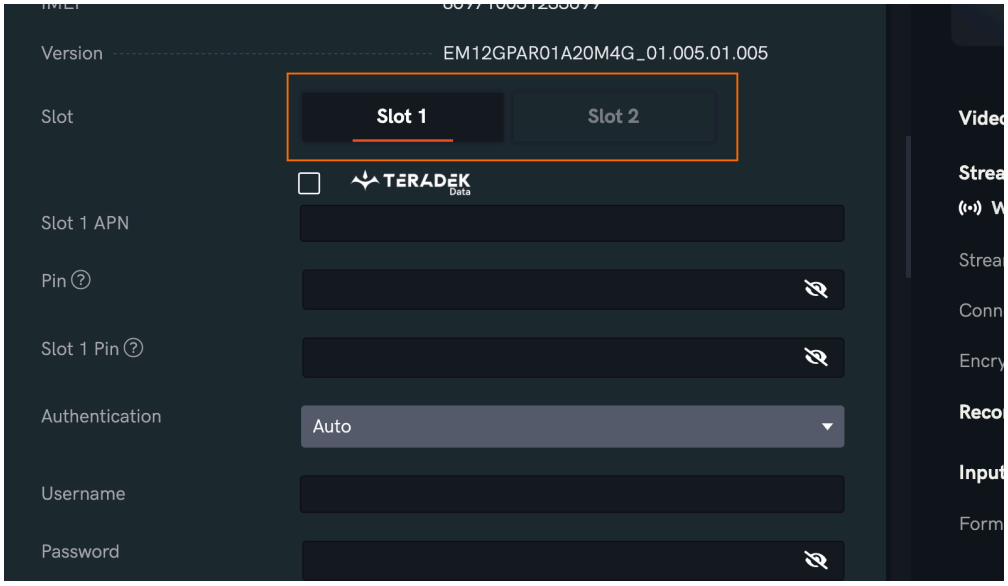
2. If the SIM card is not detected, connect your computer to Prism's AP network (see **WIRELESS NETWORK**), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and configure the internal modem from the **Network** menu.

Configure SIM Cards

1. From thew web UI, navigate to the **Network** menu and select the corresponding Modem.

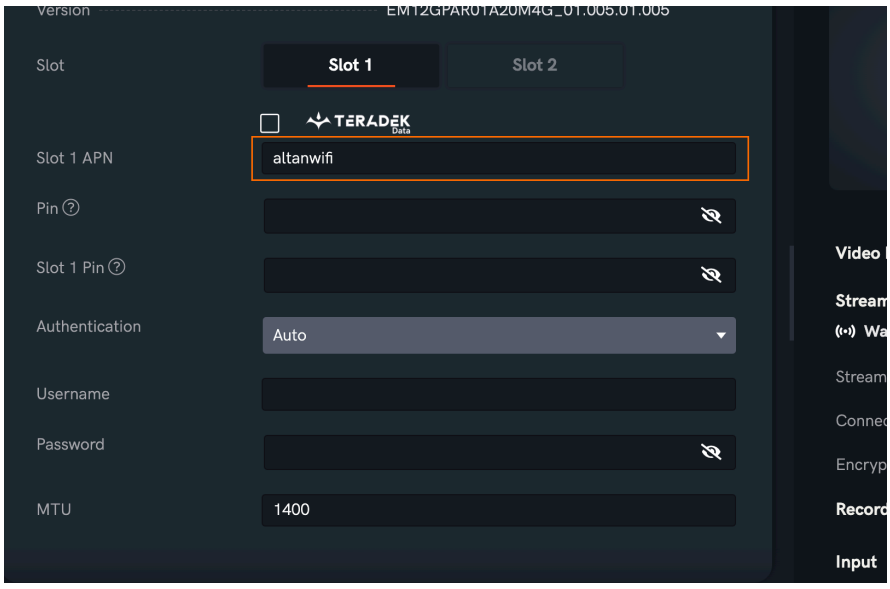


2. Select the slot with the SIM you will be using (**Slot 1 or Slot 2**). **NOTE: Most carriers' SIMs will auto-connect, requiring no additional configuration. Additional configuration is only required when you need to enter an APN, PIN, or authentication type.**

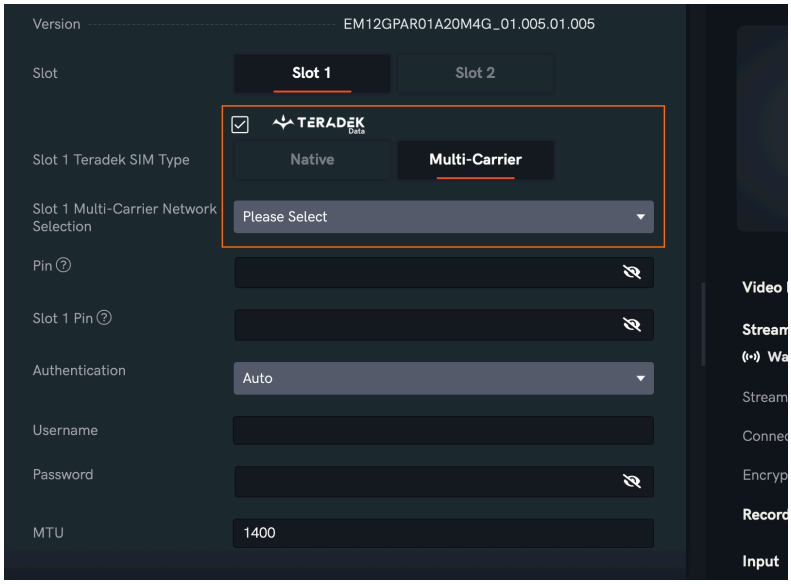


Node II supports most provider's SIM cards and can operate on most LTE/4G/3G data bands. With dual SIM slots, you can swap from one provider to another without needing to unplug the Node II. **Only one SIM card can be used at a time.**

3. **If using Telna SIM cards:** Enter **altanwifi** (for Telna SIM cards intended for use in the United States) or **internet** (for Telna SIM cards intended for use in Europe) into the selected slot's **APN** field (Slot 1 or 2). Ensure that the **Authentication method** is set to **Auto.**



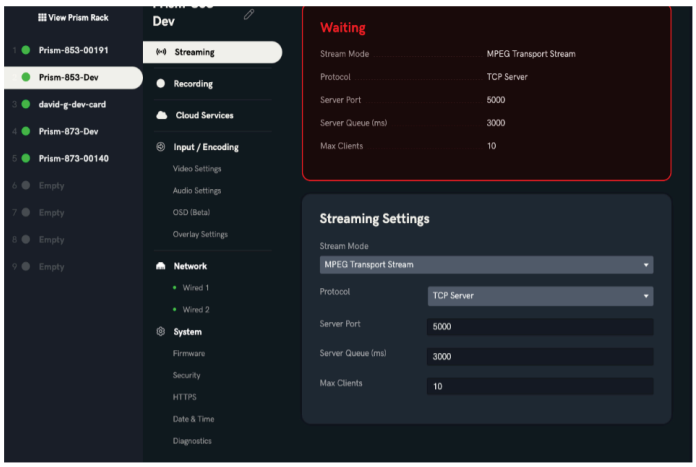
If using Teradek Data SIM cards: Click the **Teradek Data** checkbox, then select either **Native** or **Multi-Carrier.** For Multi-Carrier, select one of the available networks.



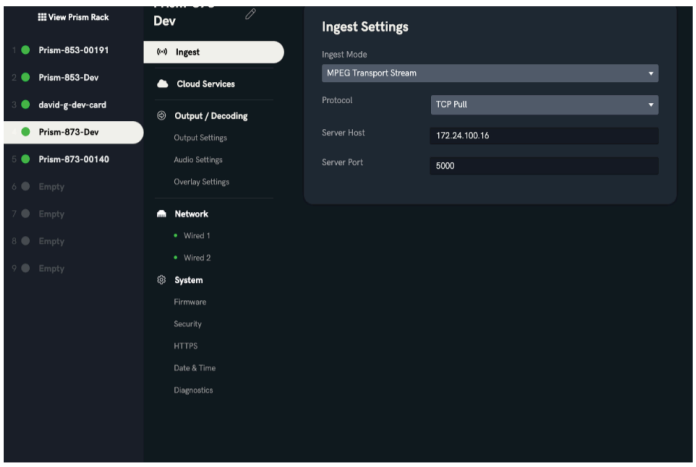
Encoder/Decoder Configuration

Configure your decoder to receive streams from an encoder.

NOTE: Prism units several streaming modes available such as SRT, RTMP, YouTube, and Facebook Live. The following instructions describe how to configure your cards using MPEG-TS mode as an example.



Encoder web UI



Decoder web UI

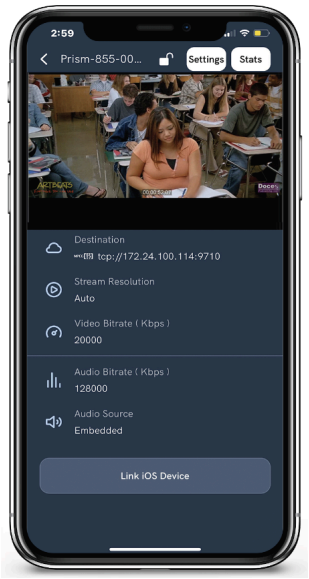
TO CONFIGURE:

1. Connect to the Prism encoder and open the encoder's web UI.
2. Open the **Streaming** menu, then select **MPEG-TS** as the streaming mode.
3. Select a protocol, then ensure the Prism decoder is configured to receive the stream using the correct protocol:
   - **TCP → TCP**
   - **TCP Server → TCP Pull**
   - **UDP → UDP**
   - **Multicast → Multicast**
4. Enter the destination IP address, then confirm the port is set to 9710 (default).
5. Click **Save**.
6. Connect to the Prism decoder and open the decoder's web UI.
7. Open the Ingest menu, then select MPEG-TS as the ingest mode.

8. Enter the protocol, ensuring the selected protocol matches the Encoder’s protocol configuration (see step 3). Confirm the port is set to 9710 (default).
9. Click **Save**.

Prism App

The Prism App allows you to remotely configure all of Prism's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Prism App is available for iOS devices.



MAIN DISPLAY
Main Screen - Displays the preview, streaming destination, audio and video bitrates, and resolution of your livestream.
Link/Unlink iOS Device - Tap the Link/Unlink iOS tab to enable/disable the use of your cellular phone's data as an Internet connection.

STATS
Tap the Stats button at the top of the screen to display Prism's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS
Tap the Settings button to configure the following options:

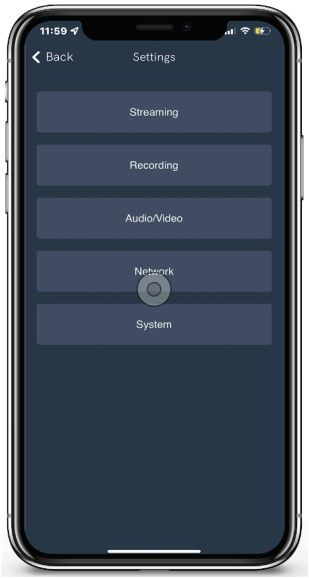
ENCODER SETTINGS

- **Streaming** - Configure your streaming method and destination
- **Recording** - Enable recording and select a media storage option

- **Input/Encoding** - Adjust the Video and Audio input settings
- **Network** - Choose a method of connecting to the Internet
- **System** - View the model and serial number of your device, or rename your Prism.

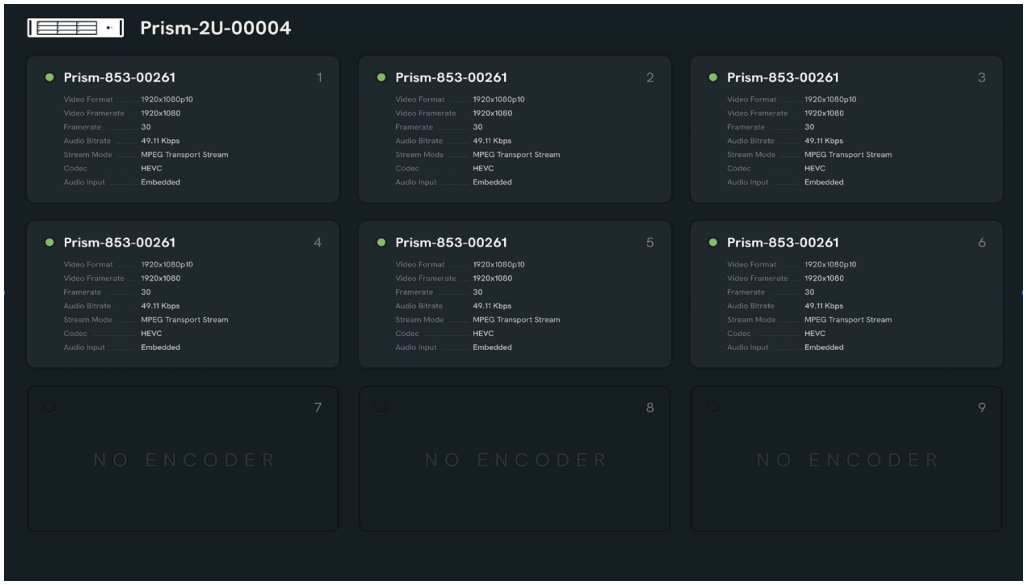
DECODER SETTINGS

- **Ingest** - Configure the ingest mode.
- **Output/Decoding** - Adjust the output settings.
- **Network** - Choose a method of connecting to the Internet.
- **System** - View the model and serial number of your device, or rename your Prism.



Card/Device Configuration

Prism has a number of options available to suit your IT and video workflow requirements. Each Prism encoder and decoder card can be configured using its own built-in web interface, which is accessible over your Ethernet network. This section discusses some of the most commonly adjusted parameters.


Prism-2U-00004
Prism-853-00261
1
Video Format 1920x1080p10
Video Framerate 1920x1080
Framerate 30
Audio Bitrate 49.11 Kbps
Stream Mode MPEG Transport Stream
Codec HEVC
Audio Input Embedded
Prism-853-00261
2
Video Format 1920x1080p10
Video Framerate 1920x1080
Framerate 30
Audio Bitrate 49.11 Kbps
Stream Mode MPEG Transport Stream
Codec HEVC
Audio Input Embedded
Prism-853-00261
3
Video Format 1920x1080p10
Video Framerate 1920x1080
Framerate 30
Audio Bitrate 49.11 Kbps
Stream Mode MPEG Transport Stream
Codec HEVC
Audio Input Embedded
Prism-853-00261
4
Video Format 1920x1080p10
Video Framerate 1920x1080
Framerate 30
Audio Bitrate 49.11 Kbps
Stream Mode MPEG Transport Stream
Codec HEVC
Audio Input Embedded
Prism-853-00261
5
Video Format 1920x1080p10
Video Framerate 1920x1080
Framerate 30
Audio Bitrate 49.11 Kbps
Stream Mode MPEG Transport Stream
Codec HEVC
Audio Input Embedded
Prism-853-00261
6
Video Format 1920x1080p10
Video Framerate 1920x1080
Framerate 30
Audio Bitrate 49.11 Kbps
Stream Mode MPEG Transport Stream
Codec HEVC
Audio Input Embedded
7
NO ENCODER
8
NO ENCODER
9
NO ENCODER

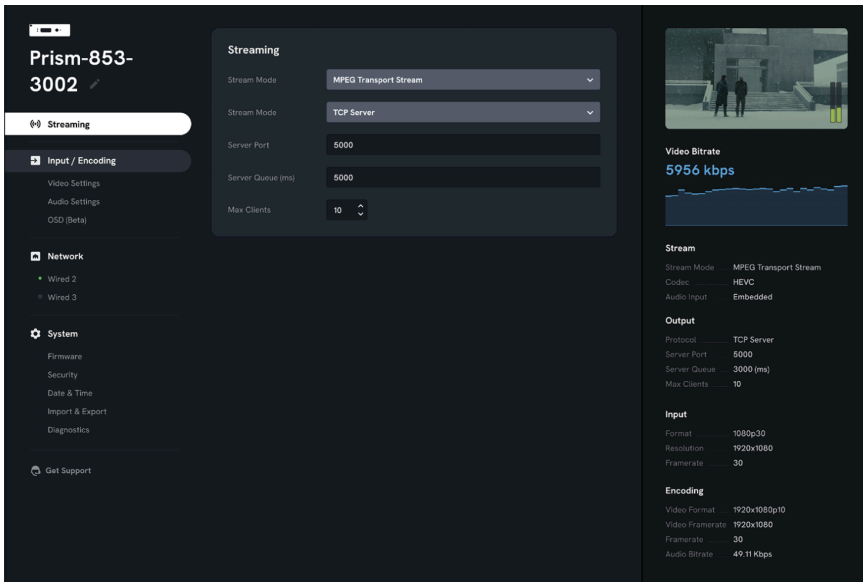
Streaming - Encoder/Decoder

Prism encoders are capable of encoding and streaming video to Prism decoders using several different protocols by configuring your decoder card to receive streams from the encoder. Choose the **Stream Mode** and **Stream Output** that are best for your application. Depending on the video's destination, you can pick from a variety of different stream modes, each with its own set of configurable settings described here. Before streaming, ensure that the encoder and decoder are on the same network and using the same streaming method.

TABLE OF CONTENTS

STREAM MODES

To view or modify the current stream mode, select the encoder you want to configure, click the **Streaming** tab on the right side of the preview window, then select a streaming mode. All streaming options are located under the card's Streaming tab.



NOTE: All streaming modes are compatible with H.264 encoders, although some configurable options will be different between H.264 and HEVC encoders.

MPEG TRANSPORT STREAM (MPEG-TS)
In MPEG Transport Stream Mode, Prism sends video via a TCP or UDP protocol to a specified unicast or multicast address. TCP is recommended when streaming over the Internet, while UDP is recommended when streaming over a local network to avoid the additional network overhead of TCP. Select the protocol best suited for your application needs, and ensure the Prism encoder is configured to stream to the Prism decoders corresponding IP address and port.

CONFIGURABLE SETTINGS

- Protocol (UDP/TCP/TCP Server/Multicast)
- TCP Server Port
- Server Queue
- Max Clients
- Local Stream Settings
  - *Password*

SRT

SRT is used to transmit high-quality, low-latency video over unreliable networks. SRT has two connection types: **Listener** and **Caller**. When the connection type is set to Listener, the encoder waits for the client to connect and pull the stream from it. When the connection type is set to Caller, the encoder pushes video to a single destination IP address on a specific port. For either mode, a port number and a passphrase (if encryption is enabled) is needed. For a direct connection (Caller mode), enter the correct destination IP address.

CONFIGURABLE SETTINGS

- Connection Type
- Host (Caller)
- Port
- Source Port
- Encryption
- Latency

TRT

TRT facilitates both single-interface and multi-interface bonded transmission, achieving latency as low as 100 ms and 250 ms respectively. This UDP-based protocol is crafted to meet the exacting demands of production managers seeking a bonded, ultra-low latency point-to-point solution for live production environments. TRT has two connection modes: **Server** and **Client**. When the connection type is set to **Server Mode**, the encoder waits for the client to connect and pull the stream from it. When the connection type is set to **Client Mode**, the encoder pushes video to a single destination IP address on a specific port for a direct connection. A source or listening port number and a passphrase (if encryption is enabled) are needed for either mode.

CONFIGURABLE SETTINGS

- Name
- Connection Mode
  - **Server**
  - **Listener**

SERVER SETTINGS

CLIENT SETTINGS

- Source/Listening Port
- Connection Limit
- Password
- Encryption Key Size
- Adaptive Bitrate
- Adaptive Redundancy
- Redundancy
- TTL
- Max MTU
- Max Burst Bitrate
- Max Burst Time
- Maximize FEC. AV Pkt. Packing
- Send Audio Independently

- Host
- Host Port
- Source/Listening Port
- Multicast Mode
- Password
- Encryption Key Size
- Adaptive Bitrate
- Adaptive Redundancy
- Redundancy
- TTL
- Max MTU
- Max Burst Bitrate
- Max Burst Time
- Maximize FEC. AV Pkt. Packing
- Send Audio Independently

RTMP (H.264 only)
RTMP mode allows Prism to stream to other video platforms, CDNs, and streaming servers that are not one of the available Internet Streaming platforms (see below). RTMP is supported by most video streaming platforms, but you must first obtain a URL and stream key/name from the service you choose to stream to. Log into your account's settings and retrieve the URL and stream key/name.

CONFIGURABLE SETTINGS

- Server URL
- Stream Key
- Username
- Password
- User Agent
    - FMLE
    - Teradek

TERADEK CLOUD
Prism encoders and decoders can be remotely accessed, configured, and controlled using Teradek's Core management and routing service. Select this mode to link your device to your Core account.

CONFIGURABLE SETTINGS

- Buffer Length
- Adaptive Bitrate (Enable/Disable)

- Encryption (Enable/Disable)

RTSP
When RTP/RTSP mode is enabled, the decoder communicates whether to use the TCP or UDP protocol for the stream. Ensure you have the correct port and stream name (**stream1** is the default).

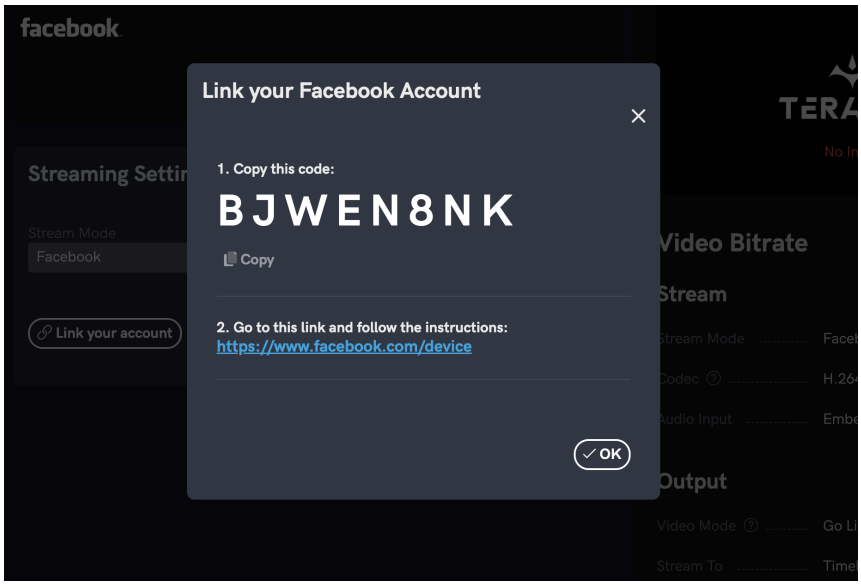
CONFIGURABLE SETTINGS

- RTSP Server Port
- Stream Name
- Enable/Disable Authentication
    - Username
    - Password

STREAMING PLATFORMS
Prism features native integration with some of the most popular streaming platforms. Select a Stream Mode (Facebook, YouTube Live, Vimeo Livestream, or Wowza), then follow the prompts to link your account.

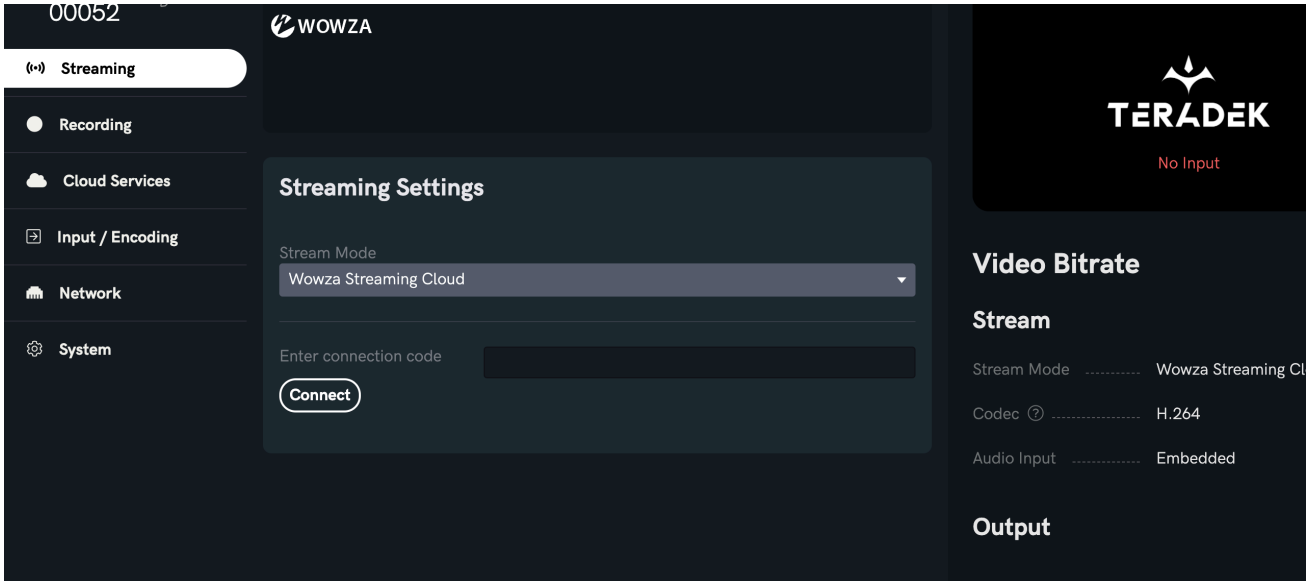
> **NOTE:** Your device must be set to H.264 in order to stream to any streaming platform.

1. Select Facebook, YouTube Live, or Vimeo Livestream, then click **Link your Account**.
2. Copy the authentication code generated for your device, go to the link provided, then follow the instructions to authenticate your account.
3. Return to the Prism encoder's web UI and click **Continue**.
4. Enter the title, description and broadcast method, then adjust your privacy settings (if applicable).
5. Click **Save**.

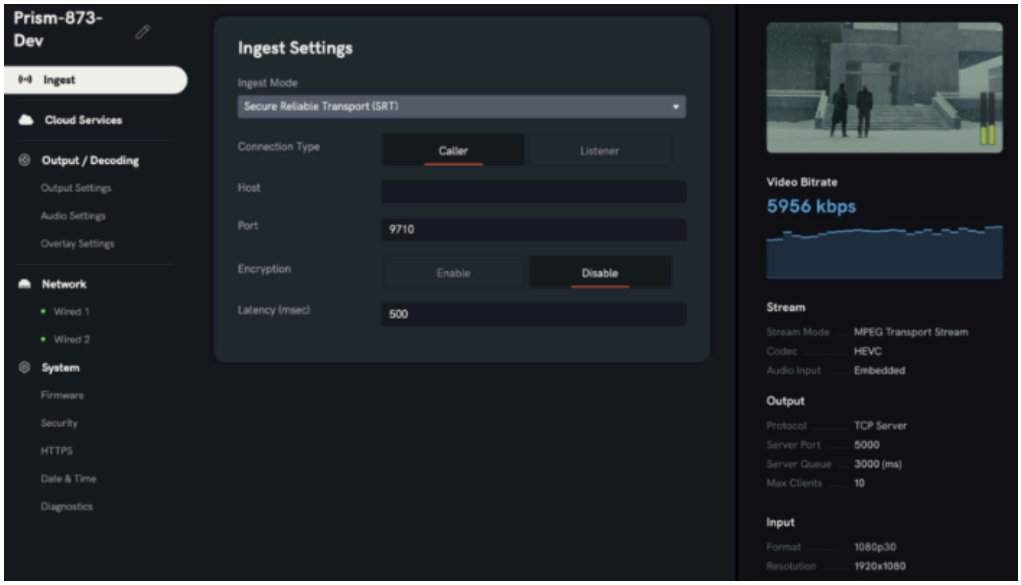


WOWZA STREAMING CLOUD

1. Select **Wowza Streaming Cloud.**
2. From your computer, log into your Wowza account and select your live stream.
3. Click the **Video Source and Transcoder** tab, then select Teradek as your encoder.
4. Scroll down and click **Regenerate Connection Code**. You will be returned to your livestream's home page where your connection code is displayed.
5. Enter the connection code in the field provided on the web UI, then click **Connect**.



STREAM OUTPUTS



MPEG TRANSPORT STREAM (MPEG-TS)

In MPEG Transport Stream Mode, Prism sends video via a TCP or UDP protocol to a specified unicast or multicast address. TCP is recommended when streaming over the Internet, while UDP is recommended when streaming over a local network to avoid the additional network overhead of TCP. Select the protocol best suited for your application needs, and ensure the Prism encoder is configured to stream to the Prism decoders corresponding IP address and port.

CONFIGURABLE SETTINGS

- Protocol
- Host
- Port
- Jitter Buffering

TRT

TRT facilitates both single-interface and multi-interface bonded transmission, achieving latency as low as 100 ms and 250 ms respectively. This UDP-based protocol is crafted to meet the exacting demands of production managers seeking a bonded, ultra-low latency point-to-point solution for live production environments. TRT has two connection modes: **Server** and **Client**. When the connection type is set to **Server Mode**, the encoder waits for the client to connect and pull the stream from it. When the connection type is set to **Client Mode**, the encoder pushes video to a single destination IP address on a

specific port for a direct connection. A source or listening port number and a passphrase (if encryption is enabled) are needed for either mode.

CONFIGURABLE SETTINGS

- Buffer Length
- Max Buffer Length
- Name
- Connection Mode
  - Server
  - Client

SERVER SETTINGS

- Source/Listening Port
- Password
- Encryption Key Size
- TTL
- Max MTU
- Auto Jitter Buffer
- Jitter Buffer Max
- Retry Request Depth
- Drop Corrupt Frames

CLIENT SETTINGS

- Host
- Host Port
- Source/Listening Port
- Multicast Mode
- Password
- Encryption Key Size
- TTL
- Max MTU
- Auto Jitter Buffer
- Jitter Buffer Max
- Retry Request Depth
- Drop Corrupt Frames

SRT

SRT is used to transmit high-quality, low-latency video over unreliable networks. SRT has two connection types: **Listener** and **Caller**. When the connection type is set to Listener, the encoder waits for the client to connect and pull the stream from it. When the connection type is set to Caller, the encoder pushes video to a single destination IP address on a specific port. For either mode, a port number is needed, and a passphrase (if encryption is enabled). For a direct connection (Caller mode), enter the correct destination IP address.

CONFIGURABLE SETTINGS

- Connection Type
- Host (Caller)
- Port
- Source Port
- Encryption
- Latency

RTSP

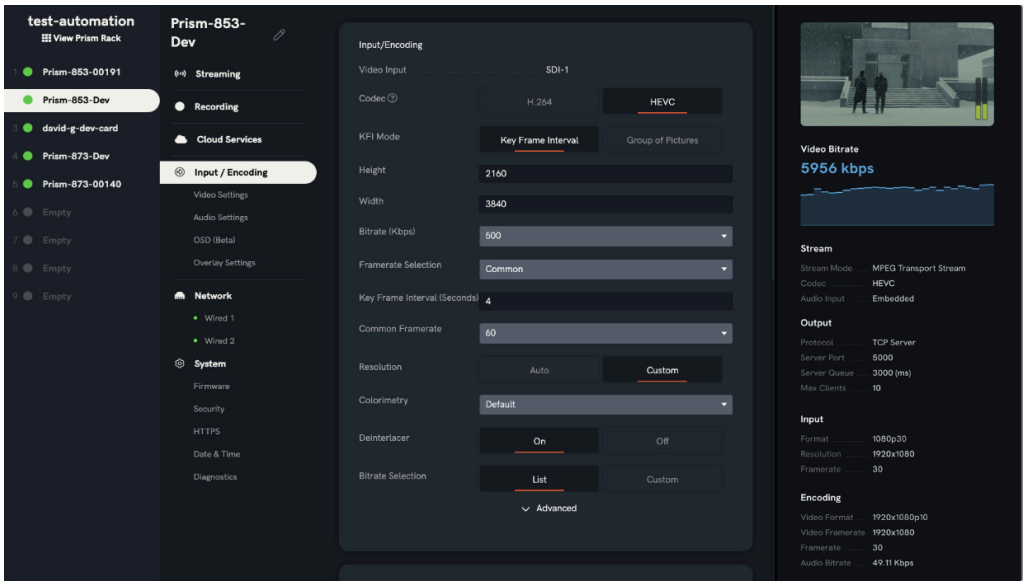
When RTSP mode is enabled, the decoder communicates whether to use the TCP or UDP protocol for the stream. Ensure you have the correct port and stream name (stream1 is the default). To view your stream on VLC, copy the IP address from the Host field, launch VLC and open **File>Open Network**. Paste the IP address in the URL field, then click **Open**.

CONFIGURABLE SETTINGS

- Host
- Port
- Stream Name
- Authentication
- Use RTP over RTSP (UCP)
- Latency

Input/Encoding

In addition to configuring your stream type, Prism allows you to control various characteristics of the network video stream. The Encoder settings can be found by clicking **Input/Encoding** at the top of the web UI.

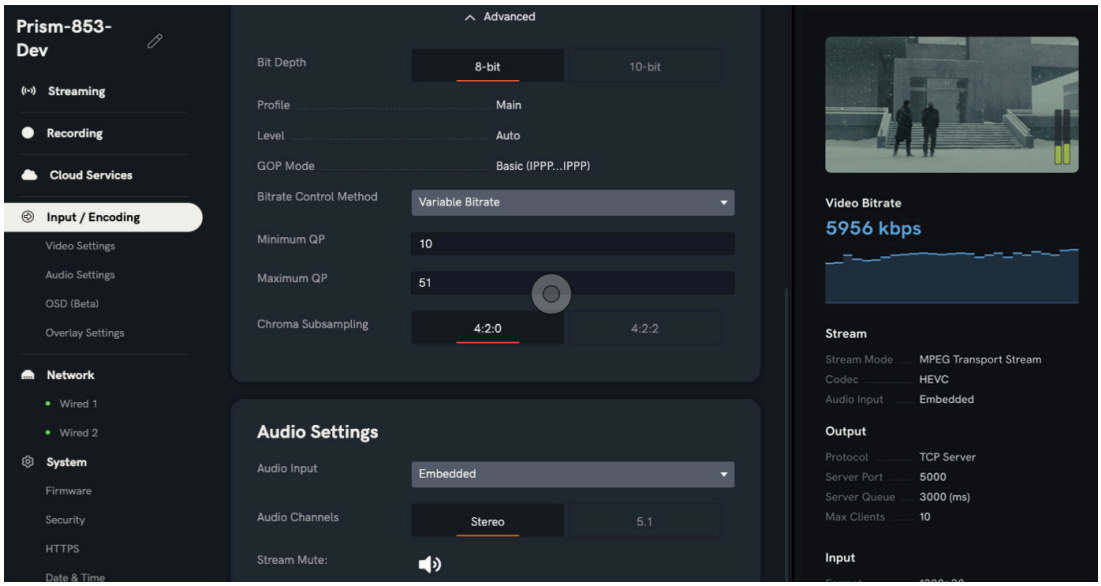


VIDEO SETTINGS

- **VIDEO INPUT** - **Prism 1RU/2RU**: Displays the source of the video input.
  Prism Flex/Mobile: Select the source of the video input (SDI, HDMI, or Auto).
- **CODEC** - Select either HEVC or H.264 compression formats.
- **DEINTERLACER (HEVC only)** - The Deinterlacer converts interlaced video into progressive video before streaming, improving the appearance of video that has been scaled down from the original input resolution. In addition to supporting scaled down interlaced video, deinterlacing is also useful when streaming to the Internet or mobile devices instead of a decoder.
- **RESOLUTION** - Maintain the input's native resolution (Auto), or manually enter a custom resolution (Custom).
- **BITRATE SELECTION** - Select your stream's target bitrate from a list of bitrate figures, or manually enter a custom bitrate. Lower bitrates require less bandwidth and may allow for a more stable stream while higher bitrates offer better video quality, but require more network bandwidth.
- **AUTO BITRATE QUALITY -** Automatically adjusts the bitrate quality to achieve the desired resolution without having to indicate a specific bitrate value. **NOTE: This setting is only available when the Bitrate Selection is set to Auto.**
- **COLORIMETRY** - Adjust your stream's color parameters
- **BIT DEPTH** - The Bit Depth setting determines how many bits are used for each color component in a video stream. 8-bit color depth is sufficient for most live streaming applications, while 10-bit color depth is required for HDR workflows or other instances where higher color resolution is required.

- **CHROMA SUBSAMPLING** - Chroma Subsampling is a compression method that reduces the color information and file size in a signal in favor of luminance data and decreased bandwidth.
- **CLOSED CAPTIONS** - Turn closed captions on and off

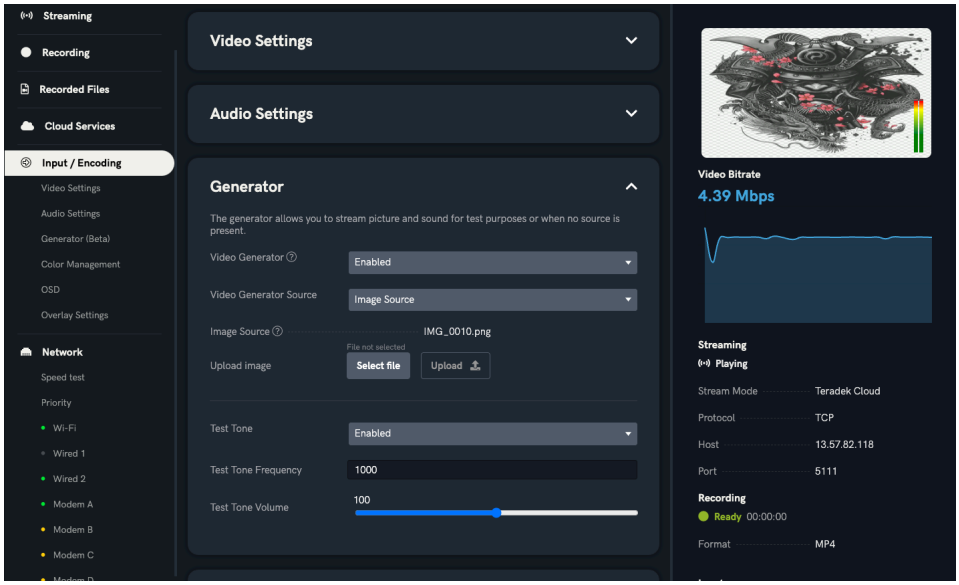
VIDEO SETTINGS ADVANCED OPTIONS



- **BITRATE CONTROL METHOD** - This option is used to define the quality and bitrate of the stream. **Variable Bitrate** allows the codec to modify the bitrate within a quality range according to the target bitrate. **Constant Bitrate** maintains the output data's bitrate at a consistent level, regardless of the video complexity. **Constant Quality** maintains the quality of the video without limiting the maximum or minimum bitrates.
- **KFI MODE** - Select either Key Frame Interval or Group of Pictures mode.
- **KEY FRAME INTERVAL/GOP LENGTH** - Adjust the amount of time between full picture refreshes (Key Frame Interval), or the number of frames (GOP Length).
- **FRAME RATE SELECTION** - Set the encoder frame rate to the exact figure or a fraction of the input frame rate.
- **NUMBER OF SLICES** - Determine the number of slices in the video frame that enables efficient compression and processing. Dividing a frame into segments allows for more efficient compression and decompression of video, making it easier to transmit and store.
- **SKIP FRAME** - Helps maintain the target bitrate by skipping frames when necessary.

GENERATOR

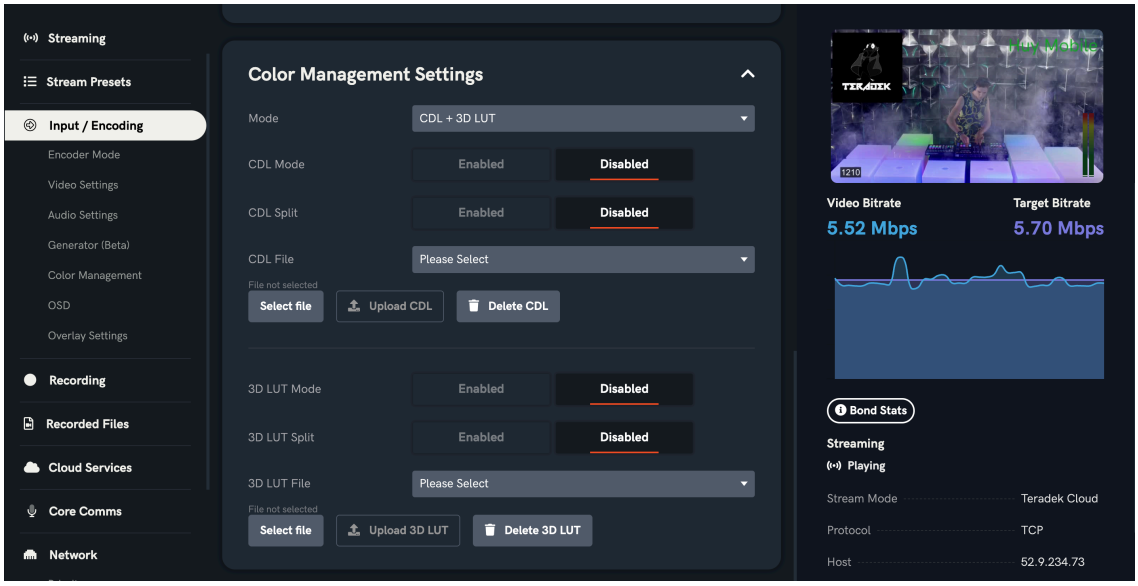
The Generator allows you to stream picture and sound for test purposes or when no source is present.



- **VIDEO GENERATOR** - **Enable** or **Disable** the Video Generator, or select **Failover** to output a specific image in case your source goes offline.
- **VIDEO GENERATOR SOURCE** - Select **Black**, **Color Bars**, or **Image** as the video test pattern source.
- **UPLOAD IMAGE** - Upload an image to use as your test pattern source. **NOTE: Only PNG files are supported.**
- **TEST TONE** - **Enable** or **Disable** the Test Tone generator, or select **On Video Generation** to enable a **Test Tone** in case your source goes offline or is unavailable.
- . Once enabled, you can adjust the Test Tone **Frequency** and **Volume.**

COLOR MANAGEMENT

Prism's Color Management menu lets you manage and apply different looks to incoming video signals using 3D LUT and CDL files saved to your Prism from your computer. You can also link Prism to your LiveGrade account using the web UI.



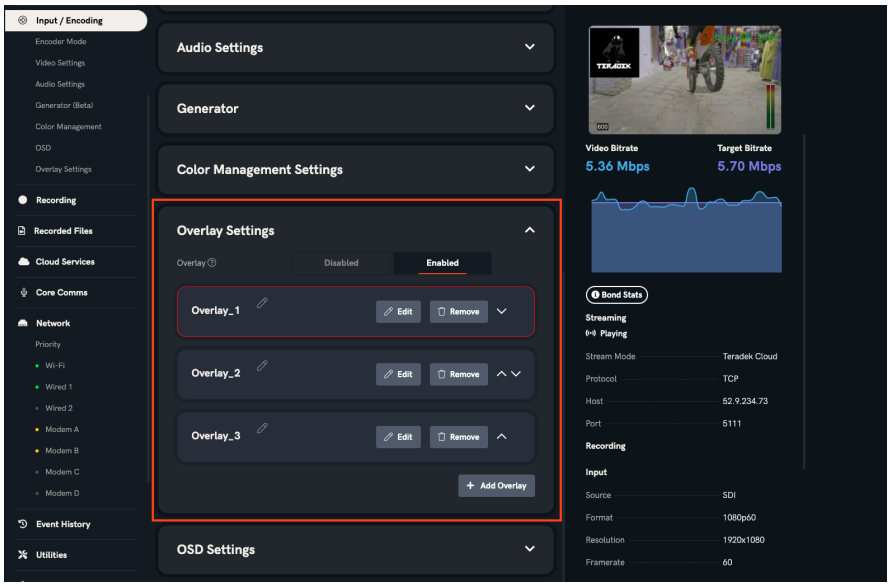
- **MODE -** Select either **CDL + 3D LUT** or **LiveGrade** for your color management mode.
  - **CDL MODE - Enable** or **disable** a CDL preset. Enabling CDL mode allows Prism to apply the preset to your preview.
  - **CDL SPLIT -** Enable the preview window to display a split screen; one side showing the CDL preset applied to the preview, and the other side without.
  - **CDL FILE -** Select a CDL file to apply to the video preview. CDL files must first be uploaded to Prism from your computer by clicking **Select file**, then **Upload CDL**. To delete a file, click **Delete CDL**.
  - **3D LUT MODE - Enable** or **Disable** a 3D LUT preset. Enabling 3D LUT mode allows Prism to apply the preset to your preview.
  - **3D LUT SPLIT -** Enable the preview window to display a split screen; one side shows the 3D LUT preset applied to the preview, and the other does not.
  - **3D LUT FILE -** Select a 3D LUT file to apply to the video preview. 3D LUT files must first be uploaded to Prism from your computer by clicking **Select file**, then **Upload 3D LUT**. To delete a file, click **Delete 3D LUT**.

AUDIO SETTINGS

- **AUDIO INPUT** - Configure the audio input source by selecting Embedded, Analog, or Mixed.
- **BITRATE SELECTION** - Select from a list of bitrate figures, or manually enter a custom bitrate.
- **OSD SETTINGS** - Configure how the time is displayed on your stream. Select either SDI, Stream, or UTC timecodes, or select disable.
- **OVERLAY SETTINGS** - Select a file to overlay onto your video stream, then adjust the location of the image.

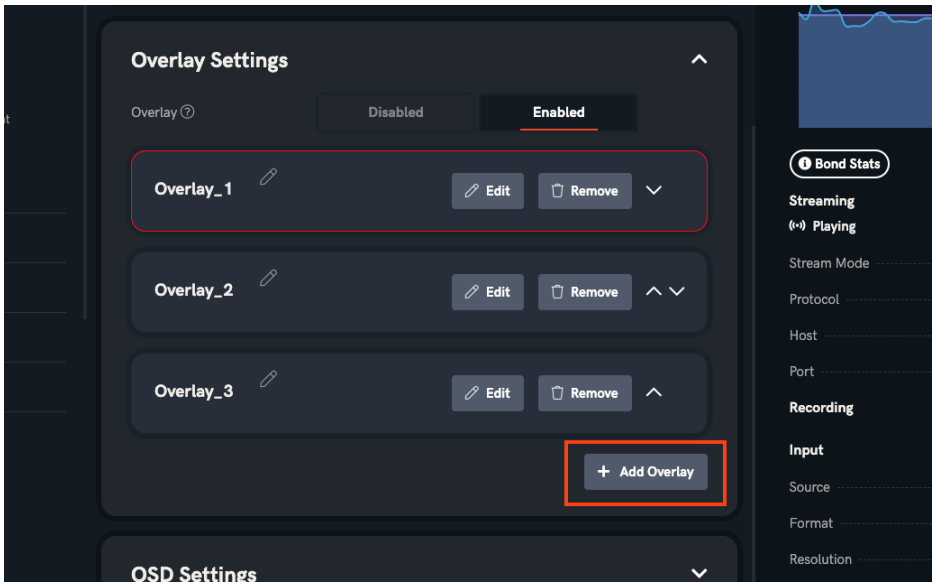
OVERLAY SETTINGS

The Overlay settings allow you to place graphics and other media over your live stream. You can create several different overlays.

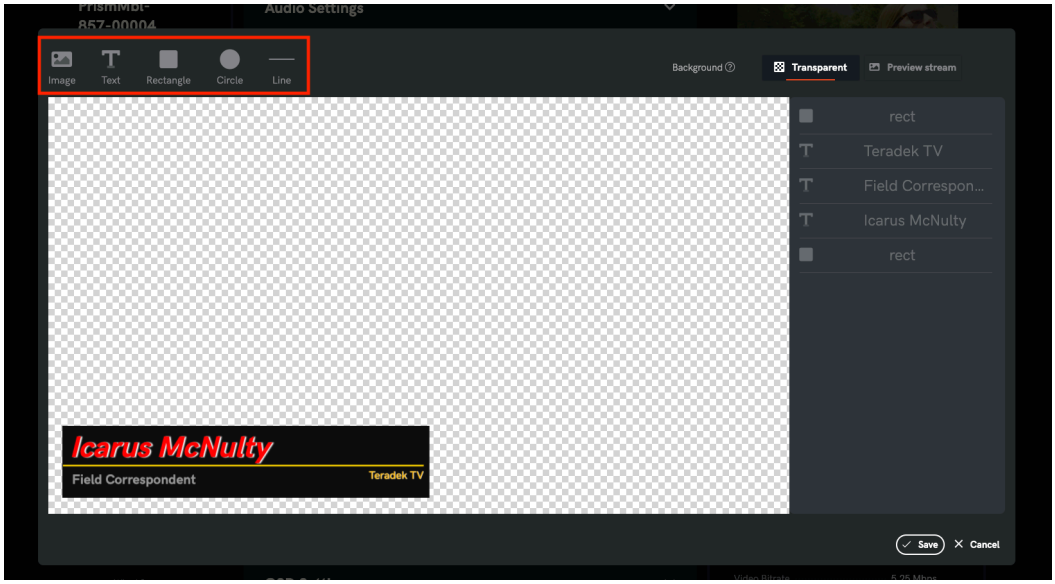


CREATE AN OVERLAY

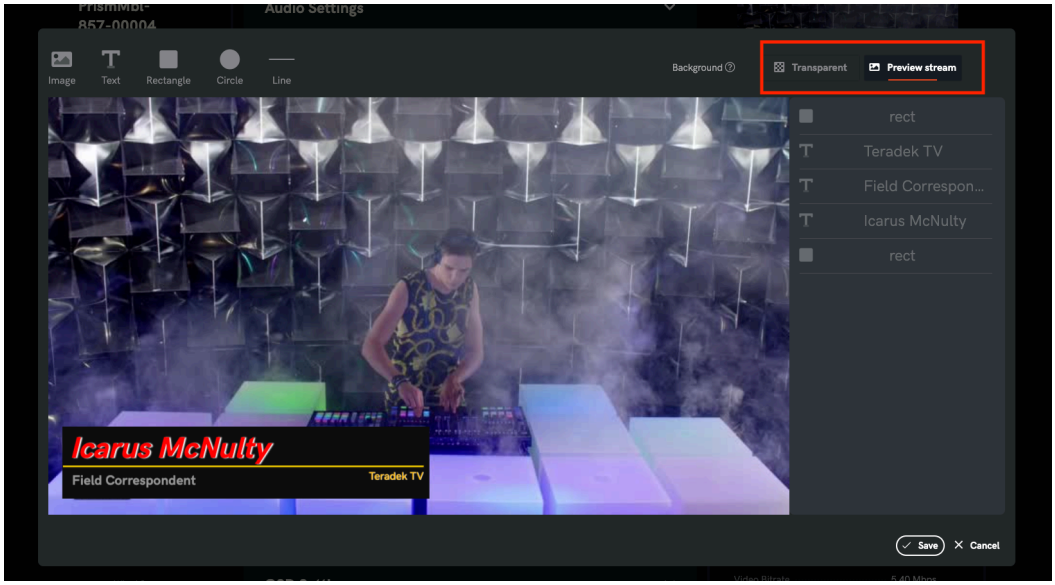
1. To create an overlay, click the **+ Add Overlay** tab.



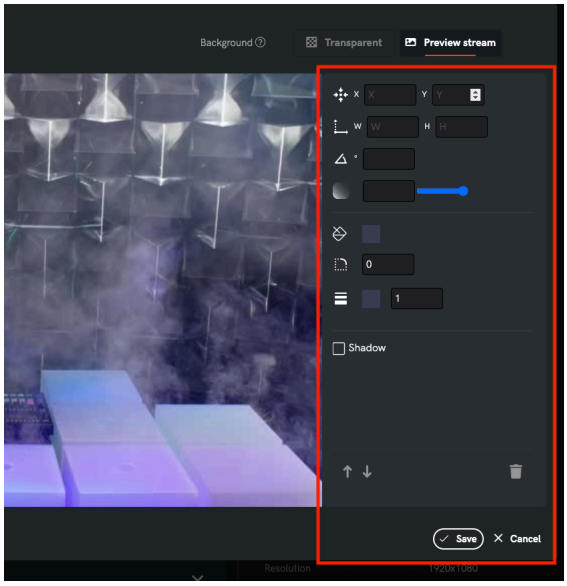
2. From the Overlay editing screen, tap **Image** on the top right corner to select an image as your overlay, or use the tools to create an overlay.



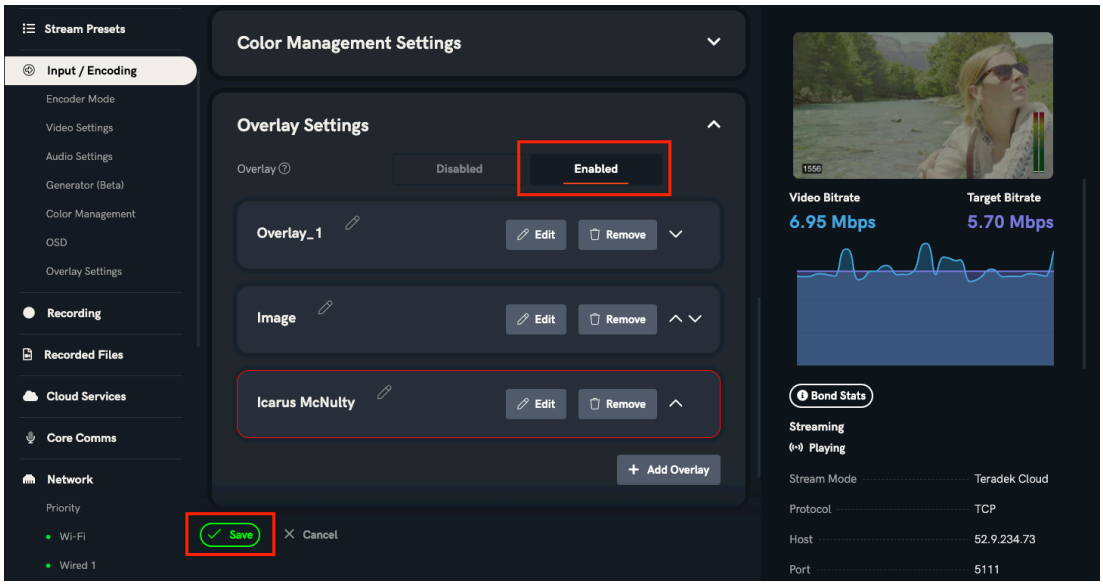
3. To preview how your Overlay will appear on the live stream, click **Preview stream**. To return to a transparent background, click **Transparent.**



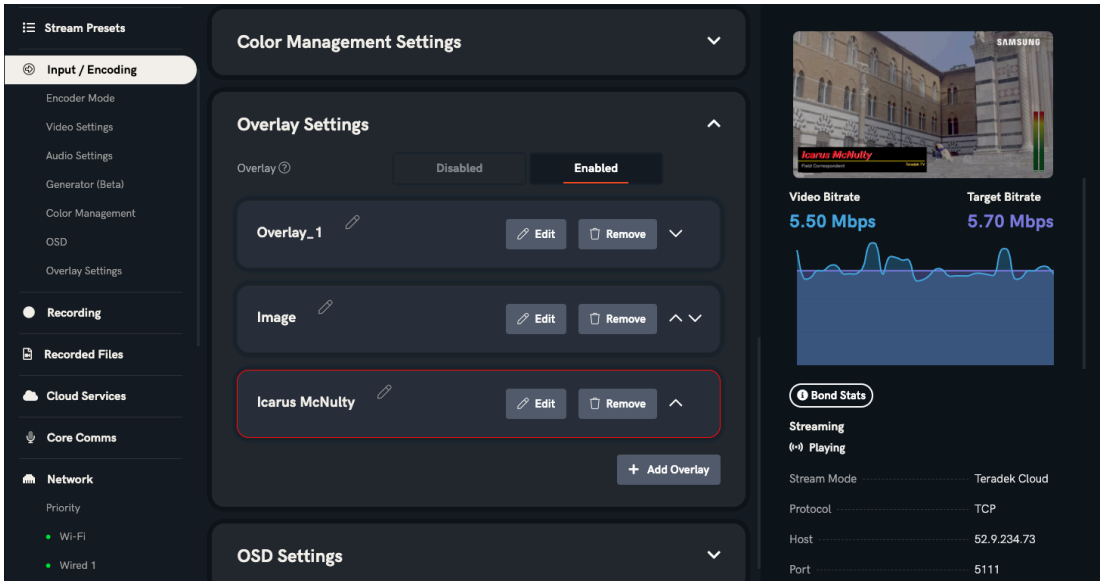
4. Elements used to create an overlay are listed on the right. To modify an element, click any of the elements listed to open the editing panel. Click **Save** when you're done to return to the web UI.



5. From the Overlay settings, click **Enabled**, then select the overlay you want displayed on your live stream. Click **Save** when you're done. **NOTE:** Overlays will not appear unless you click **Enabled**.



The Overlay is now visible on your live stream


Stream Presets
Input / Encoding
Encoder Mode
Video Settings
Audio Settings
Generator (Beta)
Color Management
OSD
Overlay Settings
Recording
Recorded Files
Cloud Services
Core Comms
Network
Priority
Wi-Fi
Wired 1
Color Management Settings
Overlay Settings
Overlay
Disabled
Enabled
Overlay_1
Edit
Remove
Image
Edit
Remove
Icarus McNulty
Edit
Remove
Add Overlay
OSD Settings
SAMSUNG
Icarus McNulty
Video Bitrate
5.50 Mbps
Target Bitrate
5.70 Mbps
Bond Stats
Streaming
Playing
Stream Mode
Teradek Cloud
Protocol
TCP
Host
52.9.234.73
Port
5111

Output/Decoding

The Video/Audio Output menu contains several output source configuration options.

- **OUTPUT FORMAT** - Use this option to configure the video output format. The output resolution can be set independently of the video stream resolution.
- **AUDIO OUTPUT** - Configure the audio output. Audio can be enabled or disabled (Mute Audio), and the output volume can also be adjusted

Recording

Prism, Prism Flex, and Prism Mobile support recording. Prism allows you to configure a network file system (NFS) to store your recorded footage on or record directly to Core. Prism Flex and Prism Mobile allow you to record your broadcasts directly to an SD Card, configure a network file system (NFS) to store your recorded footage or record directly to Core. Each recording is saved with the same resolution and bitrate set on the device.

RECORDING CONSIDERATIONS

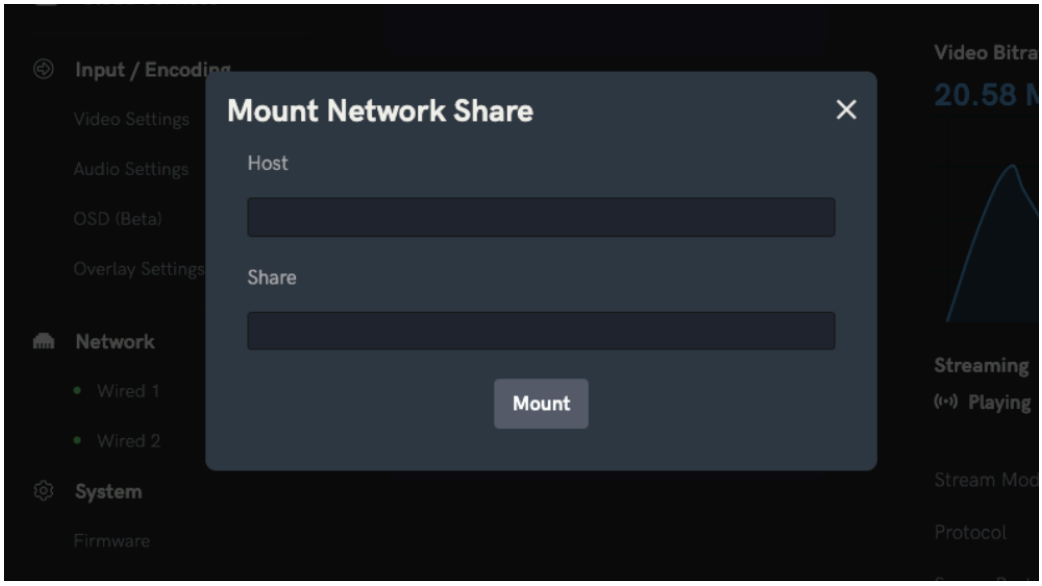
Recordings are triggered manually or automatically. If **Auto-Record** is enabled in the **Recording Settings**, a new recording is automatically created when a broadcast starts.

- For best results, use Class 6 or higher SD cards.
- Media should be formatted using FAT32 or ExFAT.
- File size is limited to 4GB for FAT32 formatted cards.
- New recordings are automatically started after the file size limit is reached.

For a list of compatible cameras with Record Triggers and Timecode capabilities, click **here**.

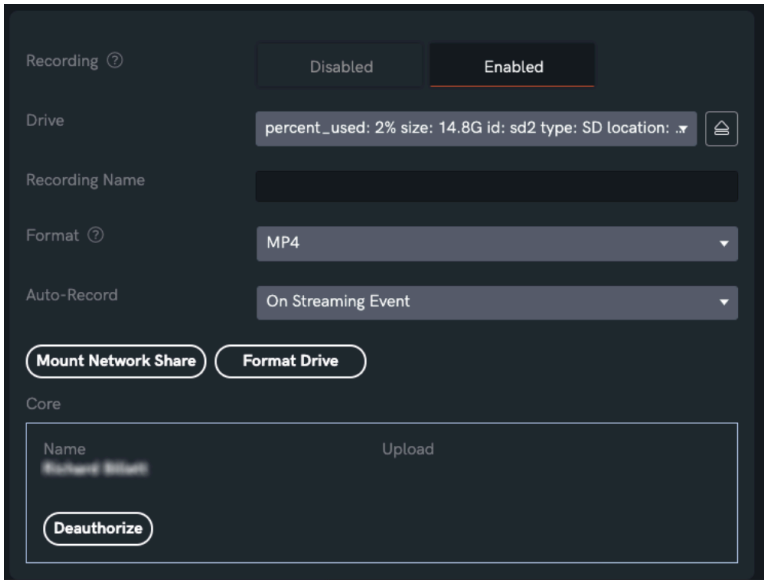
RECORD TO NFS

1. Click NFS under the **Drive** section.
2. Enter the host address and port, then click **Mount**.



RECORD TO SD CARD/USB

1. Insert a compatible SD card or USB drive into the corresponding slot in the back of the unit.
2. Enter the **Recording** menu, and select **Enabled**.
3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

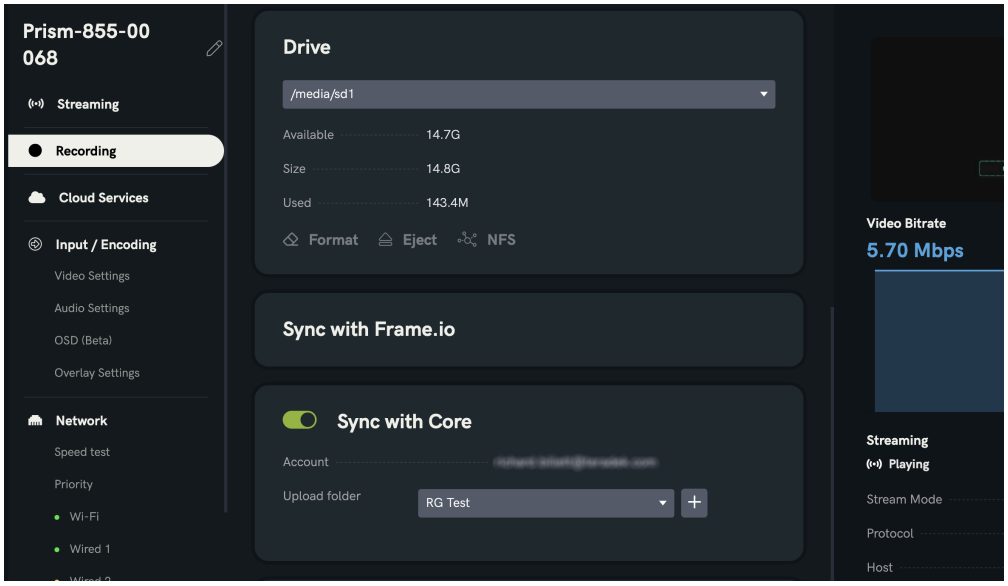


SYNC RECORDINGS WITH CORE

1. Insert a compatible SD card or USB drive into the corresponding slot in the back of the unit.
2. Enter the **Recording** menu, and select **Enabled**.
3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

4. Scroll down and enable **Sync with Core**.
5. Select an upload folder or create a new upload folder by clicking **+**.

> **NOTE:** Prism must be linked to Core before you can sync your recordings. For instructions on how to link your Prism device, please see **CORE**.



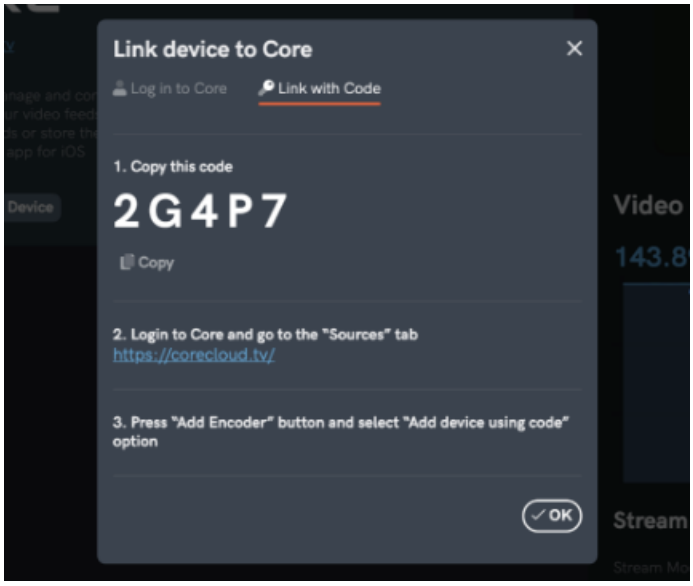
Core

Prism encoders and decoders can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. Core is a professional cloud-based solution for managing, archiving, and routing Teradek encoders and decoders.

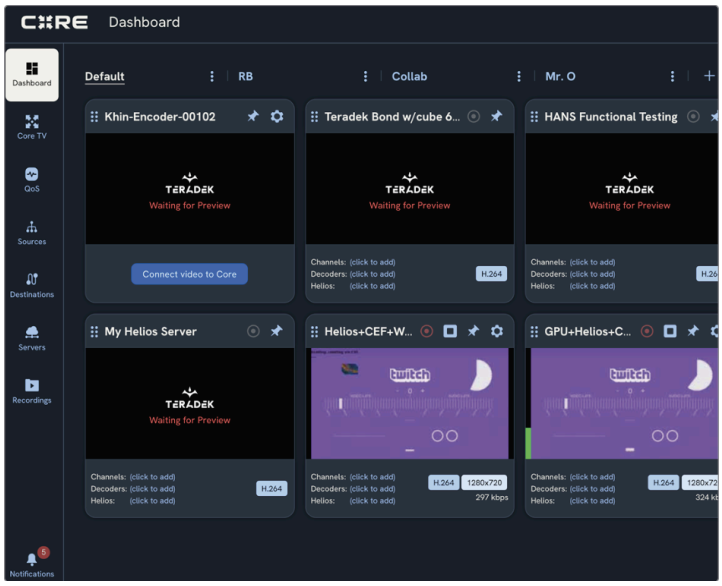
- Bond multiple Internet connections, increasing your broadcast's bandwidth and reliability
- Remotely control Prism from anywhere in the world
- Route live video feeds to multiple destinations and streaming platforms using the web UI
- Record streams and archive them to the cloud in real-time

GET STARTED

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab.
2. **Log in to Core**: Enter your credentials to link Prism to your Core account, then click **Next**.
   Link with Code: Copy the authorization code generated for your Prism, then follow the instructions.

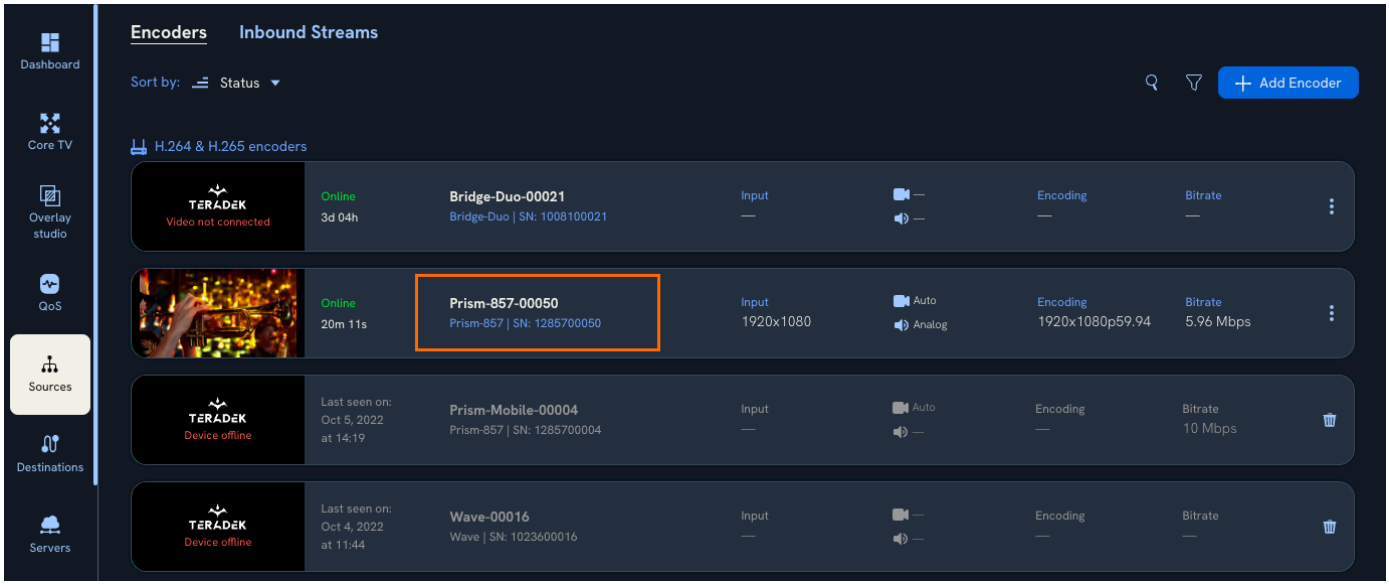


3. Select an Organization (if applicable).
4. Once a connection is established, you can configure and control Prism from the Core dashboard.

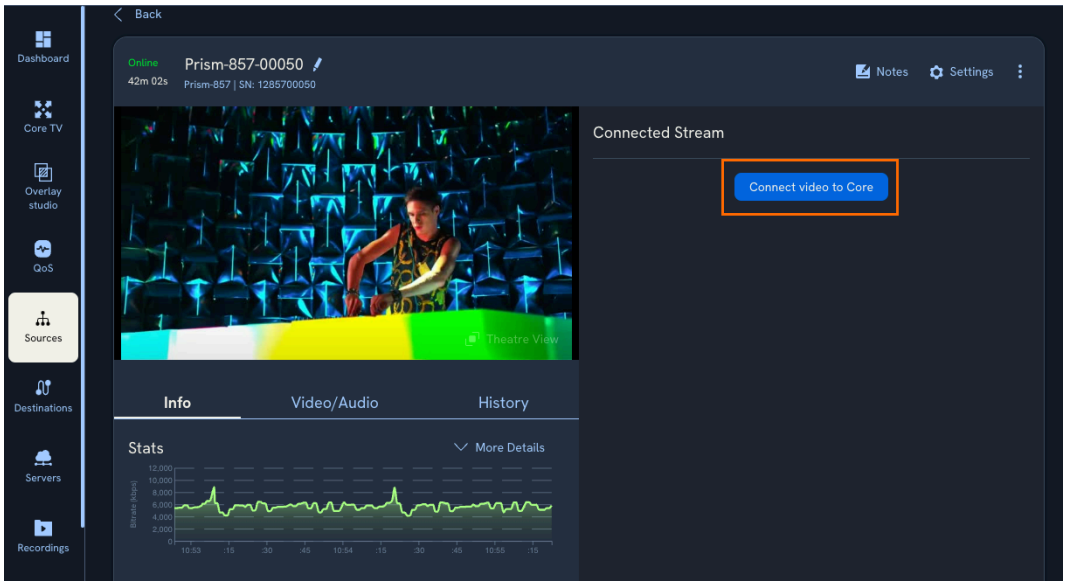


CONNECT TO A SERVER

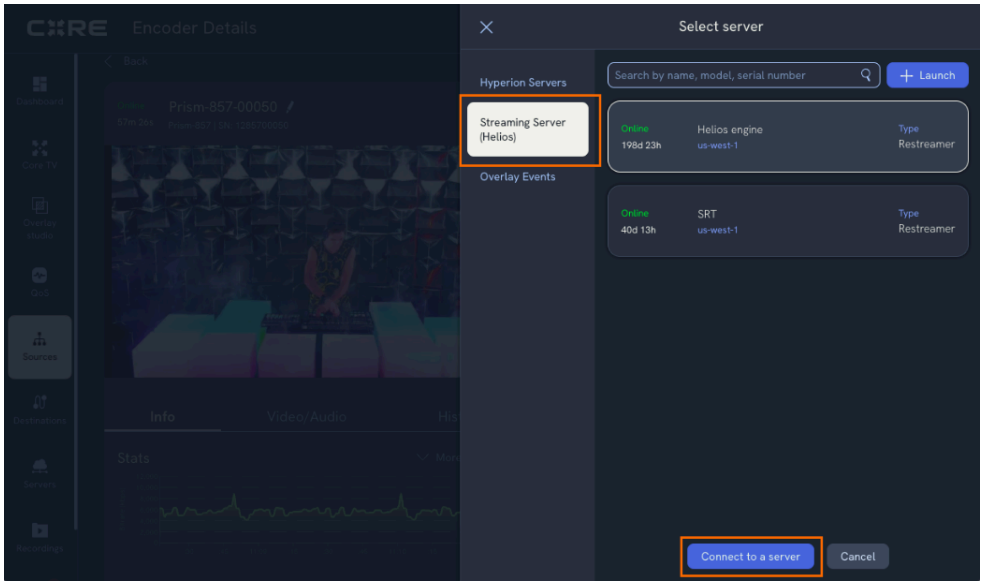
1. From the Sources tab, select your Prism unit by clicking on the name of the device.



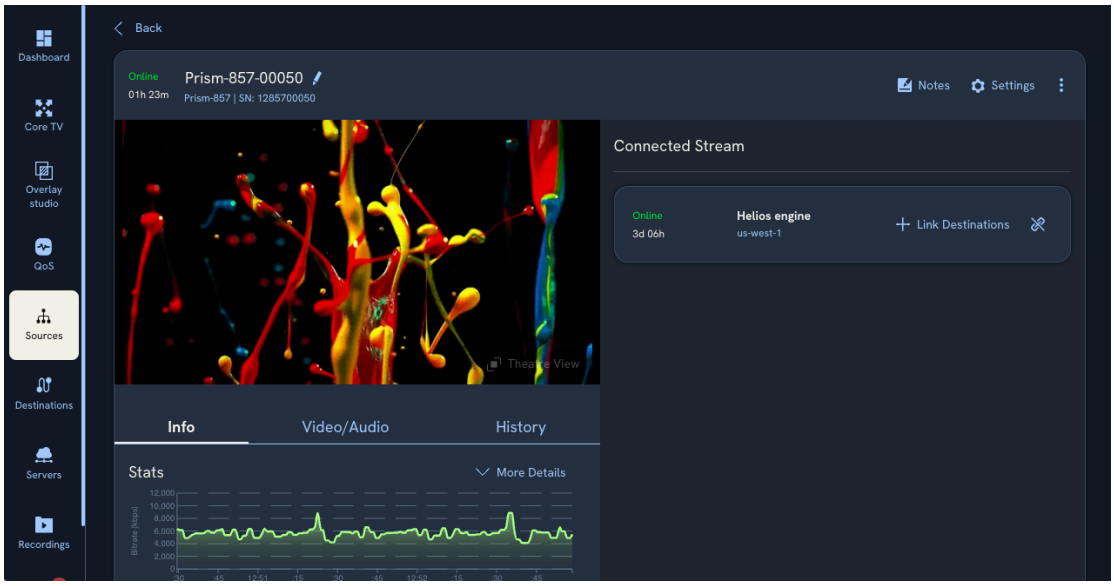
2. Click the **Connect video to Core** tab, then select **Streaming Server (Helios)**. If you haven't configured a server to your Core account, review [this tutorial] for steps on how to launch a new server.



3. Select a server, then click **Connect to a server**.



4. Under **Connected Stream** in the Encoder Details, click **+ Link Destination** to connect channels or decoders to stream to.



Core Comms

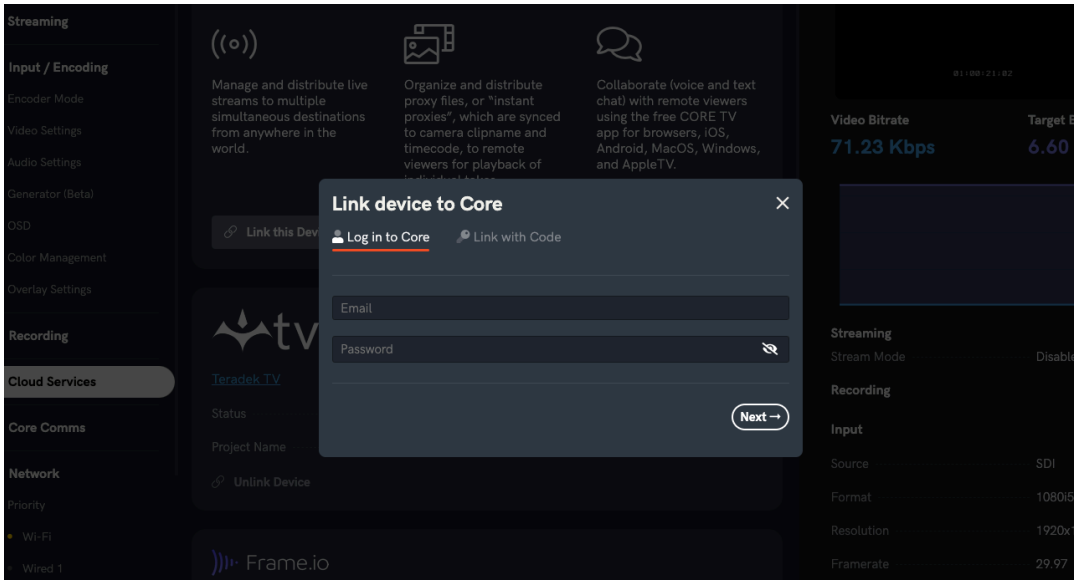
Core Comms is an all-encompassing, cloud-powered communication ecosystem that allows users to communicate and collaborate with broadcast stations, camera operators, producers, and remote staff via Core Share. This comprehensive IFB and Intercom solution empowers broadcasters with unparalleled efficiency, integrating roles, equipment, and locations.

NOTES

- Core Comms uses **Core Share** workspaces to group devices and apps for communication.
- Core Share generates a share code for you to log in instead of your typical login and password
- The same share code can be reused to configure all your devices
- If you have multiple workspaces, Core Comms will allow you to choose which workspace you want to share/view
- Core Comms requires headphones or a mic to communicate. Otherwise, it will not work
- To use your phone with Core Comms, you must download the Core Share App

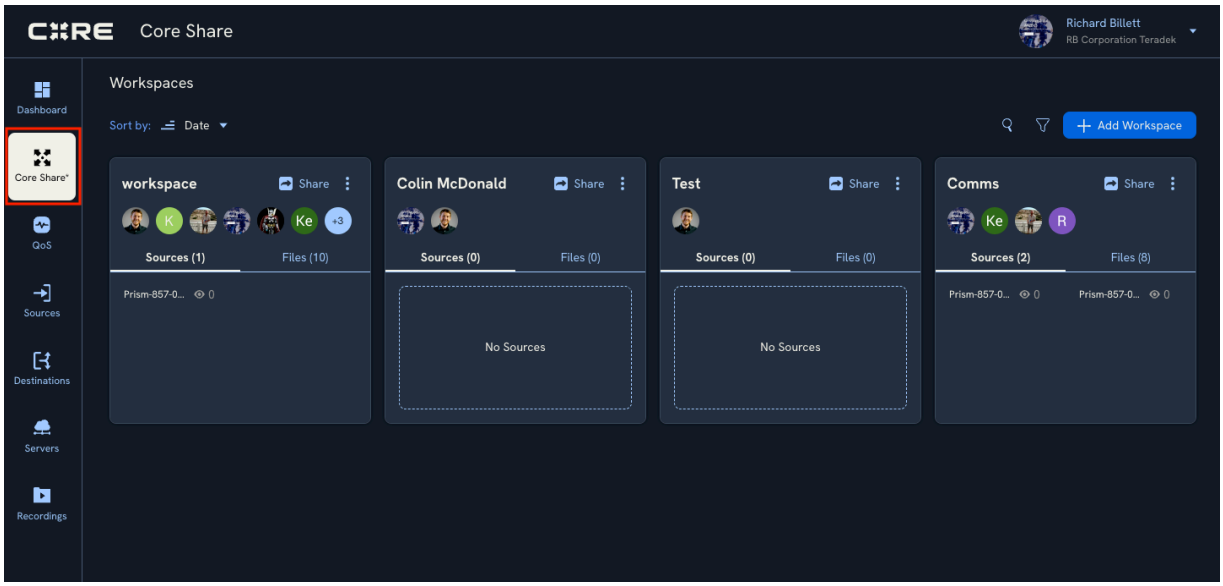
LOGIN TO CORE

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab.
2. **Log in to Core**: Enter your credentials to link Prism to your Core account, then click **Next**.
   Link with Code: Copy the authorization code generated for your Prism, then follow the instructions.

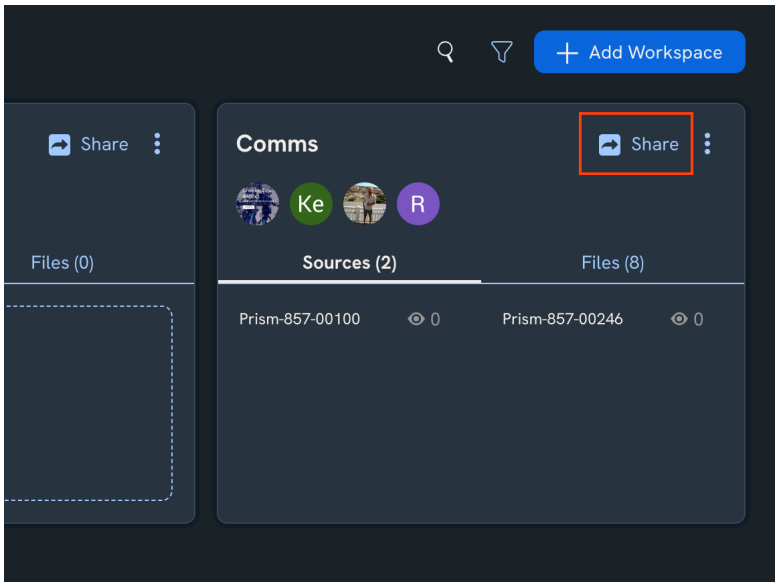


SHARE A WORKSPACE

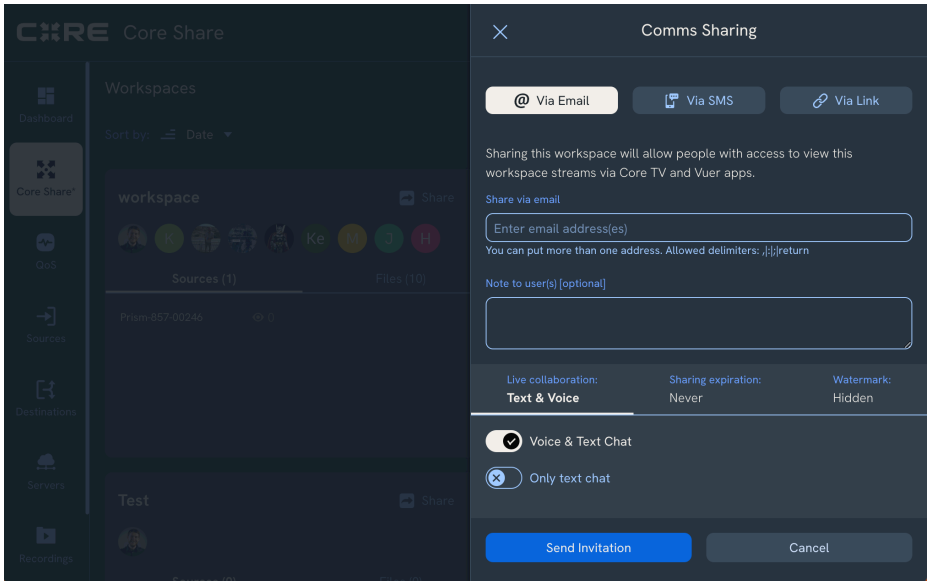
1. Click **Core Share** from the sidebar menu, then select the workspace you will share.



2. Tap the workspace's Share button to open the Comms Sharing window.

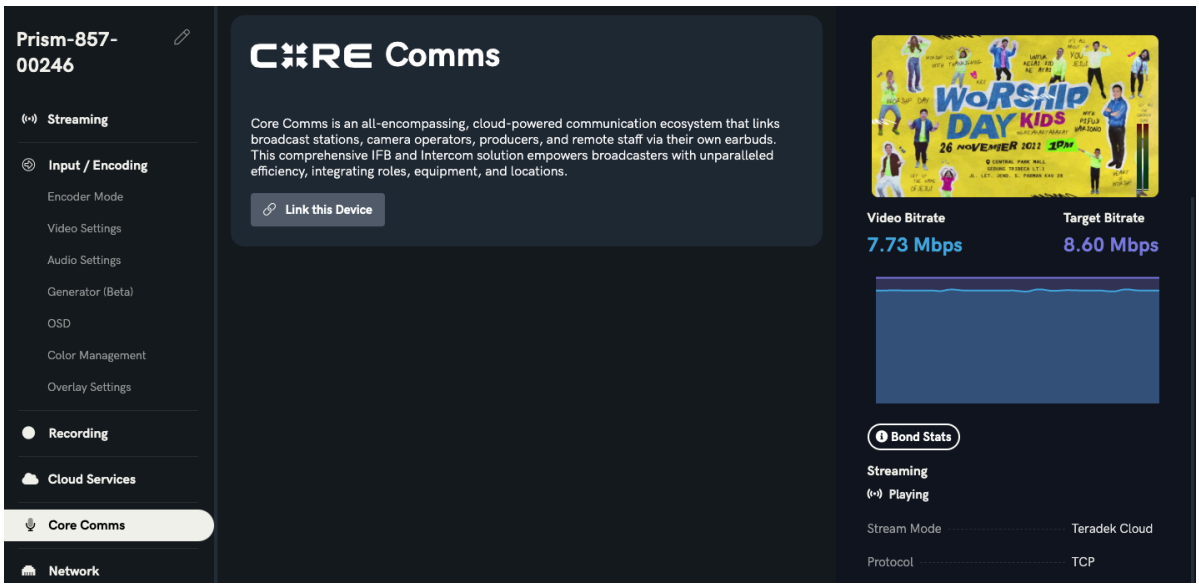


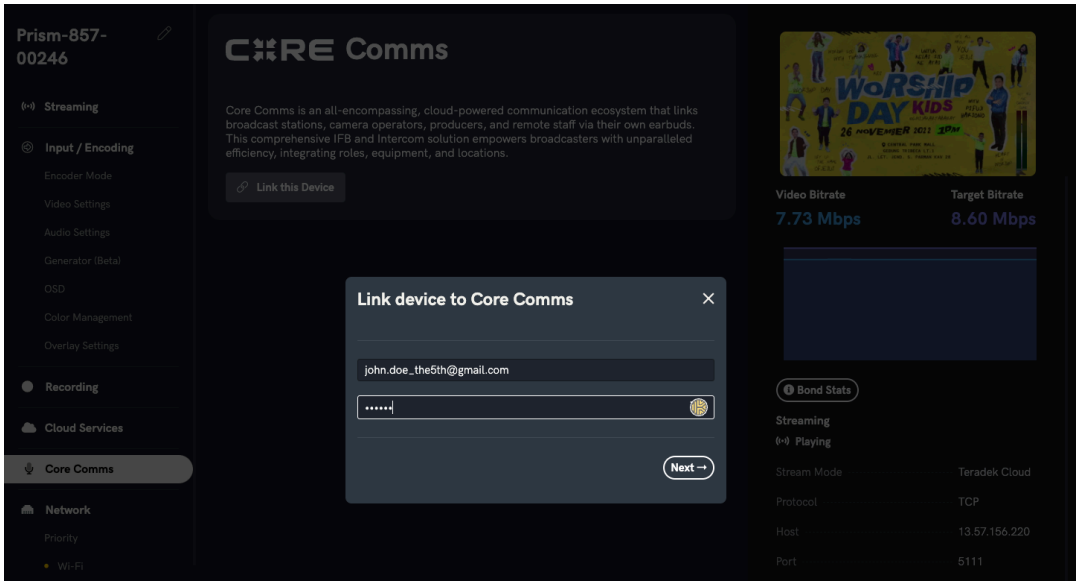
3. Select how you want to share the workspace (email, SMS, or link). To generate a share code **Via Email** or **Via SMS**, enter the email address or phone number, then click **Send Invitation**. To share **Via Link**, click the Generate tab, copy the link, then share the URL using any communication method you choose.



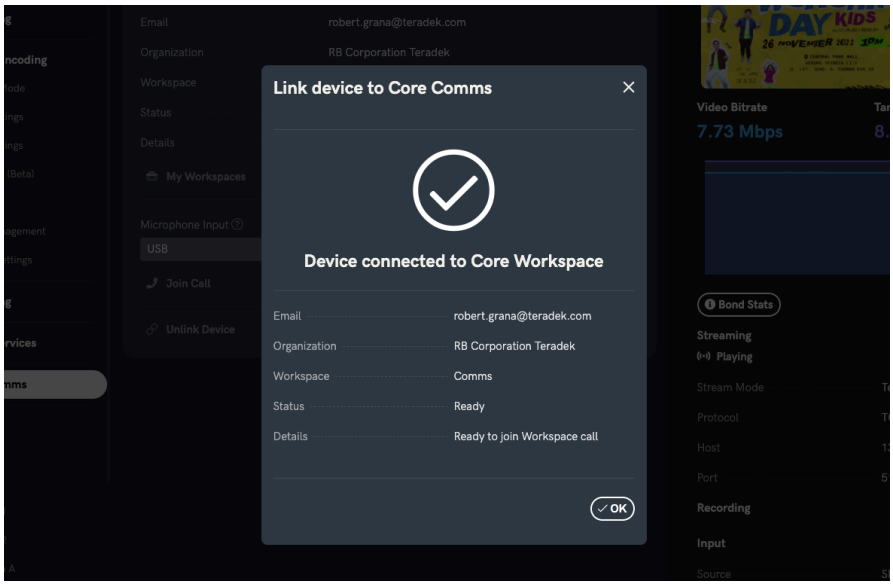
LINK YOUR DEVICE

1. Return to the Prism UI and select **Core Comms**.
2. Tap **Link this Device** and enter your email and the code you received. Click **Next**.



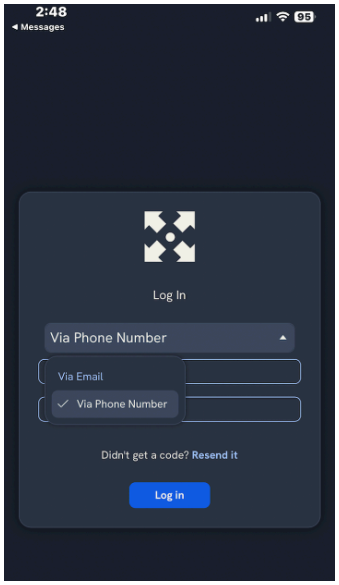


3. Select an Organization (if applicable), then click **Connect**. Your device is now connected.



VIA TEXT (SMS)

1. Copy the share code, and open the URL provided via text.
2. Tap the drop-down menu and select Via Phone Number.

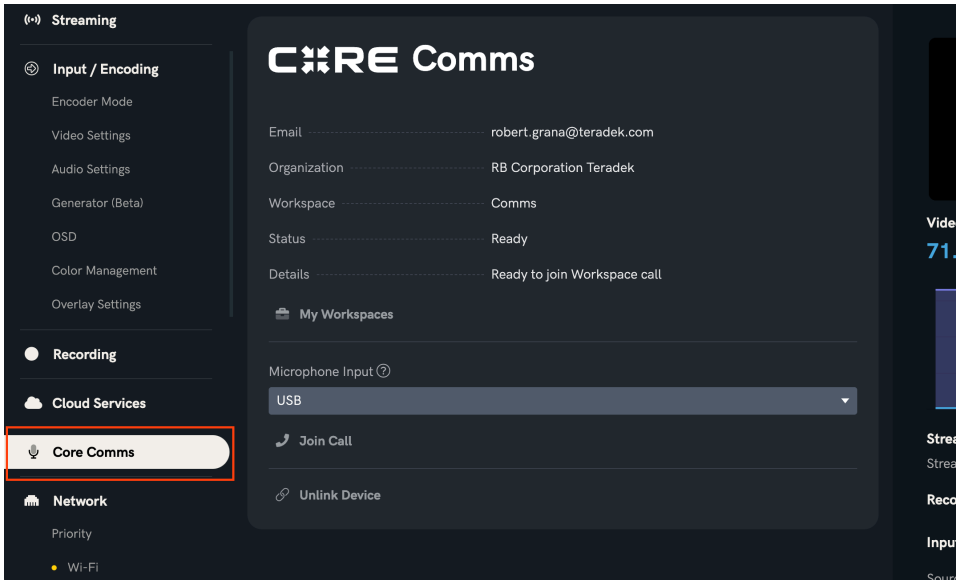


3. Enter your phone number and the share code provided in the text, then tap login.

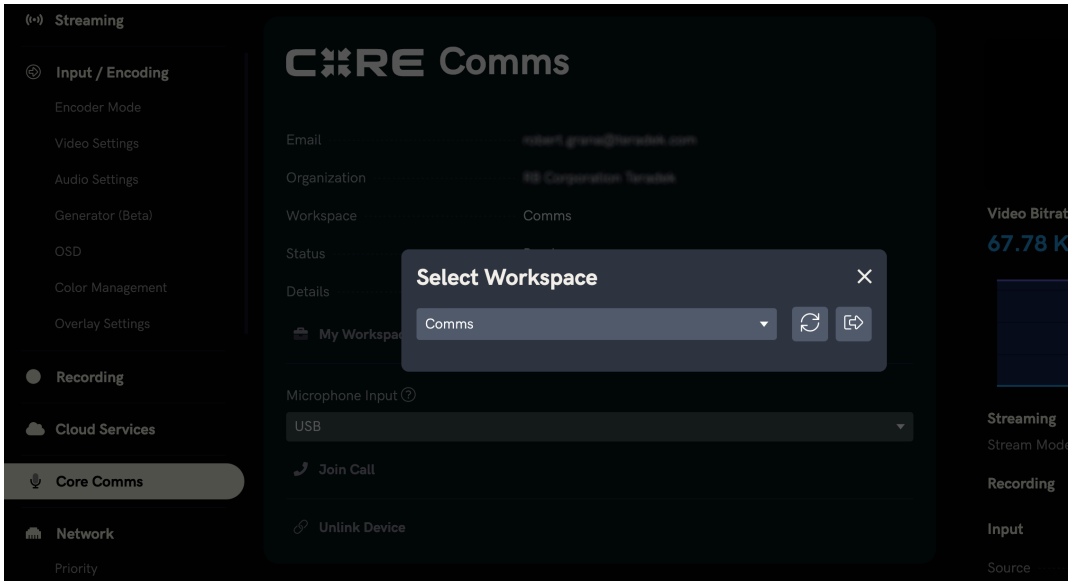
COMMUNICATE VIA CORE COMMS

COMMUNICATE VIA DEVICE

1. Once the device is connected, return to the Prism web UI and select **Core Comms**.

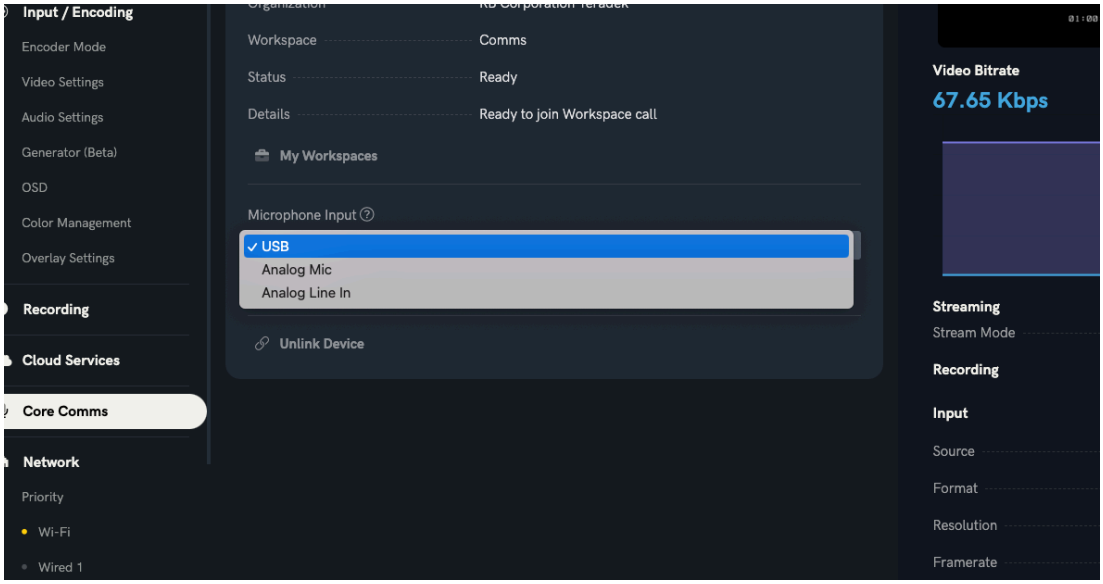


2. Tap the My **Workspaces** tab and select a workspace.

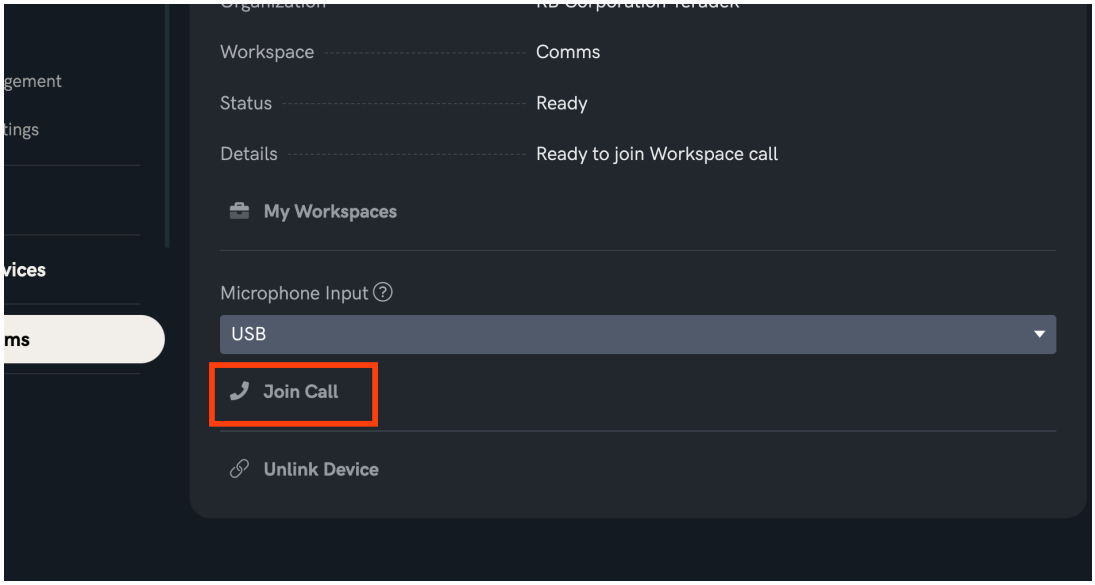


3. Connect your headphones/microphone to your device.

4. Select the **Microphone Input** type (USB, Analog Mic, or Analog Line In).

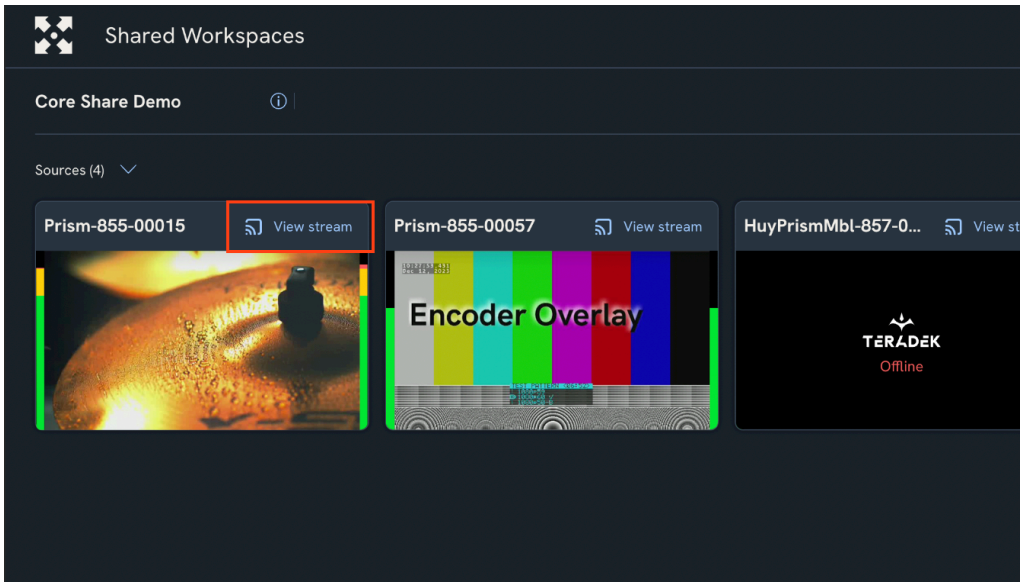


5. Tap the **Join Call** tab.

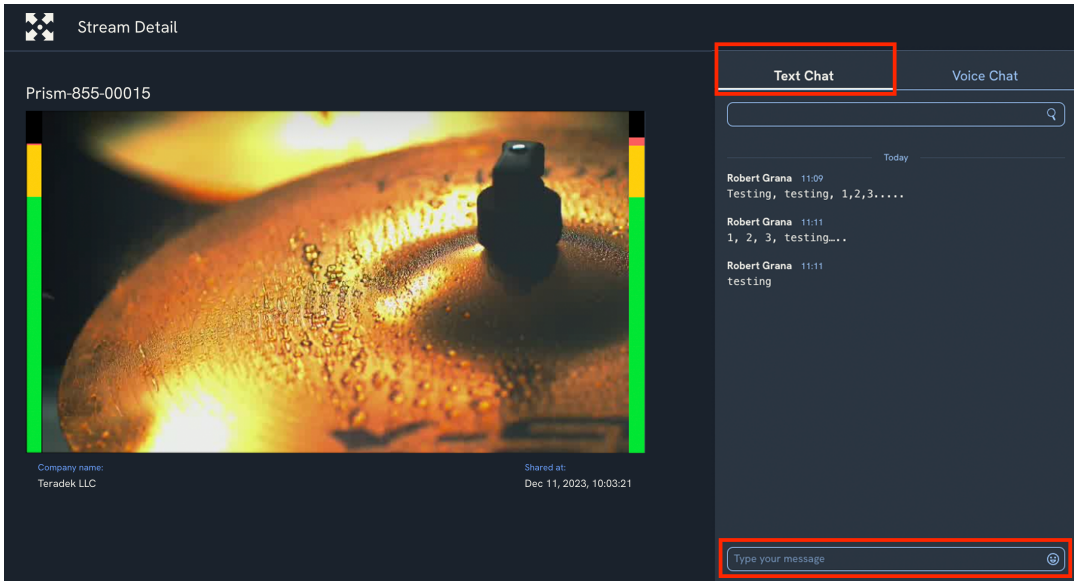


COMMUNICATE VIA SHARED LINK

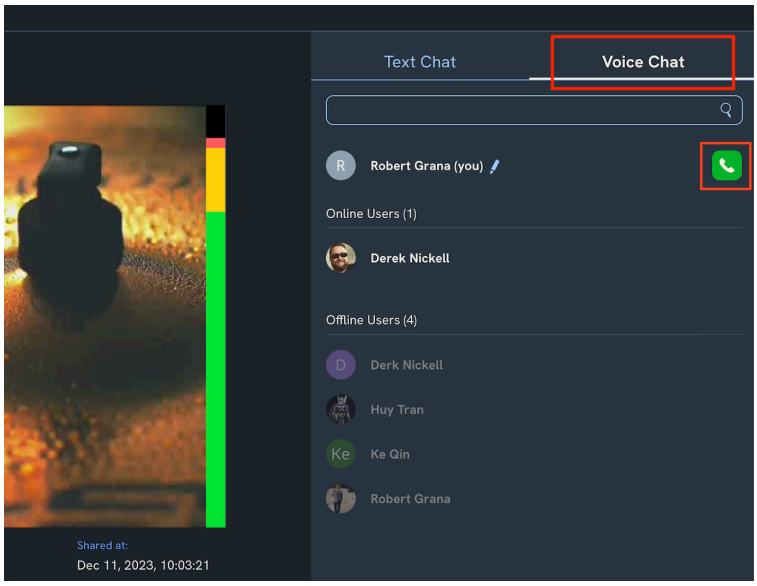
1. Click on the shared link you received to open the workspace in your web browser.
2. Click the **View stream** tab to open the **Stream Details.**



3. Click **Text Chat** to communicate via text, then type in your message and press the enter/return button on your keyboard to send the message. Anyone connected to the shared workspace will be able to communicate via text chat.



4. For Voice Chat, click the **Voice Chat** tab, then click the green phone icon. **NOTE**: Ensure your headphones/microphone are connected to your computer.



You are now able to communicate with other users who have access to the workspace once the other user(s) joins the call.

Core Share

Core Share allows anyone to view live video from your Core workspace on any web browser or mobile device running the Core Share app, even if they don't have a Core account.

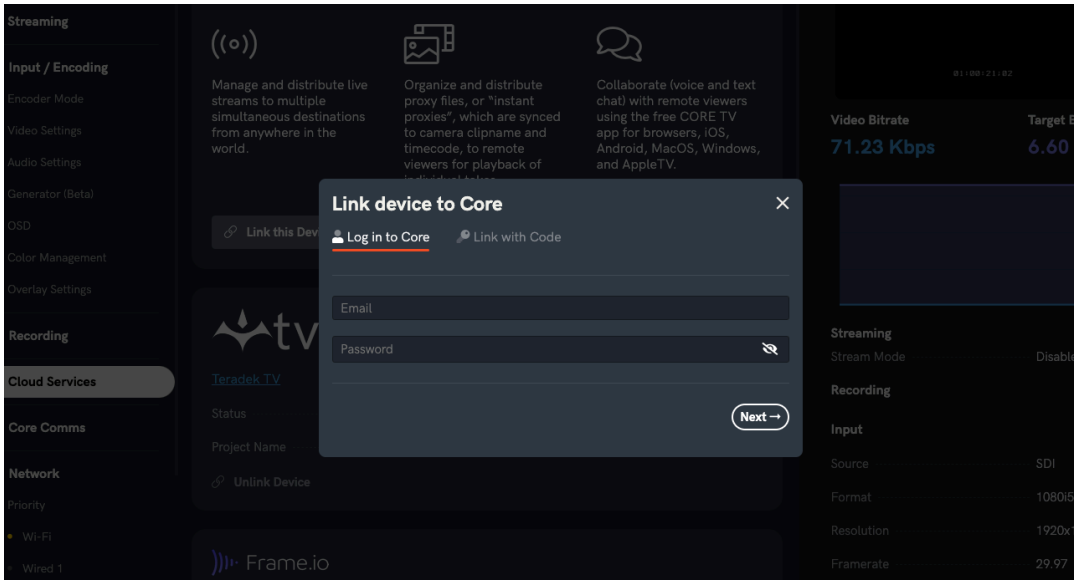
Table of Contents

NOTES

- Core Share generates a share code for you to log in instead of your typical login and password
- The same share code can be reused to configure all your devices
- You must download the Core Share App

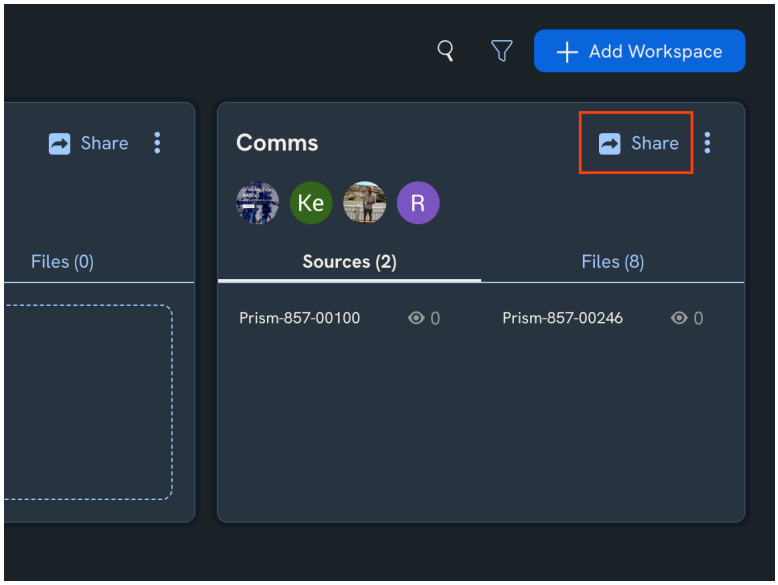
Connect Your Device

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab.
2. **Log in to Core**: Enter your credentials to link Prism to your Core account, then click **Next**.
   Link with Code: Copy the authorization code generated for your Prism, then follow the instructions.
3. Refer to other sections in this guide for more information about using your encoder with Core.



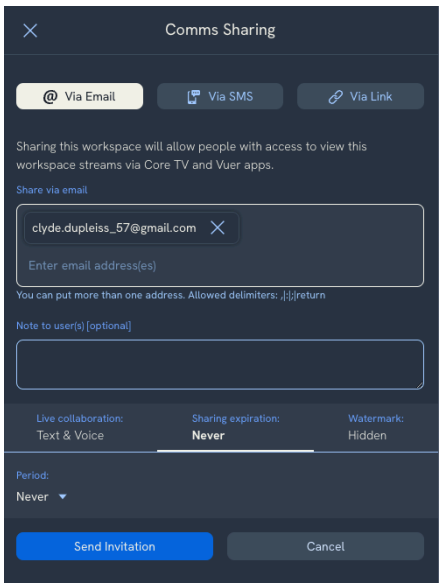
Share a Workspace

1. Add a workspace (source) to your Core account if you haven't already. For instructions on how to add a workspace to your Core dashboard, please click **here**.
2. Click **Core Share** from the sidebar menu, then select the workspace you will share.
3. Tap the workspace's **Share** tab to open the Sharing window.
4. You can share workspaces via E-mail, text (SMS), or a sharling link. See the next section for details.

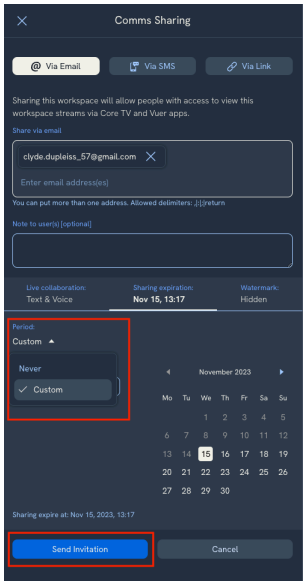


Sharing Via Email

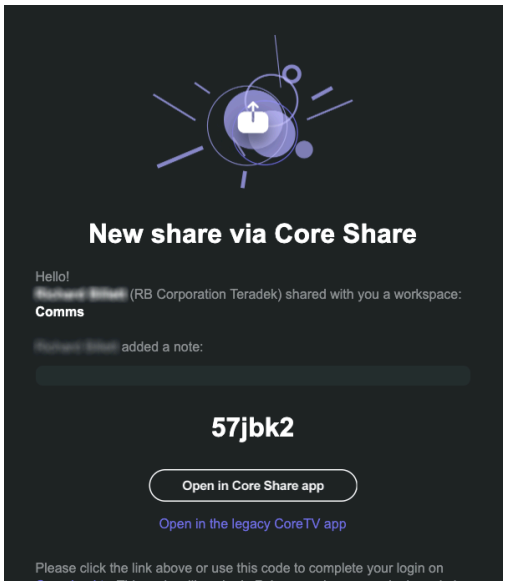
1. Click the **Via Email** tab.
2. Enter the email address(es) in the **Share via email** field.



3. Click **Sharing Expiration** to enter a sharing period (**Never** or **Custom** date), then choose whether or not you want to display the **watermark**. You can also add a custom note (optional) to send to your collaborators in the **Note to user(s)** field.
4. Click **Send Invitation**.

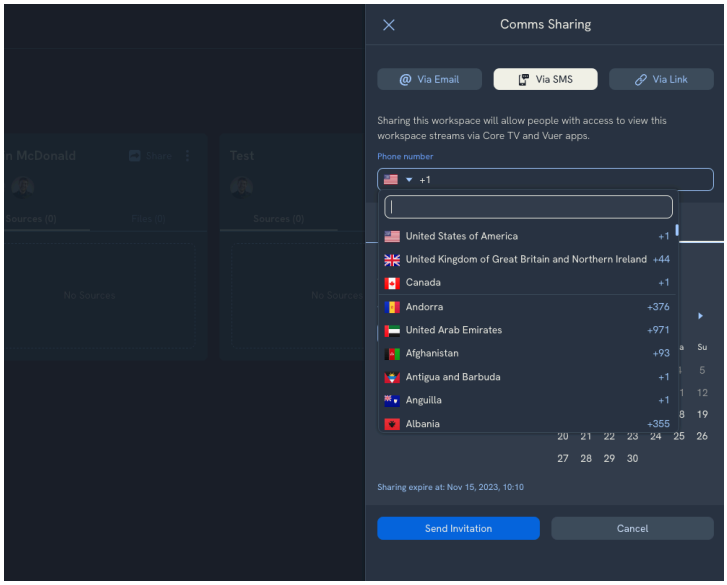


The people you have shared the workspace with will receive an e-mail like the one pictured below that contains their share code.

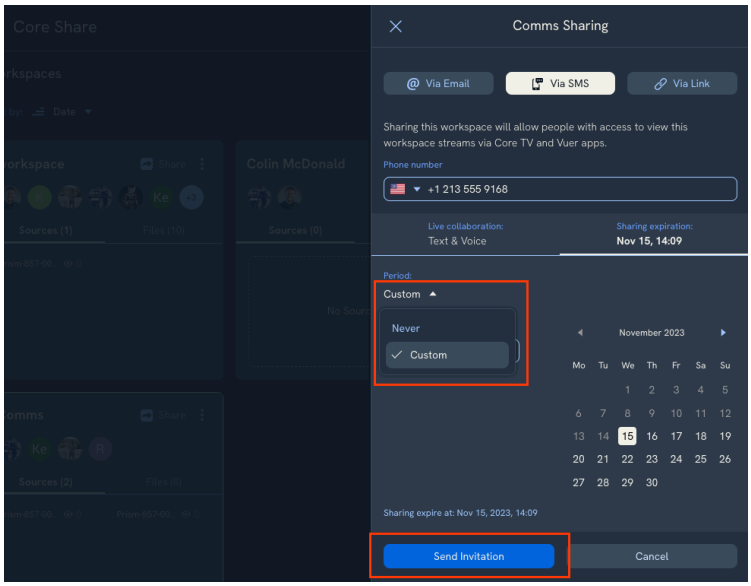


Sharing Via SMS

1. Click the **Via SMS** tab.
2. Select the country code, then enter the phone number you wish to share your workspace with.

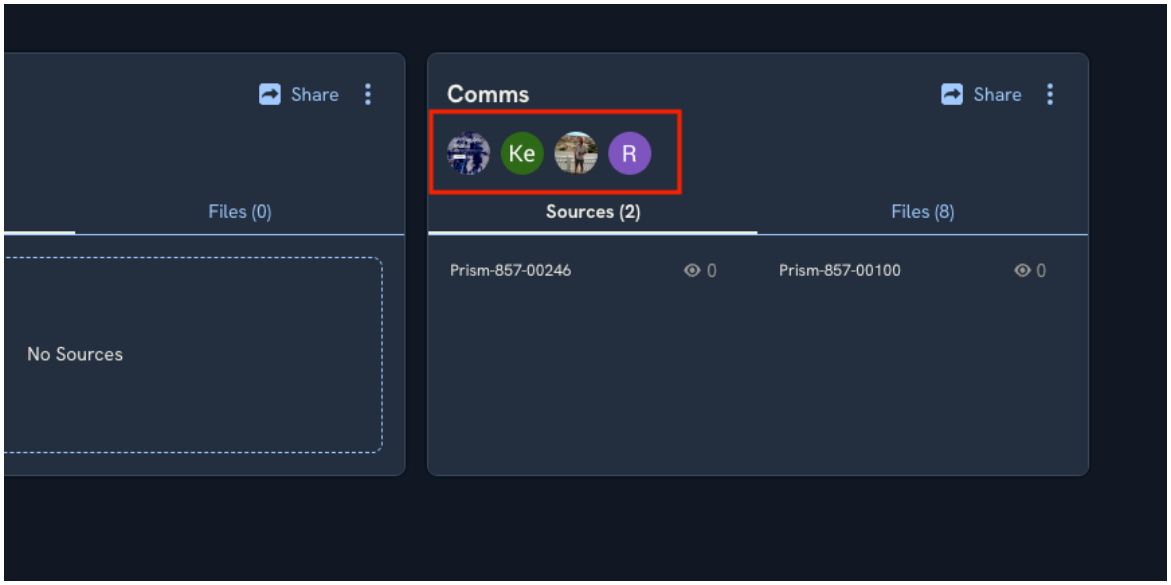


3. Click **Sharing Expiration** to enter a sharing period (**Never** or enter a **Custom** date).
4. Click **Send Invitation**. Core will send an SMS to the phone number you entered containing the share code.

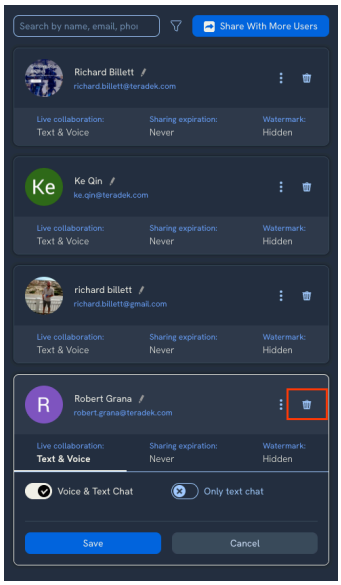


Unshare a Workspace

To unshare your workspace, return to the **Workspaces** page and click on any of the icons listed under the name of the workspace.



Click the trash icon to remove the user.

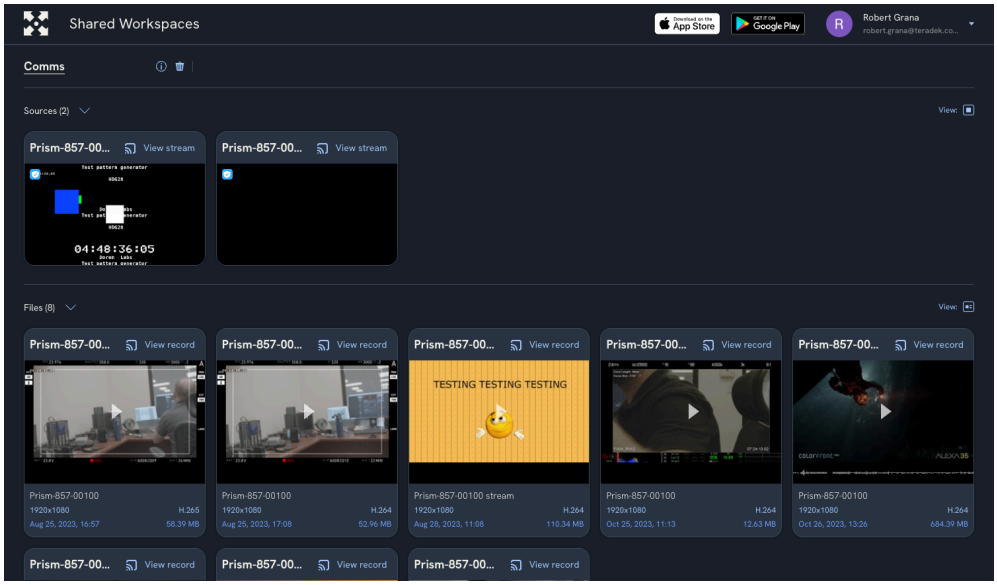


View a Workspace

View in your Web Browser

1. To view the shared workspace, open the email you received from Core, copy the share code, and then click **Open in Core Share app.**

2. Core Share will automatically populate the email and share code fields and open the shared workspace. If it does not, enter your email after you click Open in Core Share app, then click Continue with Sign In to enter the share code.



View on a Mobile Device

See the Core Share App section below for instructions on viewing streams on your mobile device.

Core Share App

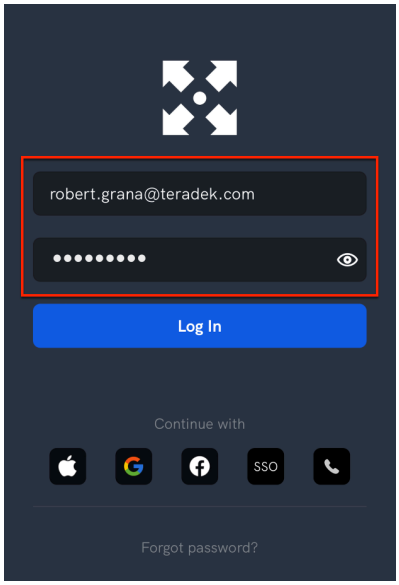
Core Share is a live production collaboration app that enables Core users to view shared workspaces and communicate with their entire production team in real-time. To get started, download the Core Share app, available for iOS, Android, and Windows.

Download here for iOS

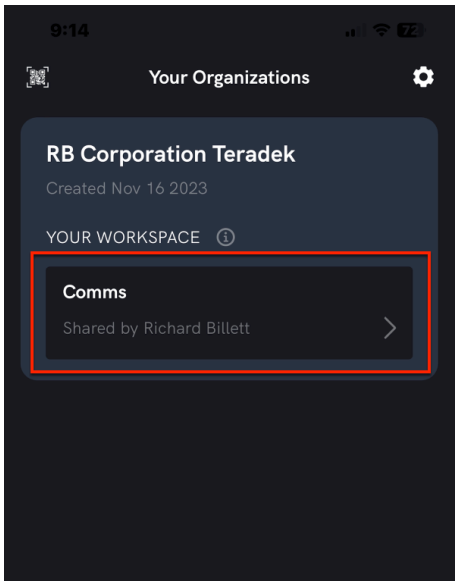
Download here for Android

Core Share on the Teradek Downloads Page

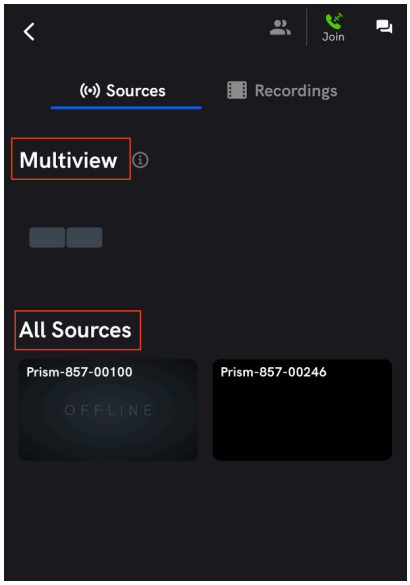
1. Download the **Core Share App** (iOS /Android). See links above.
2. Ensure the admin has shared a workspace with you. You will receive a share code via either e-mail or SMS.
3. Enter your email/phone number and access code. You can also enter your **Core** credentials if you have a Core account.
4. Tap the **Log In** button



After logging in, you can see information about the shared workspaces and associated organization. To enter the workspace, simply tap the listing.



Once inside the workspace, you can either select the individual sources or if multiple cameras are connected, tap one of the multiview layouts to view 2, 3, or 4 videos at once.

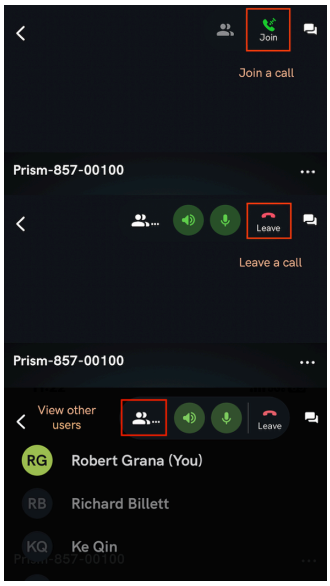


Voice Chat

Core Share enables voice and text chat for connected viewers. This permission must be enabled when the workspace is shared. This works for both connected apps, and devices with Core Comms enabled.

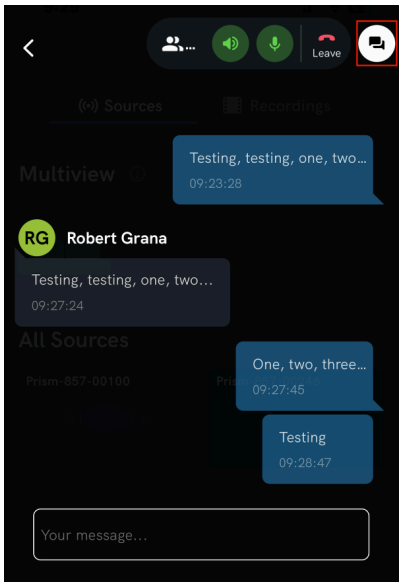
Visit the **Core Comms** article for More information on how to enable and use Core Comms with your encoders and decoders: **https://guide.teradek.com/a/1744234-core-comms**

- To communicate with crew members via voice chat, tap the **Join** tab (green phone icon) at the top of the screen.
- To end the call, tap the **Leave** tab (red phone icon).To view other users in the shared workspace, tap the **Users** tab.



Text Chat

You can text with other people in a workspace by tapping the text chat icon. Text messages are only visible for currently connected users, messages are not saved for later viewing.

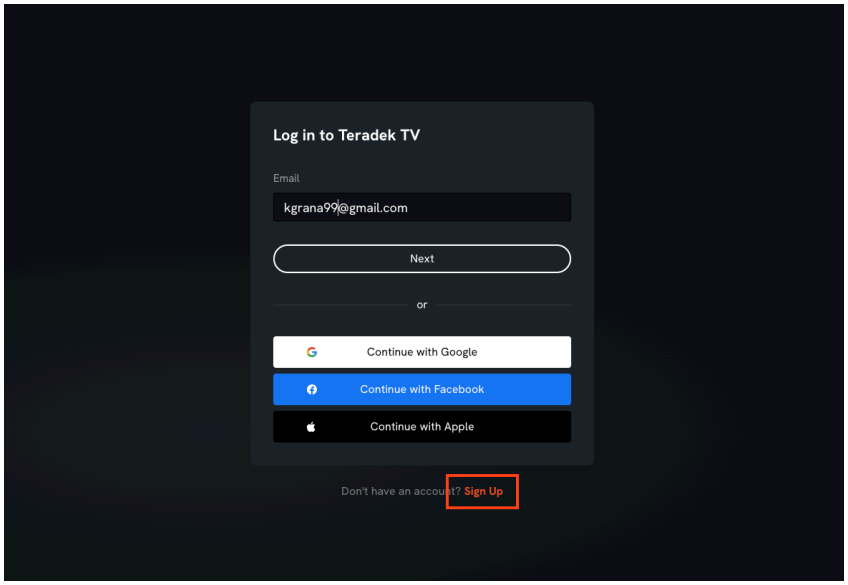


Teradek TV

Teradek TV is an all-in-one live feed and instant recordings review platform that provides real-time visibility into all stages of production, connecting creatives, producers, executives, and other remote collaborators.

Get Started

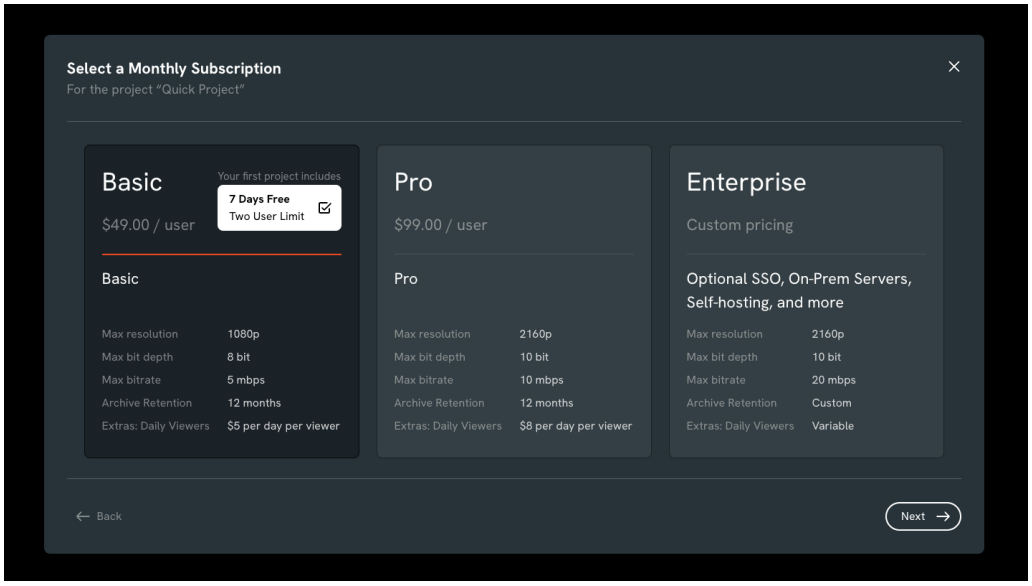
1. Visit https://teradek.com/pages/teradek-tv and click the **Sign Up** tab to create an account. If you already have an active subscription, you can just log in to your account and skip to Create a Project.



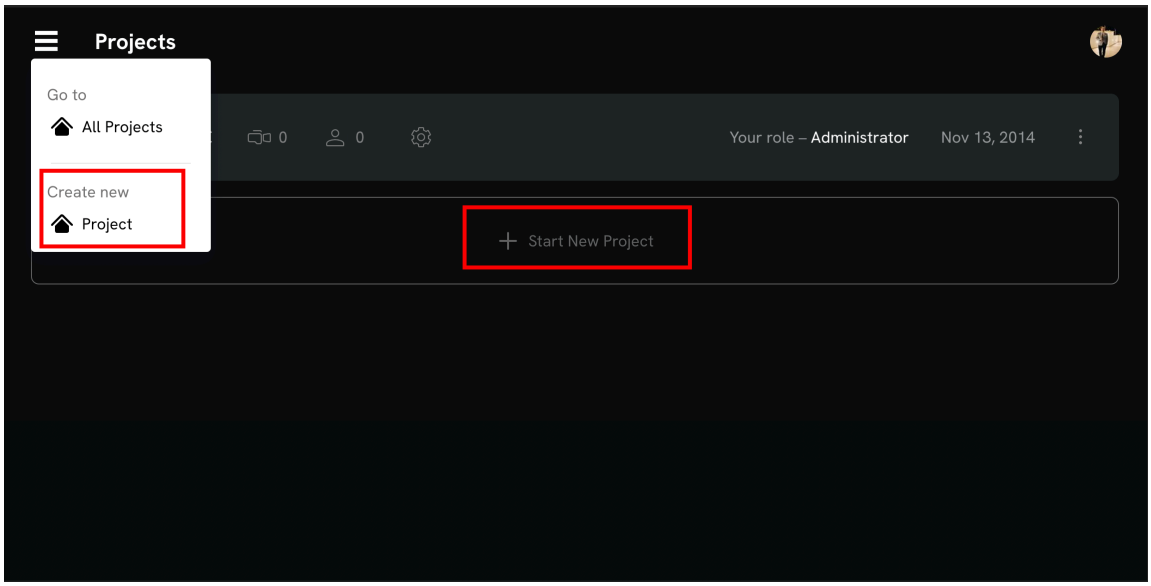
2. You will receive a confirmation email after creating an account. Confirm your email address, then log in to your new account.

Create a Project

1. To start a new project, you need to subscribe to a monthly plan. Select a plan that works best for you, then click **Next** to enter your payment information. Once you've entered your payment information, click **Create Project**.

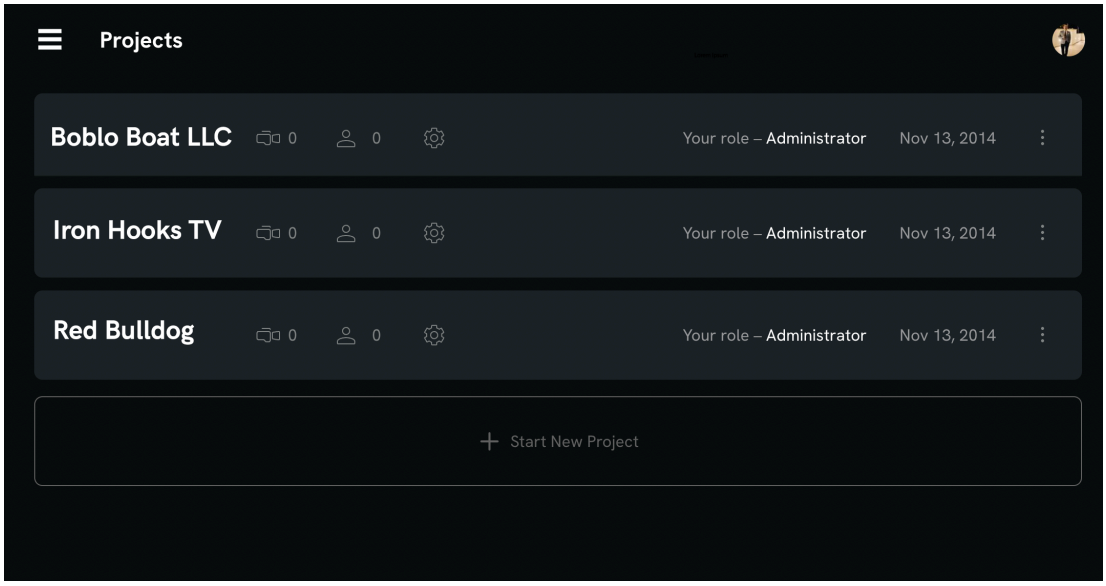


2. Your new project is now listed on the **Projects** page. To create another project, click **Create New Project** from the settings tab on the top left corner or click the **Start New Project** thumbnail at the bottom of the Projects list.



Connect to Teradek TV

To connect your Prism device to Teradek TV, select a project by clicking on the title, then follow the steps to create a Camera (source) to link your device to.

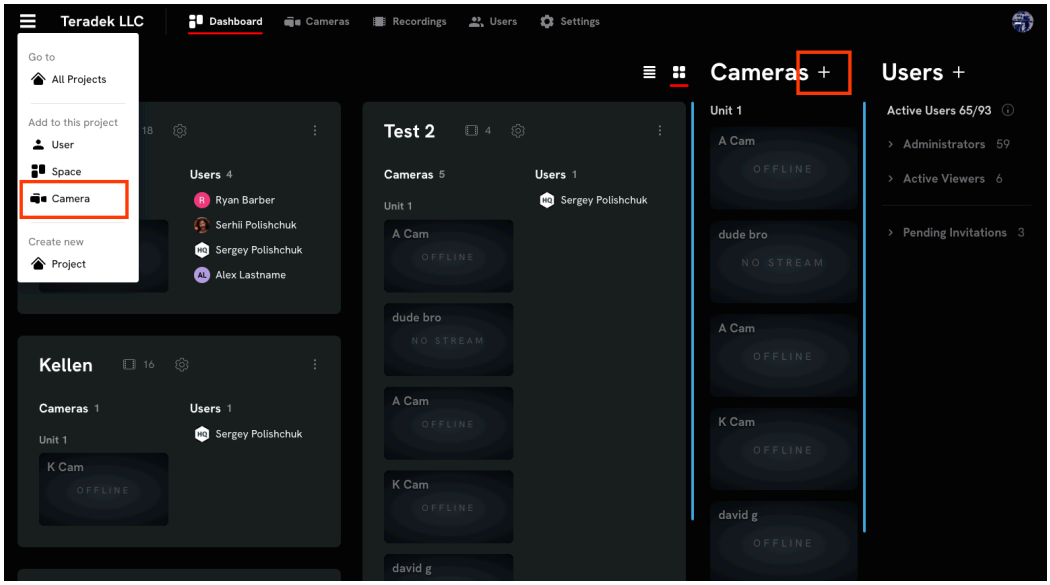


Create a Camera (Source)

1. From the Prism web UI, select **Cloud Services**, select **Teradek TV**, then click the **Link this Device** tab.

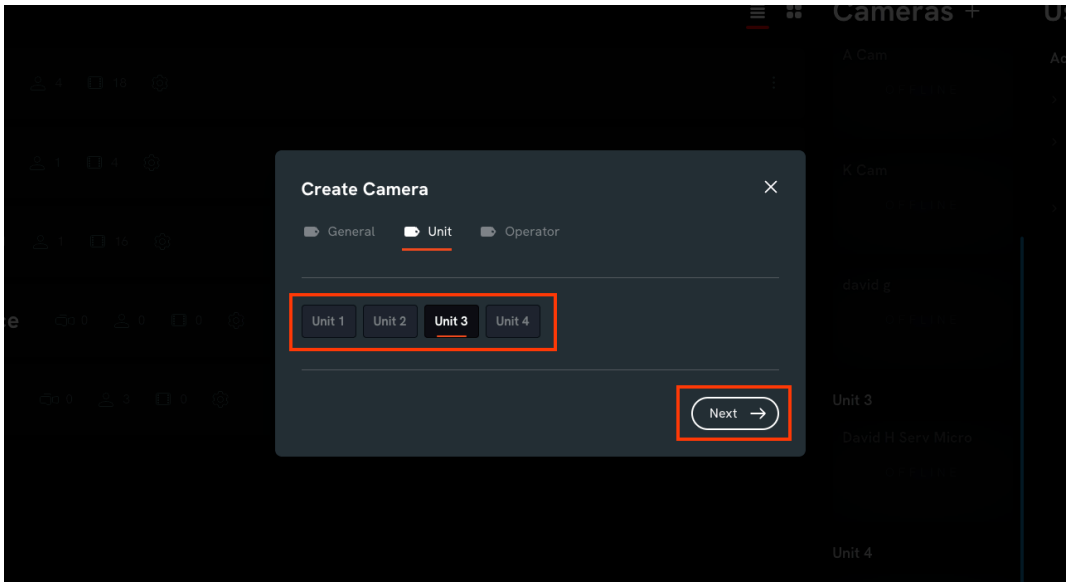
2. Copy the authorization code generated for your Prism device by clicking the **Copy** tab.

3. From your Teradek TV dashboard, create a camera (source) by clicking **Camera** from the settings tab or clicking the **+** sign next to the **Cameras** tab on your dashboard.

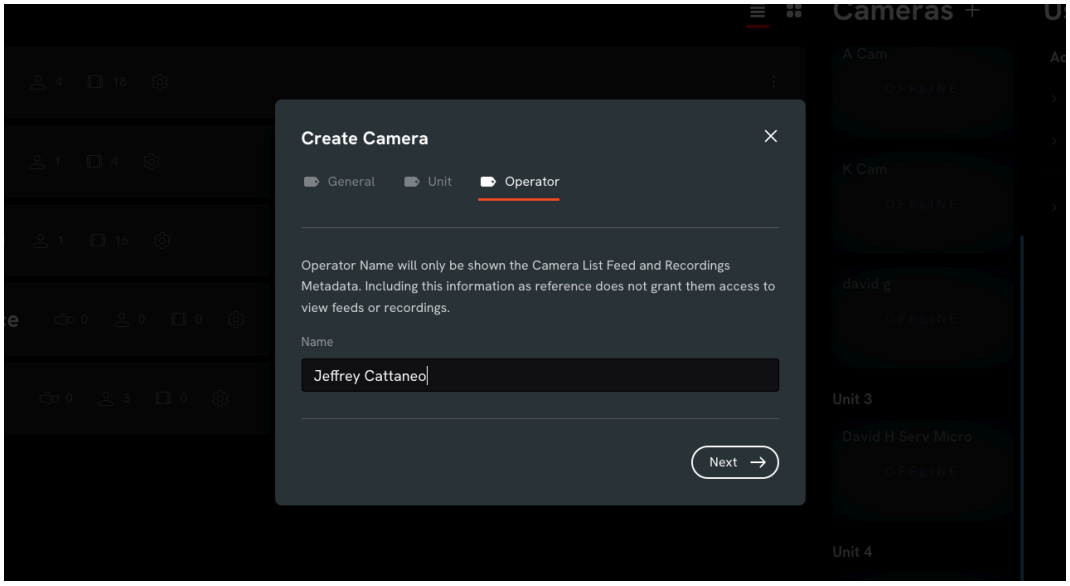


2. Choose a default name (A Cam, B Cam, C Cam, etc.) or create a name for your camera, then click **Next**.

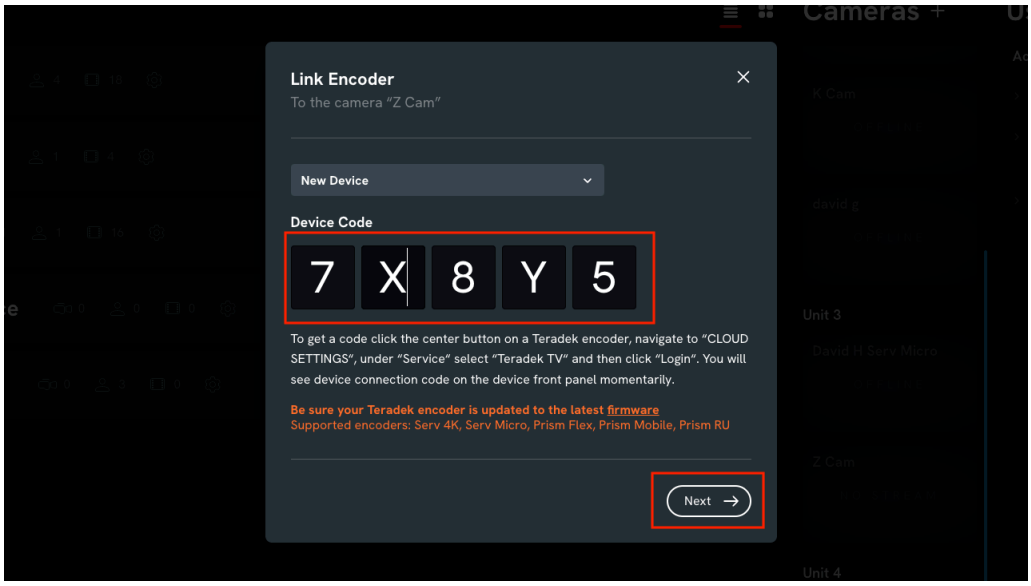
3. Select a unit (group) to add your camera to, then click **Next**. **NOTE:** Units consist of multiple cameras that can be used for the same project.



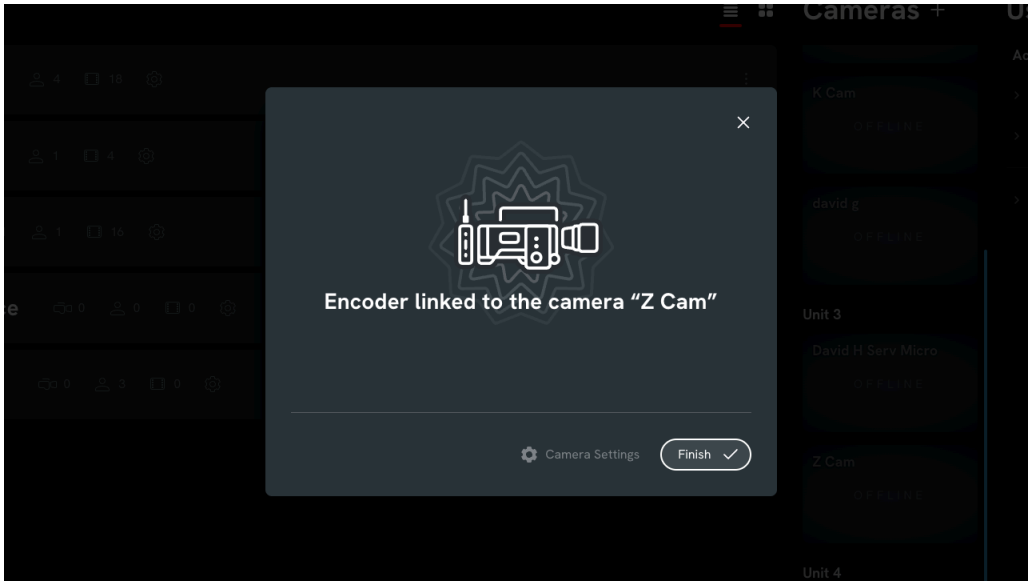
4. Enter the name of the camera operator, then click **Next** to create the camera.



5. Click the **Link Encoder** tab, then enter the authorization code generated for your Prism device. You can paste the code or enter it manually. Click **Next** when done.

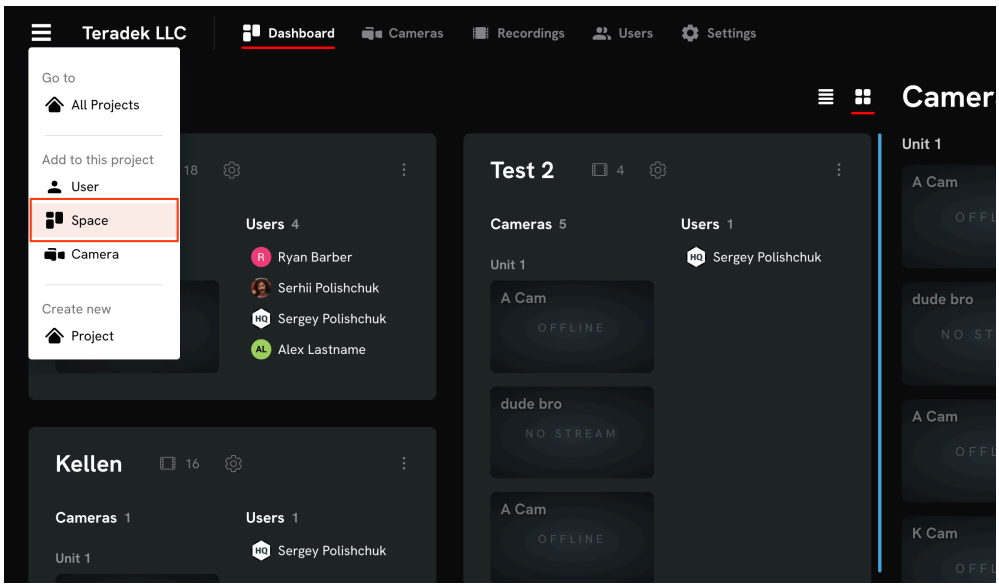


6. Confirm how your device is connected to the Internet, then click **Next**. Your Prism encoder is now connected to the camera and ready to be added to a **Space**. Click **Finish**.



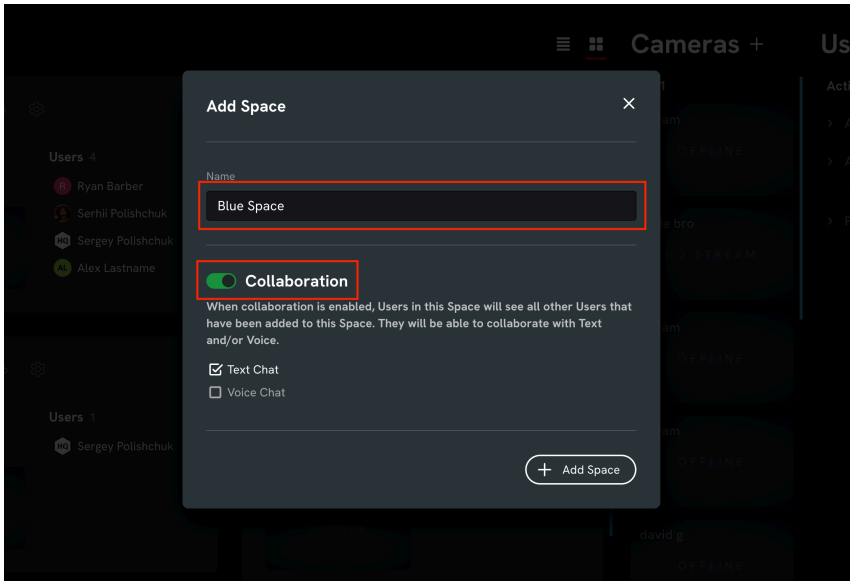
Create Spaces

1. Click the settings tab on the top left corner and click **Space** or the **+** sign next to the **Spaces** tab on your dashboard.

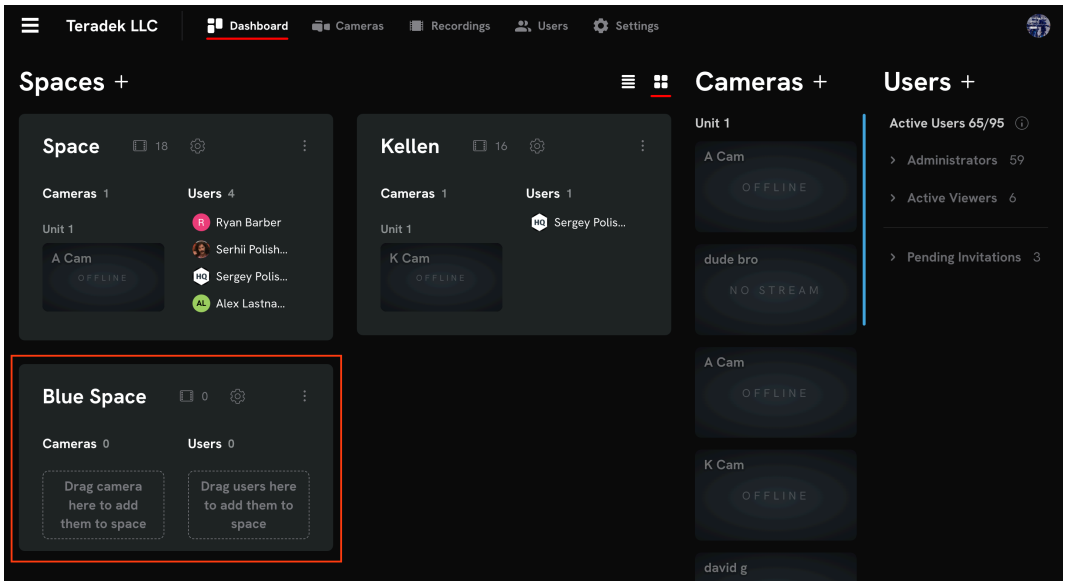


2. Enter a name for the space and enable **Collaboration.**

3. Select how users will collaborate (Text chat and/or Voice chat), then click the **Add Space** tab.

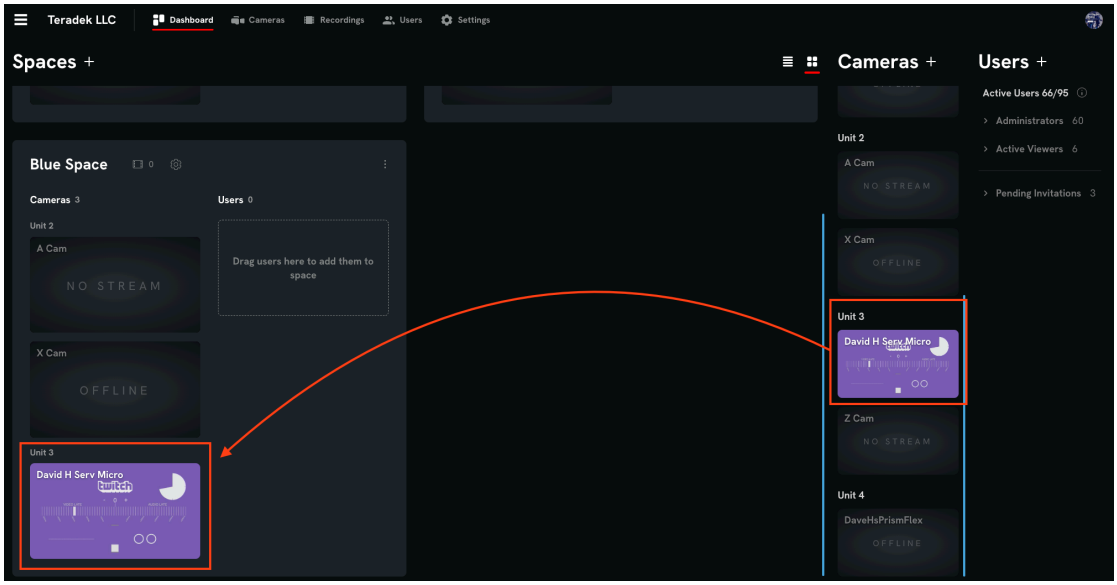


The Space is now visible in your Dashboard. You can add **Cameras** and **Users** to your **Space**.



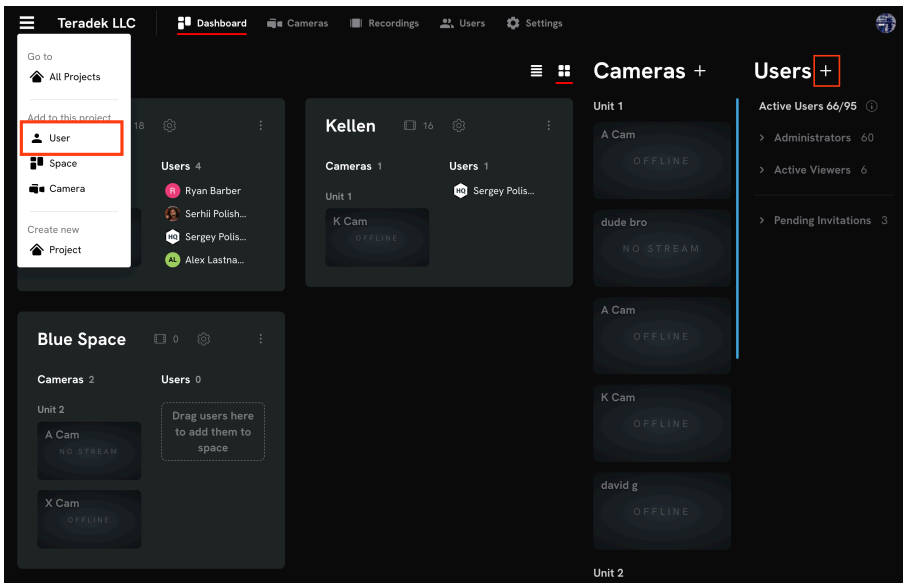
Add Cameras to a Space

To add the Camera, simply drag and drop the Camera's thumbnail into the Space.



Add Users to a Space

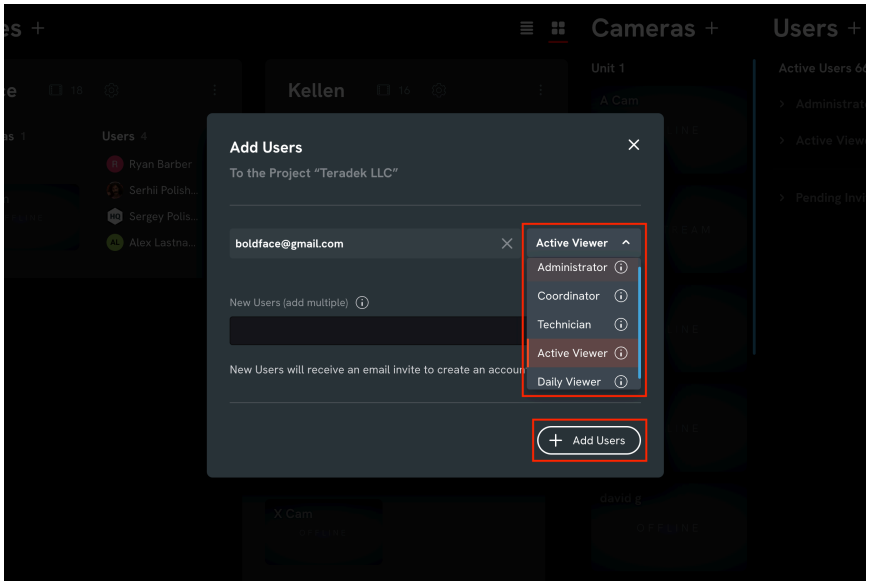
1. To invite Users to collaborate, click the settings tab on the top left corner and select **User**, or click the **+** sign next to the **Users** tab on your dashboard.



2. Enter the user's email address, and select what level of permissions they will granted. Click **Add Users** when done.

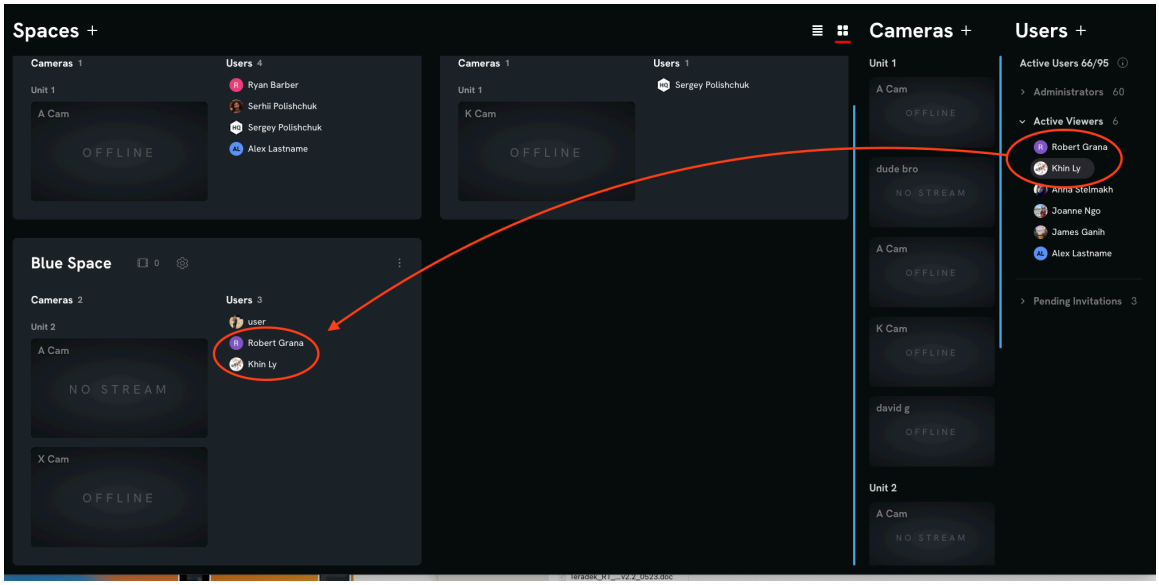
PERMISSION TYPES

- **Administrator:** Full access to billing, project settings, cameras, live feeds, recordings, devices, the Sharing Dashboard, and your fellow collaborators.
- **Coordinator:** Full access to the Sharing Dashboard, where you can create Spaces, collections of cameras, live feeds, and recordings shared with various Viewers.
- **Technician:** Full access to Cameras and Devices.
- **Active/Daily Viewer:** Full access to Spaces, collections of live feeds, and recordings.



3. Once the User logs in and accepts the invitation, they will be listed under **Active Users** according to their permission type.

4. To add a User, simply drag and drop the User's icon into the Space you want to share.


Spaces +
Cameras 1
Unit 1
A Cam
OFFLINE
Users 4
Ryan Barber
Serhii Polishchuk
Sergey Polishchuk
Alex Lastname
Cameras 1
Unit 1
K Cam
OFFLINE
Users 1
Sergey Polishchuk
Blue Space
Cameras 2
Unit 2
A Cam
NO STREAM
X Cam
OFFLINE
Users 3
user
Robert Grana
Khin Ly
Cameras +
Unit 1
A Cam
OFFLINE
dude bro
NO STREAM
A Cam
OFFLINE
K Cam
OFFLINE
david g
OFFLINE
Unit 2
A Cam
NO STREAM
Users +
Active Users 66/95
Administrators 60
Active Viewers 6
Robert Grana
Khin Ly
Joanne Ngo
James Ganih
Alex Lastname
Pending Invitations 3

Other Platforms

- Frame.io
- PIX
- Sony Ci

Frame.io

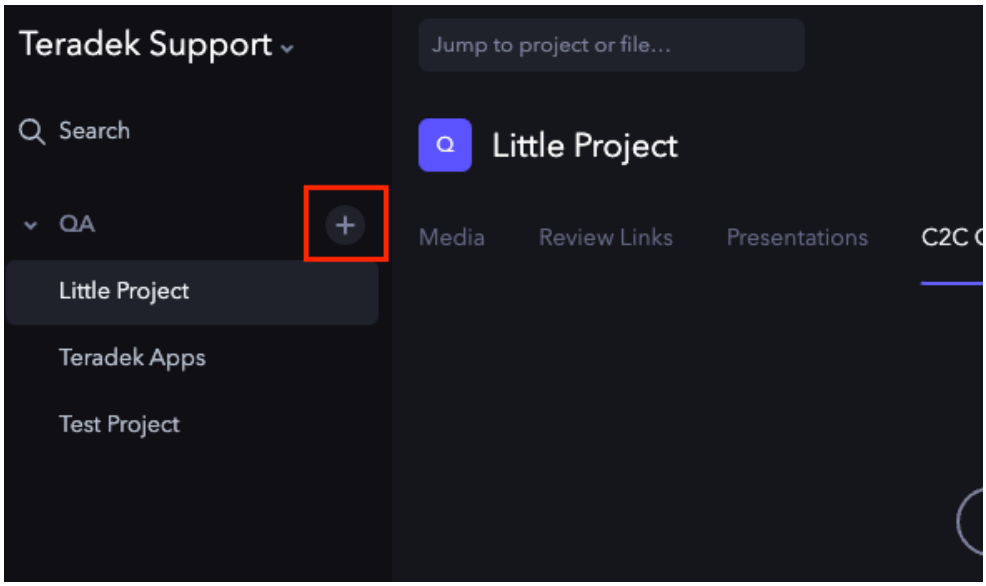
Frame.io is a collaboration platform that allows video producers and editors to privately upload, review, and share media with their entire crew from anywhere in the world. **NOTE: You'll need to have a subscription before using Frame.io.**

Connect to Frame.io

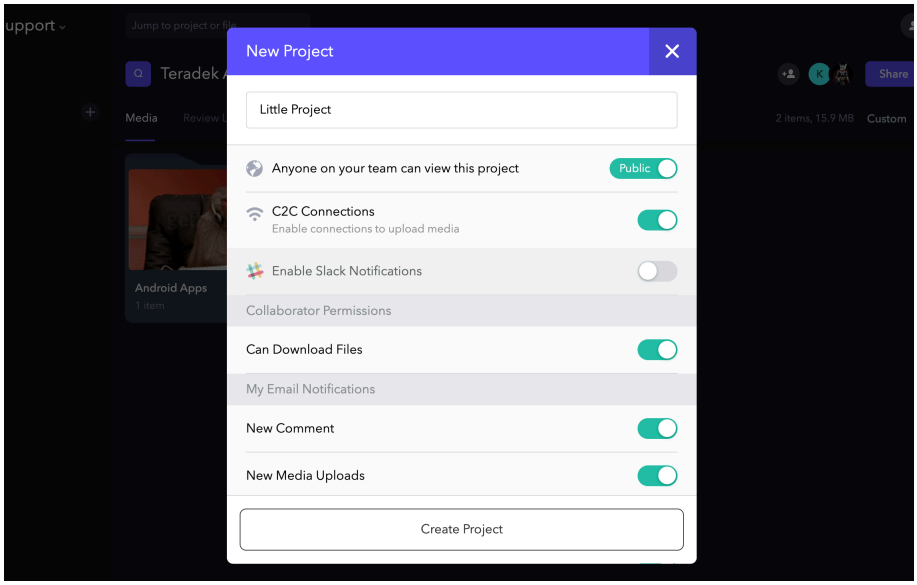
1. From the web UI, select **Cloud Services**, select Frame.io, then click the **Link this Device** tab.

2. Copy the authorization code generated for your Prism device by clicking the **Copy** tab.

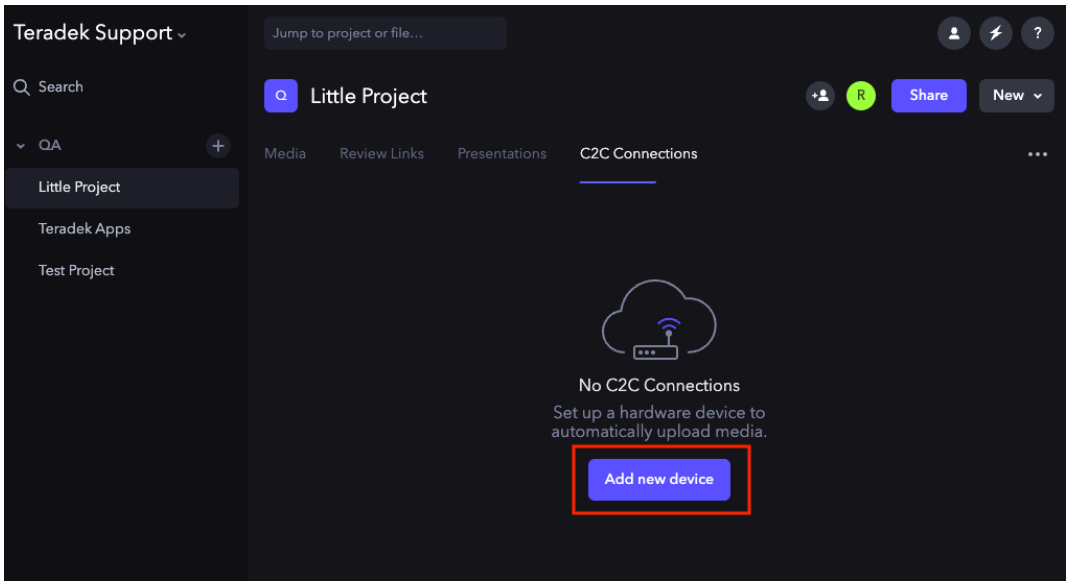
3. Log in to your Frame.io account, then create a project by tapping the **+** sign next to your account name (see image).



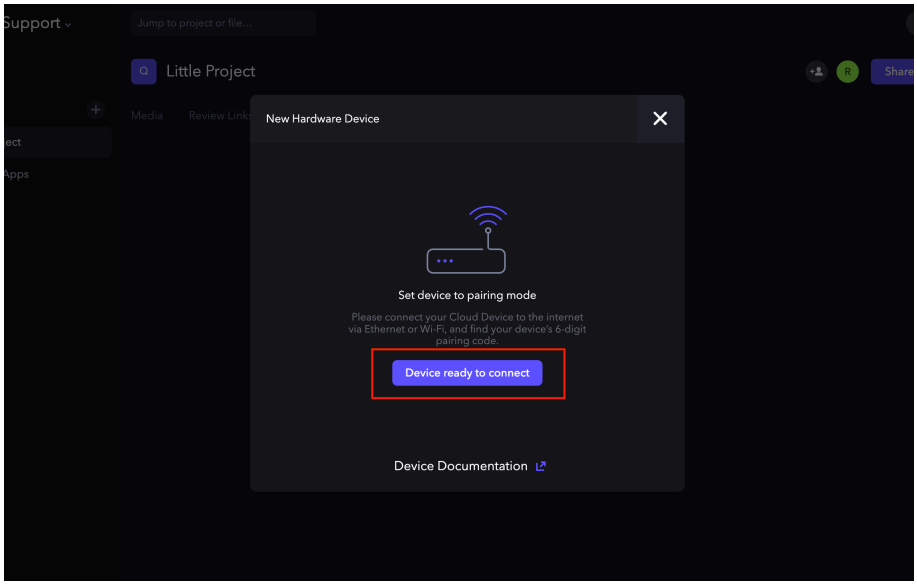
4. Enter a project name, then toggle the **C2C Connections** switch to enable your Prism device to upload video. Click the **Create Project** tab.



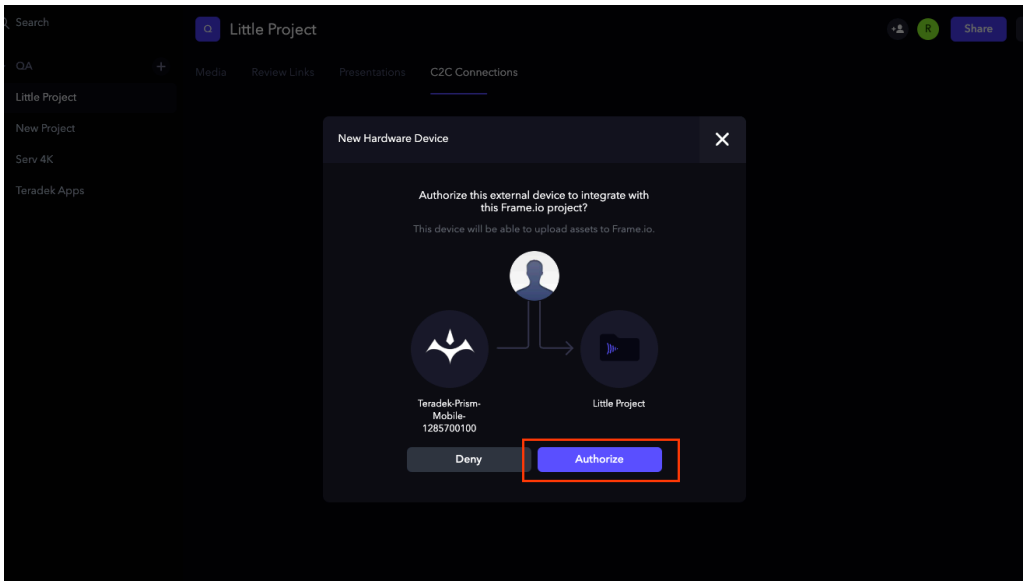
5. Click the **C2C Connections** tab above, then click the **Add new device** tab (see image).



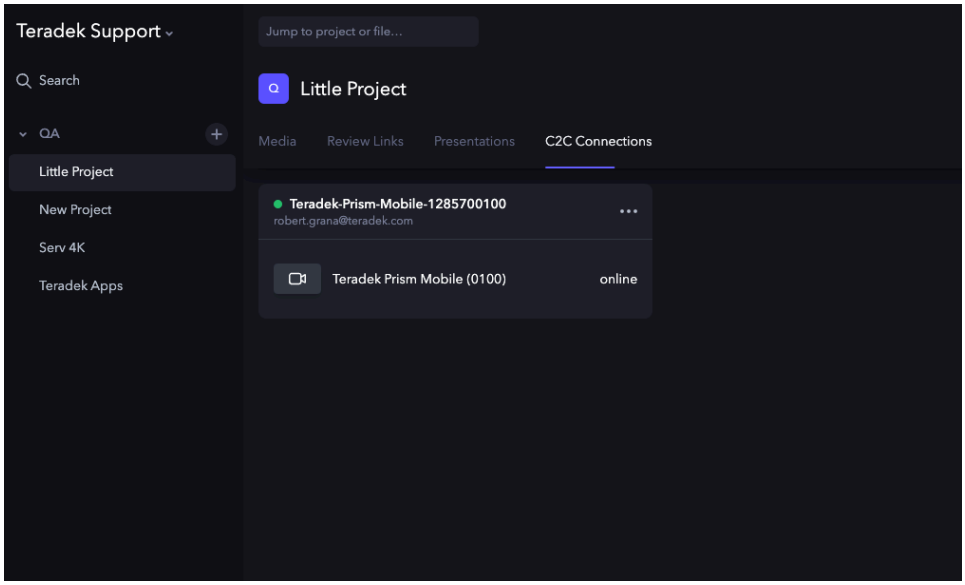
6. Click the **Device ready to connect** tab.



7. Enter the authorization code you copied, click **Authorize,** and then **Finish.**



8. Once successful, Prism will be listed under the **C2C Connections** tab (see image). All future recordings will be listed under the **Media** tab.

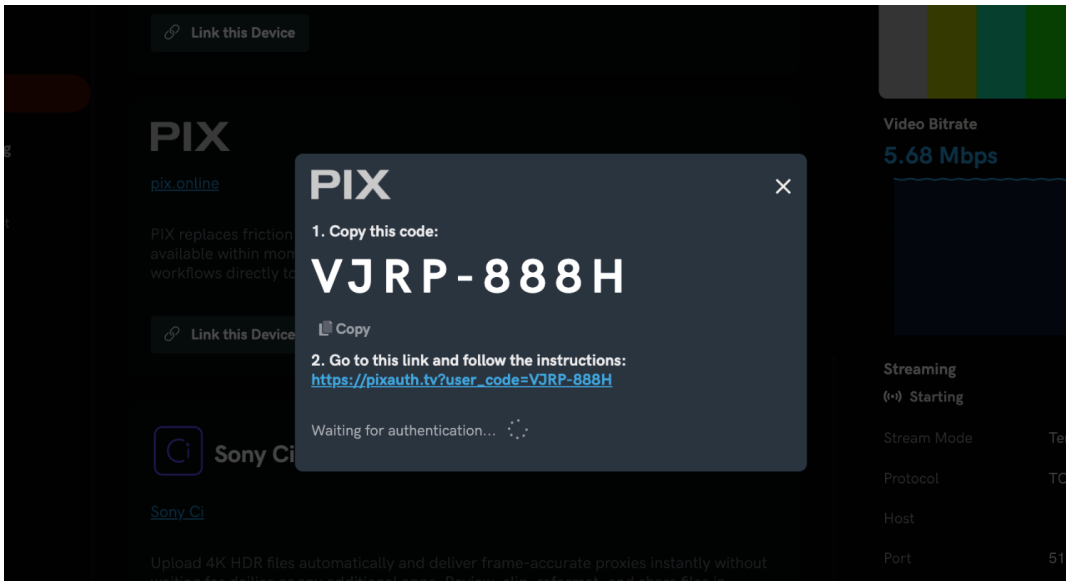


PIX

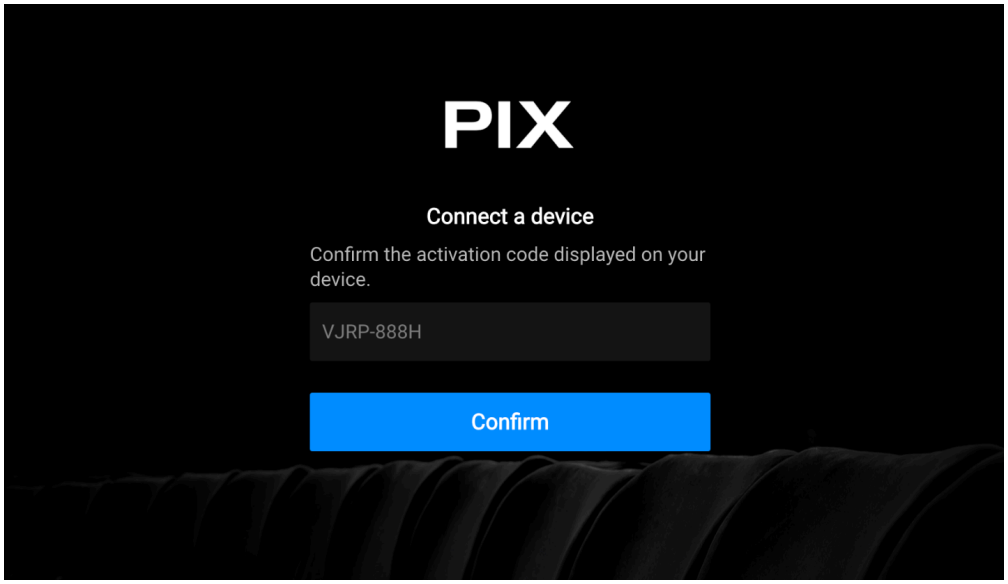
PIX collaboration workflows bridge feature film, streaming, and broadcast television from production origination to post-production, providing the highest quality, most trusted solutions for collaborative review for executives, filmmakers, and content creators.

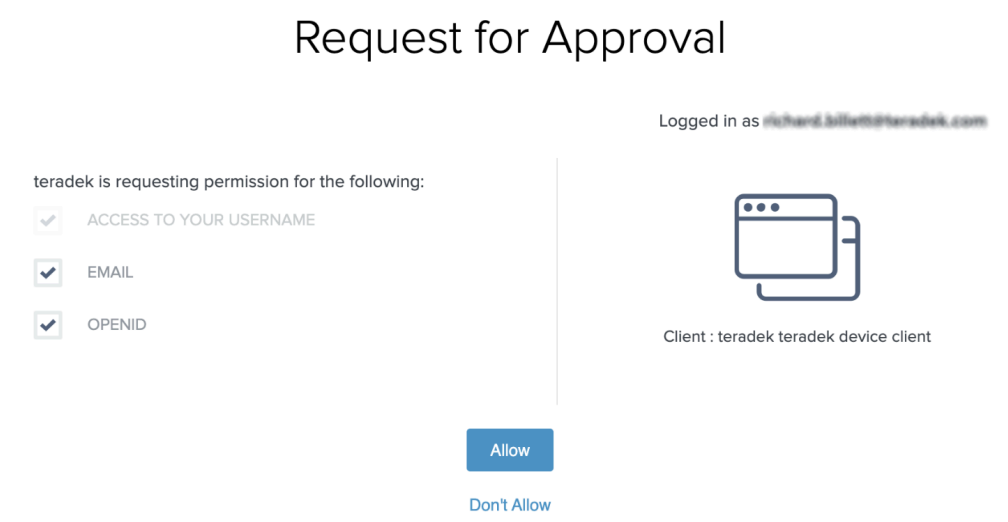
Connect to PIX

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab under **PIX**.
2. Copy the authorization code generated for your Prism device, then click on the link provided.

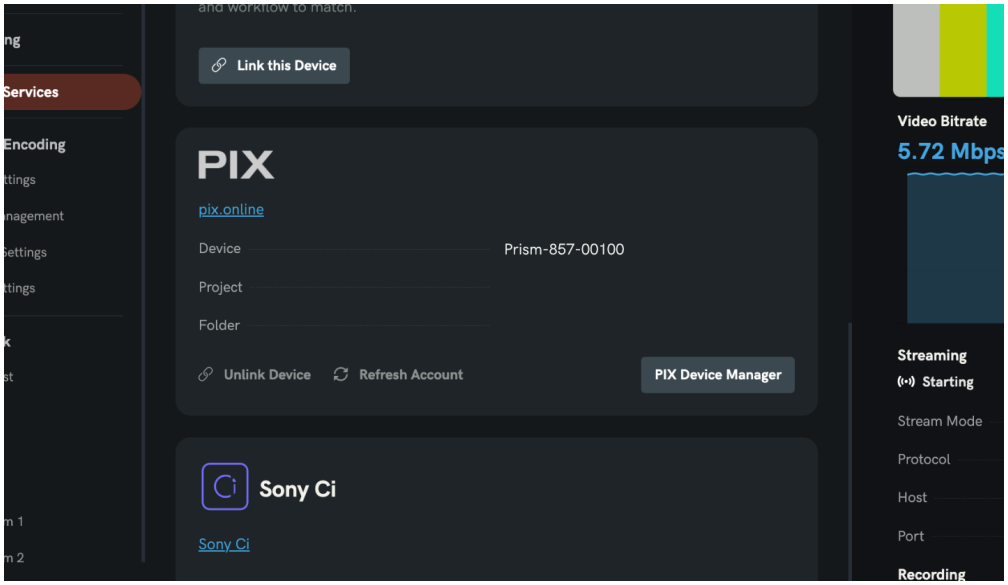


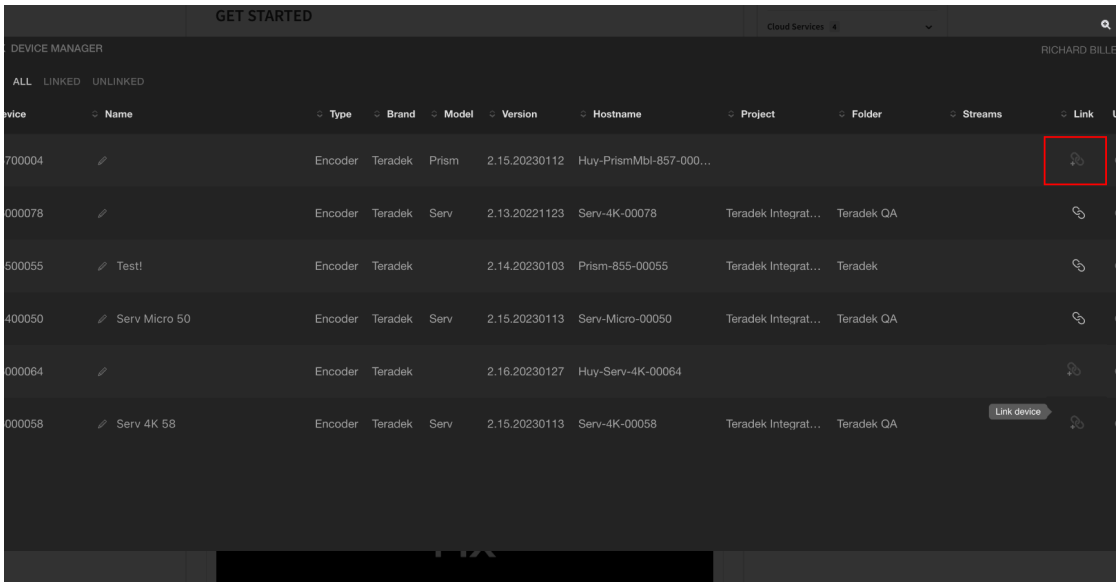
3. Log into your PIX account.
4. Click **Confirm** to authorize your Prism device, then click **Allow** on the following screen.



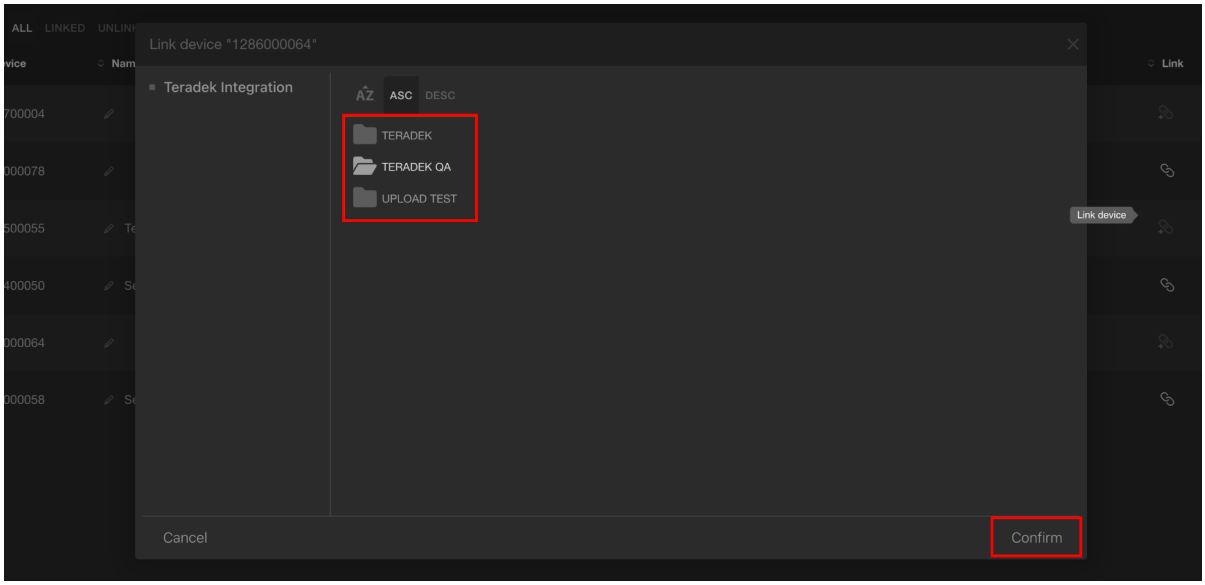


5. Return to the PIX section in the Prism web UI and click **PIX Device Manager.** Click the link icon that corresponds to your device.

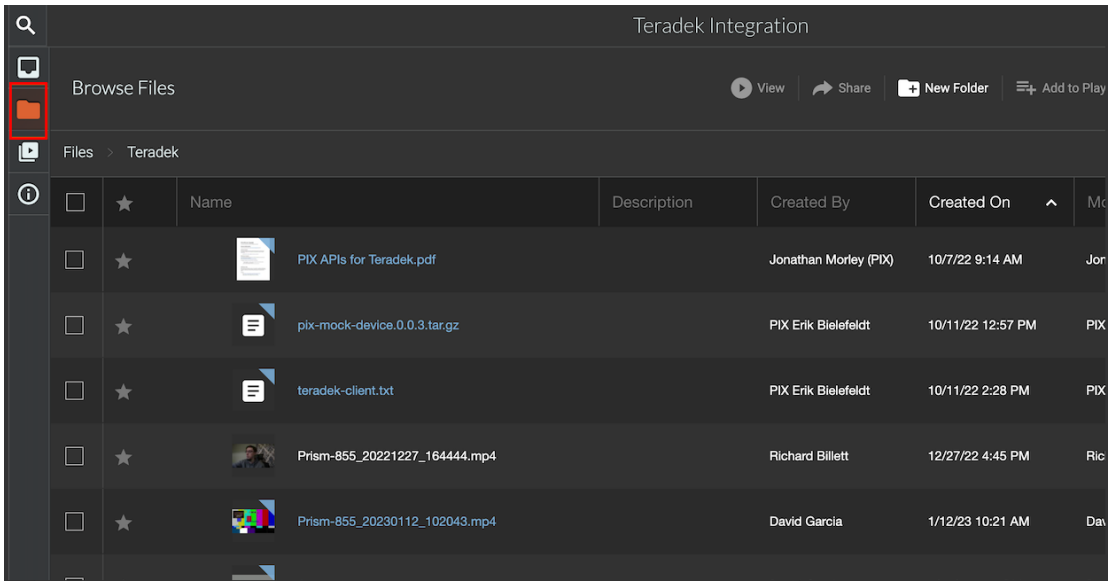




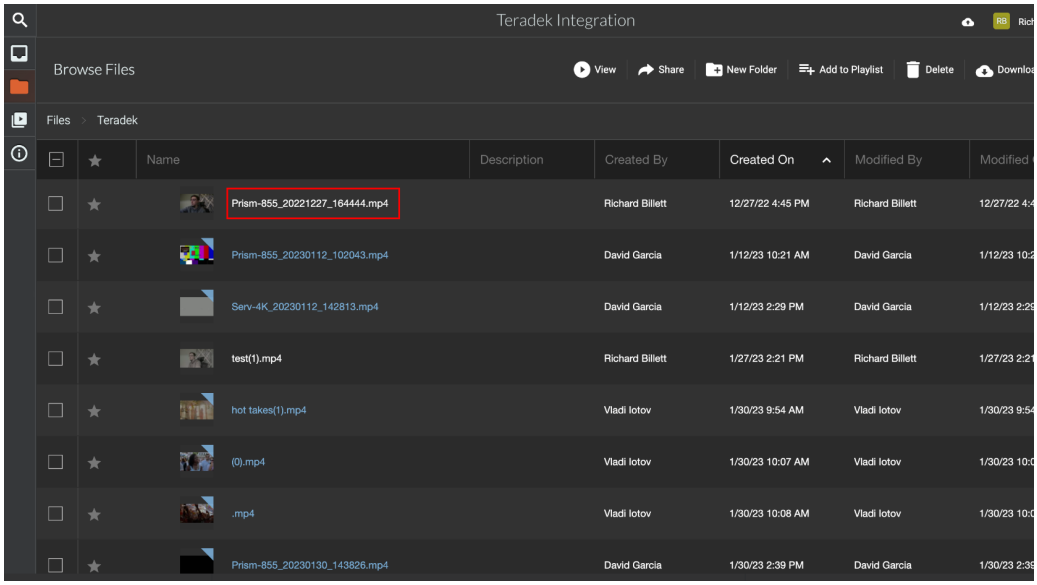
6. Select the project name, then select the folder to which you want your files to be delivered. Click **Confirm.**



7. Return to the PIX UI and click the **Browse Files** icon in the upper left corner. Double-click the folder name to view the files.



8. Double-click the file name to view or play the file.



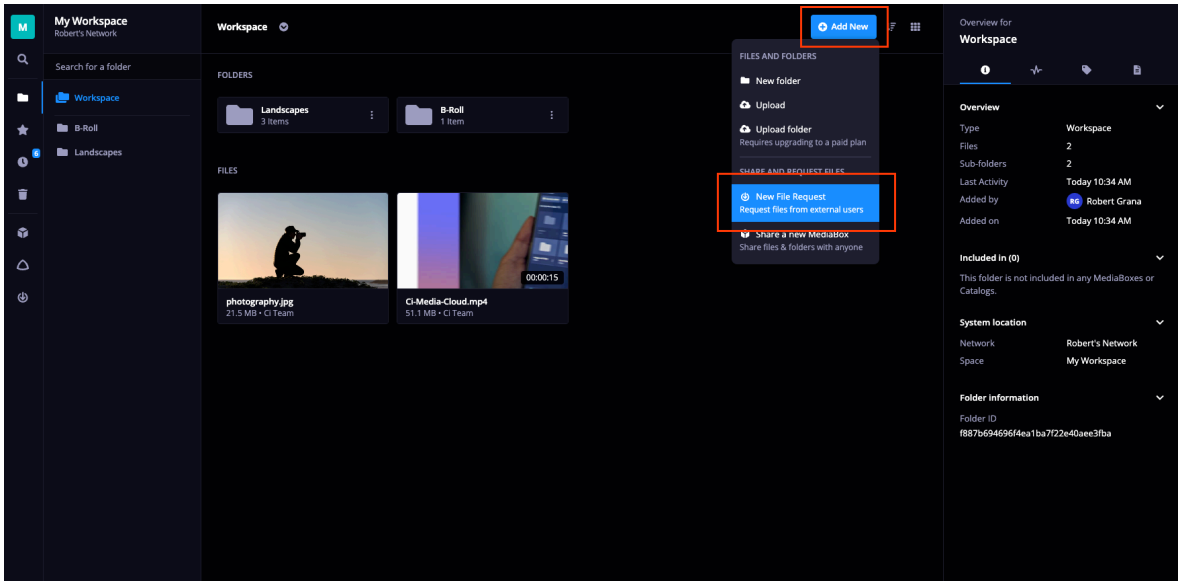
Sony Ci

Upload 4K HDR files automatically and deliver frame-accurate proxies instantly without waiting for dailies or any additional apps. Review, clip, reformat, and share files in minutes without leaving the cloud. With Sony Ci, you can unlock numerous opportunities, such as:

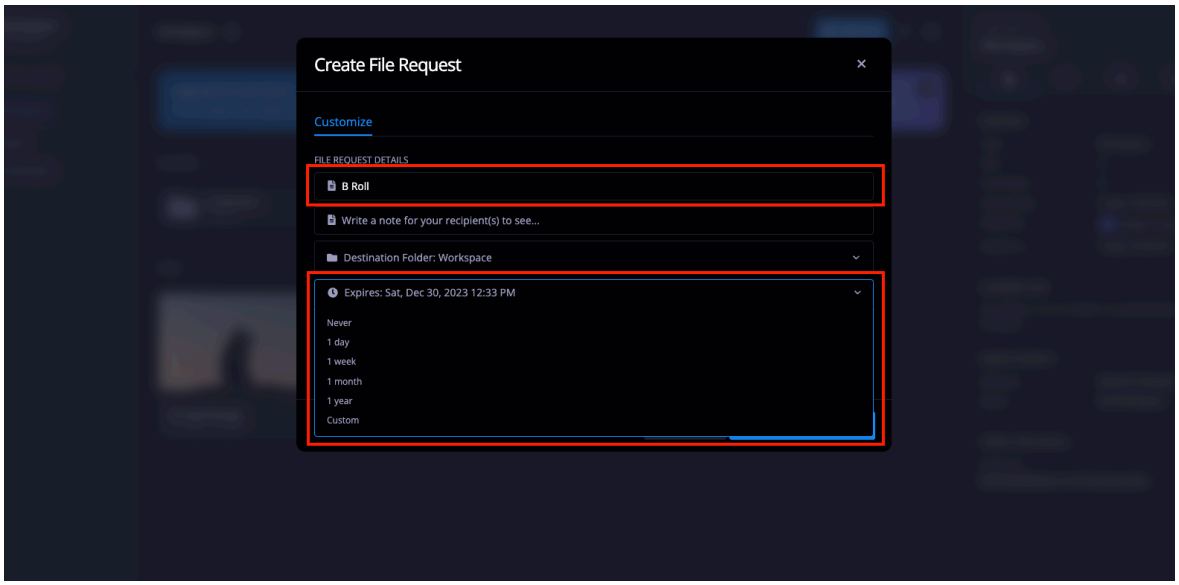
- Remote Collaboration and Live Notes
- Review and Instant Editorial
- Automatic OCF Sync
- Continuity Across Imaging Chain
- Accurate Review on all Screens

Connect to Sony Ci

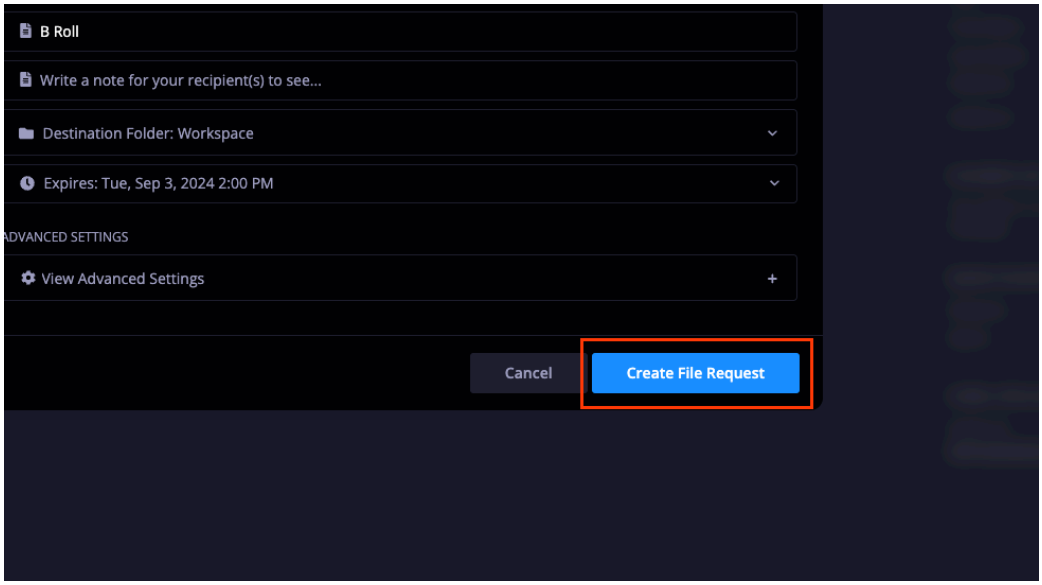
1. Log in to your Sony Ci account.
2. From the workspace, click **Add New**, then select **New File Request**.



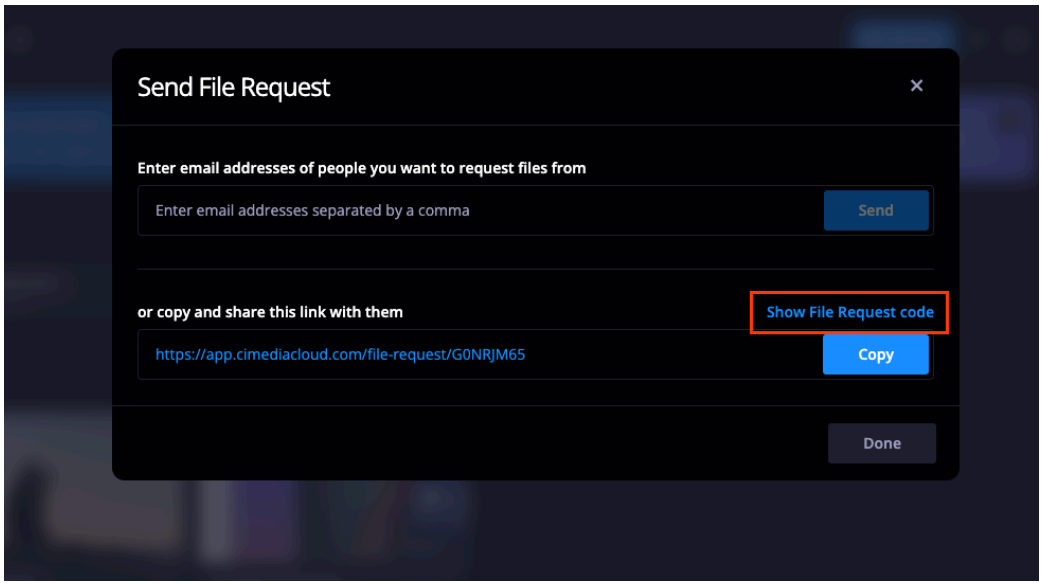
3. Create a name for your encoder/camera, and enter a time frame or expiration date.



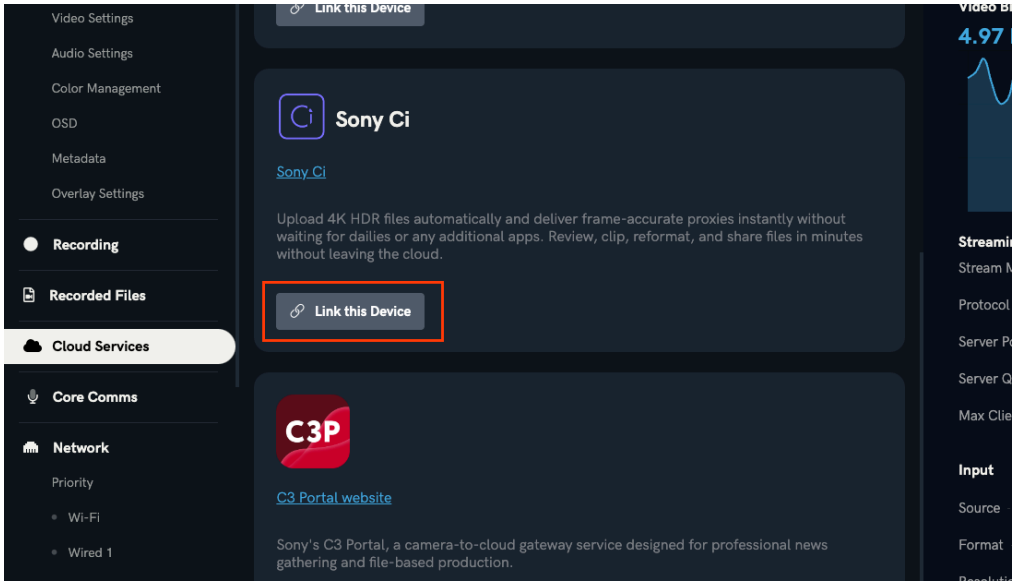
4. Click the **Create File Request** tab.



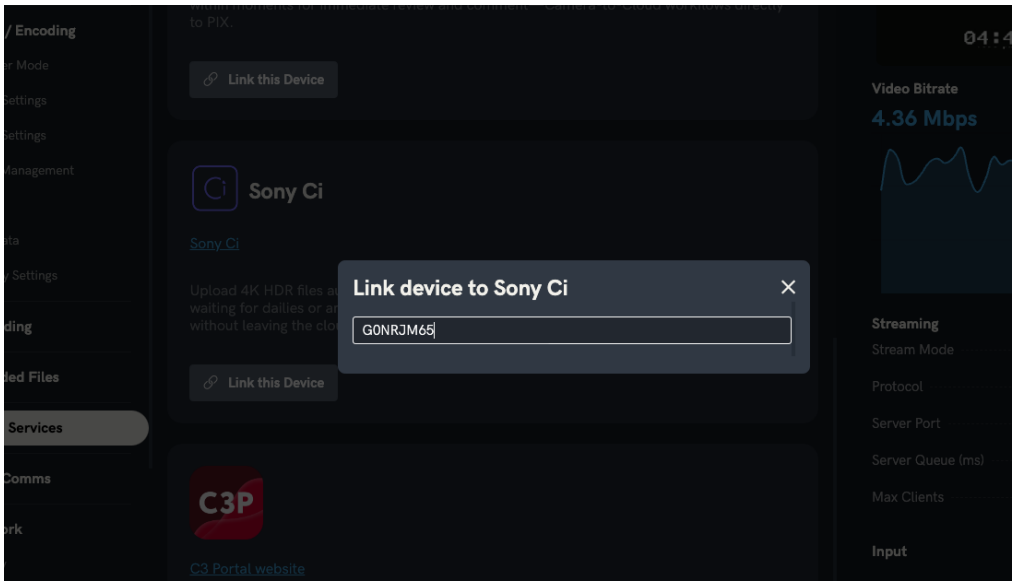
5. Click **Show File Request Code**, then click the **Copy** tab.



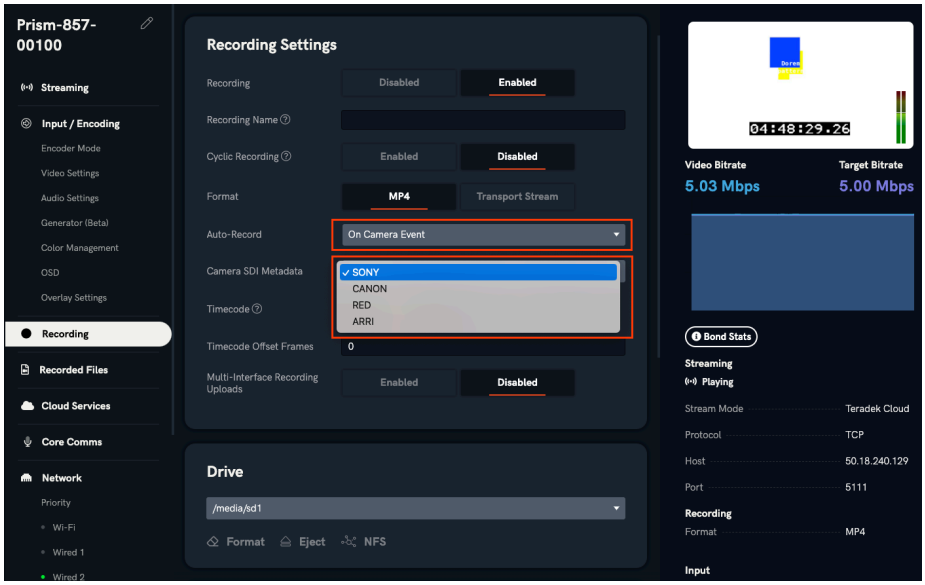
6. Return to the Prism web UI **Cloud Services** section, scroll down to **Sony Ci**, then click the **Link this Device** tab.



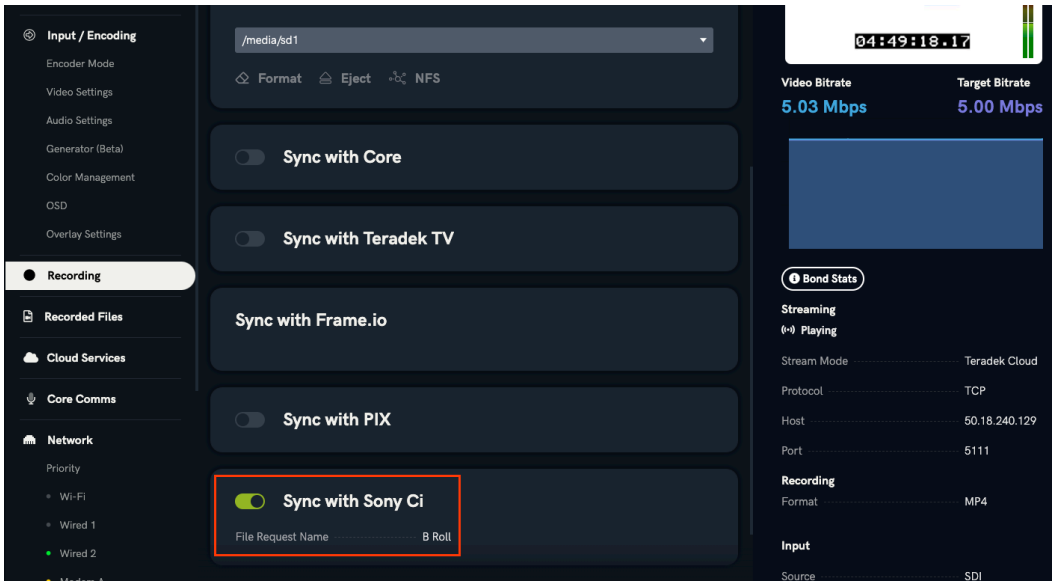
7. Paste the **File Request Code** in the corresponding field.



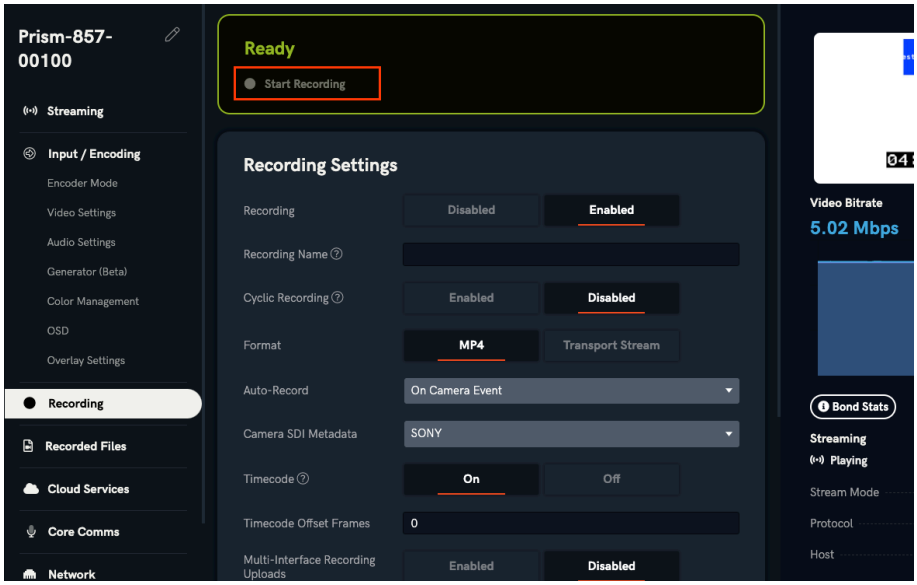
8. In the **Recordings** tab, set **Auto-Record to On Camera Even**t and the **Camera SDI Metadata** to the camera you plan to use. Then click **Save**. **NOTE:** Ensure that there is an SD card installed.



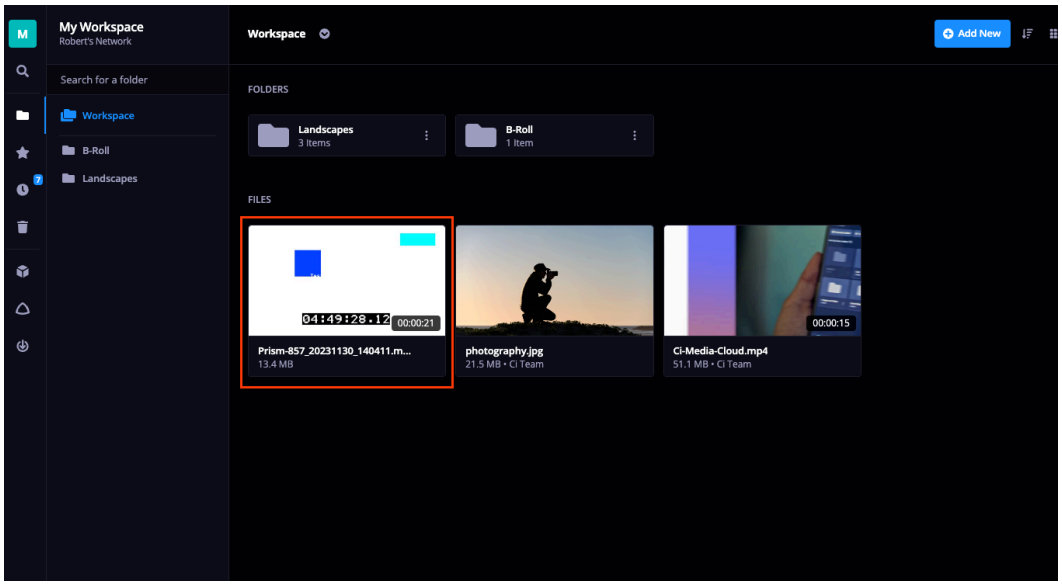
9. Turn on **Sync with Sony Ci.**



10. Click **Start Recording** at the top of the web UI

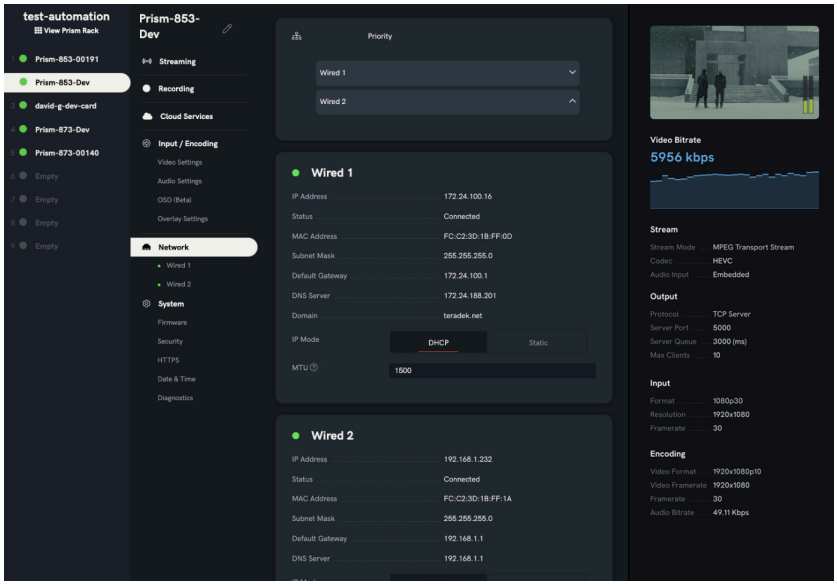


11. Once the recording has stopped, refresh the Sony Ci web UI to display your newly recorded files. The new clip will also appear in the **Recorded Files** section of your Prism's web UI.



Network Configuration

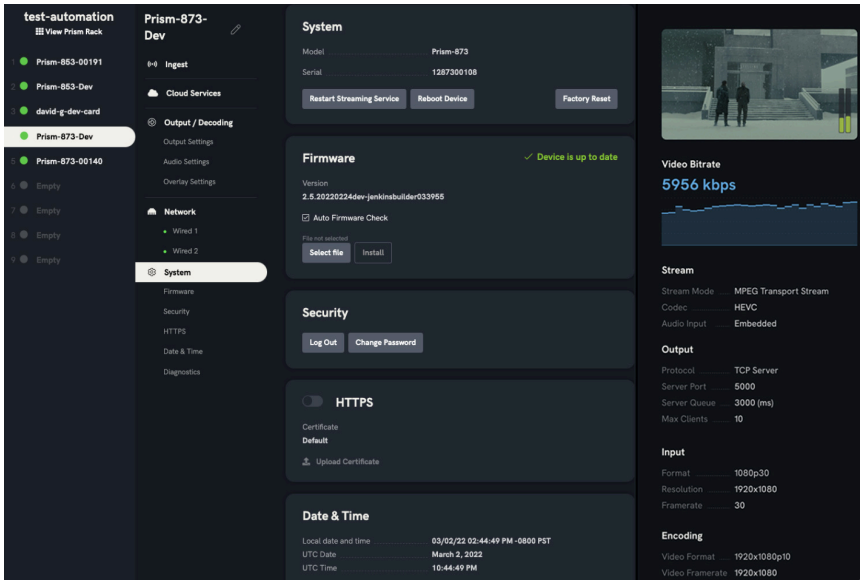
Configure Prism's network interface and encryption options by opening the **Network** menu from the web UI.



CONFIGURABLE OPTIONS

- **WIFI Mode (WiFi only) -**
  - **Access Point (AP):** Prism acts as its own dual-band access point, allowing you to connect your device directly to Prism's AP network, and for bonding multiple cellular devices for increased bandwidth.
  - **Client:** Prism and your mobile device connect to the same local wireless network. Client Mode is typically used for normal WiFi operating and connecting to your local router
- **IP Mode** -
  - **Dynamic (DHCP):** When set to DHCP, Prism requests an IP address and configuration from the network's DHCP server.
  - **Static:** When set to Static, you will need to manually configure the IP address, subnet mask, gateway, and DNS server to connect to the network.
- **MTU (Wired or Modem only)** - MTU (Maximum Transmission Unit) represents the maximum packet or frame size that can be transmitted via Ethernet. The larger the MTU of a connection, the more data that can be passed in a single Ethernet packet.
- **Authentication (Node II/USB Modem only) -**
  - **Auto**: The modem is automatically detected and configured. Prism Flex/Mobile supports many modems worldwide using his setting.
  - **PAP (Password Authentication Protocol)**: Requires a username and password to establish a network connection.
  - **CHAP (Challenge-Handshake Authentication Protocol)**: Authenticates a user or network host to an authenticating entity (e.g., an internet service provider).

System Configuration



Essential system functions, including factory reset, firmware upgrade, and diagnostics reports can be performed from the System menu in the web UI.

- **SYSTEM/ABOUT -** Displays Prism's model and serial number, along with the following configurable options:
  - **Restart Streaming Service:** Restart your streaming platform.
  - **Reboot:** Restart Prism
  - **Factory Reset:** Restore Prism cards to their original settings
- **FIRMWARE** - Check for new updates and upgrade Prism's firmware to the latest version. If an update is available, simply follow the prompts to complete the firmware update.
- **SECURITY** - Add, change, or delete your password.
- **HTTPS** - Enable HTTPS to encrypt any data transmitted over the Internet.
- **PUBLIC SNAPSHOT** - Enable/Disable Public Snapshot. Public Snapshot allows you to access snapshots via HTTP(S).
- **DATE & TIME** - Enter an NTP link to automatically synchronize the time and date.
- **DIAGNOSTICS** - Generate a diagnostic report for any encoder or decoder card. Diagnostic reports can be used by Teradek's support team to assist during troubleshooting.

Prism 4K 1RU/2RU

ENCODER CARD	DECODER CARD

VIDEO		
Video Inputs	SD/HD/3G/6G/12G-SDI (75 Ω BNC)	N/A
Video Outputs	SD/HD/3G/6G/12G-SDI (75 Ω BNC loop out)	**2x** SD/HD/3G/6G/12G-SDI (75 Ω BNC)
Supported Resolutions	**4Kp** 23.98/29.97/59.94 **1080p** 23.98/29.97/59.94 **1080i** 59.94 **1080PsF** 23.98/29.97 **720p** 59.94 **576i** **480i**	**4Kp** 23.98/29.97/59.94 **1080p** 23.98/29.97/59.94 **1080i** 59.94 **1080PsF** 23.98/29.97 **720p** 59.94 **576i** **480i**
VIDEO PROCESSING		
Video Compression	**ISO MPEG-4 Part 10:** Advanced Video Coding (AVC)/ITU H.264 **H.264:** Baseline profile, Main profile, High profile **ISO MPEG-H Part 2:** High Efficiency Video Coding (HEVC)/ITU H.265 **HEVC**: Main profile	**ISO MPEG-4 Part 10:** Advanced Video Coding (AVC)/ITU H.264 **H.264:** Baseline profile, Main profile, High profile **ISO MPEG-H Part 2:** High Efficiency Video Coding (HEVC)/ITU H.265 **HEVC**: Main profile
Supported Video Bitrate	250 Kbps to 85 Mbps	250 Kbps to 85 Mbps
Video Format Conversion Support	Built in video scaler and deinterlacer	Built in video scaler and deinterlacer
HDR Support	Yes (HDR 4:2:2 10bit)	Yes
AUDIO		
Audio Compression	AAC-LC	AAC-LC
Audio Input	3.5mm stereo line level analog	N/A
Audio Output	Embedded SDI loop output	Embedded, 2 channel
PHYSICAL ATTRIBUTES		

Dimensions	1”W x 10.9”D x 3.56”H [26.1 x 276.5 x 90.5mm]	1”W x 10.9”D x 3.56”H [26.1 x 276.5 x 90.5mm]
Weight	12.4oz [352g]	12.4oz [352g]
Construction	Milled aluminum	Milled aluminum
INTERFACES		
Configuration Interface	Feature-rich web UI for configuration and control	Feature-rich web UI for configuration and control
Switches	Menu joystick and Reboot button	Menu joystick and Reboot button
Card slots	N/A	N/A
NETWORK		
Ethernet	N/A	N/A
POWER		
Power Input	Powered by chassis	Powered by chassis
Nominal Power Consumption	Up to 15W/card	Up to 15W/card
PROTOCOL SUPPORT		
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Supported Video Transport Protocols	RTMP, MPEG-TS (UDP, TCP, TCP Server, and Multicast), Sputnik/Core Bonding, CDNs (YouTube, Facebook, and Vimeo), and Secure Reliable Transport (SRT)	RTMP, MPEG-TS (UDP, TCP, TCP Pull, and Multicast), and Secure Reliable Transport (SRT)
Bonding	Yes (**2x** Ethernet interfaces)	N/A
Remote	Teradek Core	Teradek Core

Prism HD+ 1RU/2RU

Prism HD+ Cards

	ENCODER CARD	DECODER CARD
VIDEO		
Video Inputs	SD/HD/3G-SDI (75 Ω BNC)	N/A
Video Outputs	SD/HD/3G-SDI (75 Ω BNC loop out)	**2x** SD/HD/3G-SDI (75 Ω BNC)
Supported Resolutions	**1080p**23.98/24/25/29.97/30/50/59.94/60 **1080psf**23.98/24/25/29.97/30 **1080i**50/59.94/60 **720p**50/59.94/60 **480i(NTSC)/576i(PAL)**	**1080p**23.98/24/25/29.97/30/50/59.94/60 **1080psf**23.98/24/25/29.97/30 **1080i**50/59.94/60 **720p**50/59.94/60 **480i(NTSC)/576i(PAL)**
VIDEO PROCESSING		
Video Compression	**ISO MPEG-4 Part 10:** Advanced Video Coding (AVC)/ITU H.264 **H.264:** Baseline profile, Main profile, High profile **ISO MPEG-H Part 2:** High-Efficiency Video Coding (HEVC)/ITU H.265 **HEVC**: Main profile	**ISO MPEG-4 Part 10:** Advanced Video Coding (AVC)/ITU H.264 **H.264:** Baseline profile, Main profile, High profile **ISO MPEG-H Part 2:** High-Efficiency Video Coding (HEVC)/ITU H.265 **HEVC**: Main profile
Supported Video Bitrate	250 Kbps to 85 Mbps	250 kbps 85 Mbps
Video Format Conversion Support	Built in video scaler and deinterlacer	Built in video scaler and deinterlacer
HDR Support	Yes	Yes
AUDIO		
Audio Compression	AAC-LC	AAC-LC

Audio Input	Embedded over SDI, 3.5mm TRRS Stereo Line Level Analog or Microphone in, adjustable gain	N/A
Audio Output	Embedded SDI loop output	Embedded over SDI, 3.5mm Stereo Headphone (TRRS) output
PHYSICAL ATTRIBUTES		
Dimensions	1”W x 10.9”D x 3.56”H [26.1 x 276.5 x 90.5mm]	1”W x 10.9”D x 3.56”H [26.1 x 276.5 x 90.5mm]
Weight	12.4oz [352g]	12.4oz [352g]
Construction	Milled aluminum	Milled aluminum
INTERFACES		
Configuration Interface	Feature-rich web UI for configuration and control	Feature-rich web UI for configuration and control
Switches	Menu joystick and Reboot button	Menu joystick and Reboot button
Card slots	N/A	N/A
NETWORK		
Ethernet	N/A	N/A
POWER		
Power Input	Powered by chassis	Powered by chassis
Nominal Power Consumption	Up to 15W/card	Up to 15W/card
PROTOCOL SUPPORT		
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Supported Video Transport Protocols	RTMP, MPEG-TS (UDP, TCP, TCP Server, and Multicast), Sputnik/Core Bonding, CDNs (YouTube, Facebook, and Vimeo), and Secure Reliable Transport (SRT)	RTMP, MPEG-TS (UDP, TCP, TCP Pull, and Multicast), and Secure Reliable Transport (SRT)

Remote	Teradek Core	Teradek Core

Prism Chassis (2RU/1RU)

PHYSICAL ATTRIBUTES	
Dimensions	**2U:** 17”W x 12.1”D x 3.5”H [431.8 x 307.3 x 88.9 mm] **1U:** 17”W x 12.1”D x 1.75”H [431.8 x 307.3 x 44.5 mm]
Weight	**2U:** 143oz [4040g], **1U:** 87oz [2474g]
Construction	Milled/Bent aluminum
INTERFACES	
Switches	On/Off button
Card Slots	**2U:** 9x card slots, **1U:** 3x cards slots
PROTOCOL SUPPORT	
Bonding	Yes (**2x** Ethernet interfaces)
POWER	
Power Input	**2U:** 2x Hot-swappable 500W A/C power inputs **1U:** 500W A/C power input **2U/1U:** Removable, redundant power supply (optional)
Nominal Power Consumption	5W

Prism Flex

	ENCODER	DECODER
VIDEO		
Video Inputs	**1x** SD/HD/3G/6G/12G-SDI (75 Ω BNC) **1x** HDMI 2.0 Type-A receptacle	N/A
Video Outputs	**1x** SD/HD/3G/6G/12G-SDI (75 Ω BNC)	**2x** SD/HD/3G/6G/12G-SDI (75 Ω BNC) **1x** HDMI 2.0 Type-A receptacle
Supported Resolutions	**4K DCI p**23.98/24/25/29.97/30/59.94 **4K UHD p**23.98/24/25/29.97/30/50/59.94/60 **1080p** 23.98/24/25/29.97/30/50/59.94/60 **1080i** 50/59.94/60 **1080PsF** 23/24/25/29/30 **720p** 50/59.94/60 **576i** **480i**	**4K DCI p**23.98/24/25/29.97/30/59.94 **4K UHD p**23.98/24/25/29.97/30/50/59.94/60 **1080p** 23.98/24/25/29.97/30/50/59.94/60 **1080i** 50/59.94/60 **1080PsF** 23/24/25/29/30 **720p** 50/59.94/60 **576i** **480i**
Color Sampling	**SDI**: YCbCr 4:2:2 **10-Bit/HDMI**: RGB 4:4:4, 8-bit	**SDI**: YCbCr 4:2:2 **10-Bit/HDMI**: RGB 4:4:4, 8-bit
VIDEO PROCESSING		
Video Compression/ Decompression	**H.264 (AVC)**: base/main/high profile up to level 4.2, **H.265 (HEVC)**: main profile up to level 4.1	**H.264 (AVC)**: base/main/high profile up to level 4.2, **H.265 (HEVC)**: main profile up to level 4.1
Supported Video Bitrate	250 Kbps to 85 Mbps	250 Kbps to 85 Mbps
Video Format Conversion Support	Built in video scaler and deinterlacer	Built in video scaler and deinterlacer
HDR Support	Yes (Rec. 2100)	Yes (Rec. 2100)
Color Correction	CDL/1024 1D LUT (supports 10-bit color) 33x33x33 3D LUT (supports 10-bit color)	CDL/1024 1D LUT (supports 10-bit color) 33x33x33 3D LUT (supports 10-bit color)

Chroma Subsampling	4:2:0, 4:2:2	
Recording	SD Card - Full Size, USB External Drive, Network File Storage (NFS)	N/A
PROTOCOL SUPPORT		
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Supported Video Transport Protocols	RTMP, MPEG-TS (UDP, TCP, TCP Server, and Multicast), Sputnik/Core Bonding, CDNs (YouTube, Facebook, Twitch and Vimeo), and Secure Reliable Transport (SRT)	RTMP, MPEG-TS (UDP, TCP, TCP Pull, and Multicast), and Secure Reliable Transport (SRT)
Cloud Integrations	Teradek Core, Frame.IO Sony Ci, PIX	
Remote Management	Teradek Core	Teradek Core
Bonding	Ethernet, Wi-Fi, USB modems, Prism App	Ethernet, Wi-Fi, USB modems, Prism App
AUDIO		
Audio Support	Stereo, 5.1 surround sound	Stereo, 5.1 surround sound
Audio Compression	AAC-LC	AAC-LC
Audio Bitrate	32kbps to 512kbps	32kbps to 512kbps
Audio Sample Rate	48kHz	48kHz
Audio Input	Embedded SDI/HDMI Audio Input (2 channel), 3.5mm (TRRS) Stereo Mic Level Analog Input, adjustable gain	3.5mm Stereo Headphone (TRRS) input
Audio Output	3.5mm Stereo Headphone (TRRS) output	Embedded SDI/HDMI Audio Input (2 channel), 3.5mm (TRRS) Stereo Mic Level Analog Input, adjustable gain

PHYSICAL ATTRIBUTES		
Dimensions	6.25”W x 3.6”D x 1.4”H [162 x 92 x 35mm]	6.25”W x 3.6”D x 1.4”H [162 x 92 x 35mm]
Weight	11.6oz [328.9g]	11.6oz [328.9g]
Construction	Milled aluminum	Milled aluminum
Mounting Options	Can be mounted with 1/4-20 mounting holes, Vertical Desktop Stand (included)	Can be mounted with 1/4-20 mounting holes, Vertical Desktop Stand (included)
INTERFACES		
Configuration Interface	Feature-rich web UI and mobile App for configuration and control, OLED Status Display w/Nav control button	Feature-rich web UI and Mobile App for configuration and control, OLED Status Display w/Nav control button
Switches	Menu button and On/Off switch	Menu button and On/Off switch
USB Interface Functionality	**2x** Powered USB-C host ports with USB 4G/LTE/5G modem support	**2x** Powered USB-C host ports with USB 4G/LTE/5G modem support
Ethernet	**2x** 10/100/1000 BASE-T Gigabit Ethernet (RJ45)	**2x** 10/100/1000 BASE-T Gigabit Ethernet (RJ45)
Wireless	**WiFi:** 2.4/5GHz 802.11 a/b/g/n/ac/ax MiMo	**WiFi:** 2.4/5GHz 802.11 a/b/g/n/ac/ax MiMo
POWER		
Power Input	2-pin circular locking connector	2-pin circular locking connector
Voltage	8-28V DC	8-28V DC
Nominal Power Consumption	21W	21W

Prism Mobile

VIDEO	
Video Inputs	**1x** 12G/6G/3G/HD/SD-SDI (75 Ω BNC) **1x** HDMI 2.0 Type-A receptacle
Video Outputs	12G/6G/3G/HD/SD-SDI (75 Ω BNC)
Supported Resolutions	**4K DCI** p23.98/24/25/29.97/30/50/59.94/60 **4K UHD** UHD p23.98/24/25/29.97/30/50/59.94/60 **1080p** 23.98/24/25/29.97/30/50/59.94/60 **1080i** 50/59.94/60 **1080PsF** 23/24/25/29/30 **720p** 50/59.94/60 **576i** **480i**
Color Sampling	**SDI**: YCbCr 4:2:2 **10-Bit/HDMI**: RGB 4:4:4, 8-bit
VIDEO PROCESSING	
Video Compression/ Decompression	**ISO MPEG-4 Part 10:** Advanced Video Coding (AVC)/ITU H.264 **AVC:** Baseline, Main, High **ISO MPEG-H Part 2:** High-Efficiency Video Coding (HEVC)/ITU H.265 **HEVC:** Main
Supported Video Bitrate	250 Kbps to 85 Mbps
Video Format Conversion Support	Built in video scaler and deinterlacer
HDR Support	Yes (Rec. 2100)
Color Correction	CDL/1024 1D LUT (supports 10-bit color) 33x33x33 3D LUT (supports 10-bit color)
Bonding	**Support for up to 9 network inputs:** **4x** Cellular phones **2x** Internal Node modems **1x** External modem **2x** Ethernet networks

Recording	**Supported File Type** - MP4, TS wrapper **Supported Media** - SD Card, USB, NFS
PROTOCOL SUPPORT	
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Supported Video Transport Protocols	Secure Reliable Transport (SRT), RTMP/RTMPS, MPEG-TS (UDP, TCP, TCP Server, Multicast), CDNs (YouTube, Facebook, Vimeo), RTSP/RTP
Remote	Teradek Core
AUDIO	
Audio Support	Stereo, 5.1 surround sound
Audio Compression	AAC-LC
Audio Bitrate	32kbps to 512kbps
Audio Sample Rate	48kHz
Audio Input	Embedded SDI/HDMI Audio Input (2 channel), 3.5mm (TRRS) Stereo Line Level Analog or Microphone input, adjustable gain
Audio Output	3.5mm TRRS Stereo Headphone output, adjustable gain
PHYSICAL ATTRIBUTES	
Dimensions	5.9”W x 3.9”D x 1.3”H [162 x 92 x 35mm]
Weight	23.4oz [664g] without plates; 30.5oz (864g) with plates
Construction	Milled aluminum
Mounting Options	Camera-back, Gold, Gold 26V and V-Lock mounts, Can be mounted using the 1/4” 20 mounting holes
INTERFACES	
Configuration Interface	Feature-rich Web UI for local device management, configuration, and control, Intuitive iOS configuration app (Prism App), OLED Status Display w/ Nav control buttons, Core for cloud-based device management

Cellular	**2x** Internal Node II modems with dual switchable SIM slots, Supports up to 4 cellular SIM cards
USB Interface Functionality	**1x** Powered LEMO with Node II LTE/4G/3G Modem support **1x** Powered USB-A with external storage support
Ethernet	**2x** 10/100/1000 BASE-T Gigabit Ethernet (RJ45)
Wireless	**WiFi:** 2.4/5GHz 802.11 a/b/g/n/ac/ax MiMo
POWER	
Power Input	2-pin circular locking connector, Gold, Gold 26V and V-Lock Battery Plates
Voltage	8-28V DC
Power Consumption	20W Nominal, 36W Max

Support Resources

In addition to this Reference Guide, you can find more information on Prism's features and operation by visiting **www.teradek.com**. If you are unable to find what you need online, please contact Teradek's support staff.

E-mail: **support@teradek.com** | Phone: (888) 941-2111 ext. 2 (available M-F 7am-6pm PST)

Disclaimer

This manual is intended for user information only. Every effort has been made to ensure that the contents within are accurate at the time of printing, and that updates are made in a timely manner. Teradek cannot be held responsible for inaccuracies, typographical errors, or out-of-date information contained within this manual.

Warning

Prism devices contain sensitive electronic components that can be damaged by electrostatic discharge (ESD). When handling, care must be taken so that the device is not damaged. Damage due to inappropriate handling is not covered by the warranty. For complete warranty information, please see the warranty card that arrived with the device, or visit **www.teradek.com/pages/warranty-information.**

FCC Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the

  receiver is connected.
- Consult the dealer or an experienced radio or television technician for help

This device complies with Part 15 of the FCC rules and also with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

EC Declaration of Conformity

This equipment may be operated in all EU countries with the following restrictions:

- 5.15-5.35GHz frequencies for indoor use only

Teradek hereby declares that this Radio Transmitter is in compliance with the essential requirements and other relevant provisions of Directives 2014/53/EU and 2011/65/EU. The full text of the EU DoC is located at: **https://support.teradek.com/hc/en-us/articles/233429747-EC-Declaration-of-Conformity-for-CE-mark**