SERV

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Serv 4K Quick Start Guide

Serv 4K lets you securely stream live camera feeds and instant recordings to anyone, anywhere, on or off set. See what the camera, editor, and colorist see—from production through final color. Serv 4K can encode up to 4Kp60 video with stunning 10-bit 4:2:2 image fidelity, can stream to up to 20 local viewers when connected to a WiFi network in Client mode (10 viewers when using Serv 4K in AP mode) when using VUER, and can be connected to Teradek's Core Cloud Platform for even more flexibility.

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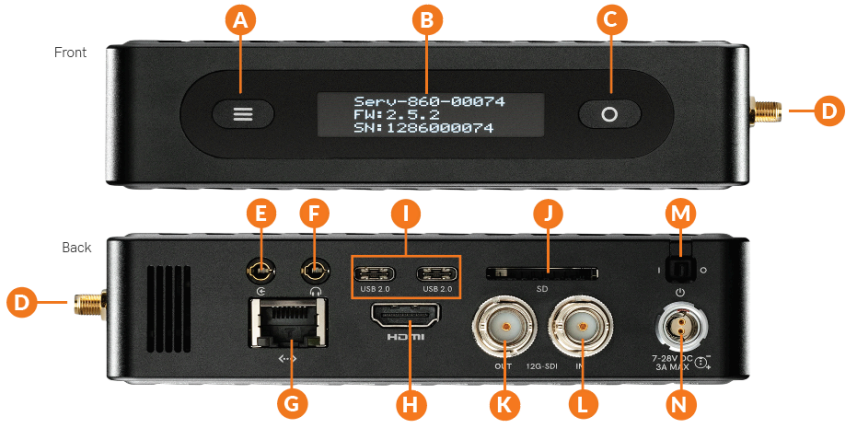
PHYSICAL PROPERTIES



A: Menu button
B: OLED display
C: Select/Enter button
D: RP-SMA connectors
E: Mic/Line stereo TRRS input
F: Headphone TRRS output
G: Ethernet port
H: HDMI input
I: Dual USB ports
J: SD card slot
K: SDI output
L: SDI input
M: Power switch
N: Power input

WHAT'S INCLUDED

- 1x Serv 4K Encoder
- 1x 2 pin Connector to Power Tap (D-Tap) - 18in cable
- 1x SDI - BNC to BNC Cable - 10in cable
- 1x PSU 2pin Connector to 30W AC Adapter (Int) - 6ft cable
- 2x Antenna 2dBi WIFI 2.4/5.8GHz

POWER AND CONNECT

1. Connect power to Serv 4K using the included A/C adapter or D-Tap cable to a battery.
2. Attach the two Wi-Fi antennas to the RP-SMA connectors **(D)**.
3. Connect your video source's HDMI or SDI output to Serv 4K's input connector (**H** or **L**).
4. Turn the Power switch on the back **(M)** to the ON position.

MENU BUTTON OPERATION

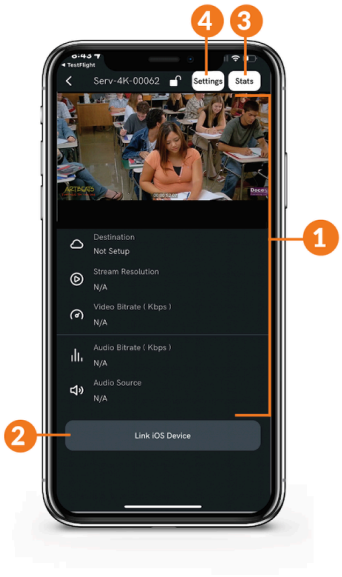
Use Serv 4K's Menu and Select/Enter buttons to navigate the status screens and configurable settings.

Menu button (A): Cycle through the status screens

Select/Enter button (C):
Select (Short-press) - Cycle through the settings/info within a screen
Enter (Long-Press) **-** Confirm changes, switch modes, etc.
- WiFi screen - Switch from AP to Client mode
- Ethernet screen - Switch from DHCP to Static mode
- Bitrate - Select a video bitrate value (300kbps to 45Mbps)
- Audio Input screen - Switch to Embedded, Analog, or Mixed
- Video Resolution - Switch to Auto or Common

SERV APP

The Serv App allows you to remotely configure all of Serv 4K's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Serv App is available for iOS devices.



MAIN DISPLAY

• **Main Screen (1) -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your stream.

• **Link/Unlink iOS Device (2)-** Tap the Link/Unlink iOS button to use of your cellphone's data as an Internet connection for streaming to Core.

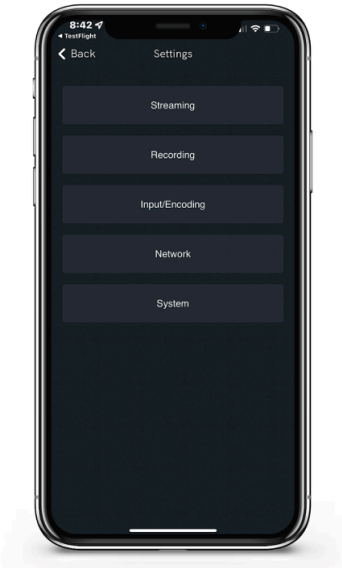
STATS

Tap the **Stats** button **(3)** at the top of the screen to display Serv 4K's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button **(4)** 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 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 Serv 4K.



GET ONLINE

You can use the front panel interface, web UI, or Serv App to control and configure Serv 4K to connect to a network.

Connect to a WiFi Network

Serv 4K supports two wireless modes: **Access Point (AP) Mode** (for connecting directly to Serv 4K using WiFi) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router).

NOTE: Serv 4K can stream to up to 20 clients when connected to a Wi-Fi network in Client mode, or 10 when using Access Point (AP) mode. The number of connected devices is based on streaming bitrate.

1. Connect your phone or laptop to Serv 4K's access point, **Serv-4K-XXXXX** (**XXXXX** represents the last five digits of your Serv 4K's serial number), then enter the default IP address **172.16.1.1** in your web browser.

2. **To switch to Client Mode:** From the Serv App or web UI, navigate to the **Network** settings, select **WiFi/ Wireless**, then switch to **Client Mode**. From the front panel, press the **Menu** button to navigate to the

WiFi screen. Press the **Select/Enter** button to navigate to the WiFi Mode screen, then hold down the **Select/Enter** button to switch to **Client Mode.**

3. From the Serv App or web UI, click the **WiFi scan** or **Saved Networks** tab to connect to an available network, then enter the password. Once connected, the display will list the network Serv 4K is connected to and the assigned IP address.

Connect via Ethernet

1. Connect Serv 4K's Ethernet port (G) to an Ethernet switch or router.

2. To confirm Serv 4K is connected, press the **MENU** button to navigate to the Ethernet screen and confirm the front panel status reads **Ethernet: Connected** along with the IP address. From the Serv App or web UI, navigate to the **Network>Wired** settings and confirm the status reads **Connected** along with the IP address.

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

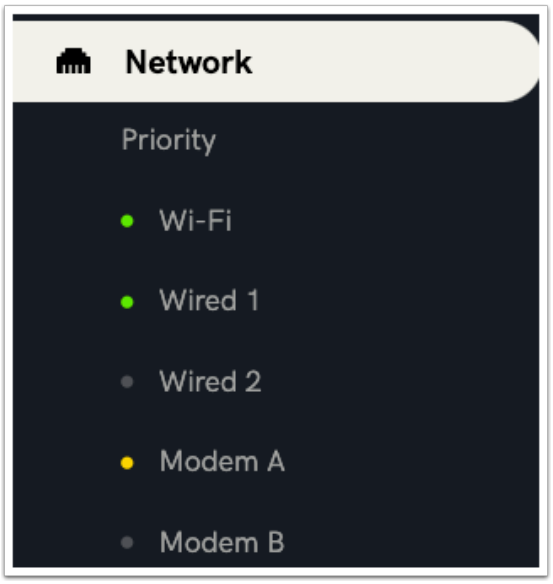
Connect via Node Modem

1. Attach a Node Modem one or both to Serv 4K's USB-C ports (I), then press the **MENU** button on the front panel to navigate to the Modem screen and verify that the modem has been detected and connected.

2. If the modem is not detected, connect your computer to Serv 4K's AP network, then enter the default IP address **172.16.1.1** in the navigation bar to access the web UI and manually configure the modem from the **Network** menu.

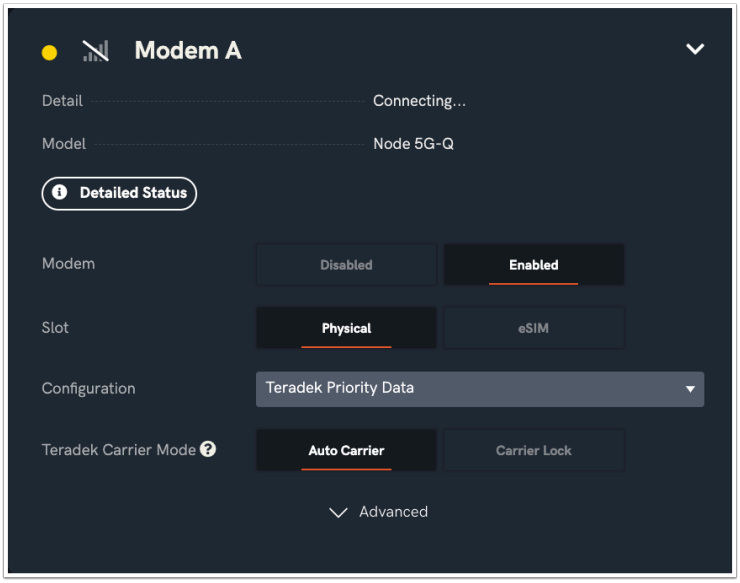
Configure Node Modems

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

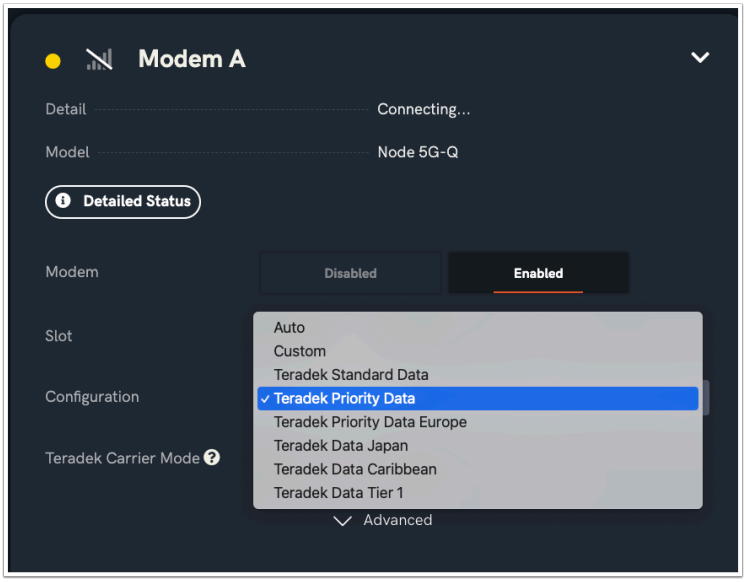


2. Select the slot with the SIM you will be using: **Slot 1 (Physical) or Slot 2(eSim)**

> **NOTE:** Node Modems supports most provider's SIM card and can operate on most 5G/LTE/ 4G/3G data bands. With dualSIM slots, you can have two different carriers and swap between them without needing to unplug the Node. **Only one SIM card can be used at a time.**



3. If necessary, configure the modem with APN or select the Teradek Data configuration you have purchased. If the modem doesn't connect, please contact support@teradek.com.



MOUNTING

Serv 4K encoders have a 1/4”-20 threaded hole on the bottom for mounting. Additionally, you can install dual mount pro battery plates on your Serv 4K, allowing you to attach your unit to either the back of a camera or monitor.

- Mount the Serv 4K onto the back of your camera keeping the antennas clear of any obstructions.
- For best results, orient the encoder so it has clear line-of-sight.

RECORDING

Serv 4K encoders support recording to an SD card or NFS drive. Each recording is saved with the same resolution and bitrate set in Serv 4K.

Record to SD card

1. Insert a compatible SD card into the corresponding slot (J).
2. From the Serv App or the web UI, enter the **Recording** menu, and select **Enabled**.
3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

Record to NFS drive

1. Click the **NFS** icon.
2. Enter the **Host** address and **Share** port, then click **Mount**.

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 streaming or camera event 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 (FAT32).

CLOUD SERVICES

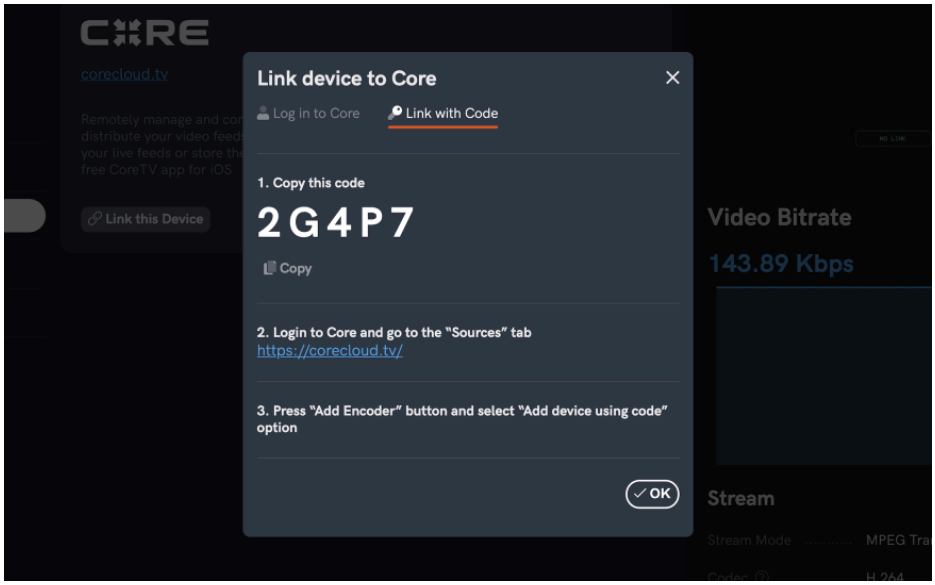
Core

Serv 4K can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can bond multiple Internet connections, remotely control Teradek encoders, decoders and bonded systems from anywhere in the world, and stream to multiple destinations. Visit https://corecloud.tv to learn more.

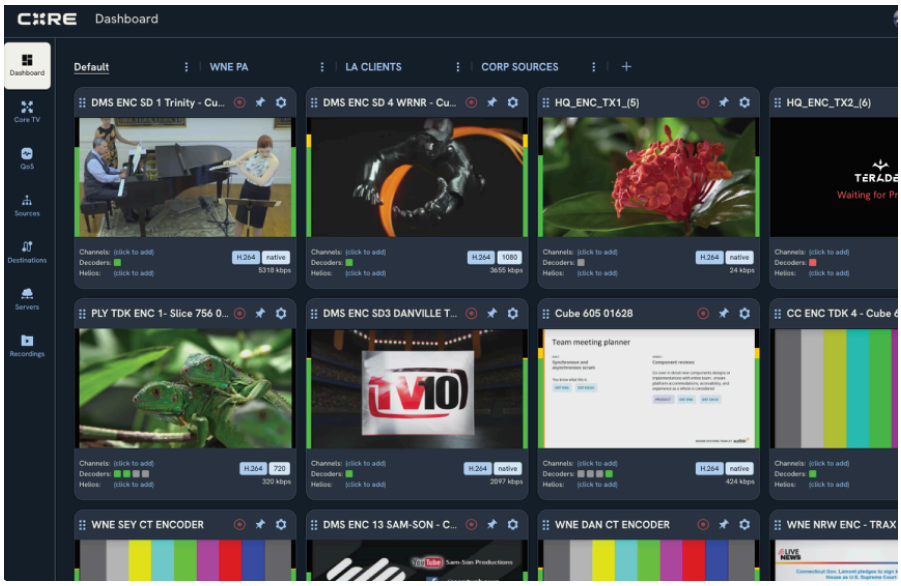
Connect Serv 4K to Core

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 Serv 4K to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Serv 4K, then follow the instructions provided.



3. Once a connection is established, you can configure Serv 4K from either the web UI or Core dashboard.



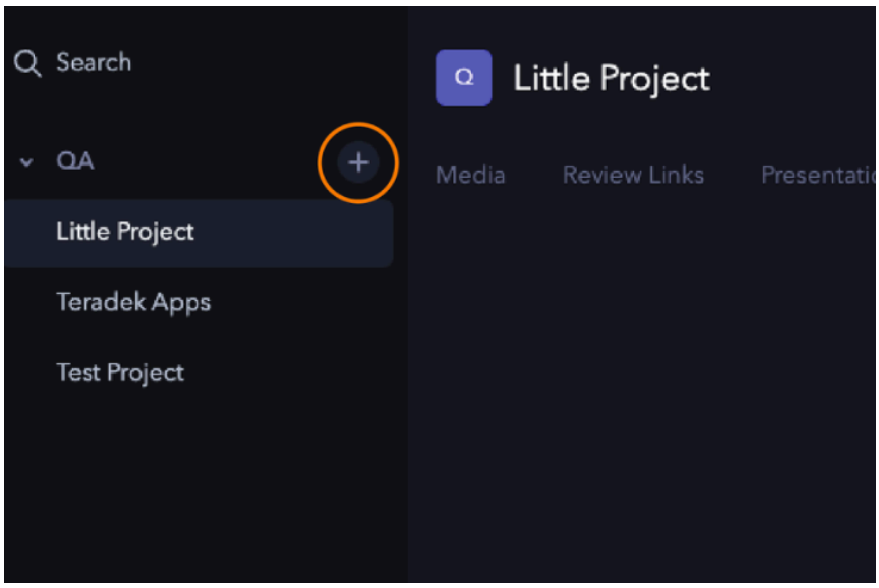
Frame.IO

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 must first have a subscription before you can use Frame.io**.

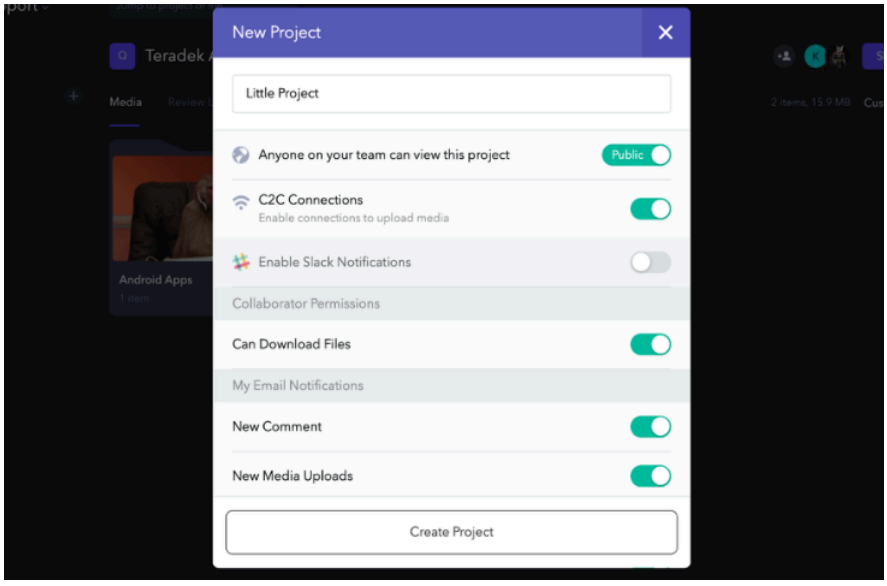
1. From the web UI, select **Cloud Services**, select Frame.io, then click the **Link this Device** tab.

2. Copy the authorization code generated for your Serv 4K by clicking the **Copy** tab.

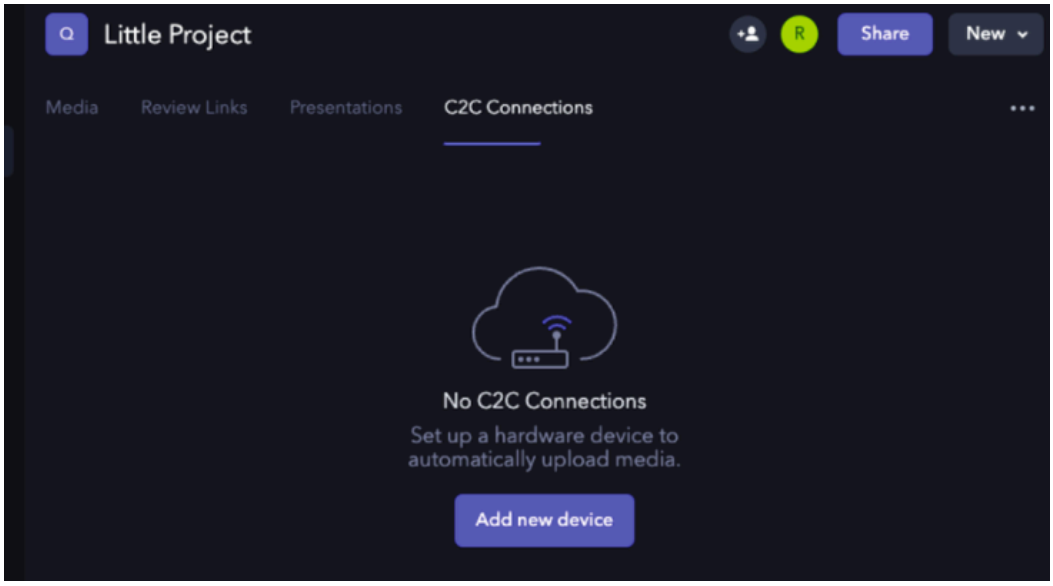
3. Log in to your Frame.io account, then create a project by tapping the **+** sign next to your account name (see image).



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

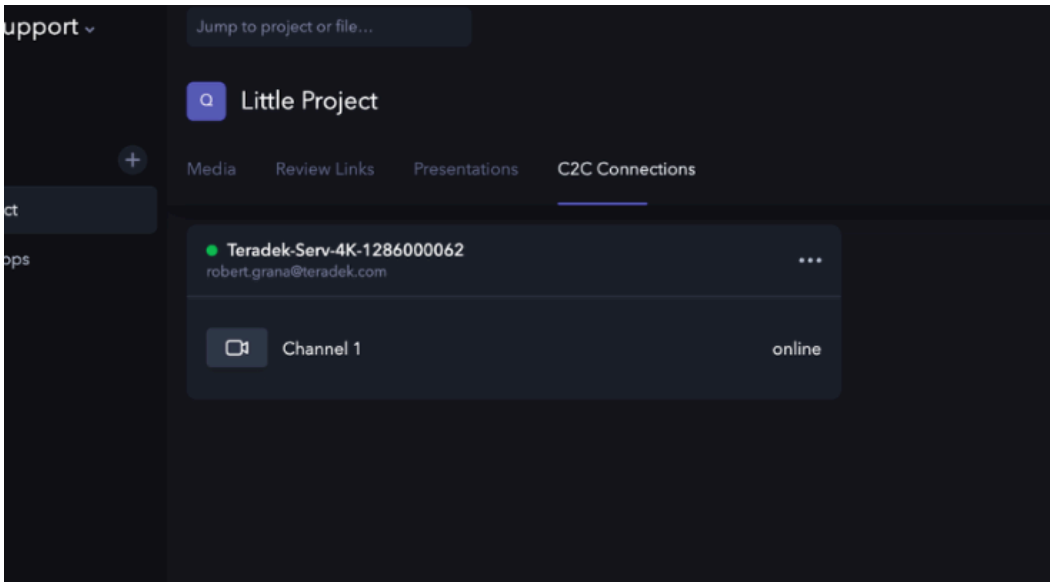


5. Click the **C2C Connections** tab above, then click the **Add new device** tab (see image).



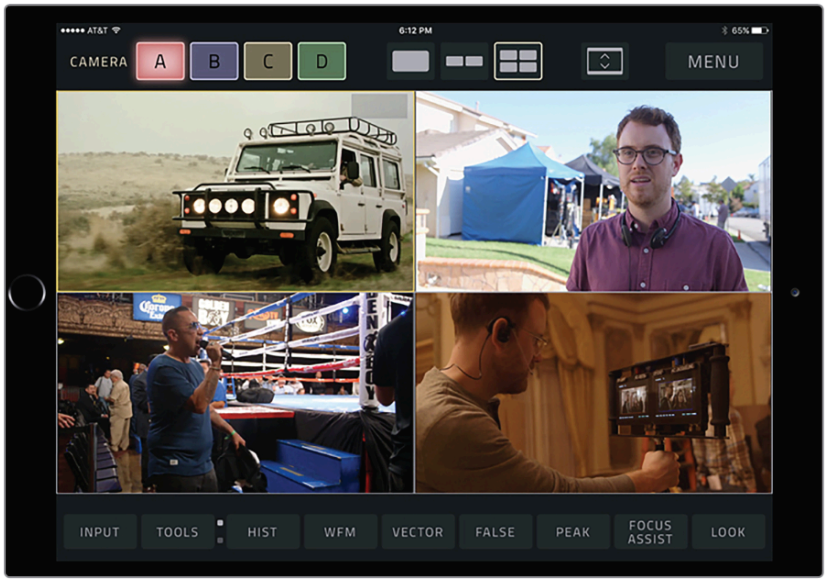
6. Click the **Device ready to connect** tab, then enter the authorization code. Click **Authorize**, then click **Finish.**

7. If successful, Serv 4K will be listed under the **C2C Connections** tab (see image). All future recordings will be listed under the **Media** tab.



MONITOR WITH VUER

Teradek's VUER is a free app that allows you to monitor and analyze up to four live video feeds simultaneously, each with its own set of tools to help you and your crew gain insights into your footage.



1. Download VUER from the App Store (iOS devices), or from the Google Play Store (Android devices).

2. Connect your device to the same network as Serv 4K (Ethernet or WiFi), then launch VUER.

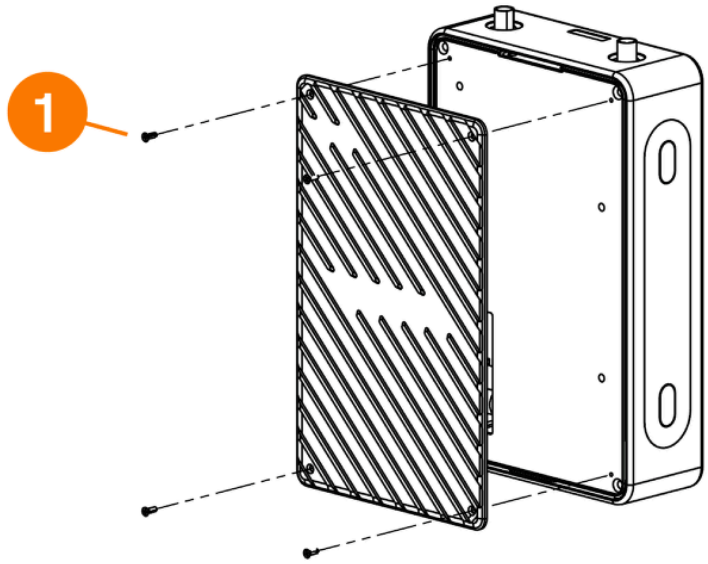
3. From the VUER app, tap **CAMERA** on the upper, left-hand corner, choose your device(s), then tap **Done**.

4. To adjust the stream resolution and bitrate, long-press **VIDEO** on the Tool bar to display the full menu. Make your selection, then tap **APPLY**.

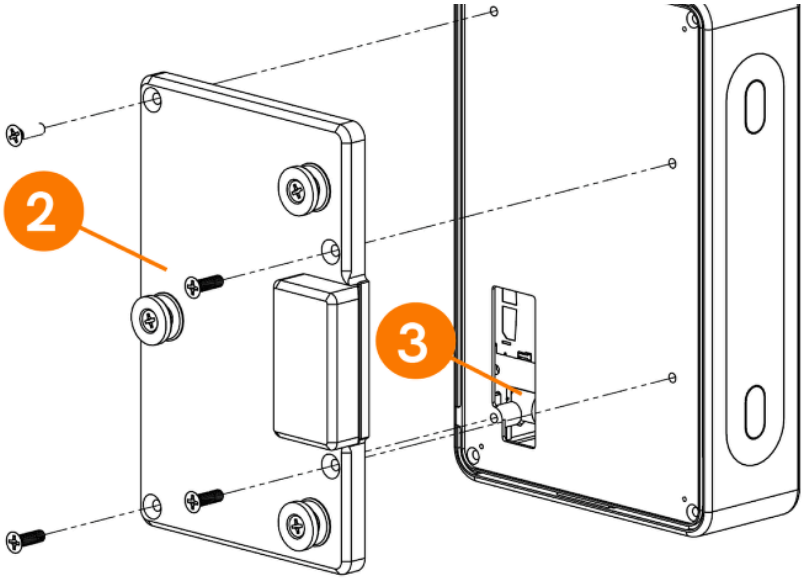
PRO BATTERY PLATE INSTALLATION

Teradek's Pro Battery Plates allow users to mount a Serv 4K unit to the back of a camera or monitor (Male), and/or attach a compatible battery for pass-through power (Female).

1. Remove the front and back cover plates from the Serv 4K by removing the four corner screws (1).

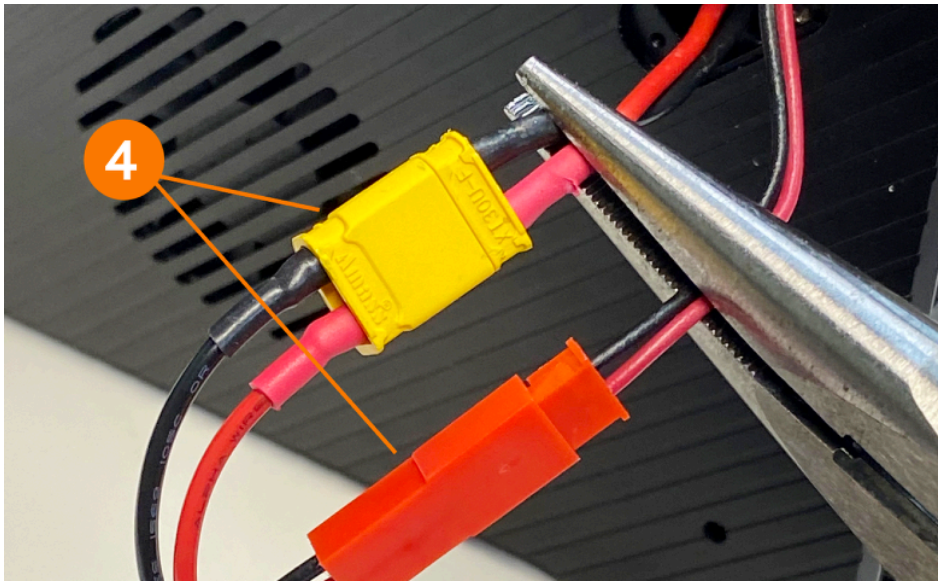


2. Position the male/camera-side plate (2) on the front of the unit, then insert the male plate's XT60 connector through the hole (3) so that it passes through and exits on the same side of the unit's JST connector.



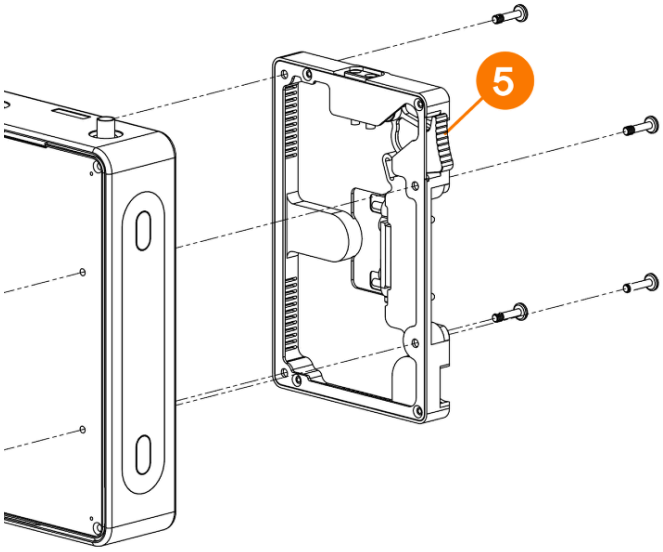
3. Insert the socket/Phillips head screws through the plate and into the unit, then tighten.

4. Connect both the JST and XT60 connectors (4) on the opposite side to the female/battery-side plate's matching connectors.



5. Position the female/battery-side plate (5) on the opposite side of the unit so that the screw holes on the plate align with the holes on the unit.

6. Insert the Phillips head screws through the plate and into the unit, then tighten.



OTHER RESOURCES

- **SERV 4K QUICK START GUIDE PDF:** https://teradek.com/pages/downloads#serv-4k
- **SERV 4K SUPPORT ARTICLES:** https://support.teradek.com/hc/en-us/categories/115000127753-Serv-Pro

Serv Micro Quick Start Guide

Serv Micro lets you securely stream live camera feeds and instant recordings to anyone, anywhere, on or off set. See what the camera, editor, and colorist see—from production through final color. Serv Micro can encode up to 1080p60 video with stunning 8-bit 4:2:0 image fidelity, and can be connected to Teradek's Core Cloud Platform for even more flexibility.

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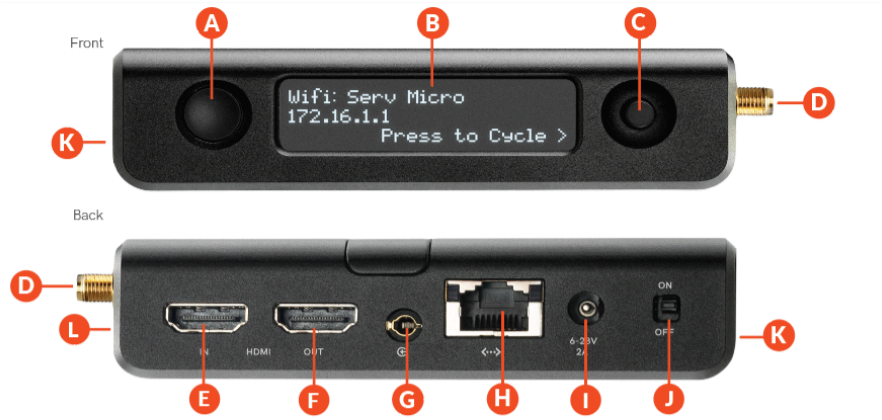


A: MENU button	**E:** HDMI input	**I:** 6-28V DC power input
B: OLED display	**F:** HDMI output	**J:** Power switch
C: Menu joystick	**G:** Mic/Line stereo TRRS input	**K:** SD card slot (not shown)
D: RP-SMA connectors	**H:** Ethernet	**L:** USB modem port (not shown)

WHAT'S INCLUDED

- **1x** Serv Micro Encoder
- **1x** HDMI Male Type C (Mini) - HDMI Male Type A (Full) - 18in cable
- **1x** Ethernet cable
- **1x** PSU 18W AC Adapter 12VDC (Int) - 6ft cable
- **2x** Antenna 2dBi WIFI 2.4/5.8GHz

POWER AND CONNECT

1. Attach a battery or use the included A/C adapter to connect power to Serv Micro.

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

3. Connect the HDMI output from your video source to Serv Micro's input HDMI connector (E).

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

MENU BUTTON OPERATION

Use Serv Micro's Menu and Select/Enter buttons to navigate the status screens and configurable settings.

Menu button (A):

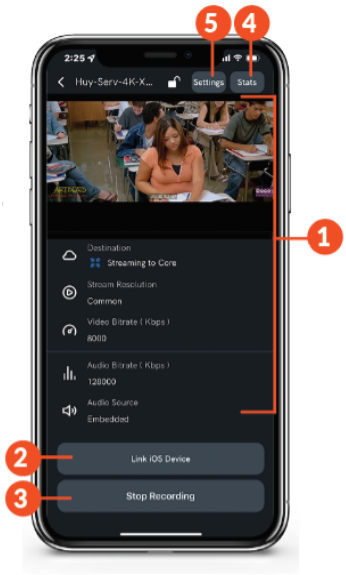
Cycle through the status screens or long press to turn the unit on/off

Select joystick (C):

- **WiFi** - Switch from AP to Client mode
- **Ethernet** - Switch from DHCP to Static mode
- **Recording** - Enable or Disable recording
- **Video** - Switch between Auto and HD
- **Bitrate** - Select a video bitrate value (300kbps to 15mbps)
- **Audio Input** - Switch from HDMI, Analog, or Mixed
- **System** -Perform factory reset

SERV MANAGER

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



MAIN DISPLAY

• **Main Screen (1) -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your stream.

• **Link/Unlink iOS Device (2)-** Tap the Link/Unlink iOS button to use of your cellphone's data as an Internet connection for streaming to Core.

• **Start/Stop Recording (3)-** Tap the Recording tab to start/stop recording your stream. **NOTE: Recording must be enabled.**

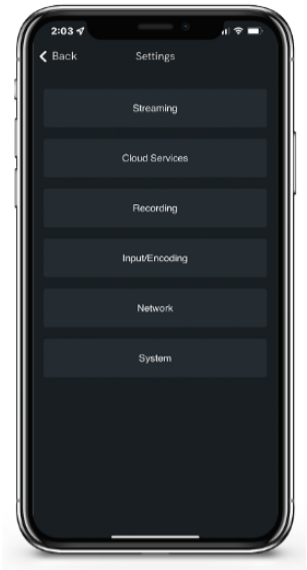
STATS

Tap the **Stats** button **(4)** at the top of the screen to display Serv Micro's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button **(5)** to configure the following options:

- **Streaming** - Configure your streaming method and destination
- **Cloud Services** - Connect Serv Micro to Core
- **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 Serv Micro.



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Connect to a WiFi Network

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1. Connect your phone or laptop to Serv Micro's access point, **Serv-Micro-XXXXX** (**XXXXX** represents the last five digits of your Serv Micro's serial number), then enter the default IP address **172.16.1.1** in your web browser.

2. **To switch to Client Mode:** From Serv Manager or the web UI, navigate to the **Network** settings, select **WiFi/Wireless**, then switch to **Client Mode**. From the front panel, press the **Menu** button to navigate to

the WiFi screen. Press the **Select/Enter** button to navigate to the WiFi Mode screen, then hold down the **Select/Enter** button to switch to **Client Mode.**

3. From Serv Manager or the web UI, click the **WiFi scan** or **Saved Networks** tab to connect to an available network, then enter the password. Once connected, the display will list the network Serv Micro is connected to.

Connect via Ethernet

1. Connect Serv Micro's Ethernet port (H) to an Ethernet switch or router.

2. To confirm Serv Micro is connected, press the **MENU** button to navigate to the Ethernet screen and confirm the front panel status reads **Ethernet: Connected** along with the IP address. From Serv Manager or the web UI, navigate to the **Network>Wired** settings and confirm the status reads **Connected** along with the IP address.

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

Connect via USB Modem

1. Attach a USB modem to Serv Micro's USB port (L), then press the **MENU** button on the front panel to navigate to the Modem screen and verify that the modem has been detected and connected.

2. If the modem is not detected, connect your computer to Serv Micro's AP network, then enter the default IP address **172.16.1.1** in the navigation bar to access the web UI and manually configure the modem from the **Network** menu.

MOUNTING

Serv Micro encoders have a 1/4"-20 threaded hole and two M3 threaded holes on the bottom for mounting.

- Mount Serv Micro vertically, keeping the antennas clear of any obstructions.
- For best results, orient the antennas so each one has clear line-of-sight and are parallel to each other

RECORDING

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

Record to SD card

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

Record to NFS drive

1. Click the **NFS** icon.
2. Enter the **Host** address and **Share** port, then click **Mount**.

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 streaming or camera event 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 (FAT32).

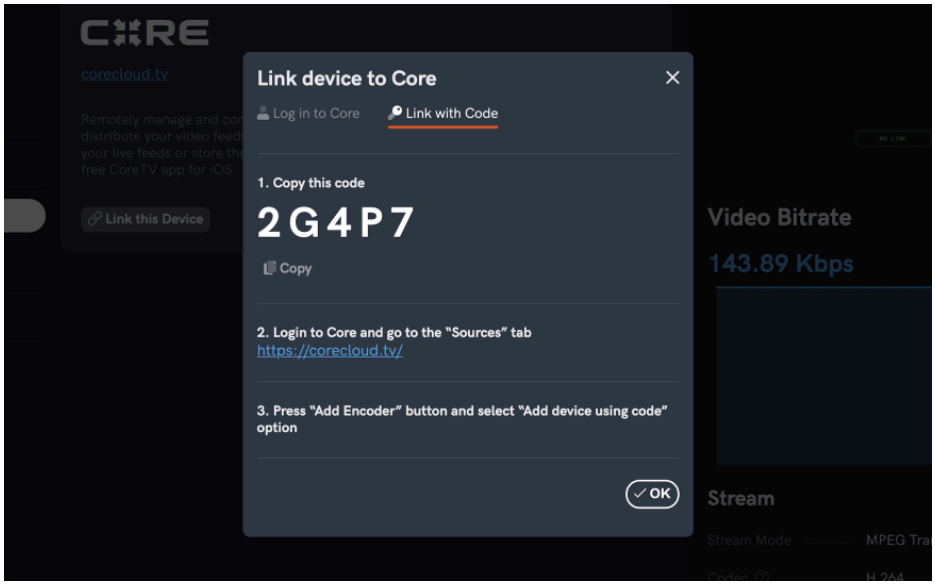
CORE

Serv Micro can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can bond multiple Internet connections, remotely control Teradek encoders, decoders and bonded systems from anywhere in the world, and stream to multiple destinations. Visit https://corecloud.tv to learn more.

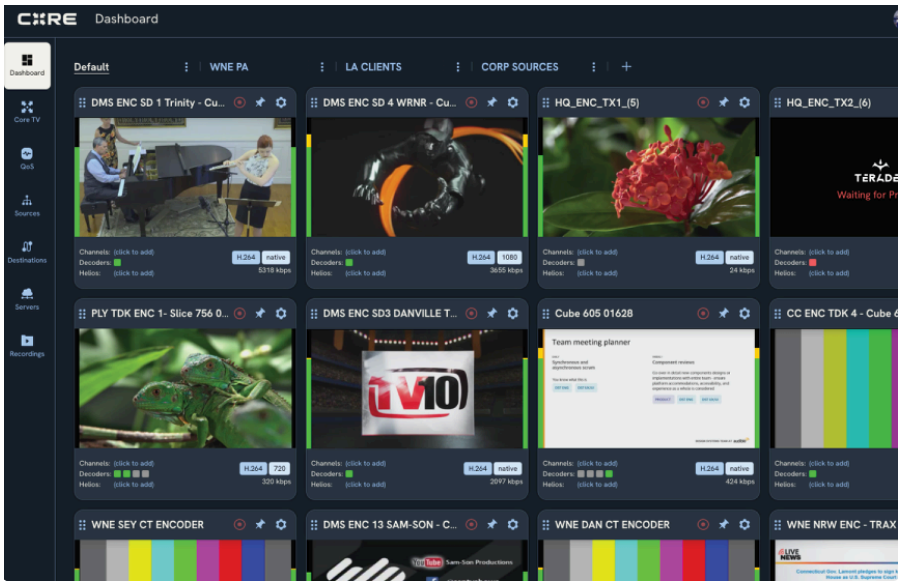
Connect Serv Micro to Core

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 Serv Micro to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Serv Micro, then follow the instructions provided.



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



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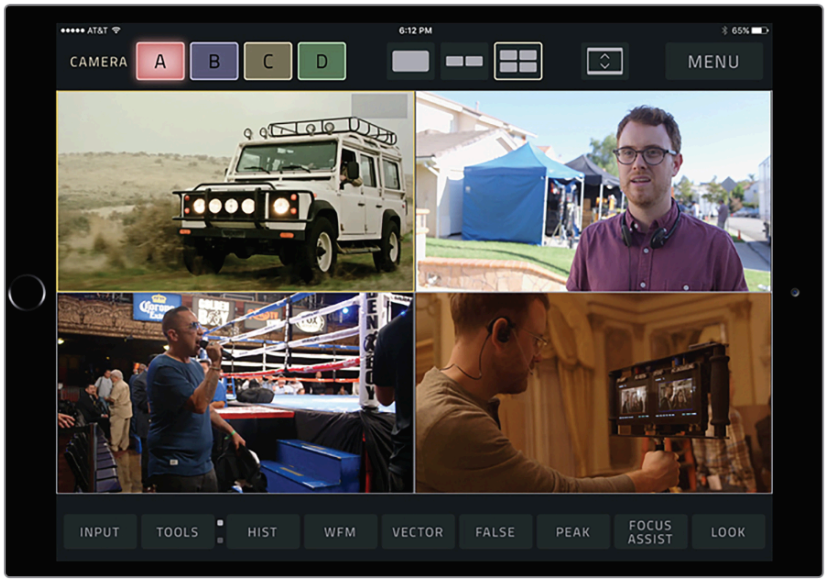


1. Download VUER from the App Store (iOS devices), or from the Google Play Store (Android devices).

2. Connect your device to the same network as Serv Micro (Ethernet or WiFi), then launch VUER.

3. From the VUER app, tap **CAMERA** on the upper, left-hand corner, choose your device(s), then tap **Done**.

4. To adjust the stream resolution and bitrate, long-press **VIDEO** on the Tool bar to display the full menu. Make your selection, then tap **APPLY**.

OTHER RESOURCES

- **SERV MICRO QUICK START GUIDE PDF:** https://teradek.com/pages/downloads#serv-4k
- **SERV SUPPORT ARTICLES:** https://support.teradek.com/hc/en-us/categories/115000127753-Serv-Pro

Serv 4K (2024) Quick Start Guide

Serv 4K lets you securely stream live camera feeds and instant recordings to anyone, anywhere, on or off set. See what the camera, editor, and colorist see—from production through final color. Serv 4K can encode up to 4Kp60 video with stunning 10-bit 4:2:2 image fidelity, can stream to up to 20 local viewers when connected to a WiFi network in Client mode (10 viewers when using Serv 4K in AP mode) when using VUER, and can be connected to Teradek's Core Cloud Platform for even more flexibility.

TABLE OF CONTENTS

PHYSICAL PROPERTIES

A: Menu Navigation buttons
B: OLED display
C: Menu button
D: RP-SMA connectors
E: Mic/Line stereo TRS input
F: Headphone TRS output
G: Ethernet port
H: HDMI input
I: Dual USB ports
J: SD card slot
K: SDI output
L: SDI input
M: Power switch
N: Power input

WHAT'S INCLUDED

- 1x Serv 4K Encoder
- 1x 2 pin Connector to Power Tap (D-Tap) - 18in cable
- 1x SDI - BNC to BNC Cable - 10in cable
- 1x PSU 2pin Connector to 30W AC Adapter (Int) - 6ft cable
- 2x Antenna 2dBi WIFI 2.4/5.8GHz

POWER AND CONNECT

1. Connect power to Serv 4K using the included A/C adapter or D-Tap cable to a battery.
2. Attach the two Wi-Fi antennas to the RP-SMA connectors **(D)**.
3. Connect your video source's HDMI or SDI output to Serv 4K's input connector (**H** or **L**).
4. Turn the Power switch on the back **(M)** to the ON position.

MENU BUTTON/NAVIGATION BUTTONS OPERATION

NAVIGATION BUTTONS OPERATION (A) Use the Navigation Buttons to cycle through the status screens or switch your configurable settings.
Press Up or Down buttons: Cycle through status screens and navigate menus
Press Center or Forward: Edit configurable settings or cycle through options

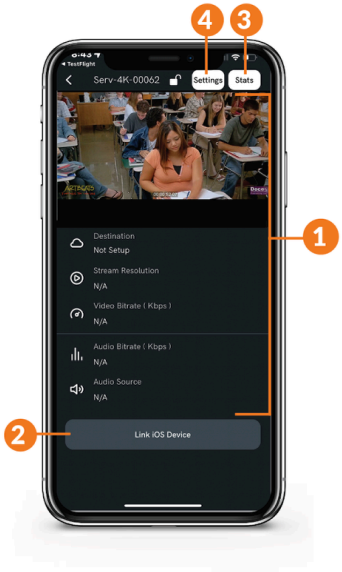
MENU BUTTON OPERATION (C)
Use Serv 4K's Menu button to navigate the status screens.
Press Button: Cycle through the status screens

- **Display settings menu** - Adjust the display brightness, display timeout, and invert time.
- **Main screen** - Displays the device name and firmware version
- **Regulatory info** - Displays the device's regulatory certifications (FCC, EC, IC, etc.)
- **Stream mode -** Displays the current stream mode
- **WiFi screen** - Displays the current WiFi network and allows you to switch from AP to Client mode
- **Ethernet screen** - Displays the Ethernet IP address and allows you to switch from DHCP to Static mode

- **Modems (1 and 2)** - Displays the carrier name and allows you to switch SIM cards
- **Modem bitrates** - Displays the current modem's bitrate.
- **Recording screen** - Hold to enable or disable the recording function
- **Cloud services** - Displays the Cloud service(s) Serv 4K is currently connected to.
- **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
- **Audio Input screen** - Displays the current Audio bitrate. Press to switch from Embedded, analog, or Mixed

SERV APP

The Serv App allows you to remotely configure all of Serv 4K's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Serv App is available for iOS devices.



MAIN DISPLAY

• **Main Screen (1) -** Displays the preview, streaming destination, audio and video bitrates, and resolution of your stream.

• **Link/Unlink iOS Device (2)-** Tap the Link/Unlink iOS button to use of your cellphone's data as an Internet connection for streaming to Core.

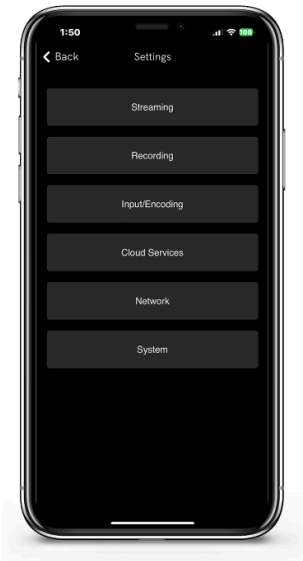
STATS

Tap the **Stats** button **(3)** at the top of the screen to display Serv 4K's serial number, current audio and video bitrates, runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings** button **(4)** 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 and Audio input settings
- **Cloud Services** - Select and connect to a cloud management service (Core, Frame.io, PIX, etc.)
- **Network** - Choose a method of connecting to the Internet
- **System** - View the model and serial number of your device, or rename the Serv 4K.



GET ONLINE

You can use the front panel interface, web UI, or Serv App to control and configure Serv 4K to connect to a network.

Connect to a WiFi Network

Serv 4K supports two wireless modes: **Access Point (AP) Mode** (for connecting directly to Serv 4K using WiFi) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router).

> **NOTE**: Serv 4K can stream to up to 20 clients when connected to a Wi-Fi network in Client mode, or 10 when using Access Point (AP) mode. The number of connected devices is based on streaming bitrate.

1. Connect your phone or laptop to Serv 4K's access point, **Serv-4K-XXXXX** (**XXXXX** represents the last five digits of your Serv 4K's serial number), then enter the default IP address **172.16.1.1** in your web browser.

2. **To switch to Client Mode:** From the Serv App or web UI, navigate to the **Network** settings, select **WiFi/ Wireless**, then switch to **Client Mode**. From the front panel, press the **Menu** button to navigate to the WiFi screen. Press the **Select/Enter** button to navigate to the WiFi Mode screen, then hold down the **Select/Enter** button to switch to **Client Mode.**

3. From the Serv App or web UI, click the **WiFi scan** or **Saved Networks** tab to connect to an available network, then enter the password. Once connected, the display will list the network Serv 4K is connected to and the assigned IP address.

Connect via Ethernet

1. Connect Serv 4K's Ethernet port (G) to an Ethernet switch or router.

2. To confirm Serv 4K is connected, press the **MENU** button to navigate to the Ethernet screen and confirm the front panel status reads **Ethernet: Connected** along with the IP address. From the Serv App or web UI, navigate to the **Network>Wired** settings and confirm the status reads **Connected** along with the IP address.

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

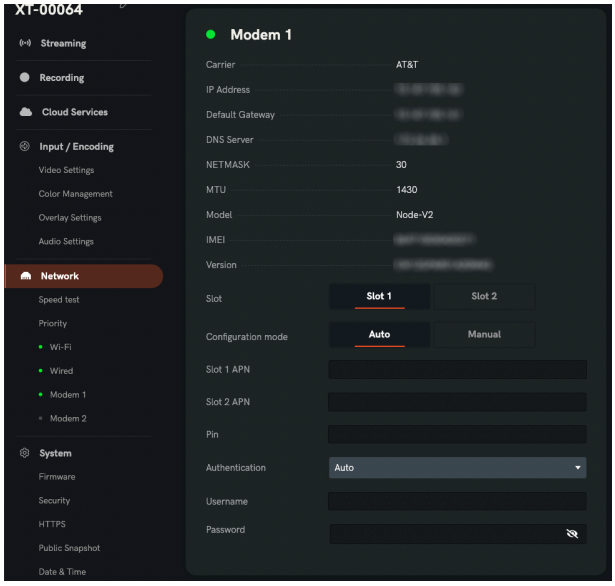
Connect via Node II or USB Modem

1. Attach a Node II or USB modem to one or both to Serv 4K's USB-C ports (I), then press the **MENU** button on the front panel to navigate to the Modem screen and verify that the modem has been detected and connected.

2. If the modem is not detected, connect your computer to Serv 4K's AP network, then enter the default IP address **172.16.1.1** in the navigation bar to access the web UI and manually configure the modem from the **Network** menu.

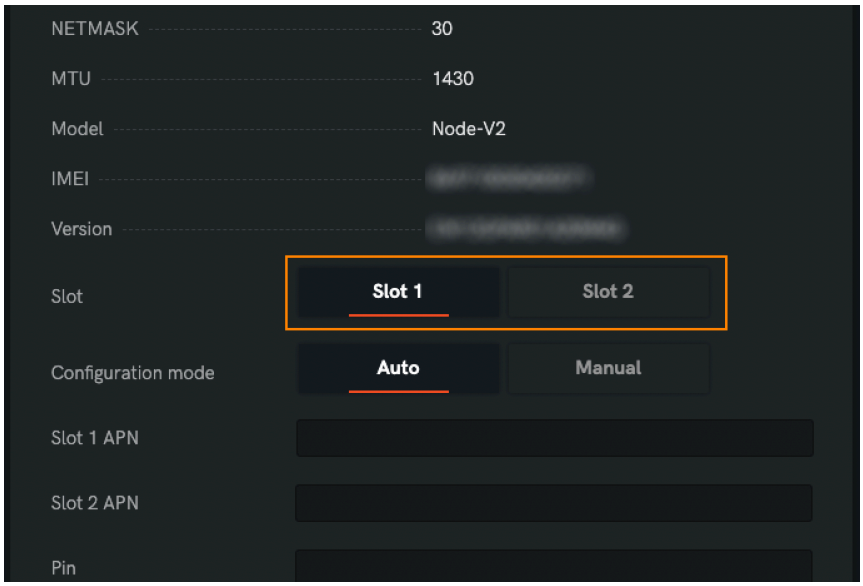
Configure Node II

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

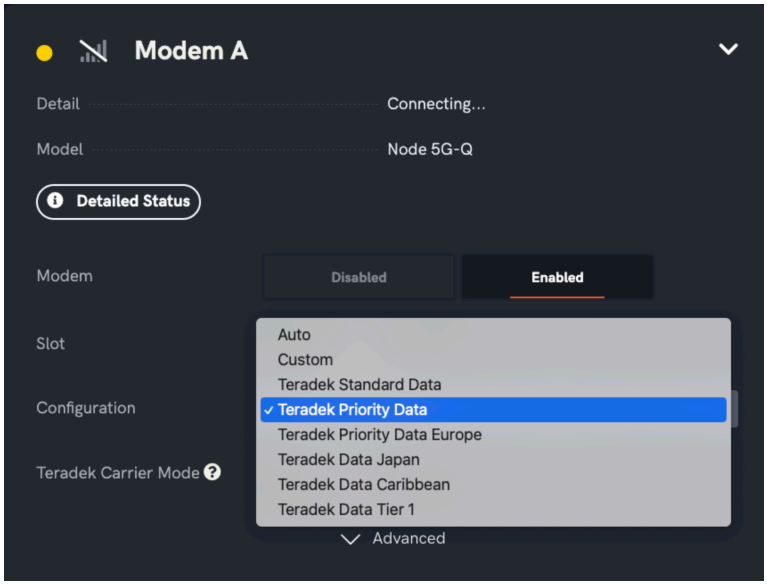


2. Select the slot with the SIM you will be using (**Slot 1 or Slot 2**).

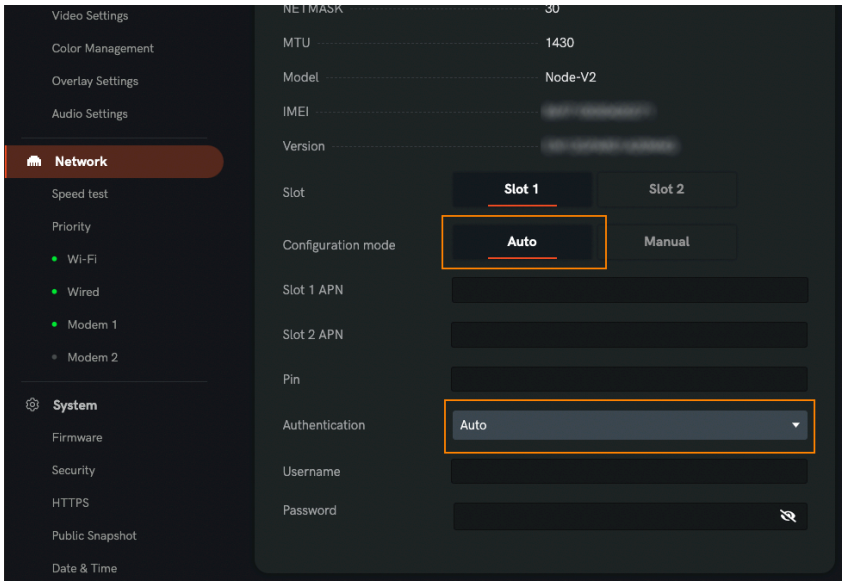
> **NOTE:** Node II supports most provider's SIM card and can operate on most LTE/4G/3G data bands. With dual SIM slots, you can swap from one provider to another without needing to unplug the Node II. **Only one SIM card can be used at a time.**



3. If applicable, configure the modem by entering an APN or select the [Teradek Data] configuration you have purchased.



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



MOUNTING

Serv 4K encoders have a 1/4”-20 threaded hole on the bottom for mounting. Additionally, you can install dual mount pro battery plates on your Serv 4K, allowing you to attach your unit to either the back of a camera or monitor.

- Mount the Serv 4K onto the back of your camera keeping the antennas clear of any obstructions.
- For best results, orient the encoder so it has clear line-of-sight.

RECORDING

Serv 4K encoders support recording to an SD card or NFS drive. Each recording is saved with the same resolution and bitrate set in Serv 4K.

Record to SD card

1. Insert a compatible SD card into the corresponding slot (J).
2. From the Serv App or the web UI, enter the **Recording** menu, and select **Enabled**.
3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

Record to NFS drive

1. Click the **NFS** icon.
2. Enter the **Host** address and **Share** port, then click **Mount**.

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 streaming or camera event 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 (FAT32).

CLOUD SERVICES

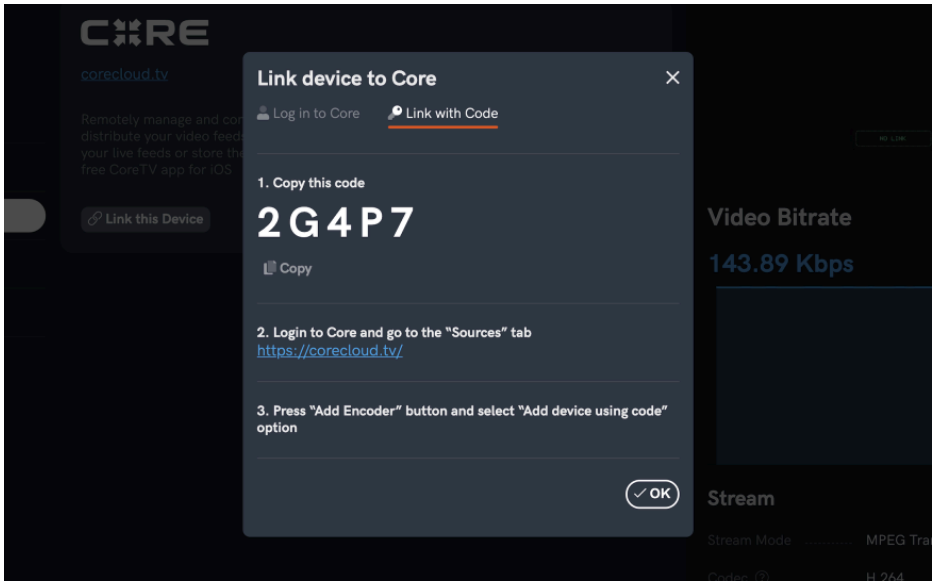
Core

Serv 4K can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can bond multiple Internet connections, remotely control Teradek encoders, decoders and bonded systems from anywhere in the world, and stream to multiple destinations. Visit **https://corecloud.tv** to learn more.

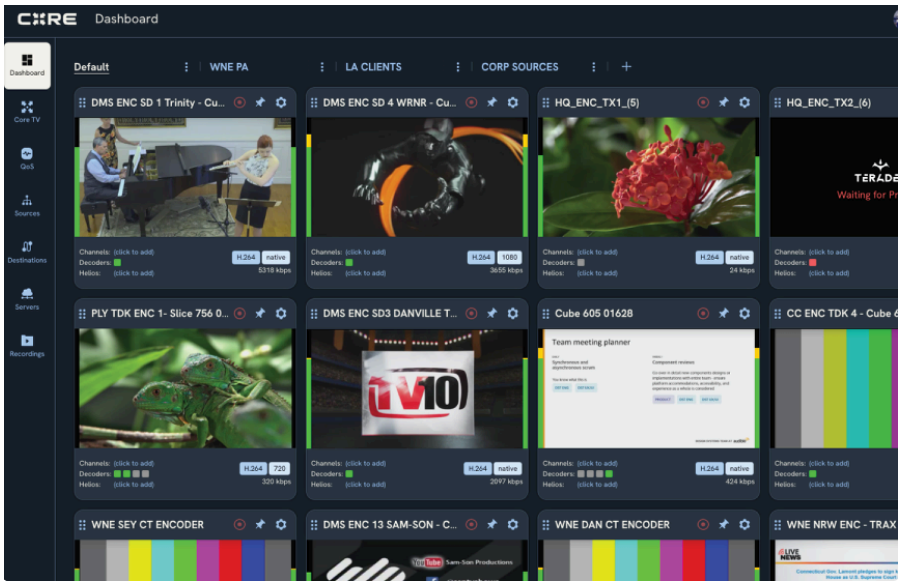
Connect Serv 4K to Core

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 Serv 4K to your Core account, then click **Next**.
Link with Code: Copy the authorization code generated for your Serv 4K, then follow the instructions provided.



3. Once a connection is established, you can configure Serv 4K from either the web UI or Core dashboard.



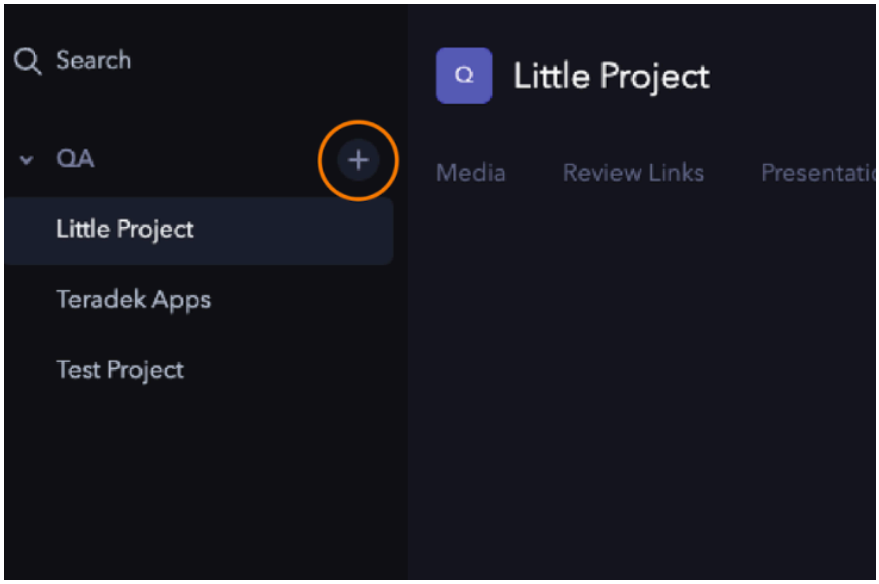
Frame.io

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 must first have a subscription before you can use Frame.io.**

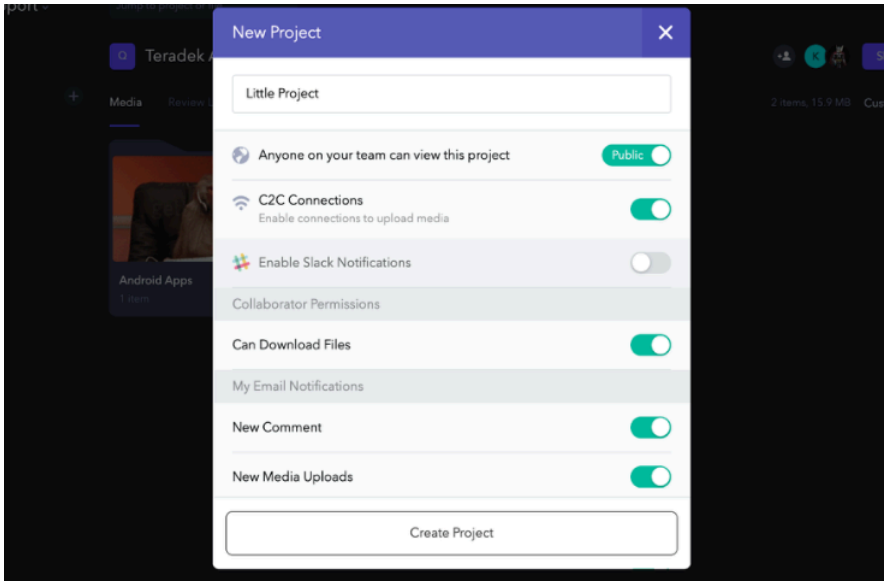
1. From the web UI, select **Cloud Services**, select Frame.io, then click the **Link this Device** tab.

2. Copy the authorization code generated for your Serv 4K by clicking the **Copy** tab.

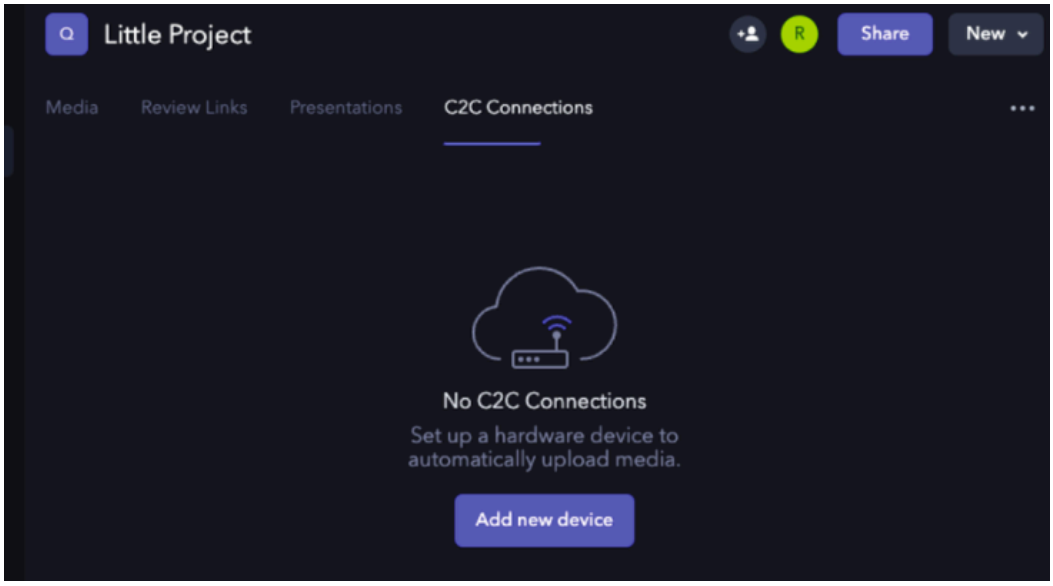
3. Log in to your Frame.io account, then create a project by tapping the **+** sign next to your account name (see image).



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

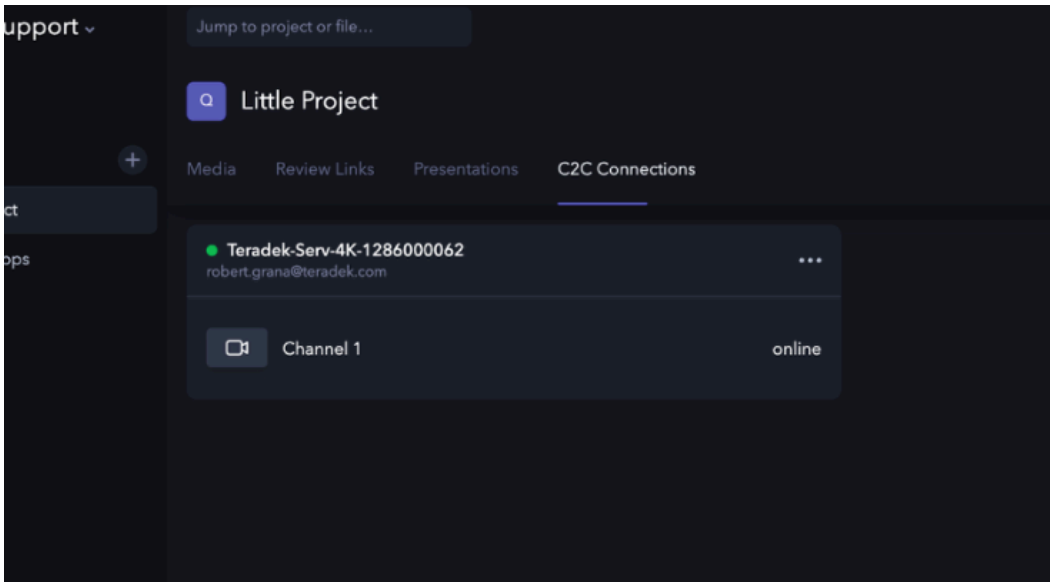


5. Click the **C2C Connections** tab above, then click the **Add new device** tab (see image).



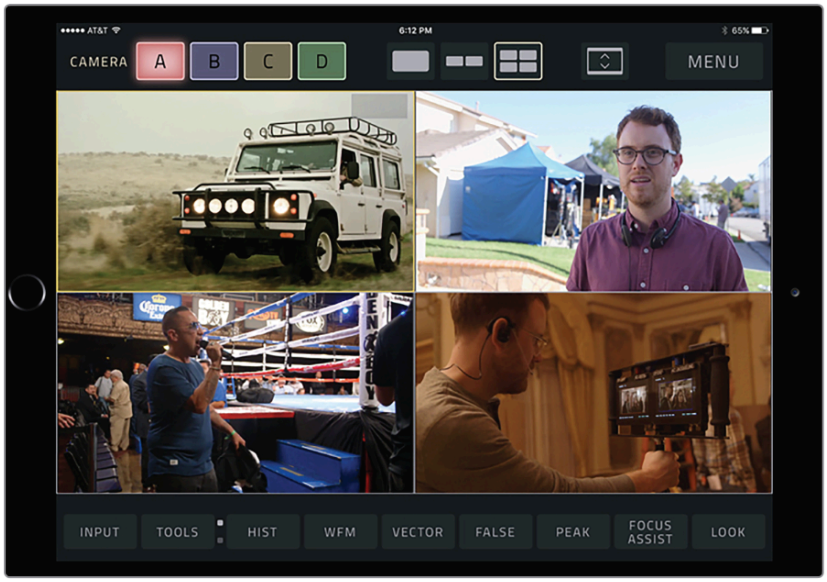
6. Click the **Device ready to connect** tab, then enter the authorization code. Click **Authorize**, then click **Finish.**

7. If successful, Serv 4K will be listed under the **C2C Connections** tab (see image). All future recordings will be listed under the **Media** tab.



MONITOR WITH VUER

Teradek's VUER is a free app that allows you to monitor and analyze up to four live video feeds simultaneously, each with its own set of tools to help you and your crew gain insights into your footage.



1. Download VUER from the App Store (iOS devices), or from the Google Play Store (Android devices).

2. Connect your device to the same network as Serv 4K (Ethernet or WiFi), then launch VUER.

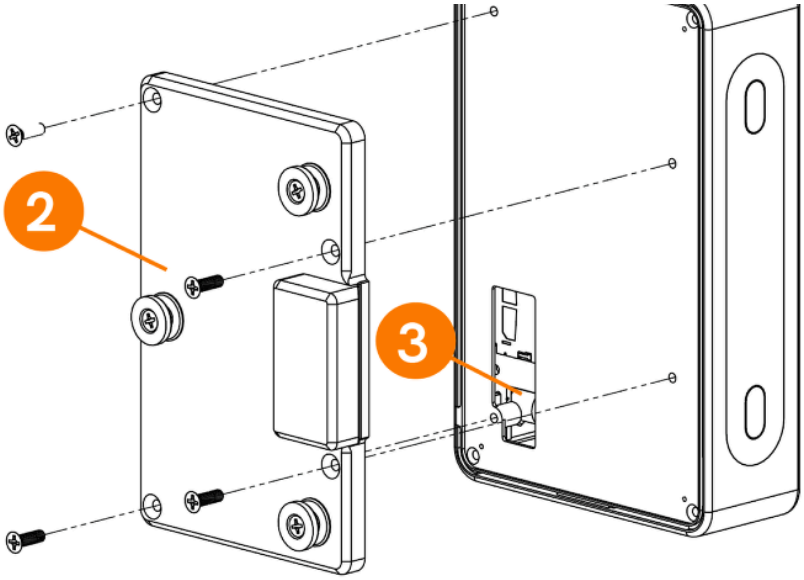
3. From the VUER app, tap **CAMERA** on the upper, left-hand corner, choose your device(s), then tap **Done**.

4. To adjust the stream resolution and bitrate, long-press **VIDEO** on the Tool bar to display the full menu. Make your selection, then tap **APPLY**.

PRO BATTERY PLATE INSTALLATION

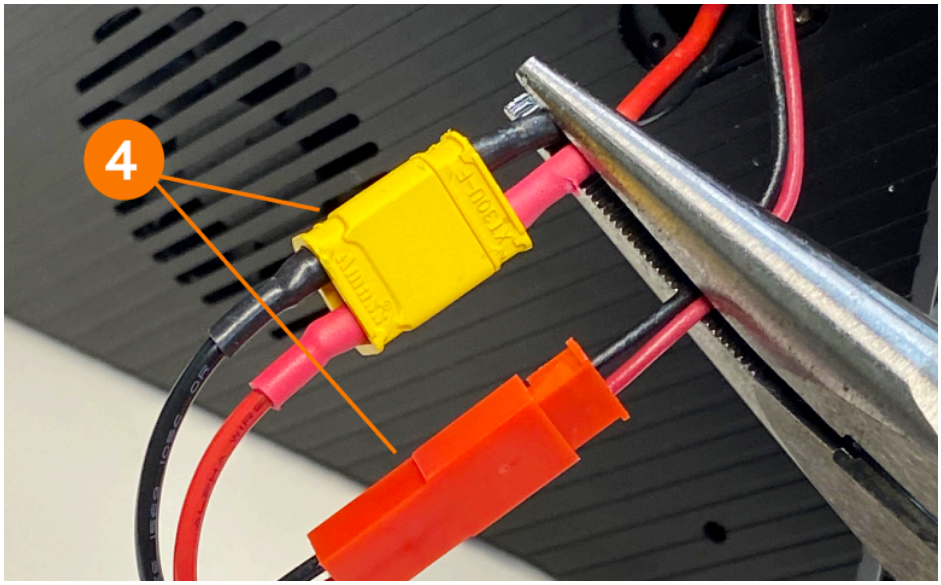
Teradek's Pro Battery Plates allow users to mount a Serv 4K unit to the back of a camera or monitor (Male), and/or attach a compatible battery for pass-through power (Female).

1. Position the male/camera-side plate (2) on the front of the unit, then insert the male plate's XT60 connector through the hole (3) so that it passes through and exits on the same side of the unit's JST connector.



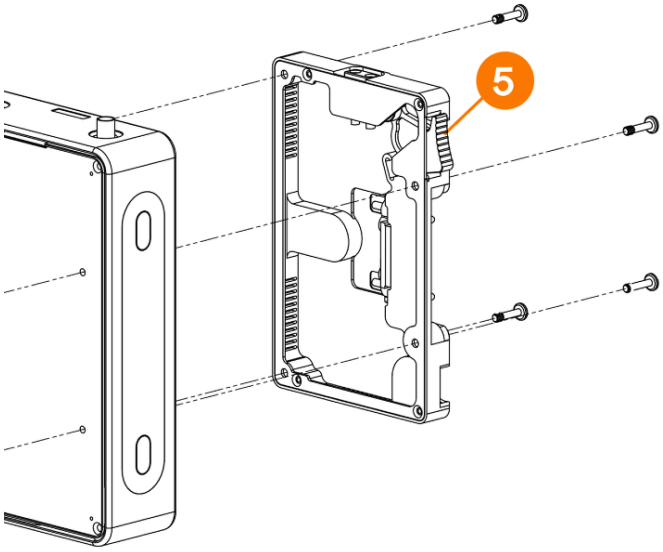
2. Insert the socket/Phillips head screws through the plate and into the unit, then tighten.

3. Connect both the JST and XT60 connectors (4) on the opposite side to the female/battery-side plate's matching connectors.



4. Position the female/battery-side plate (5) on the opposite side of the unit so that the screw holes on the plate align with the holes on the unit.

5. Insert the Phillips head screws through the plate and into the unit, then tighten.



OTHER RESOURCES

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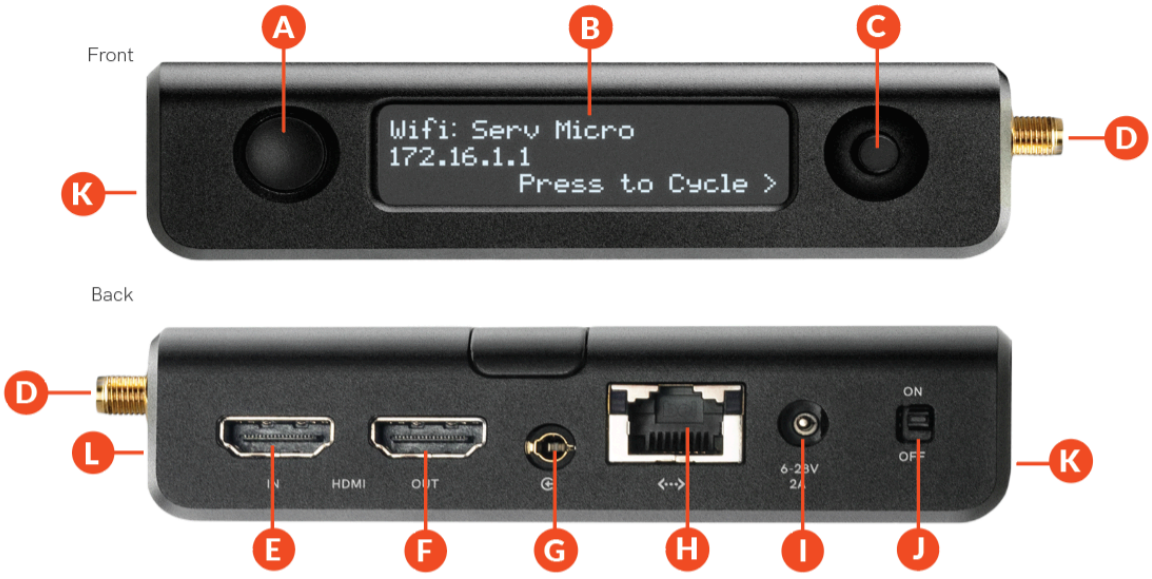
Serv Micro



A. Menu button

E. HDMI input

I. 6-28V DC power input

B. OLED display

C. Menu joystick

D. RP-SMA connectors

F. HDMI output

G. Mic/Line stereo TRRS input

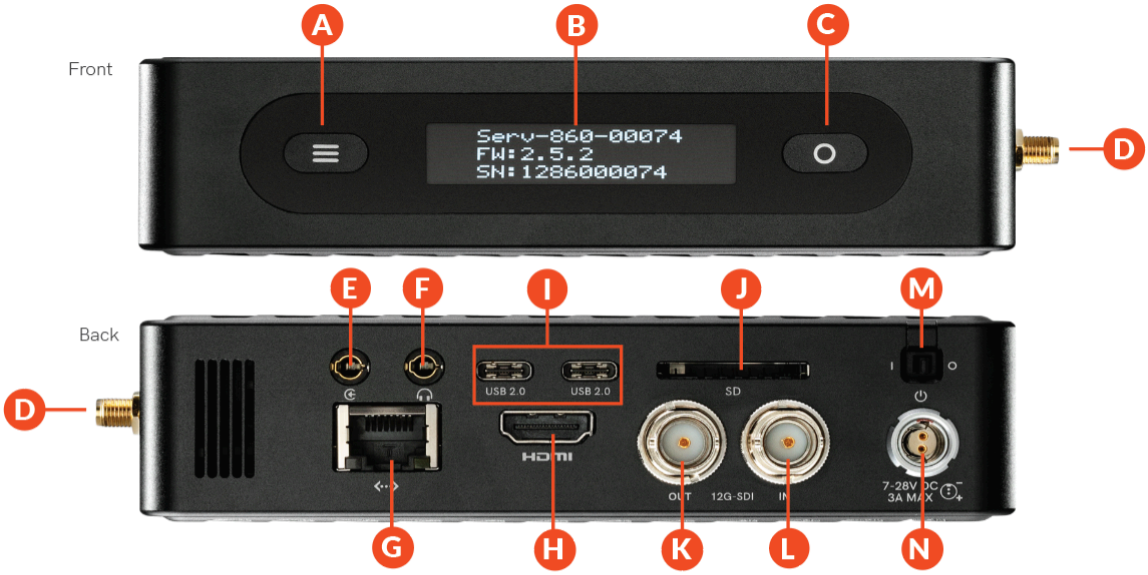
H. Ethernet port

J. Power switch

K. SD card slot (not shown)

L. USB modem port (not shown)

Serv 4K



A. Menu button

B. OLED display

C. Stream button

D. RP-SMA connectors

E. Mic/Line stereo TRRS input

F. Headphone TRRS output

G. Ethernet port

H. HDMI input

I. USB 2.0 ports

J. SD Card slot

K. SDI output

L. SDI input

M. Power switch

N. Power input

Serv 4K (2024)

A. Navigation buttons

B. OLED display

C. Menu button

D. RP-SMA connectors

E. Mic/Line stereo TRS input

F. Headphone TRS output

G. Ethernet port

H. HDMI input

I. USB 2.0 ports

J. SD Card slot

K. SDI output

L. SDI input

M. Power switch

N. Power input

Power and Connect

1. **Serv 4K:** Connect power to Serv 4K using the included A/C adapter or D-Tap cable to a battery.
   Serv Micro: Attach an LP-E6 battery or use the included A/C adapter to connect power to Serv Micro.
2. Attach the two Wi-Fi antennas to the RP-SMA connectors **(D)**.
3. Connect the HDMI or SDI output from your video source to the unit's input connector (**H** or **L**).
4. Turn the Power switch on the back **(M)** to the ON position.

Button Operation

SERV 4K

Menu button (A): Cycle through the status screens
Select/Enter button (C):
Select (Short-press) - Cycle through the settings/info within a screen
Enter (Long-Press) **-** Confirm changes, switch modes, etc.
• **WiFi screen** - Switch from AP to Client mode
• **Ethernet screen** - Switch from DHCP to Static mode
• **Bitrate** - Select a video bitrate value (300kbps to 45Mbps)
• **Audio Input screen** - Switch to Embedded, Analog, or Mixed
• **Video** - Switch to Auto or Common

SERV 4K (2024)

SERV 4K (2024)

Navigation Buttons (A) Use the Navigation Buttons to cycle through the status screens or switch your configurable settings.
Press Up or Down buttons: Cycle through status screens and navigate menus
Press Center or Forward: Edit configurable settings or cycle through options

Menu Button (C)
Use Serv 4K's Menu button to navigate the status screens.
Press Button: Cycle through the status screens

- **Display settings menu** - Adjust the display brightness, display timeout, and invert time.
- **Main screen** - Displays the device name and firmware version
- **Regulatory info** - Displays the device's regulatory certifications (FCC, EC, IC, etc.)
- **Stream mode -** Displays the current stream mode
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- **Modem bitrates** - Displays the current modem's bitrate.
- **Recording screen** - Hold to enable or disable the recording function
- **Cloud services** - Displays the Cloud service(s) Serv 4K is currently connected to.
- **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
- **Audio Input screen** - Displays the current Audio bitrate. Press to switch from Embedded, analog, or Mixed

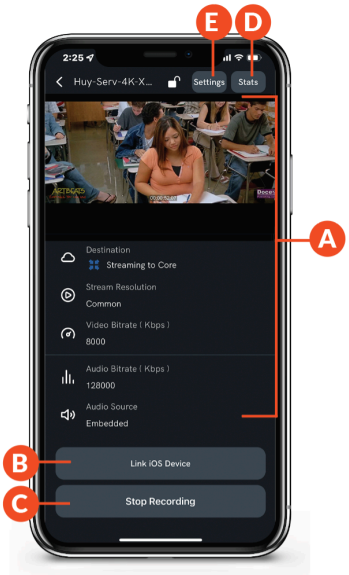
SERV MICRO

SERV MICRO

Menu button (A): Cycle through the status screens or long press to turn the unit on/off
Select joystick (C):
• **WiFi -** Switch from AP to Client mode
• **Ethernet -** Switch from DHCP to Static mode
• **Recording -** Enable or Disable recording
• **Video**: Switch between Auto and HD
• **Bitrate**: Select a video bitrate value (300kbps to 15mbps)
• **Audio Input**: Switch from HDMI, Analog, or Mixed
• **System** - Perform a factory reset

Serv Manager

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



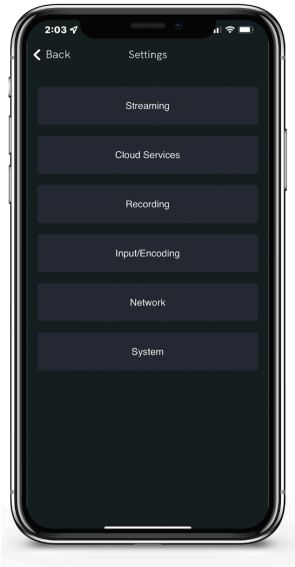
MAIN DISPLAY
Main Screen (A) - Displays the preview, streaming destination, audio and video bitrates, and resolution of your livestream.
Link/Unlink iOS Device (B) - Tap the Link/Unlink iOS tab to enable/disable the use of your cellular phone's data as an Internet connection.

STATS
Tap the Stats (**C**) 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 (**D**) button to configure the following options:

- **Streaming** - Configure your streaming method and destination
- **Cloud Services -** Connect your Serv unit to Core or Frame.io
- **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 Serv unit.



Connect to a Network

You can use the front panel interface, web UI, or Serv App to control and configure Serv 4K to connect to a network.

Connect to a WiFi Network

Serv 4K and Serv Micro both support two wireless modes: **Access Point (AP) Mode** (for connecting directly to your Serv unit using WiFi) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router).

> **NOTE**: Serv 4K can stream to up to 20 clients when connected to a Wi-Fi network in Client mode, or 10 when using Access Point (AP) mode. The number of connected devices is based on streaming bitrate.

1. Connect your phone or laptop to your Serv unit's access point, **Serv-4K-XXXXX** or **Serv-Micro-XXXXX** (**XXXXX** represents the last five digits of your Serv unit's serial number), then enter the default IP address **172.16.1.1** in your web browser.

2. **To switch to Client Mode:** From Serv Manager or the web UI, navigate to the **Network** settings, select **WiFi/Wireless**, then switch to **Client Mode**. From the front panel, press the **Menu** button to navigate to the WiFi screen. Press the **Select/Enter** button to navigate to the WiFi Mode screen, then hold down the **Select/Enter** button to switch to **Client Mode.**

3. From Serv Manager or the web UI, click the **WiFi scan** or **Saved Networks** tab to connect to an available network, then enter the password. Once connected, the display will list the network your Serv unit is connected to.

Connect via Ethernet

1. Connect an Ethernet switch or router to your Serv unit's Ethernet port (**G**).

2. To confirm your Serv unit is connected, press the **MENU** button to navigate to the Ethernet screen and confirm the front panel status reads **Ethernet: Connected** along with the IP address. From Serv Manager or web UI, navigate to the **Network>Wired** settings and confirm the status reads **Connected** along with the IP address.

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

Connect via USB Modem (Serv Micro)

1. Attach a USB modem to Serv Micro's USB port (**L**), then press the **MENU** button on the front panel to navigate to the Modem screen and verify that the modem has been detected and connected.

2. If the modem is not detected, connect your computer to Serv Micro's AP network, then enter the default IP address **172.16.1.1** in the navigation bar to access the web UI and manually configure the modem from the **Network** menu.

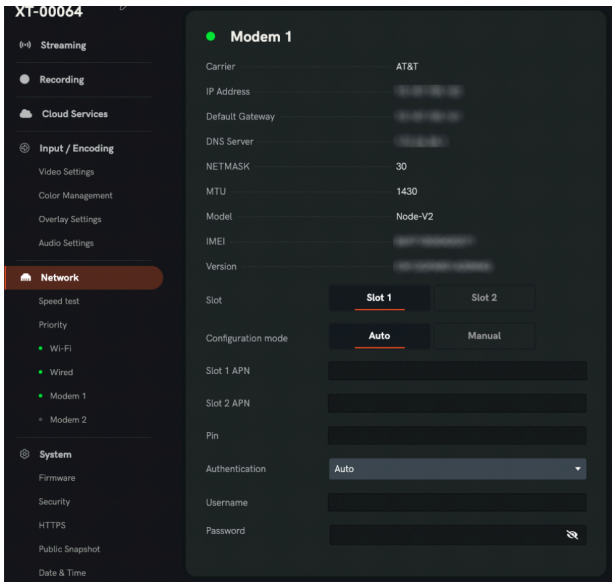
Connect via Node II or USB Modem (Serv 4K)

1. Attach a Node II or USB modem to one or both to Serv 4K's USB-C ports (**I**), then press the **MENU** button on the front panel to navigate to the Modem screen and verify that the modem has been detected and connected.

2. If the modem is not detected, connect your computer to Serv 4K's AP network, then enter the default IP address **172.16.1.1** in the navigation bar to access the web UI and manually configure the modem from the **Network** menu.

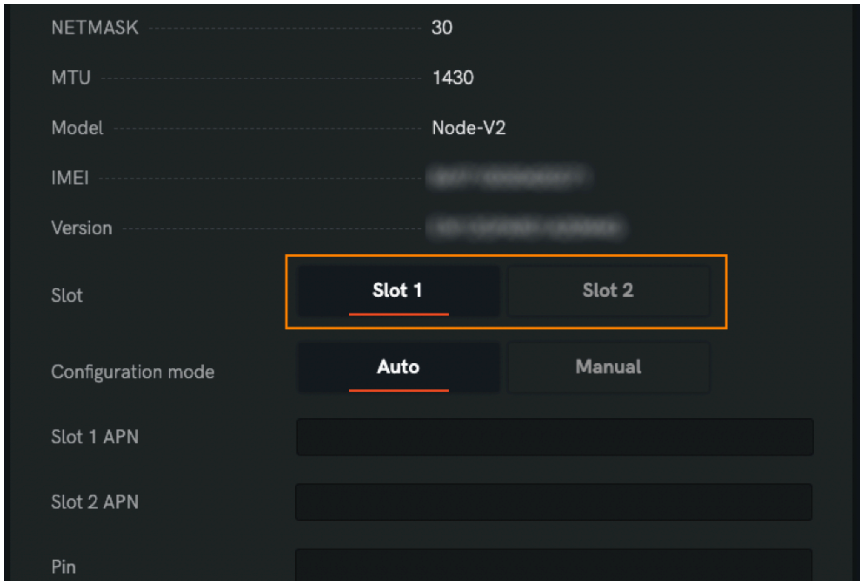
Configure Node II (Serv 4K)

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

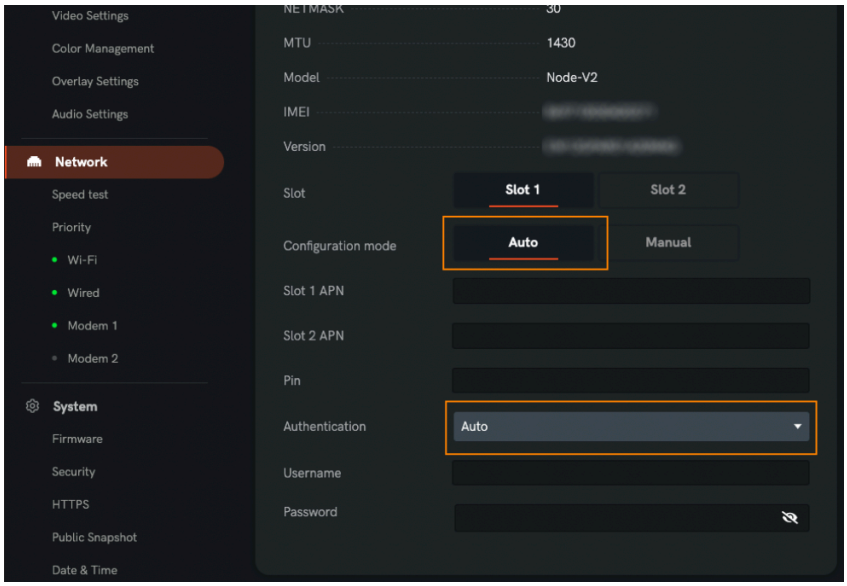


2. Select the slot with the SIM you will be using (**Slot 1 or Slot 2**).

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



Mounting

Serv 4K encoders have a 1/4”-20 threaded hole on the bottom for mounting. Additionally, you can install dual mount pro battery plates on your Serv 4K, allowing you to attach your unit to either the back of a camera or monitor. Serv Micro encoders have a 1/4”-20 threaded hole and two M3 threaded holes on the bottom for mounting.

- Mount the Serv 4K onto the back of your camera keeping the antennas clear of any obstructions.
- Mount Serv Micro vertically, keeping the antennas clear of any obstructions.
- For best results, orient the antennas so each one has clear line−of−sight and are parallel to each other

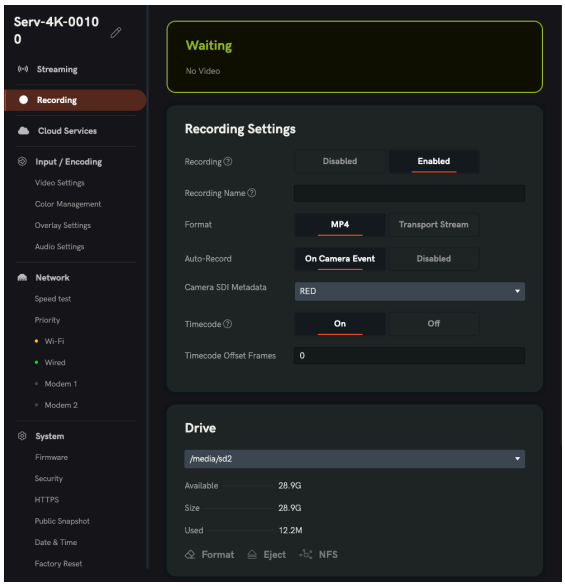
Serv Micro

Serv 4K

Serv 4K encoders can be mounted on a compatible camera

Recording

Both Serv 4K and Serv Micro support recording. Your Serv unit allows you to record your broadcasts directly to an SD Card, configure a network file system (NFS) to store your recorded footage on, or sync your recordings with Core. Each recording is saved with the same resolution and bitrate set on the device.



Recording Settings

- **Recording** - Enable or disable the recording feature.
- **Recording Name** - Create a filename for your recorded footage.
- **Format** - Select either **MP4** or **Transport Stream** format.
- **Auto-Record** - Select **On Camera Event** to send a record flag to your Serv unit when you enable recording from the camera.
- **Camera SDI Metadata (Serv 4K only)** - Select the SDI metadata format according to the camera brand. Serv 4K currently supports **RED**, **ARRI**, **SONY**, and **Canon** camera systems.
- **Timecode -** Enabling Timecode allows your Serv unit to extract timecode data from the camera and embed it into your stream. **NOTE: Timecode is only supported while in MP4 mode and if the input framerate matches the encoding framerate. We recommend setting the framerate to Auto when enabling timecode.**
- **Timecode Offset Frames -** Allows you to offset the time code frame forward or backward so that it matches the timecode on your recorded file.

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

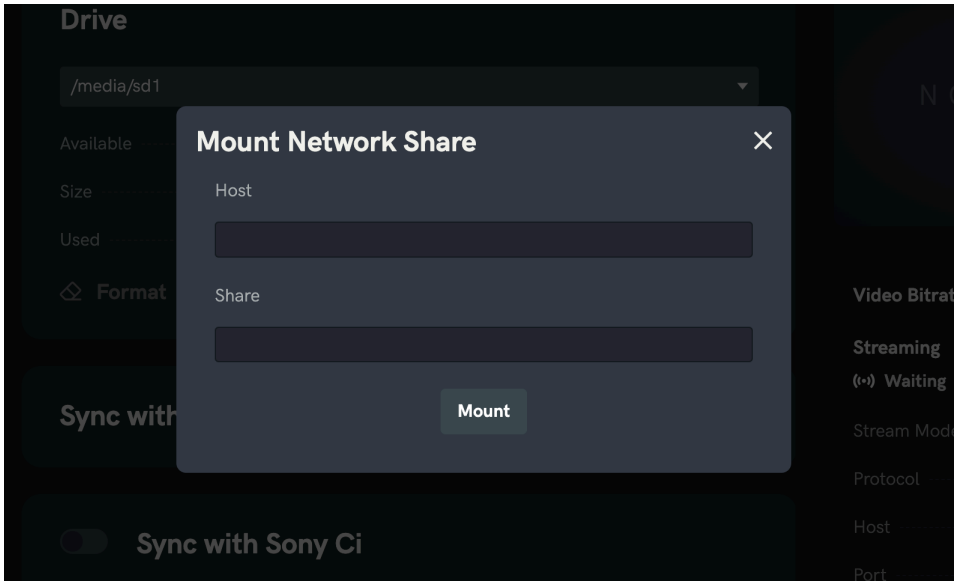
Drive Settings

Record to an SD Card

1. Insert a compatible SD card into the card slot in 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).

Record to NFS

1. Click the **NFS** icon under **Drive**.
2. Enter the host address and share port, then click **Mount**.
3. The share folder will appear under the Media dropdown menu and automatically selected to record to.

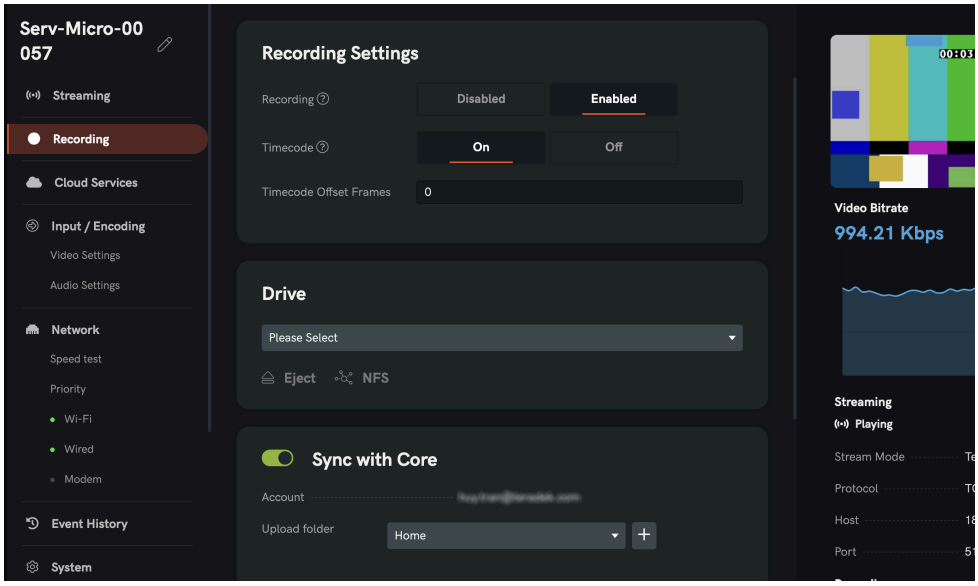


Cloud Services

Sync Recordings with Core

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

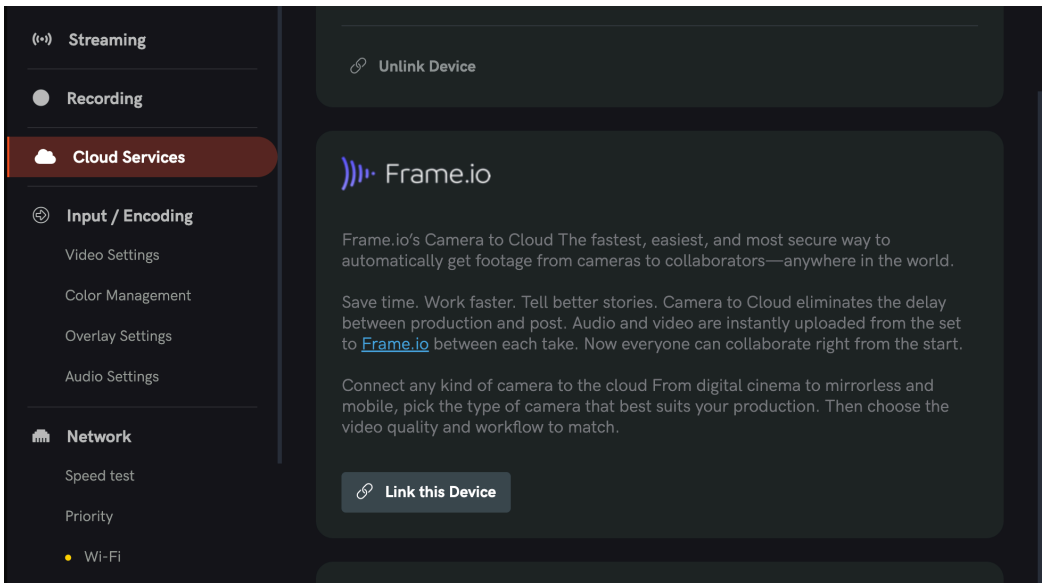
1. Insert a compatible USB drive into the corresponding slot in the back of the unit.
2. Enter the **Recording** menu, and select **Enabled**.
3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).
4. Scroll down and enable **Sync with Core**.
5. Select an upload folder or create a new upload folder by clicking **+**.



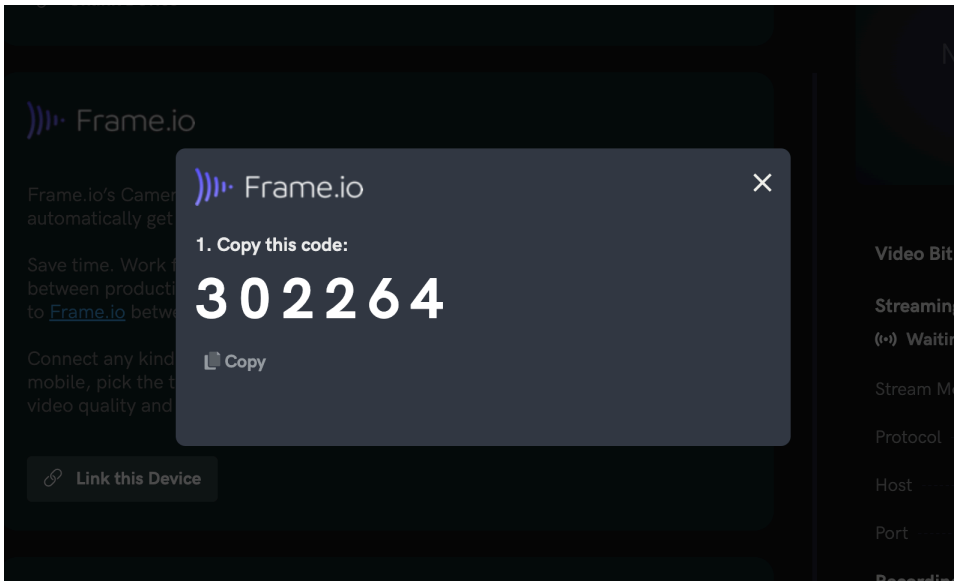
Sync with Frame.io

Frame.io is a collaboration platform that allows users to privately upload, review and share media with their entire crew from anywhere in the world. With Frame.io, video producers and editors can share files, comment on clips in real-time, and compare different versions or edits of a specific clip.
NOTE: You must first have an account to use Frame.io.

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

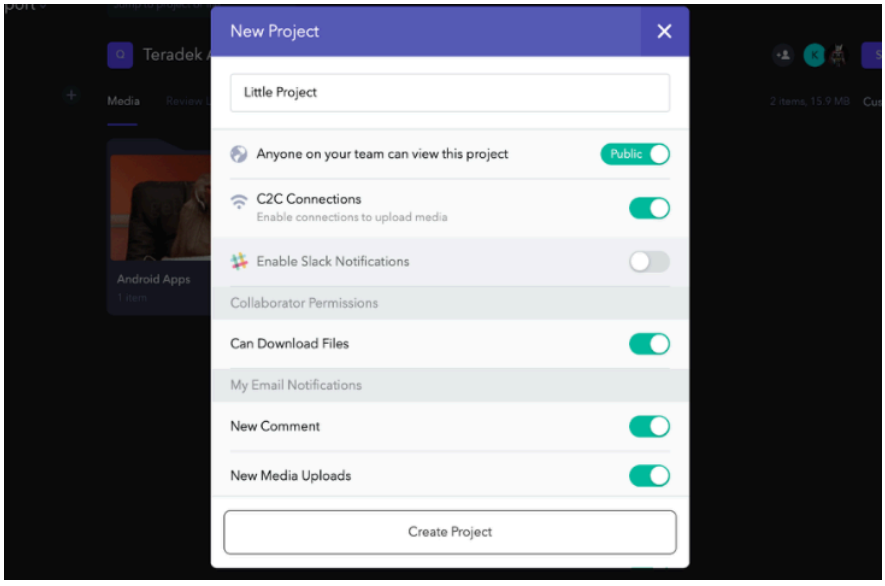


2. Copy the authorization code generated for your Serv 4K by clicking the **Copy** tab.

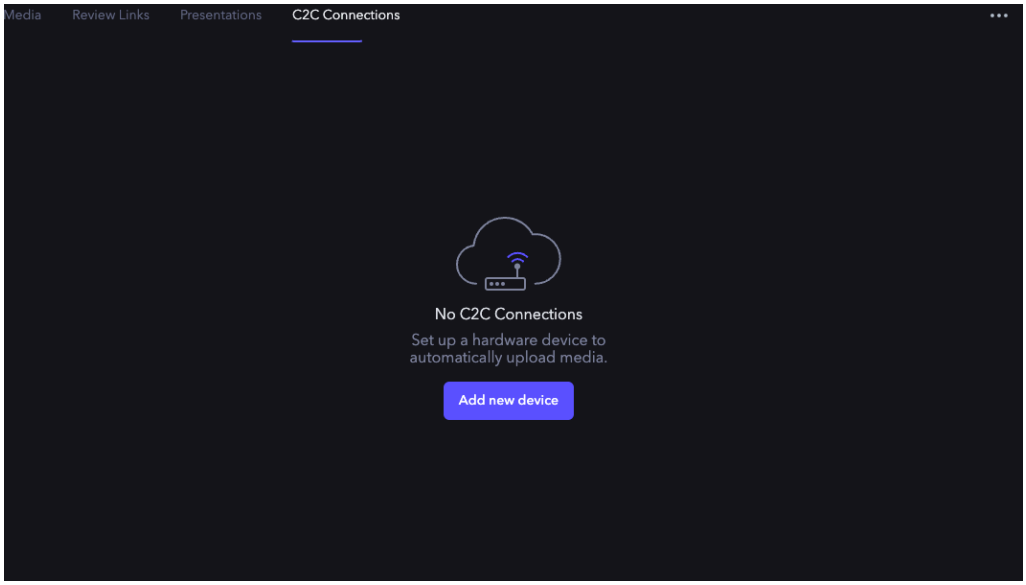


3. Log in to your Frame.io account, then create a project by tapping the **+** sign next to your account name.

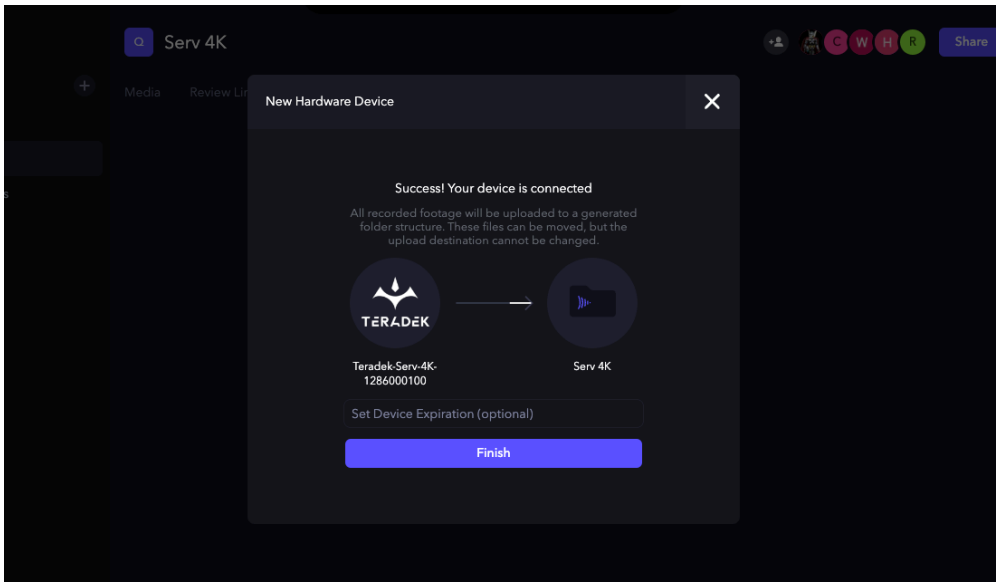
4. Enter a project name, then toggle the **C2C Connections** switch to enable your Serv unit to upload video. Click the **Create Project** tab.



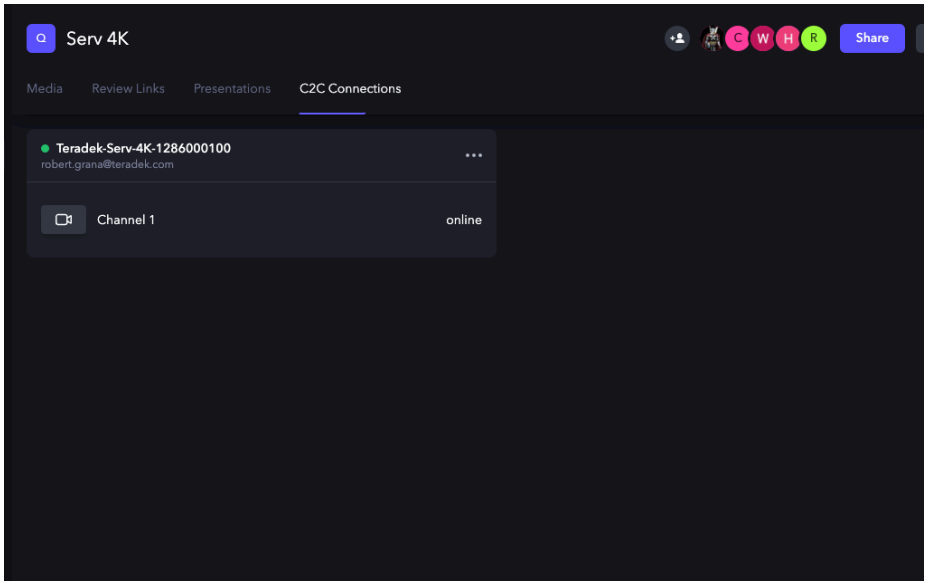
5. Click the **C2C Connections** tab above, then click the **Add new device** tab



6. Click the **Device ready to connect** tab, then enter the authorization code. Click **Authorize**, then click **Finish.**



7. If successful, your Serv unit will be listed under the **C2C Connections** tab. All future recordings will be listed under the **Media** tab.


Serv 4K
Share
Media
Review Links
Presentations
C2C Connections
Teradek-Serv-4K-1286000100
robert.grana@teradek.com
Channel 1
online

Supported Cameras for Teradek C2C Encoders

Teradek is the on-ramp to the cloud. Our encoders push live streams and instant recordings to a variety of cloud platforms for viewing and playback. Recordings can also be used for editorial, either as the hero negative or as a proxy. If used as a proxy, it is important for recordings to match the camera's original timecode and filename, so they can later be relinked to the Original Camera Footage (OCF). To do this, our encoders:

1. Read the metadata coming from the camera's SDI or HDMI feed
2. Generate instant encodings
3. Check match accuracy
4. Upload to the cloud

Each camera manufacturer and each camera define their metadata differently. Teradek encoders must therefore parse the information coming out of the SDI feed and determine how to best pull the necessary information.

We have tested the following cameras for their known accuracy. Other cameras may also work.

Tip: If using a camera not on this list, set your Teradek encoder's "Camera Record Trigger" to "Sony" in the encoder's Web UI.

Teradek SDI Encoders for Supported Cameras

- Teradek Cube 655
- Teradek Serv 4K
- Teradek Prism Series (all encoders)

Manufacture	Camera	Record Trigger	Record Trigger by default	Record Trigger Setting Name	Timecode Match	Clipname Match
ARRI	Legacy ALEXA	?	?	N/A	?	?
	ALEXA 35	?	?	N/A	?	?
	AMIRA	?	?	N/A	?	?
RED	DSMC2 Family	?	?	N/A	?	?
	DSMC3	?	?	N/A	?	?
	Komodo	?	?	N/A	?	?
Panavision	DXL2	?	?	N/A	?	?
Sony	Venice	?	✖?	HD SDI Remote I/F	?	?
	F55	?	✖?	HD SDI Remote I/F	?	?
	FS/FX Family (except FX3)	?	✖?	HD SDI Remote I/F	?	?
Canon	C300MkIII	?	?	Rec Command: On	?	?
	C400	?	?	Rec Command: On	?	?
	C500MkII					

		?	?	Rec Command: On	?	?
	Legacy C Series	?	✖?	Rec Command: On	?	✖?
Panasonic	Varicam	?	✖?	SDI Record Remote	?	✖?
	EVA1	?	✖?	SDI Record Remote	?	✖?

Teradek HDMI Encoders

- Teradek Serv Micro
- Teradek Prism Series with HDMI inputs

HDMI Metadata is not as standardized as SDI Metadata. In fact some information like Clipname is not fed through HDMI at all.

The following cameras are tested for accurate timecode matching.

Manufacture	Camera	Record Trigger	Record Trigger by default	Record Trigger Setting Name	Timecode Match	Clipname Match
Sony	A7R	?	No	See Below	?	✖?
Panasonic	GH5	?	No	See Below	?	✖?
Fujifilm	X-H2S	?			?/✖?	✖?
Canon	EOS RP	?	No	See Below	?	✖?
Canon	XC10	?	No	See Below	?	✖?
Blackmagic	Pocket	?	Yes	N/A	?	✖?

Enable HDMI triggers and Timecode

Sony A7RIII

1. Open Camera menu, navigate to System settings page 3
2. Under HDMI Settings, set TC Output to ON and REC Control to ON

Panasonic DC-GH5

1. Change REC format to anything besides MP4 or MP4 HEVC
2. Enable HDMI Time Code Output under Time Code
3. Enable HDMI Recording Control under HDMI Rec Output

Canon (tested with XC10)

1. Open Camera menu and navigate to System Setup, P.3
2. Select HDMI Time Code, set to ON
3. HDMI Rec Command option becomes available, Select it and set to ON

NOTE: Timecode is currently only accurate when used with free run timecode, Record run timecode support will be added in a future update.

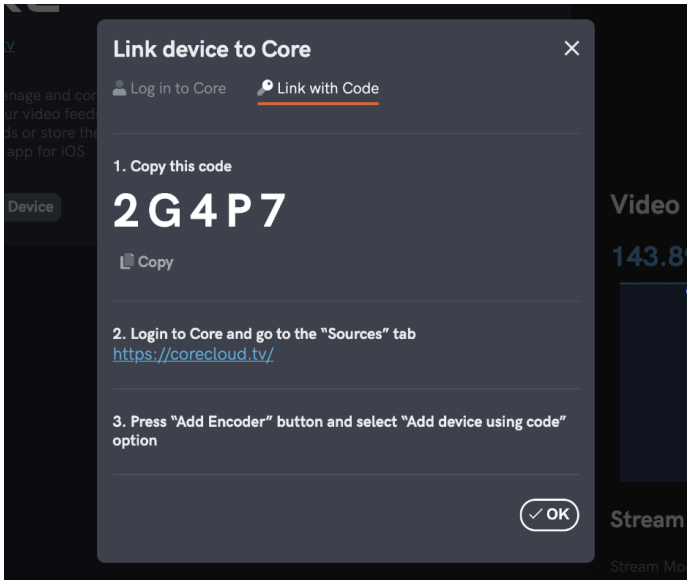
Core

Serv devices 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.

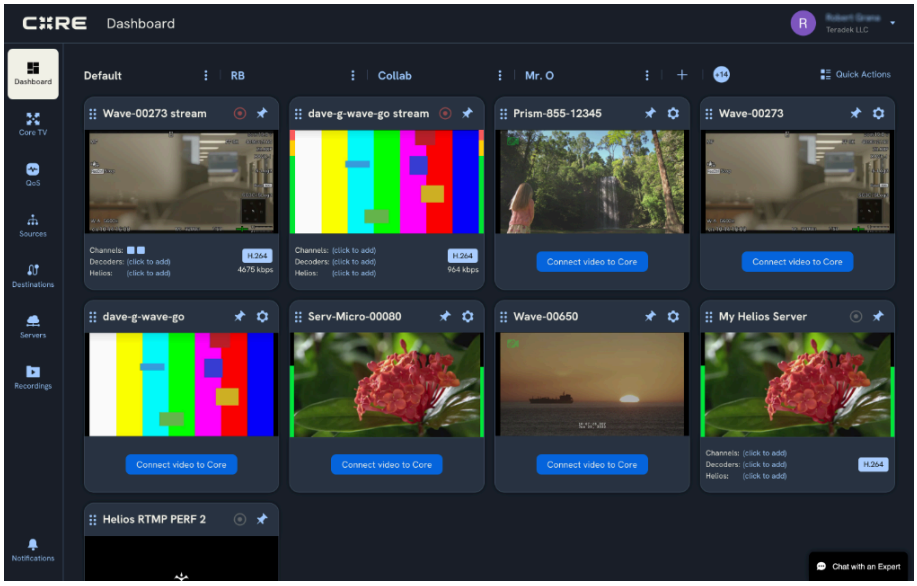
- Bond multiple Internet connections, increasing your broadcast's bandwidth and reliability
- Remotely control Serv from anywhere in the world
- Route live video feeds to multiple destinations and streaming platforms using the web UI
- Record streams and archive them to the cloud in real-time

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 Serv to your Core account, then click **Next**.
   Link with Code: Copy the authorization code generated for your Serv, then follow the instructions.

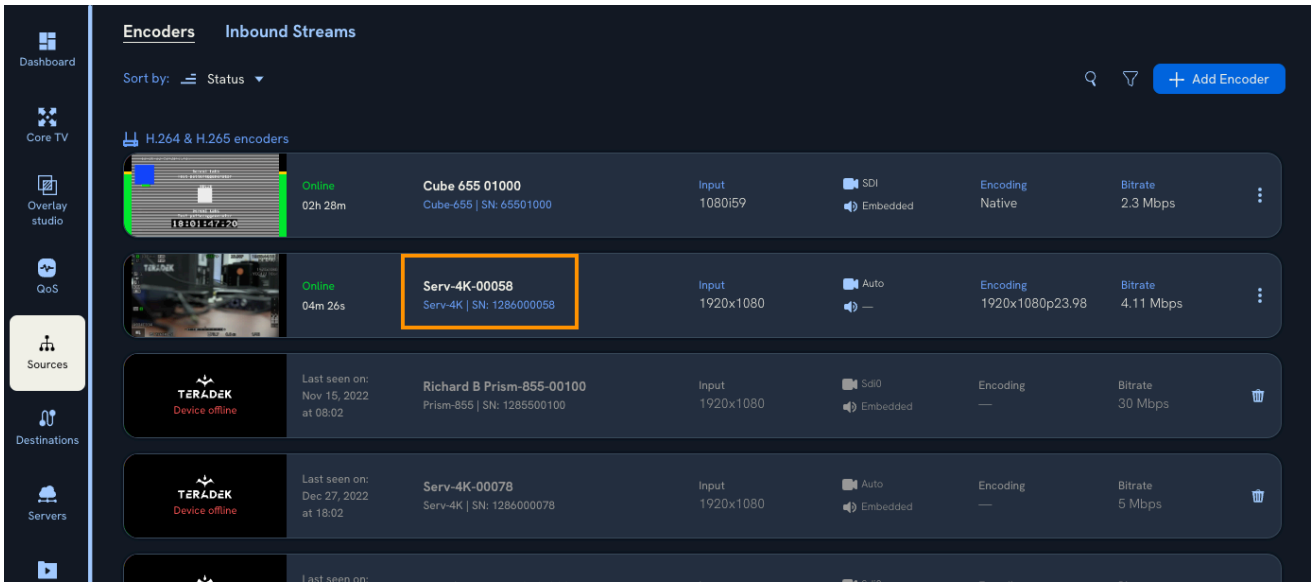


3. Select an Organization (if applicable).
4. Once a connection is established, you can configure and control Serv from the Core dashboard.

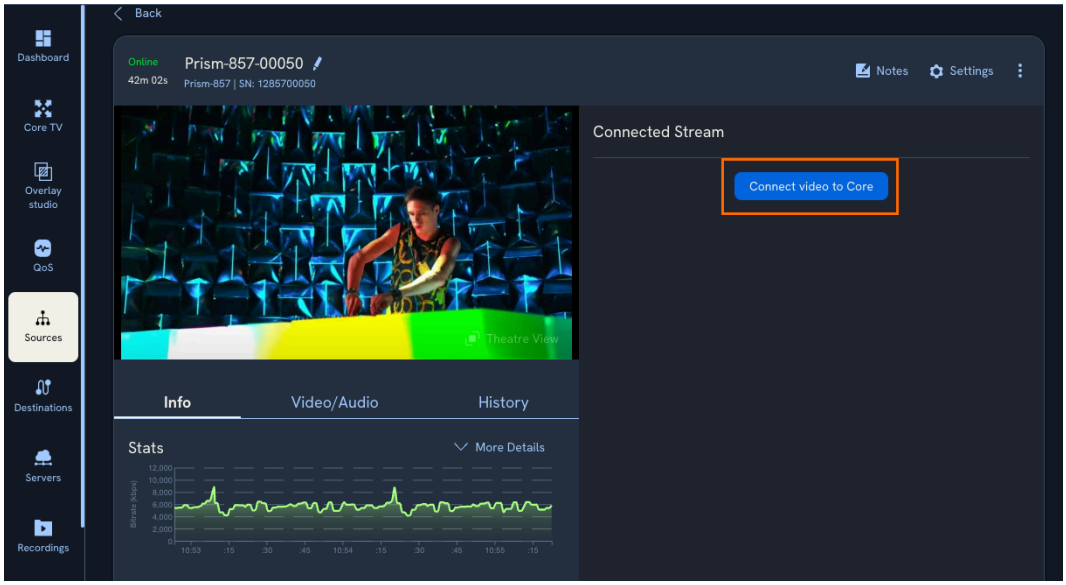


CONNECT TO A SERVER

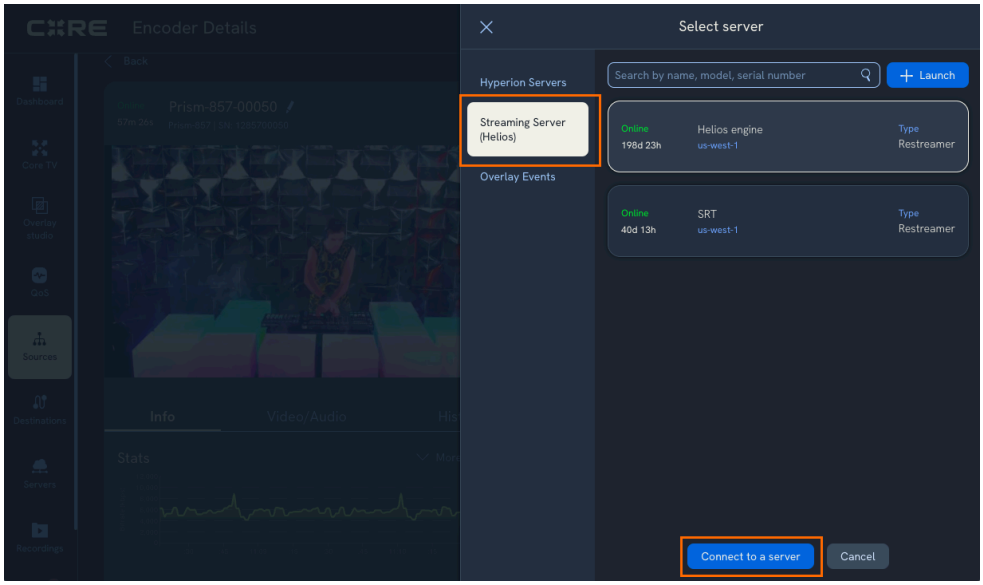
1. From the Sources tab, select your Serv unit by clicking on the name of the device.



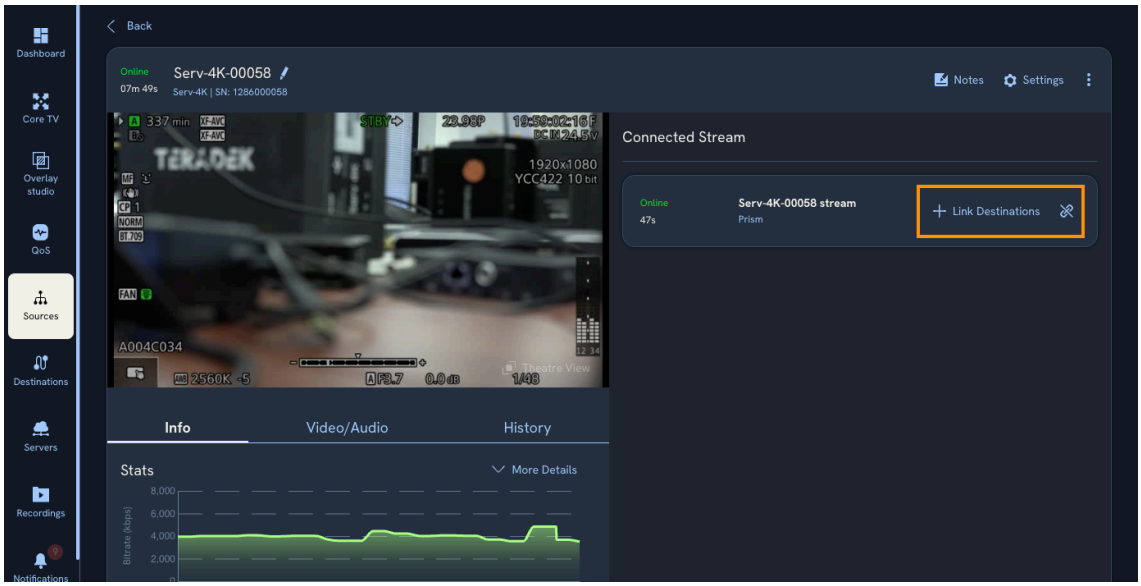
2. Click the **Connect video to Core** tab, then select **Streaming Server (Helios)**. If you haven't configured a server to your Core account, review [this tutorial] for steps on how to launch a new server.



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

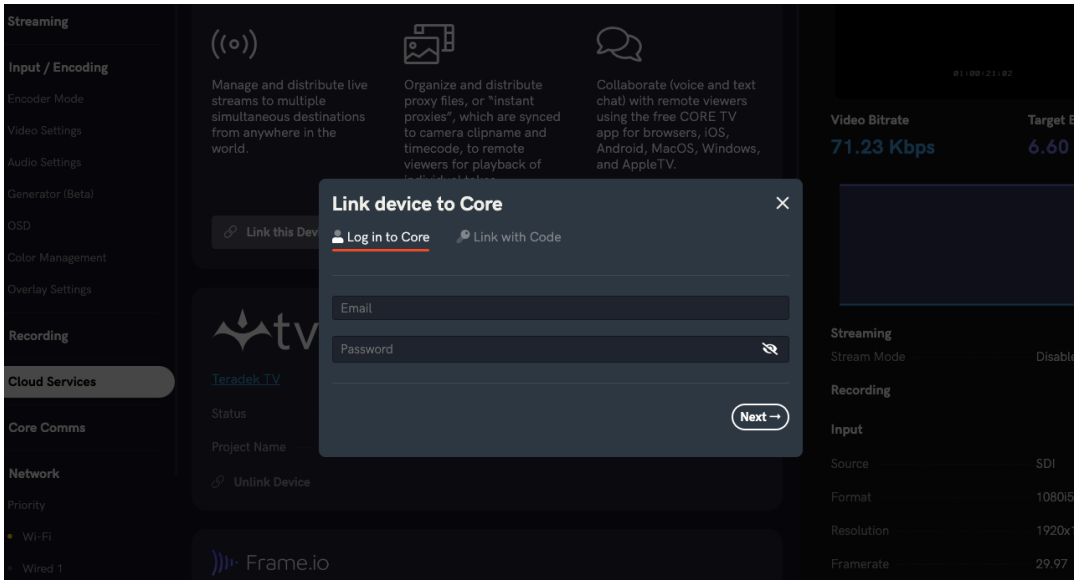
Core Comms is an all-encompassing, cloud-powered communication ecosystem that allows users to communicate and collaborate with broadcast stations, camera operators, producers, and remote staff via Core Share. This comprehensive IFB and Intercom solution empowers broadcasters with unparalleled efficiency,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

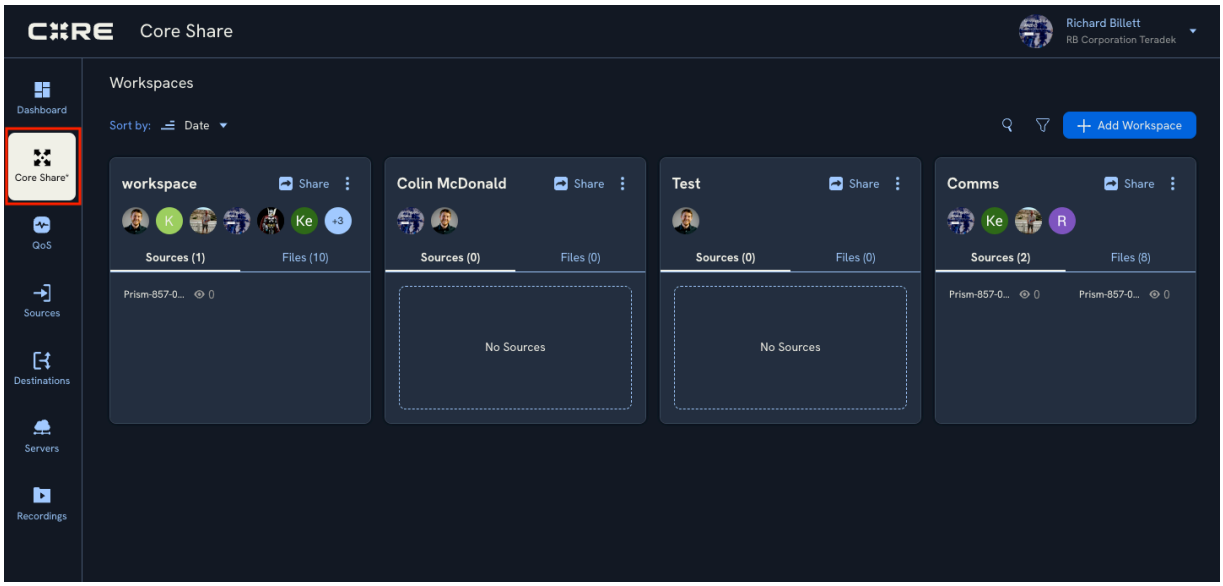
LOGIN TO CORE

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.

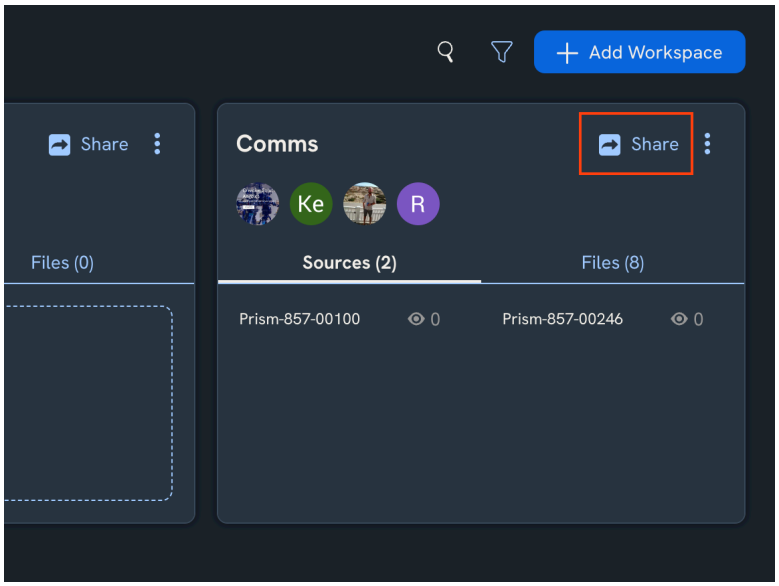


SHARE A WORKSPACE

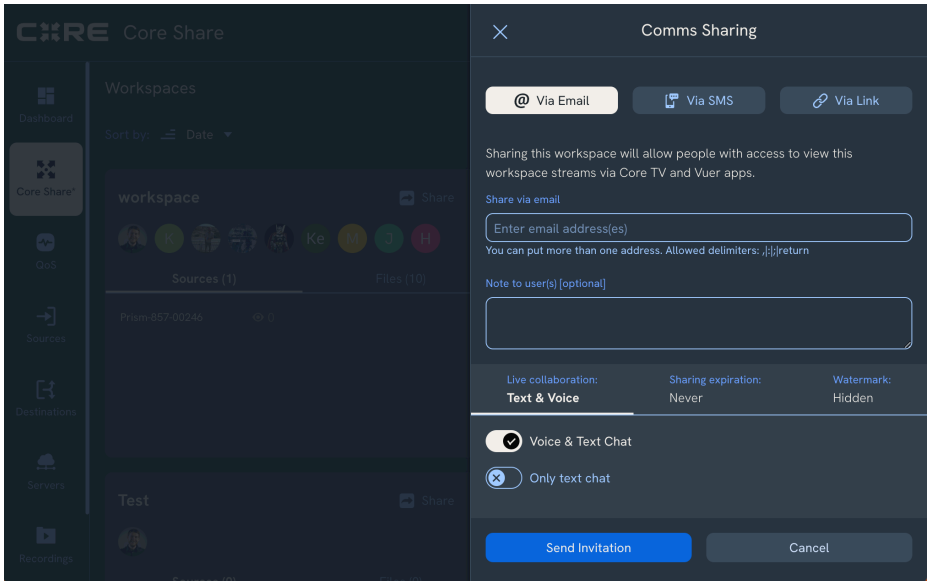
1. Click **Core Share** from the sidebar menu, then select the workspace you will share.



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

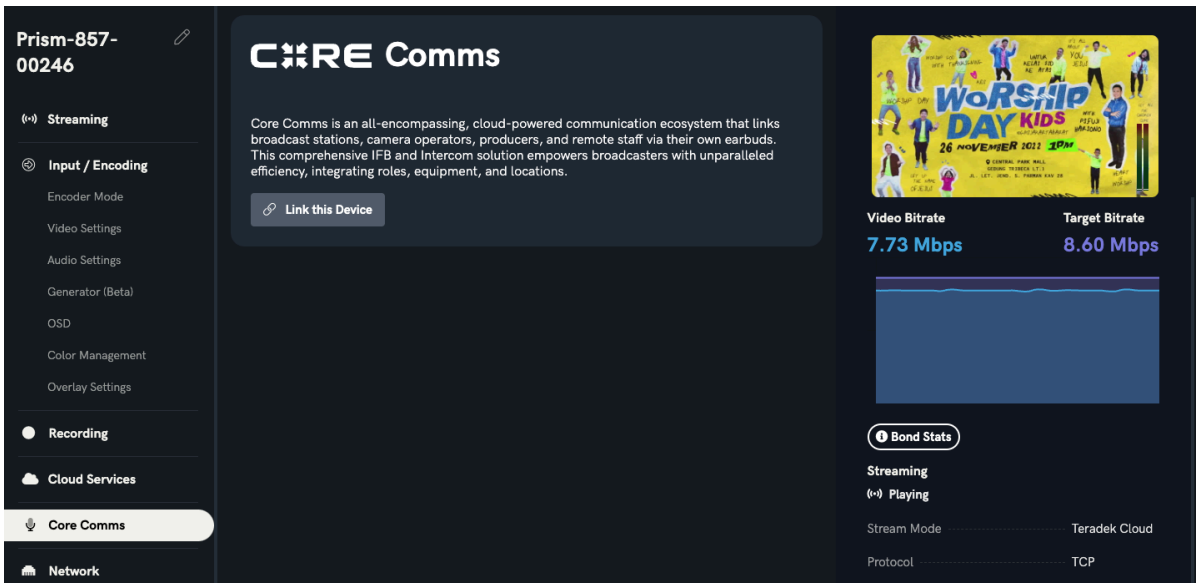


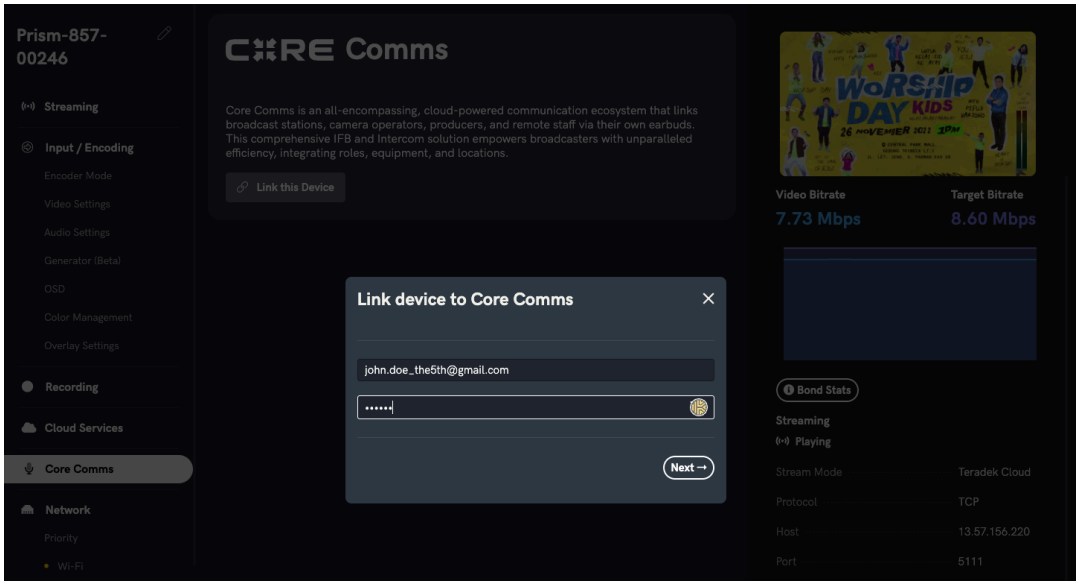
3. Select how you want to share the workspace (email, SMS, or link). To generate a share code **Via Email** or **Via SMS**, enter the email address or phone number, then click **Send Invitation**. To share **Via Link**, click the Generate tab, copy the link, then share the URL using any communication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



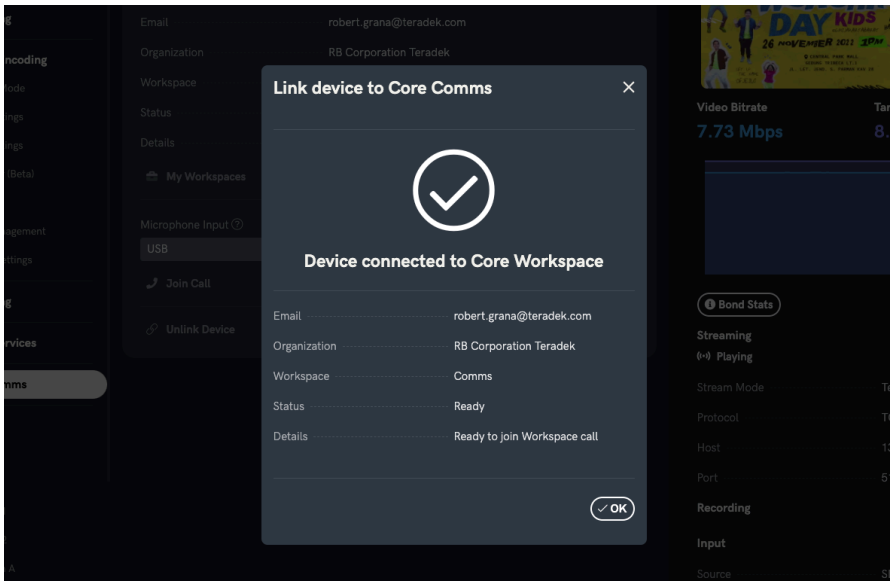
LINK YOUR DEVICE

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**.



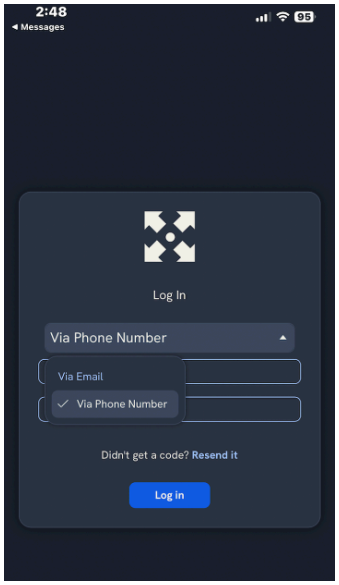


3. Select an Organization (if applicable), then click **Connect**. Your device is now connected.



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.

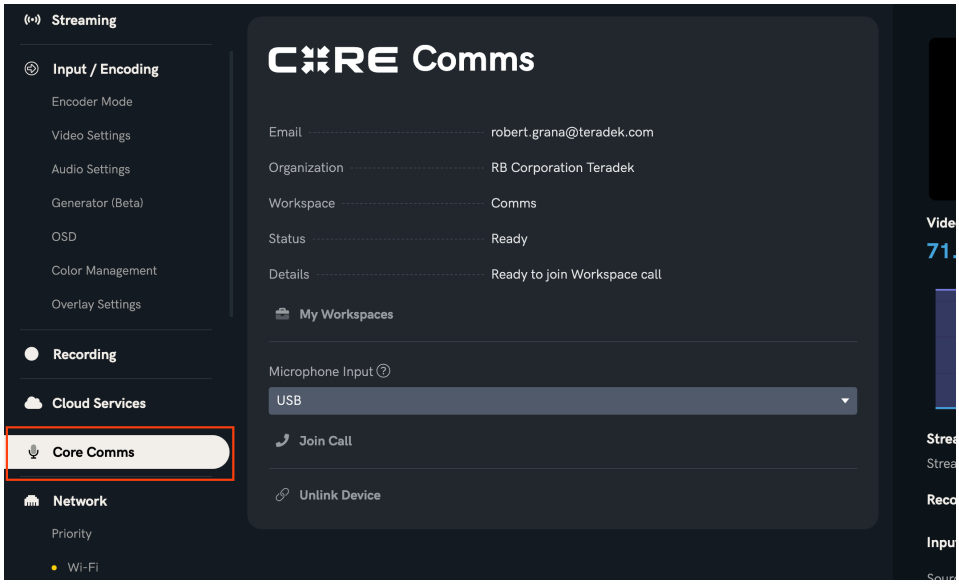


3. Enter your phone number and the share code provided in the text, then tap login.

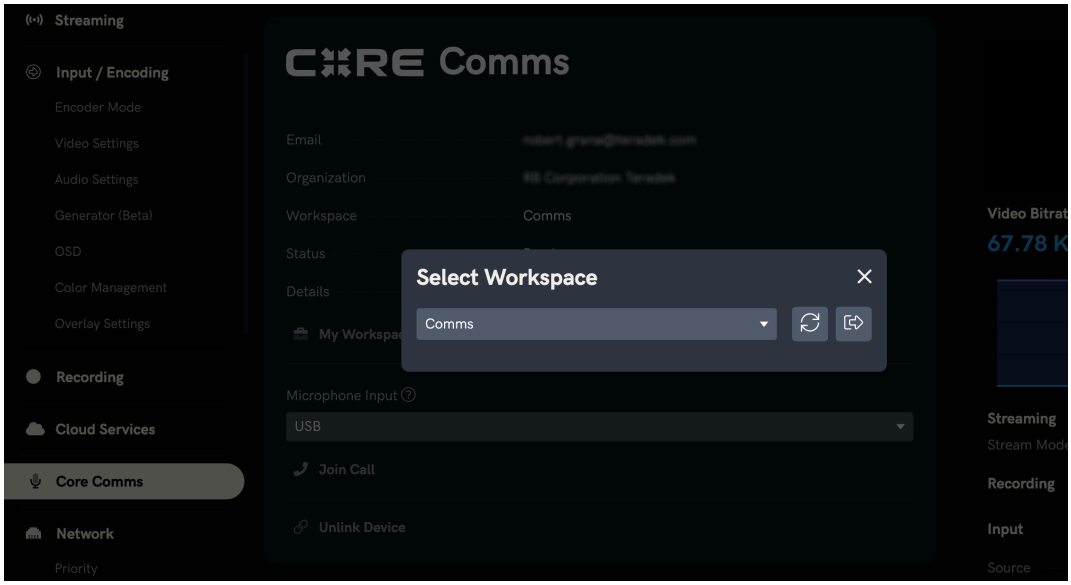
COMMUNICATE VIA CORE COMMS

COMMUNICATE VIA DEVICE

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

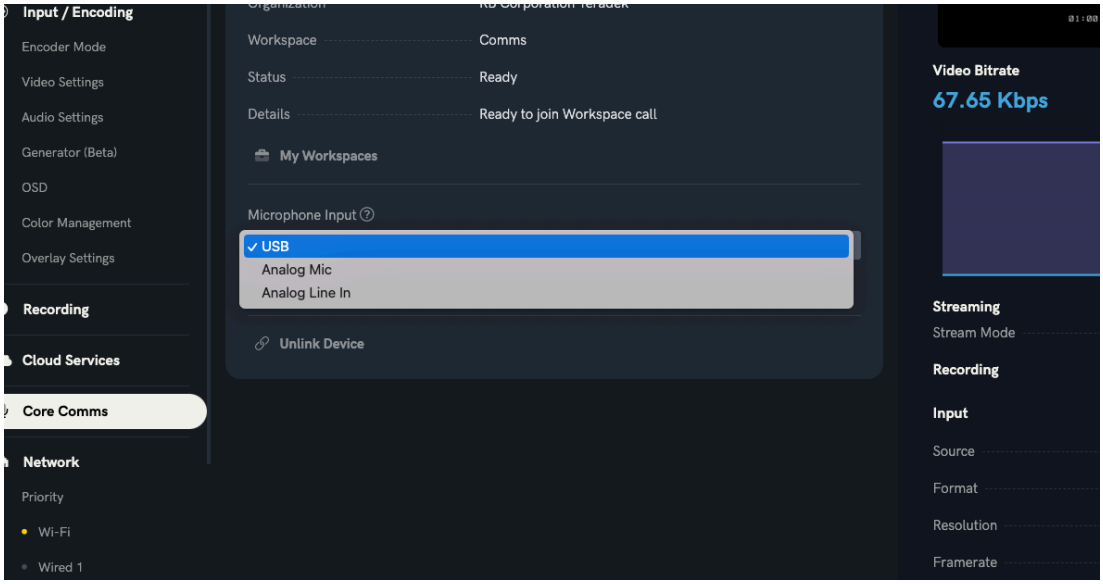


2. Tap the My **Workspaces** tab and select a workspace.

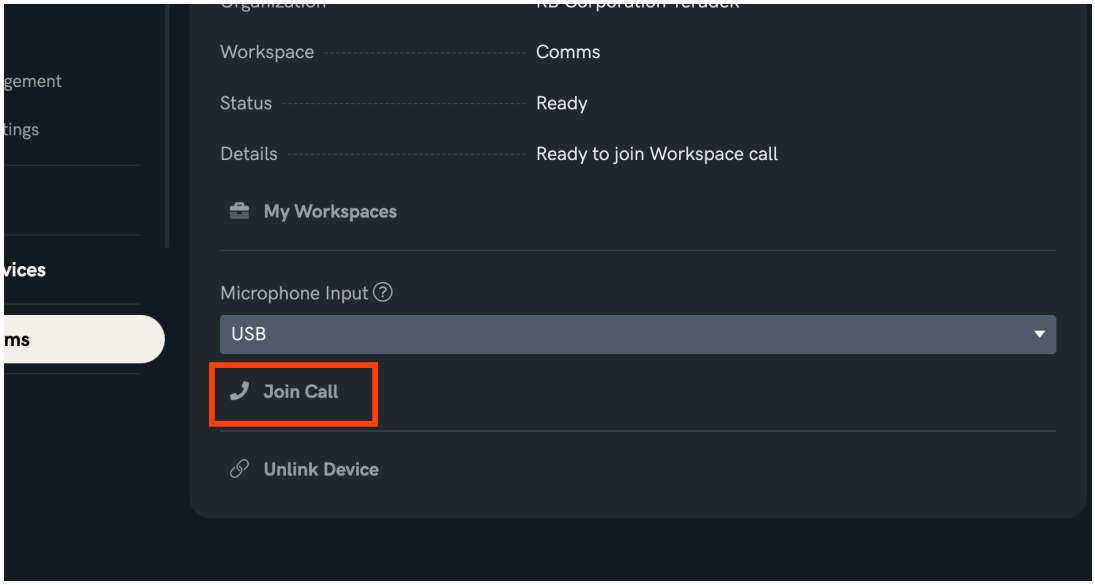


3. Connect your headphones/microphone to your device.

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

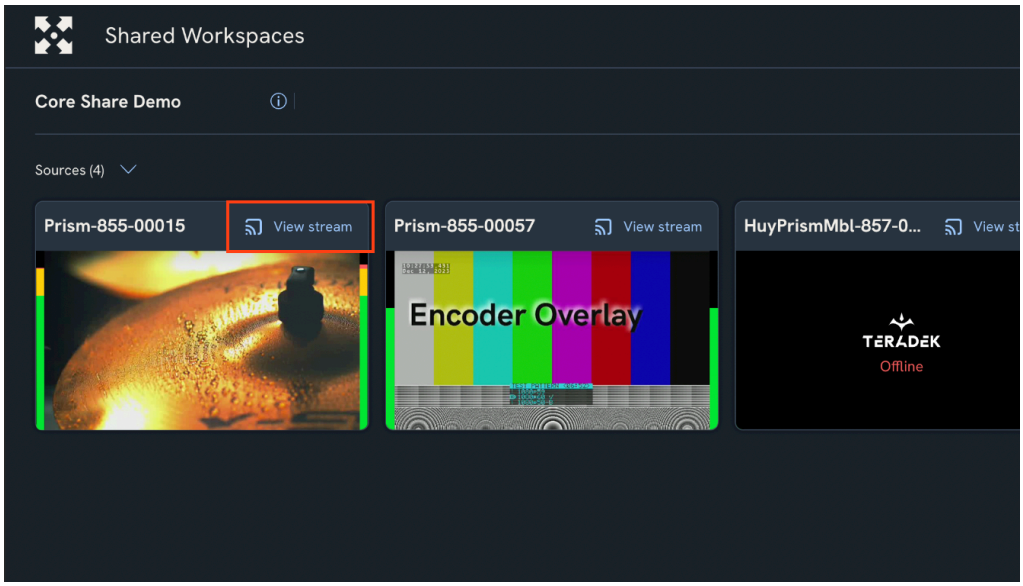


5. Tap the **Join Call** tab.

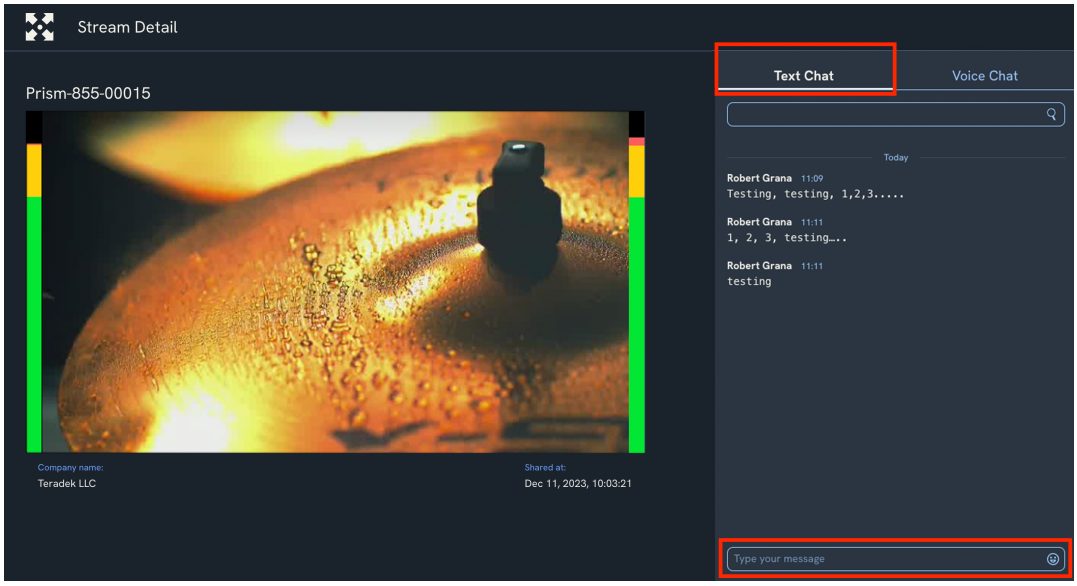


COMMUNICATE VIA SHARED LINK

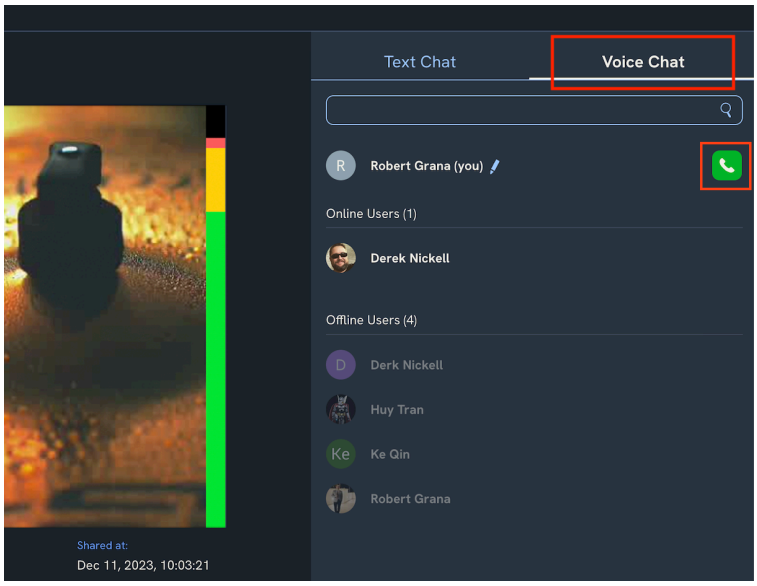
1. Click on the shared link you received to open the workspace in your web browser.
2. Click the **View stream** tab to open the **Stream Details.**



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.

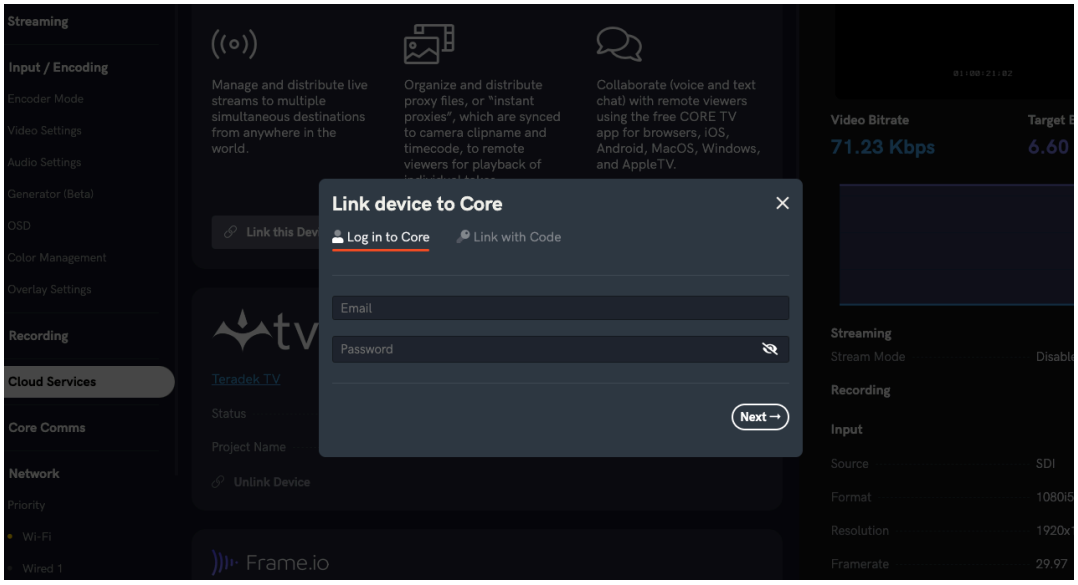
Table of Contents

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

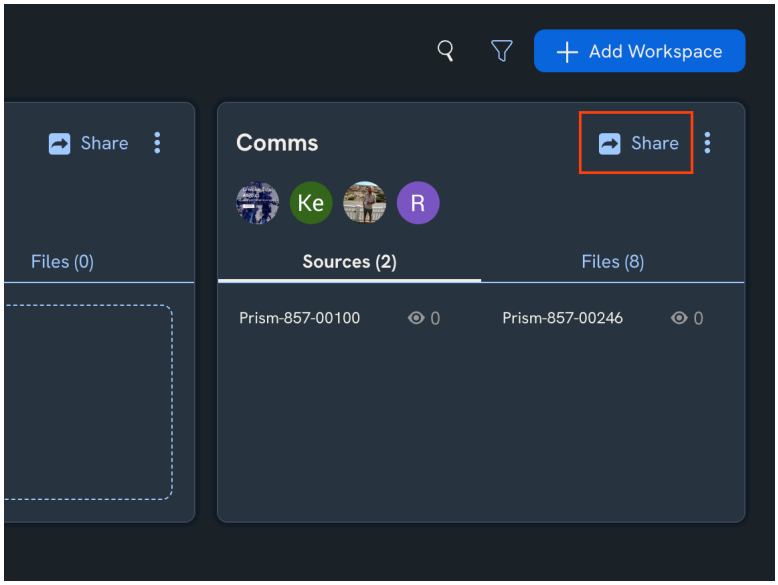
Connect Your Device

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 Serv to your Core account, then click **Next**.
   Link with Code: Copy the authorization code generated for your Serv, then follow the instructions.
3. Refer to other sections in this guide for more information about using your encoder with Core.



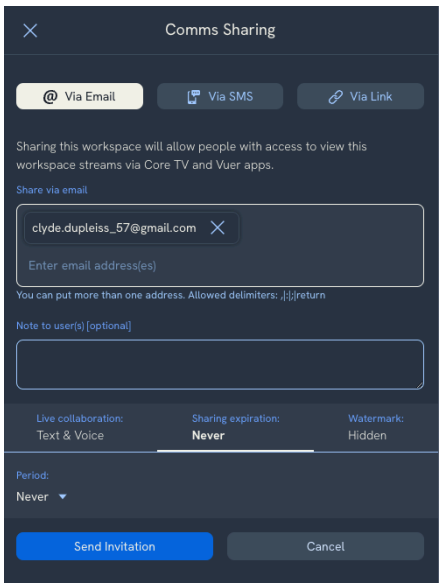
Share a Workspace

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.

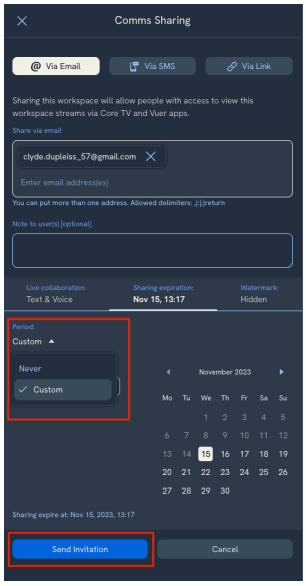


Sharing Via Email

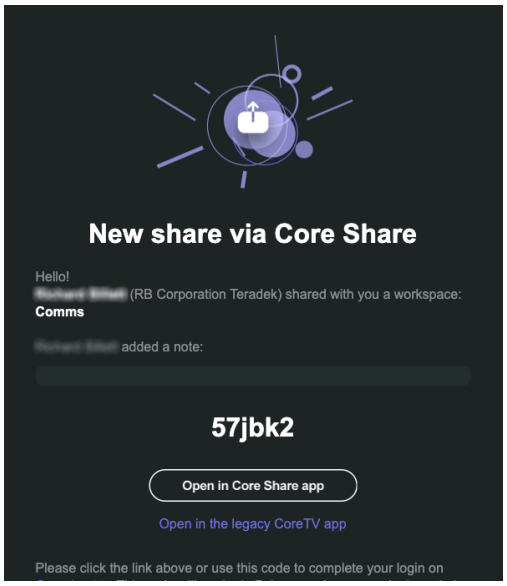
1. Click the **Via Email** tab.
2. Enter the email address(es) in the **Share via email** field.



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**.

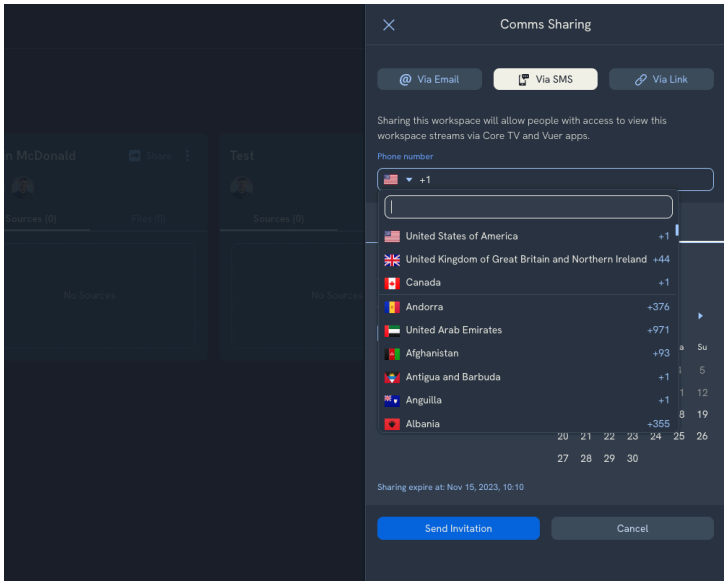


The people you have shared the workspace with will receive an e-mail like the one pictured below that contains their share code.

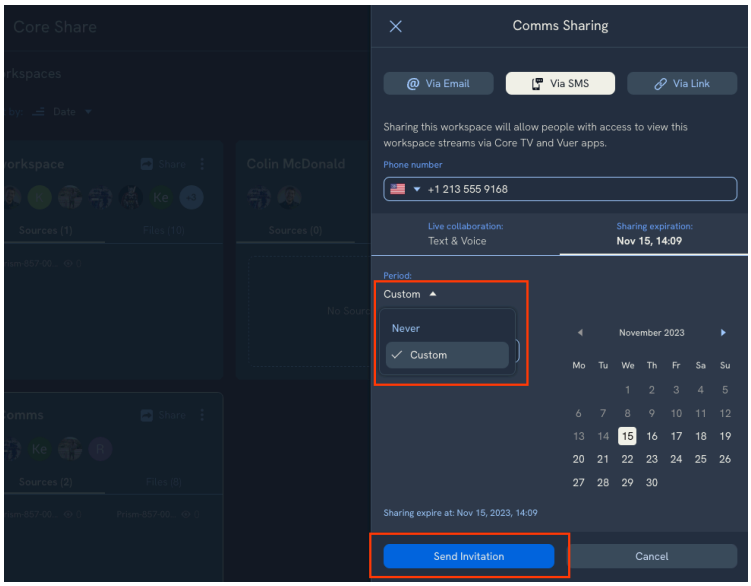


Sharing Via SMS

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

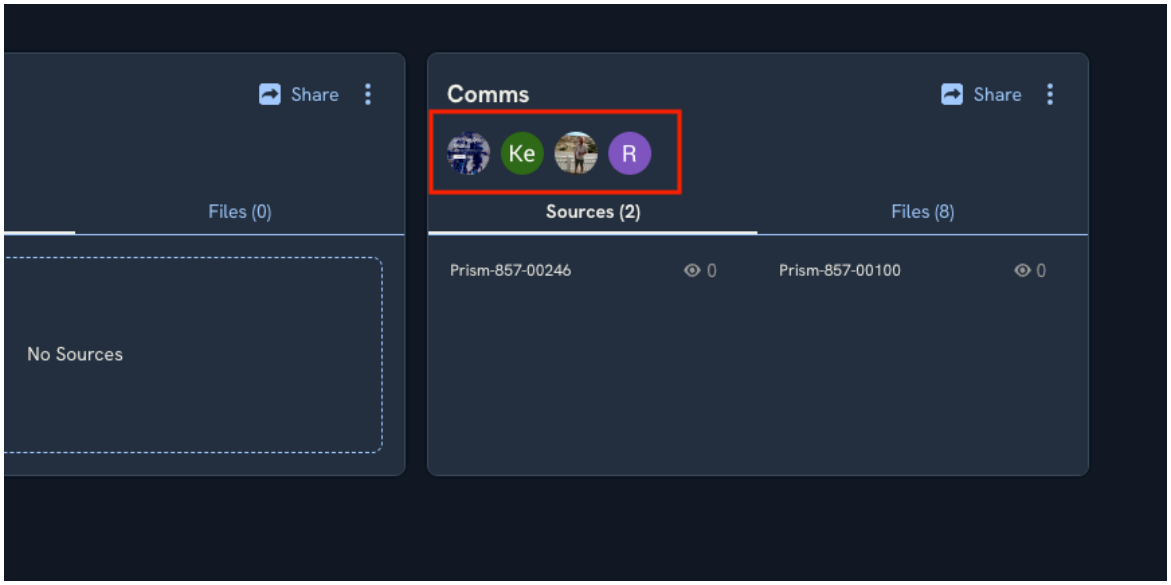


3. Click **Sharing Expiration** to enter a sharing period (**Never** or enter a **Custom** date).
4. Click **Send Invitation**. Core will send an SMS to the phone number you entered containing the share code.

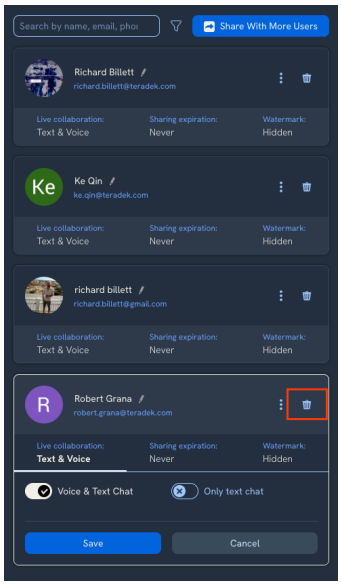


Unshare a Workspace

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.

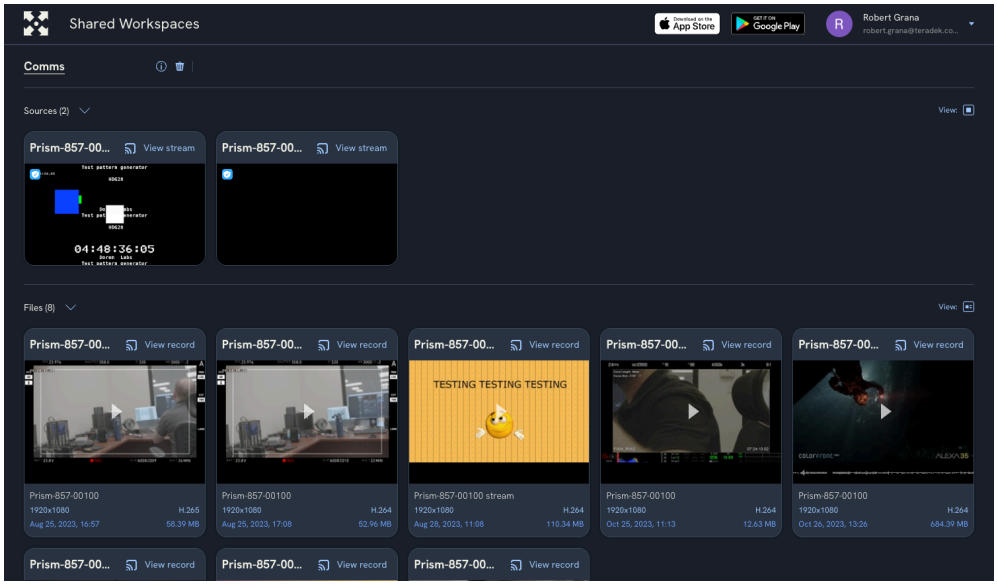


View a Workspace

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

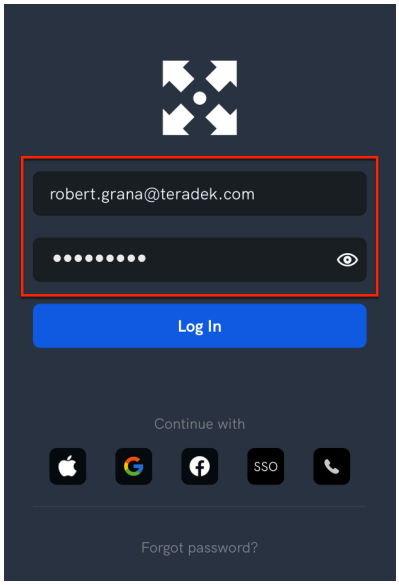
Core Share is a live production collaboration app that enables Core users to view shared workspaces and communicate with their entire production team in real-time. To get started, download the Core Share app, available for iOS, Android, and Windows.

Download here for iOS

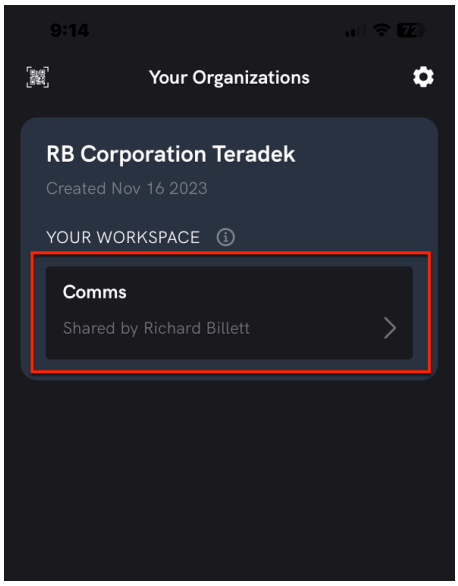
Download here for Android

Core Share on the Teradek Downloads Page

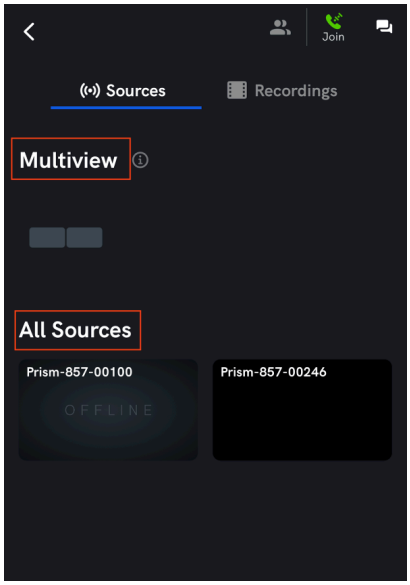
1. Download the **Core Share App** (iOS /Android). See links above.
2. Ensure the admin has shared a workspace with you. You will receive a share code via either e-mail or SMS.
3. Enter your email/phone number and access code. You can also enter your **Core** credentials if you have a Core account.
4.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

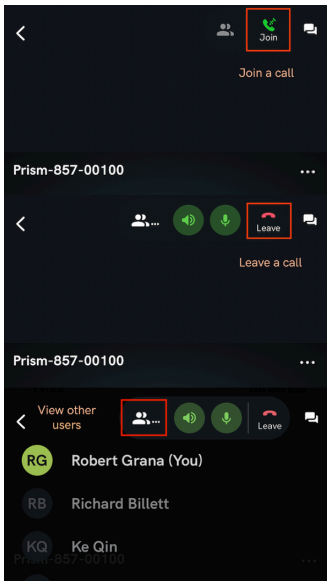


Voice Chat

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.

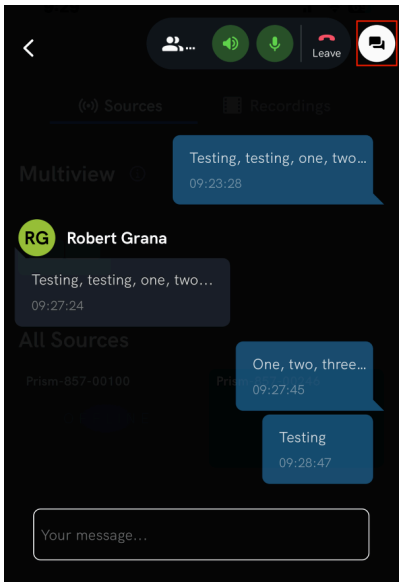
Visit the **Core Comms** article for More information on how to enable and use Core Comms with your encoders and decoders: **https://guide.teradek.com/a/1744234-core-comms**

- 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.

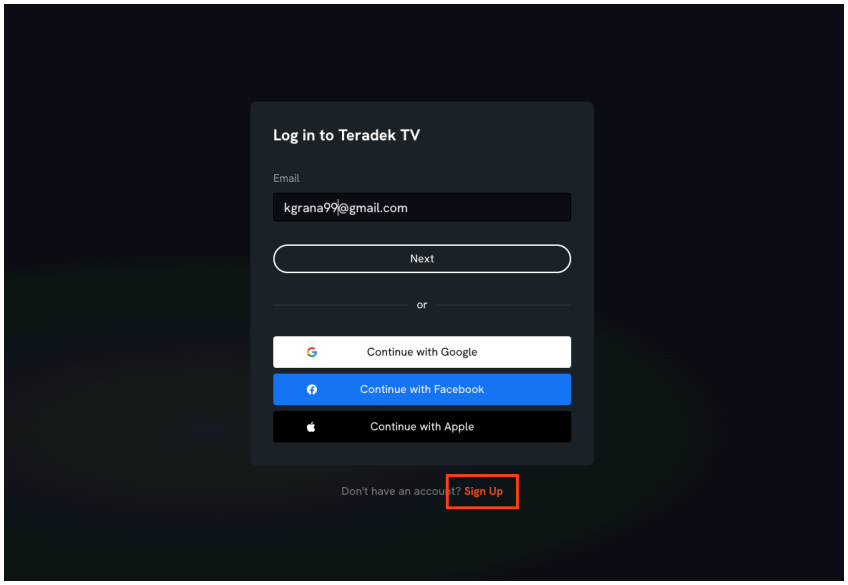


Teradek TV

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

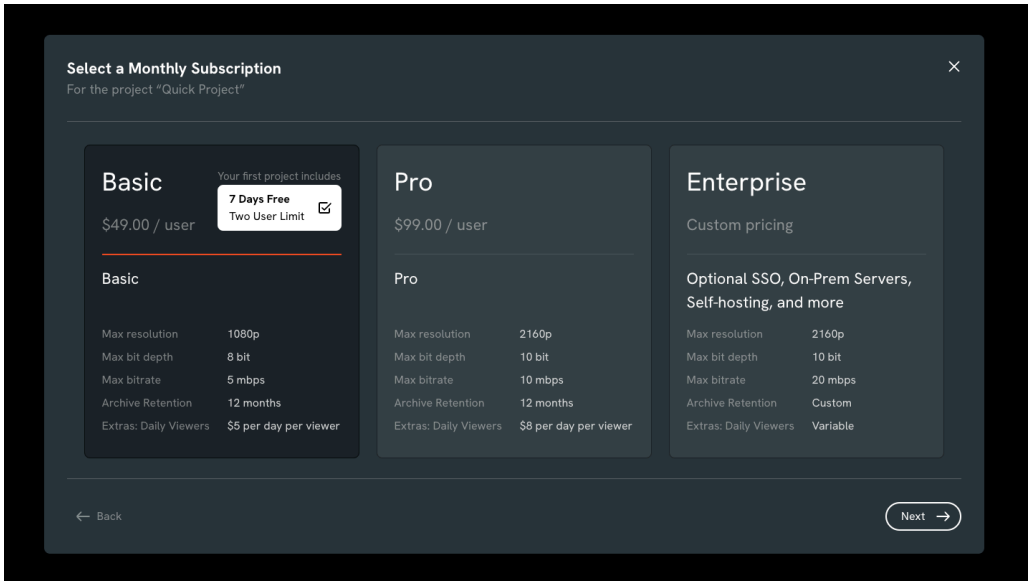
1. Visit https://teradek.com/pages/teradek-tv and click the **Sign Up** tab to create an account. If you already have an active subscription, you can just log in to your account and skip to Create a Project.



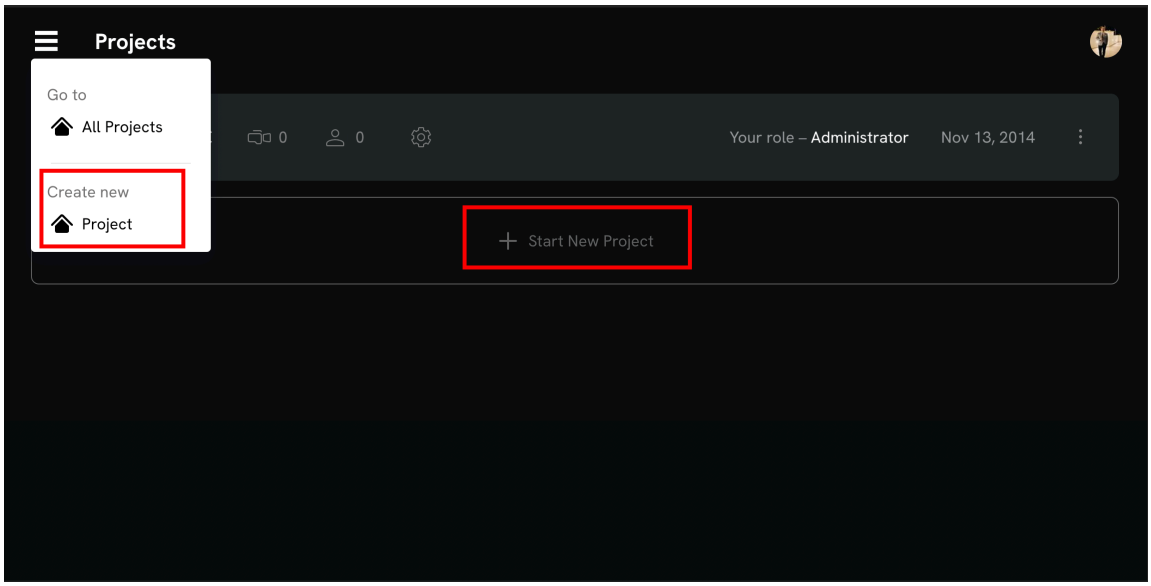
2. You will receive a confirmation email after creating an account. Confirm your email address, then log in to your new account.

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**.

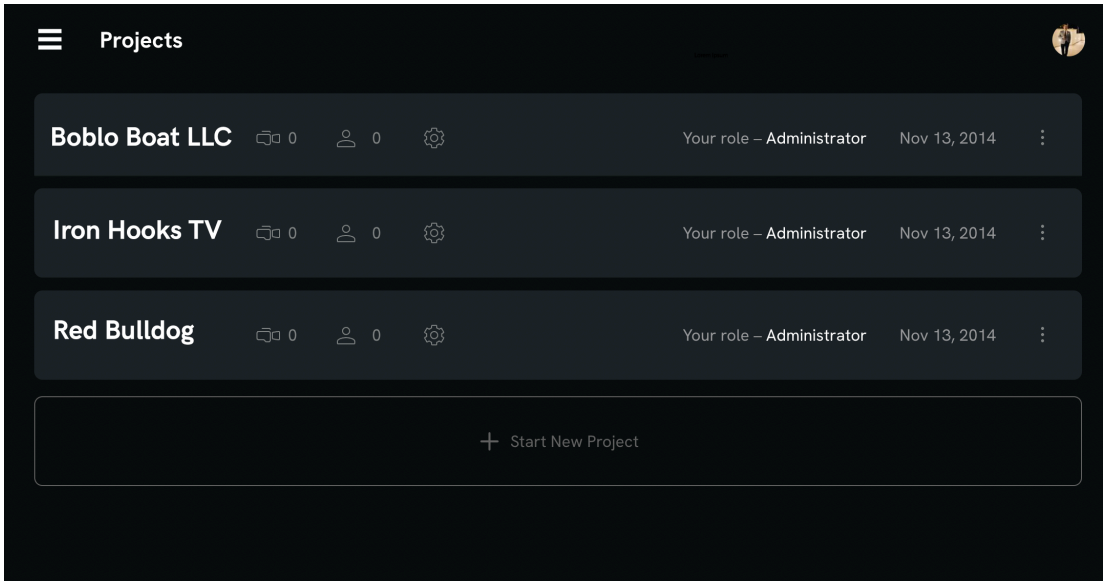


2. Your new project is now listed on the **Projects** page. To create a new project, click **Create New Project** from the settings tab on the top left corner, or click the **Start New Project** thumbnail at the bottom of the Projects list.



Connect to Teradek TV

To connect your Serv 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.

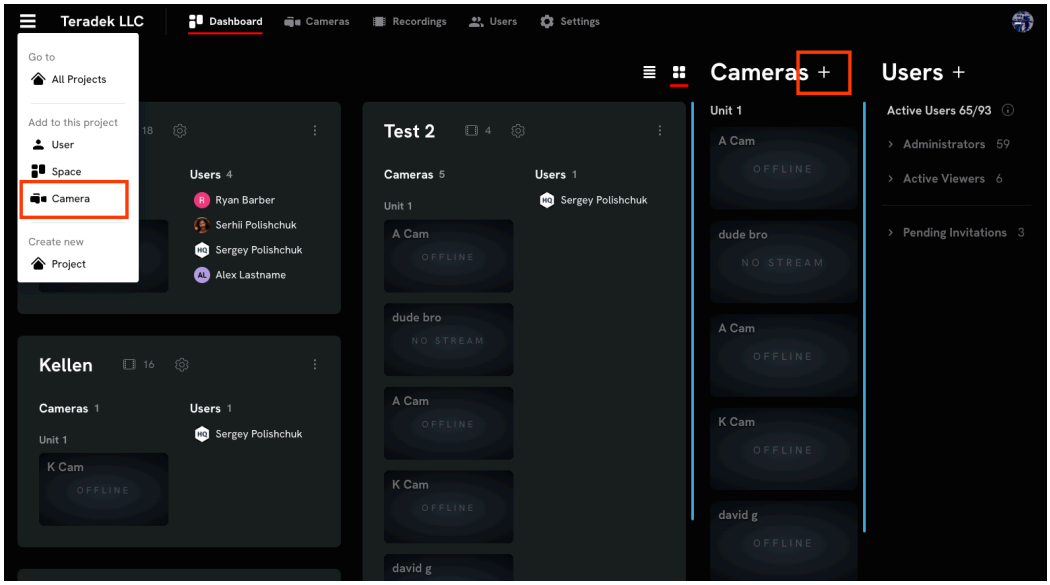


Create a Camera (Source)

1. From the Serv web UI, select **Cloud Services**, select **Teradek TV**, then click the **Link this Device** tab.
NOTE: To learn how to connect your device to a network, click **here**.

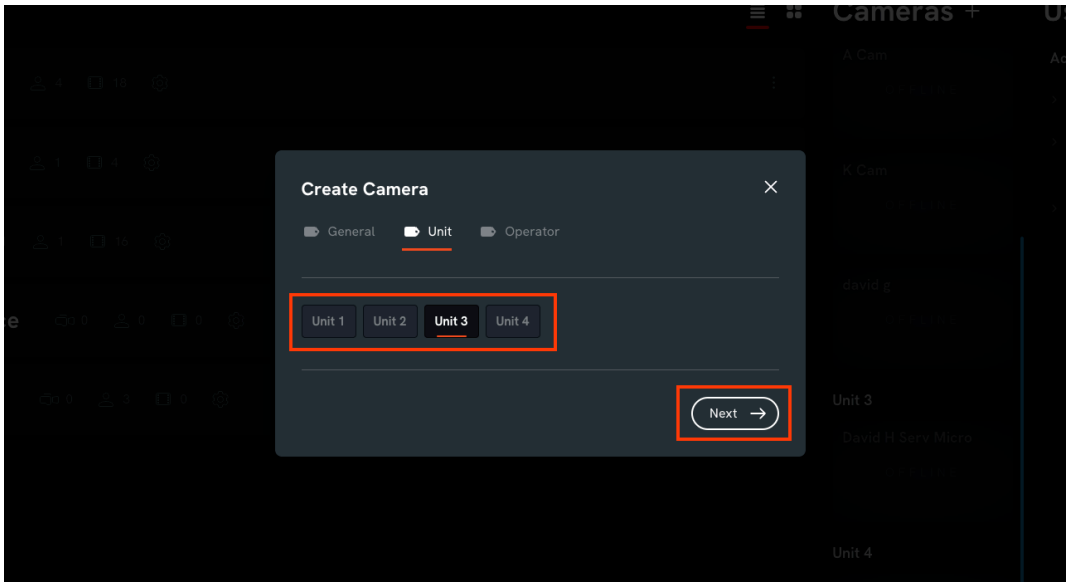
2. Copy the authorization code generated for your Serv device by clicking the **Copy** tab.

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.

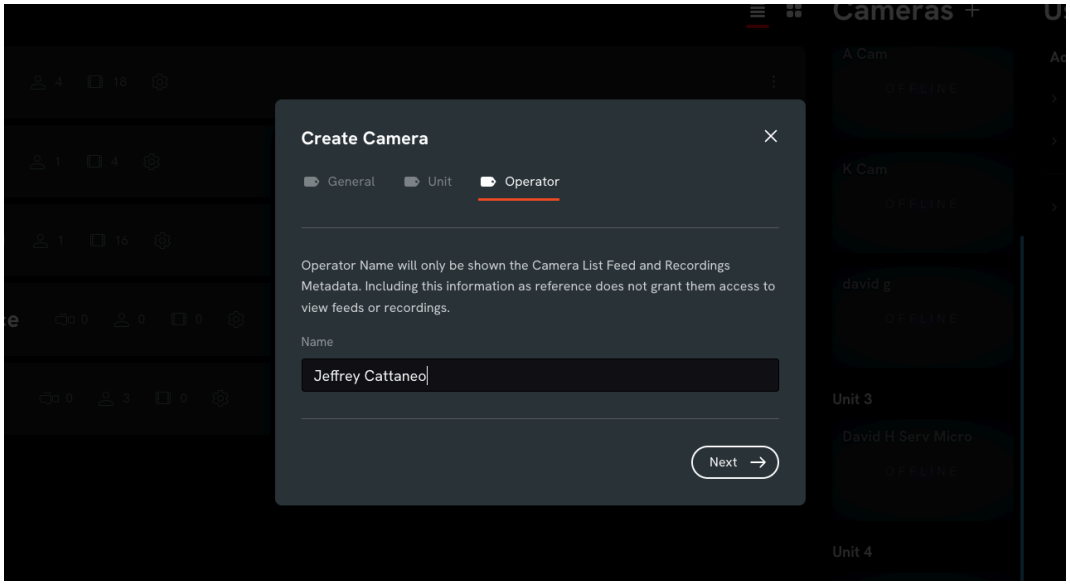


2. Choose a default name (A Cam, B Cam, C Cam, etc.) or create a name for your camera, then click **Next**.

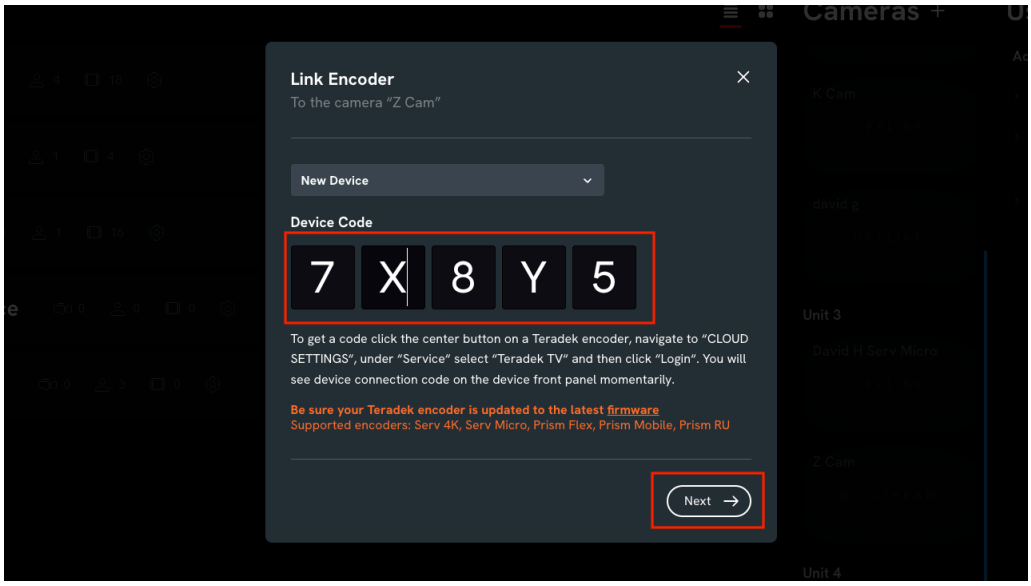
3. Select a unit (group) to add your camera to, then click **Next**. **NOTE:** Units consist of multiple cameras that can be used for the same project.



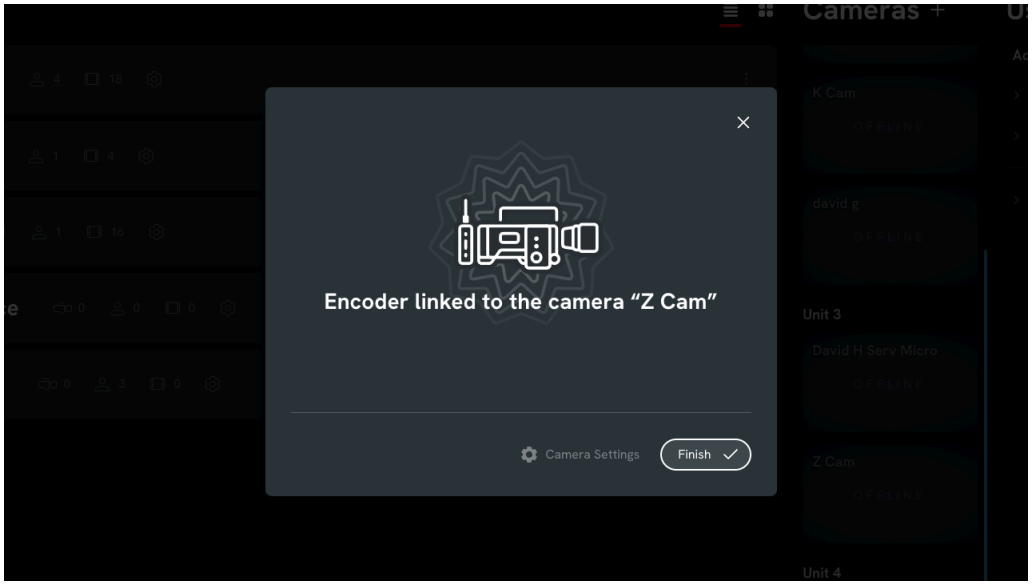
4. Enter the name of the camera operator, then click **Next** to create the camera.



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

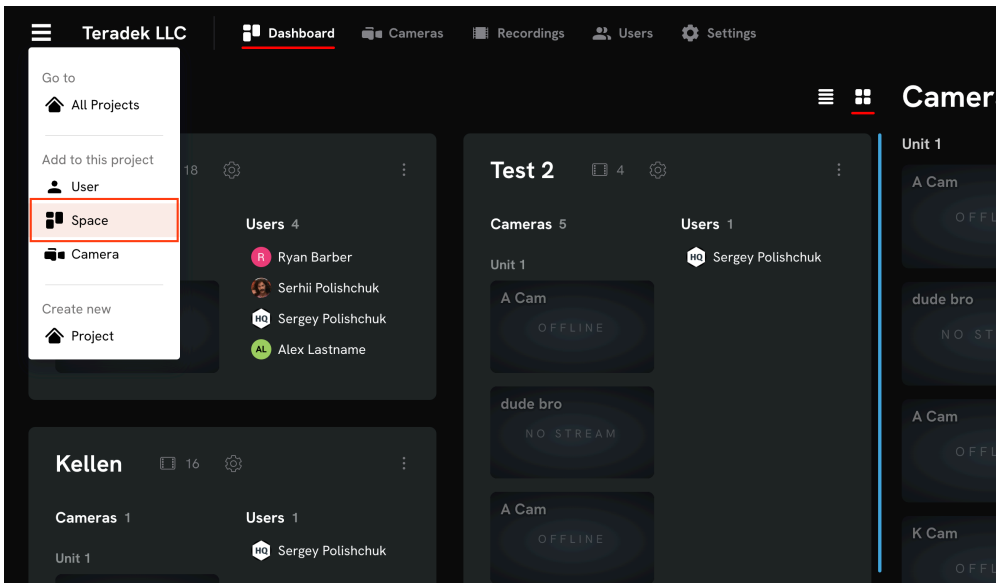


6. Confirm how your device is connected to the Internet, then click **Next**. Your Serv encoder is now connected to the camera and ready to be added to a **Space**. Click **Finish**.



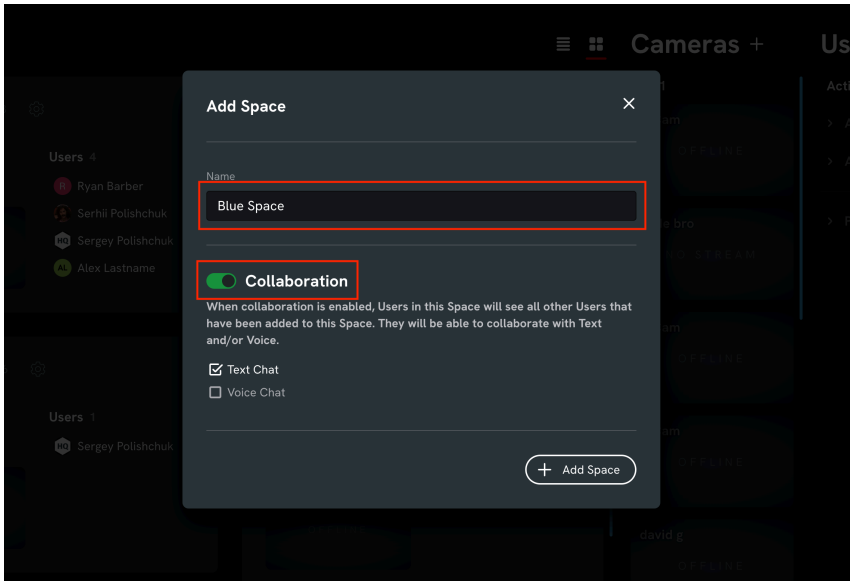
Create Spaces

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

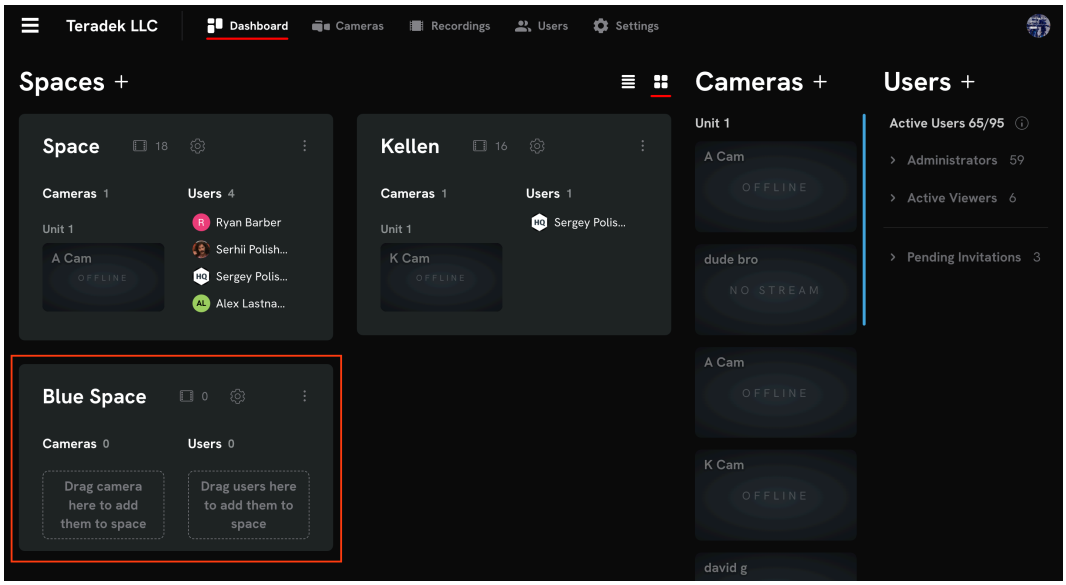


2. Enter a name for the space and enable **Collaboration.**

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

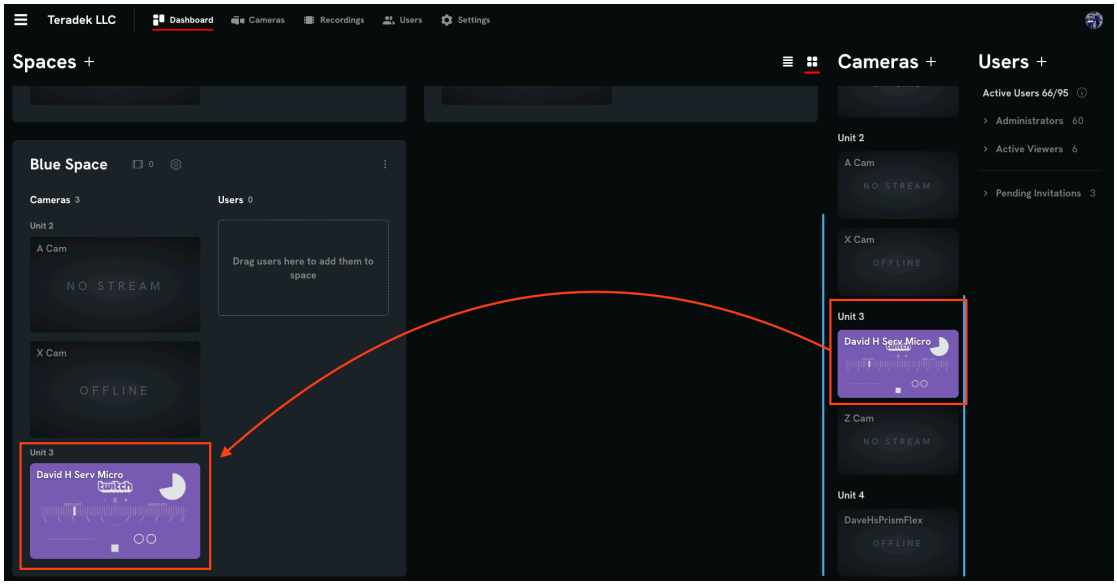


The Space is now visible in your Dashboard. You can add **Cameras** and **Users** to your **Space**.



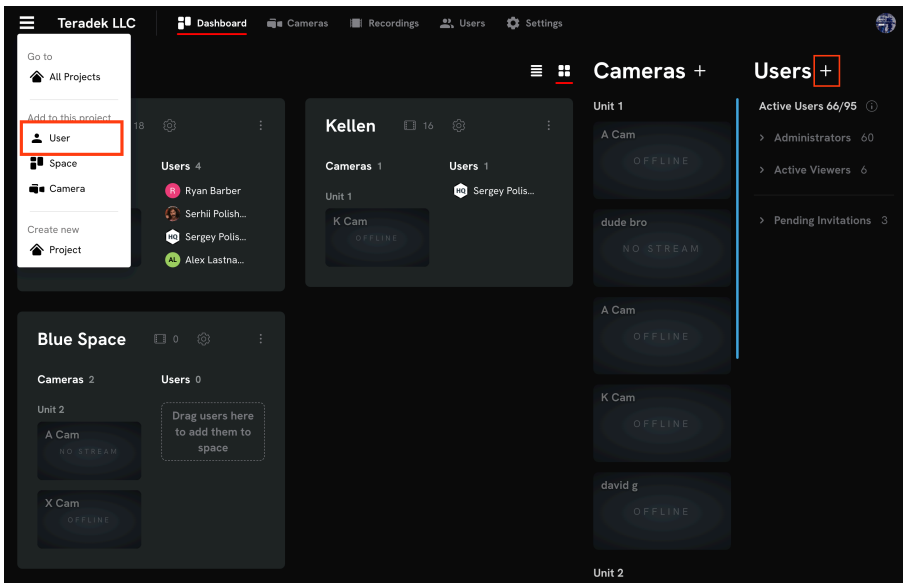
Add Cameras to a Space

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



Add Users to a Space

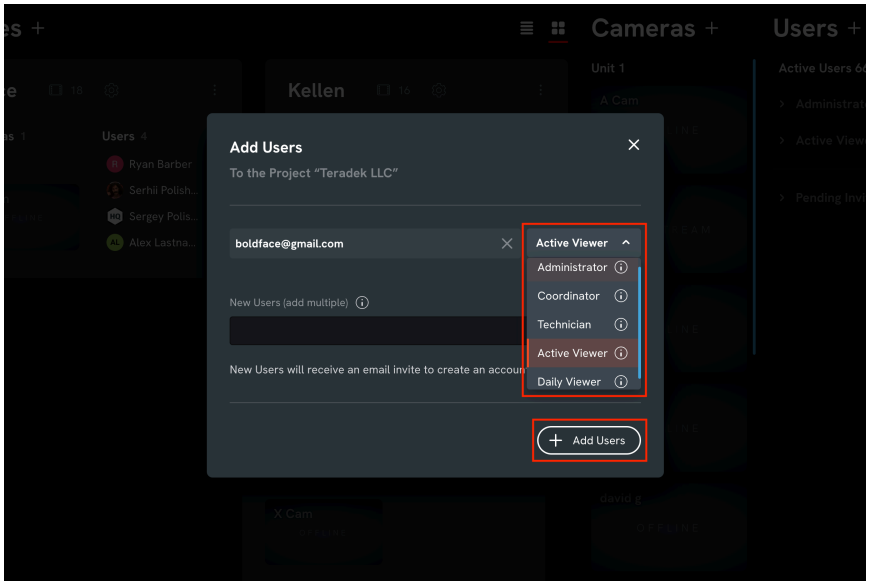
1. To invite Users to collaborate, click the settings tab on the top left corner and select **User**, or click the **+** sign next to the **Users** tab on your dashboard.



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

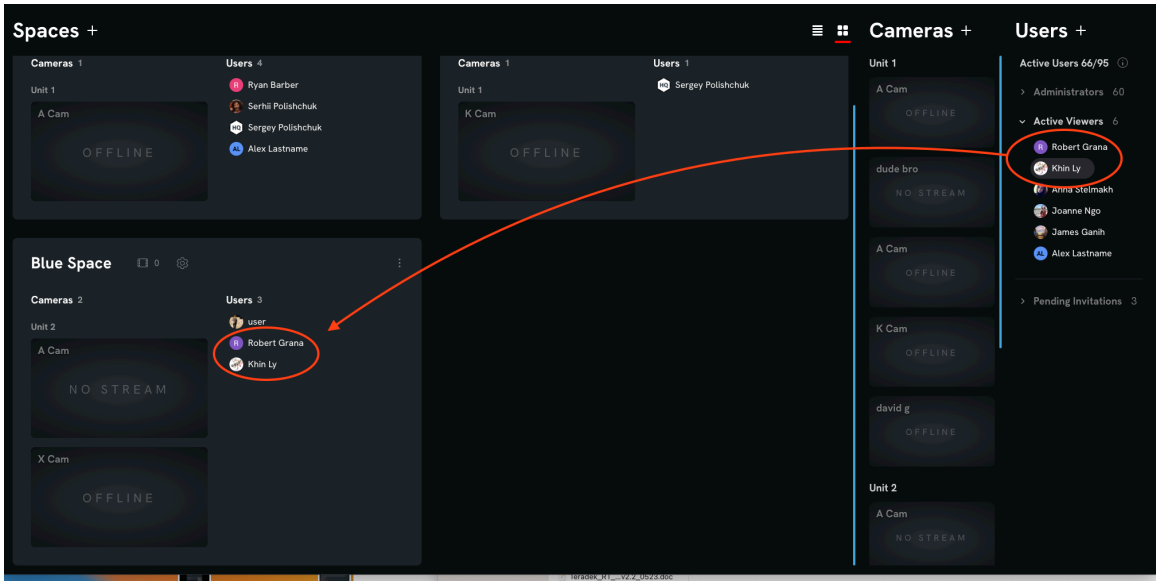
PERMISSION TYPES

- **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

Frame.io

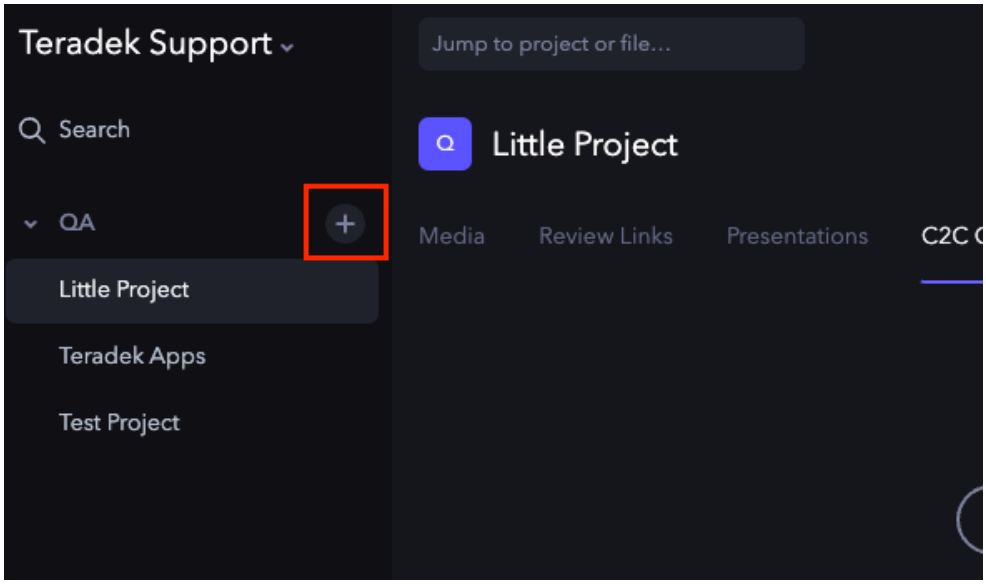
Frame.io is a collaboration platform that allows video producers and editors to privately upload, review, and share media with their entire crew from anywhere in the world. **NOTE: You'll need to have a subscription before using Frame.io.**

Connect to Frame.io

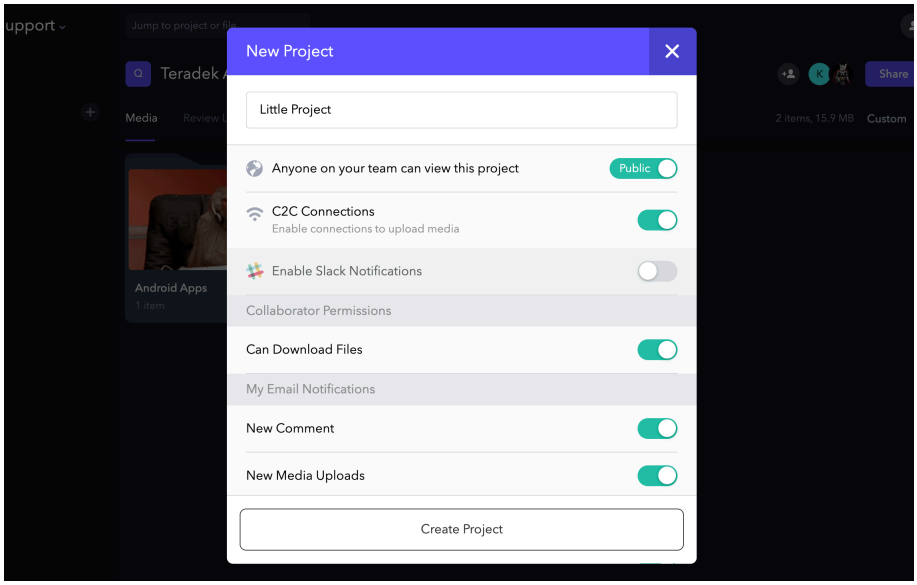
1. From the web UI, select **Cloud Services**, select Frame.io, then click the **Link this Device** tab.

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

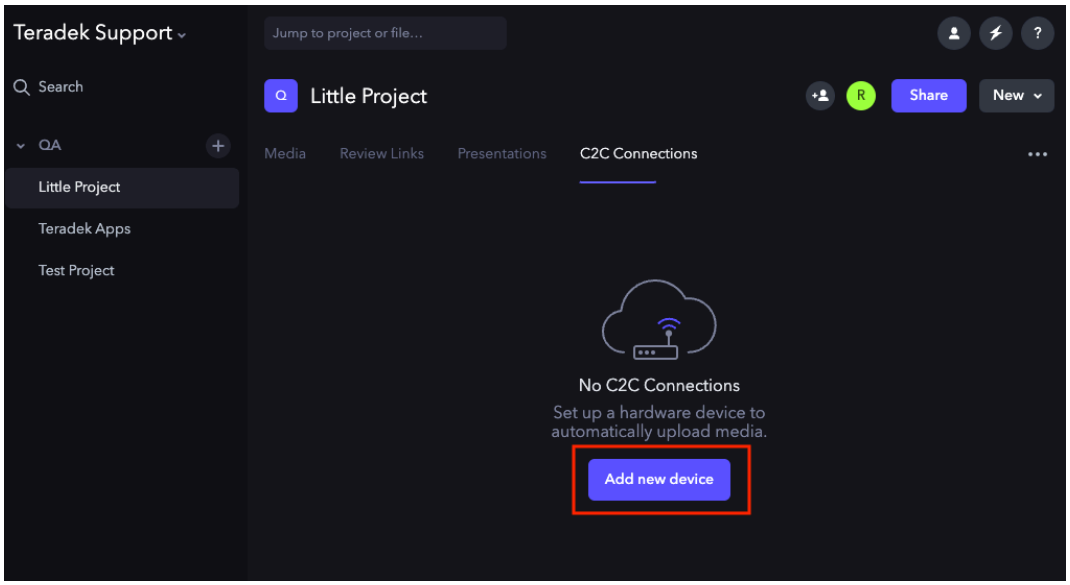
3. Log in to your Frame.io account, then create a project by tapping the **+** sign next to your account name (see image).



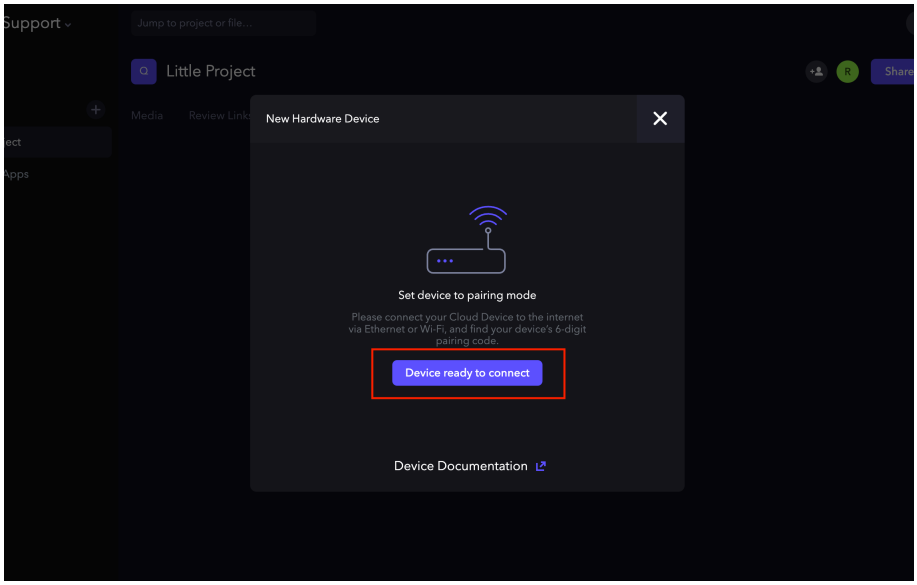
4. Enter a project name, then toggle the **C2C Connections** switch to enable your Serv device to upload video. Click the **Create Project** tab.



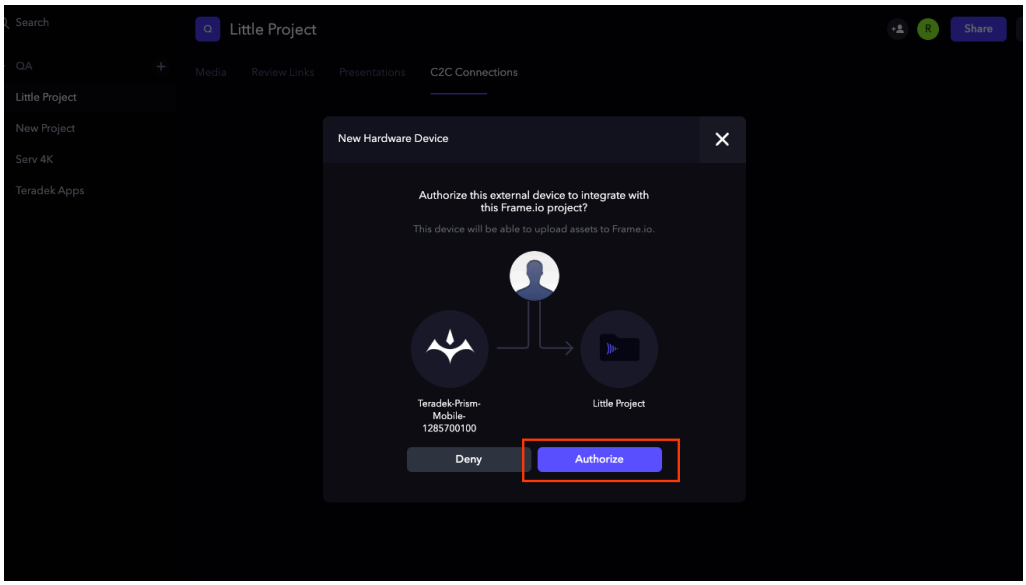
5. Click the **C2C Connections** tab above, then click the **Add new device** tab (see image).



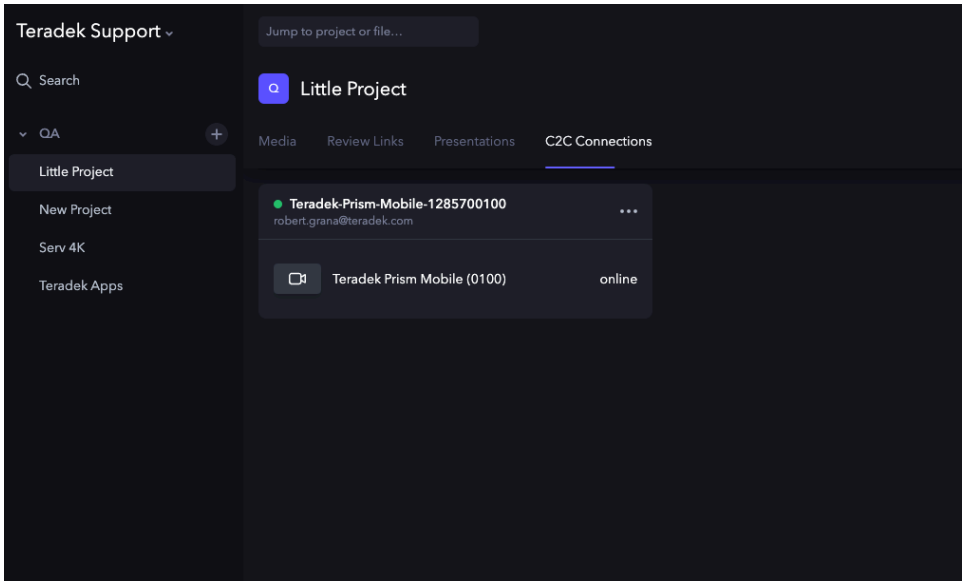
6. Click the **Device ready to connect** tab.



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



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

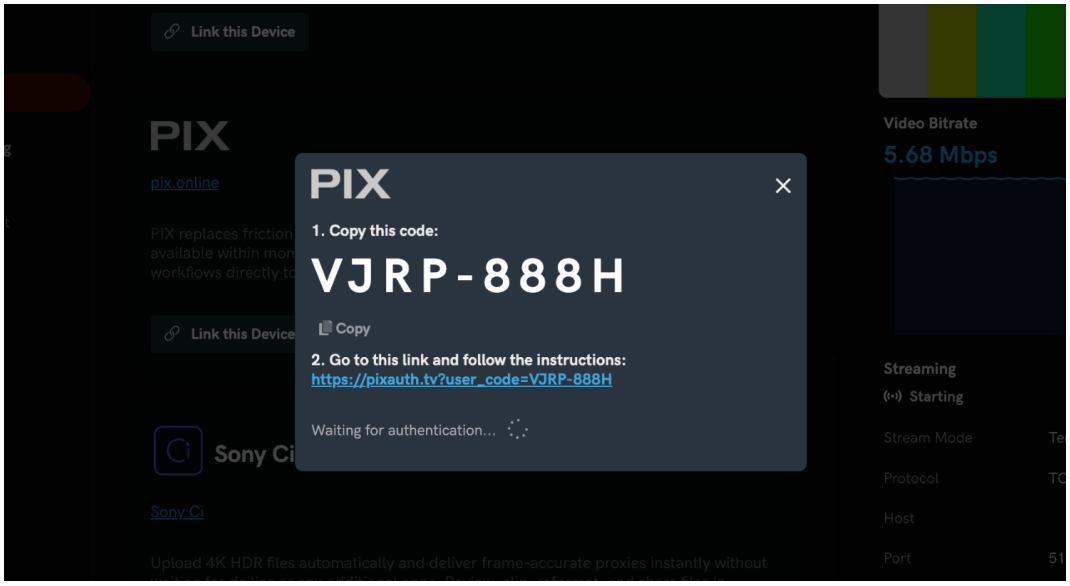

Teradek Support
Jump to project or file...
Search
Little Project
QA
Media
Review Links
Presentations
C2C Connections
Little Project
New Project
Teradek-Prism-Mobile-1285700100
robert.grana@teradek.com
Serv 4K
Teradek Prism Mobile (0100)
online
Teradek Apps

PIX

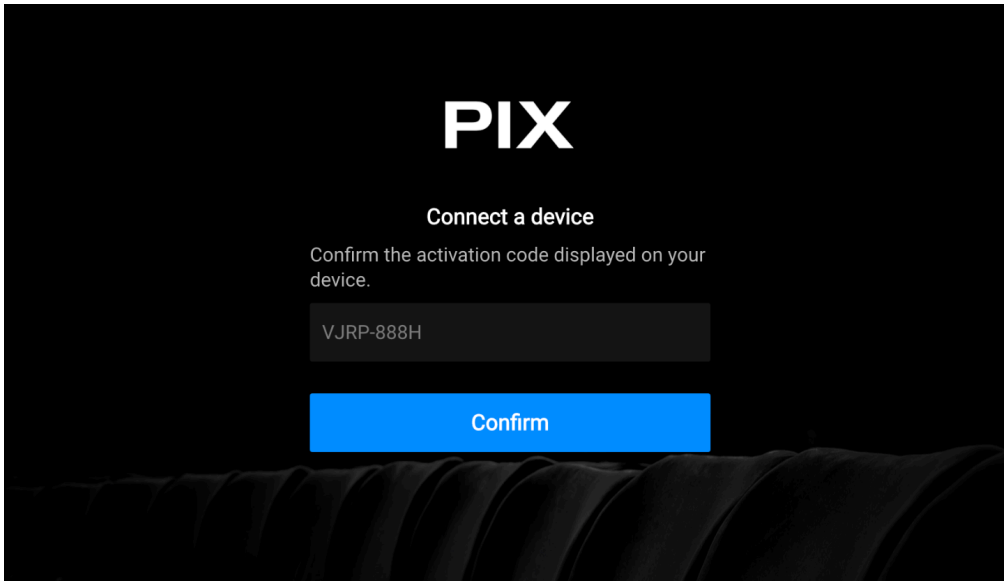
PIX collaboration workflows bridge feature film, streaming, and broadcast television from production origination to post-production, providing the highest quality, most trusted solutions for collaborative review for executives, filmmakers, and content creators.

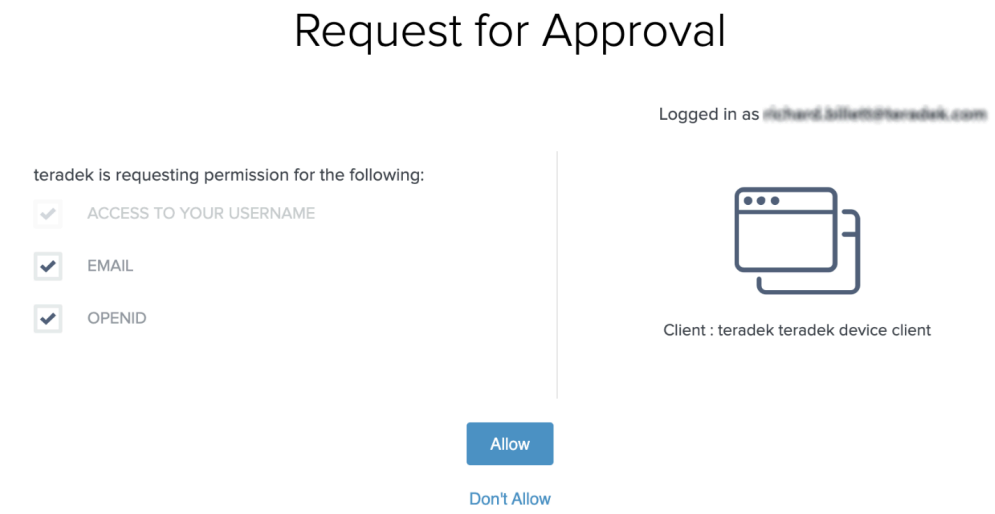
Connect to PIX

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 Serv device, then click on the link provided.

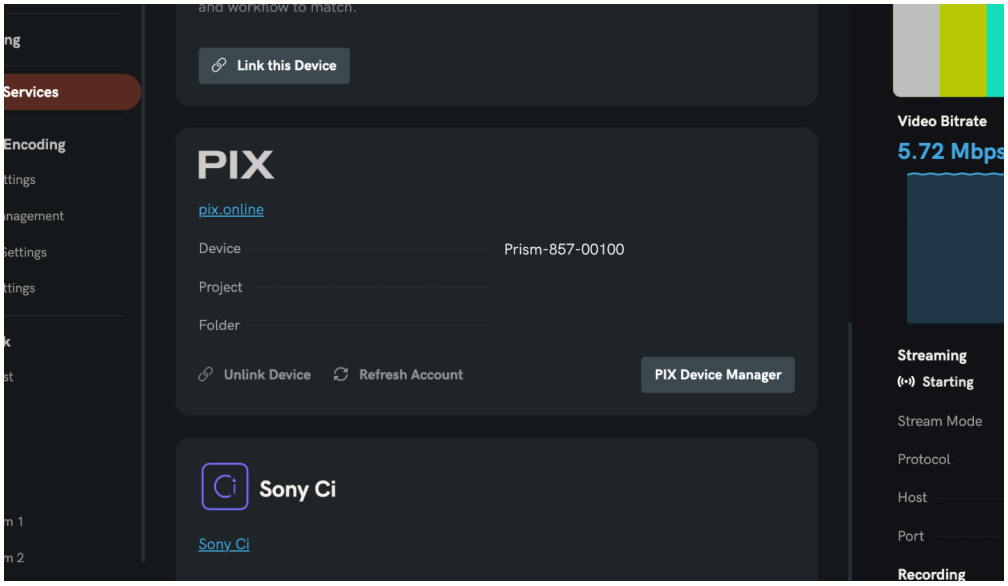


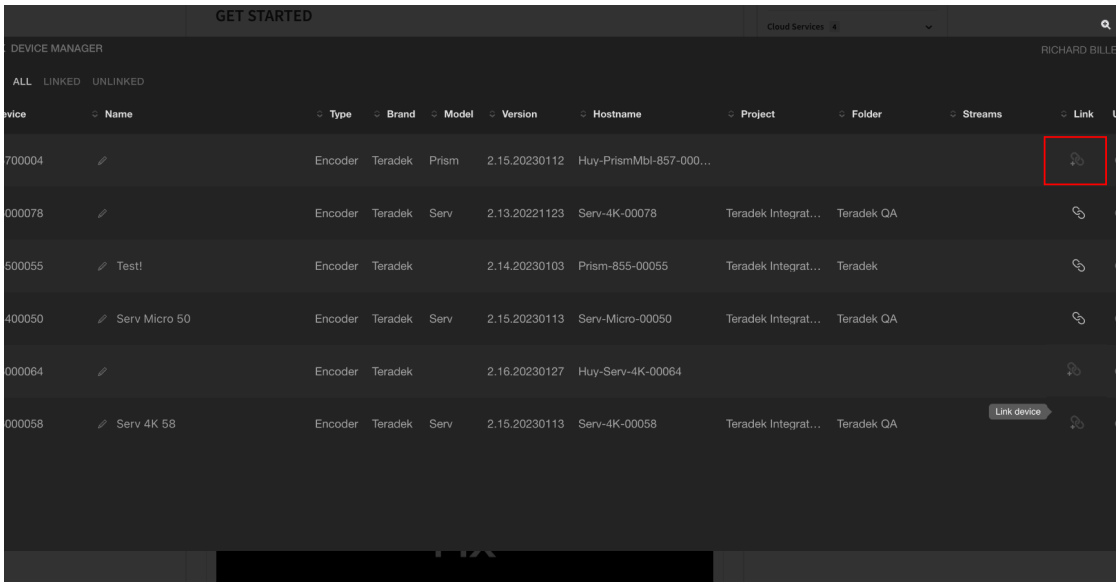
3. Log into your PIX account.
4. Click **Confirm** to authorize your Serv device, then click **Allow** on the following screen.



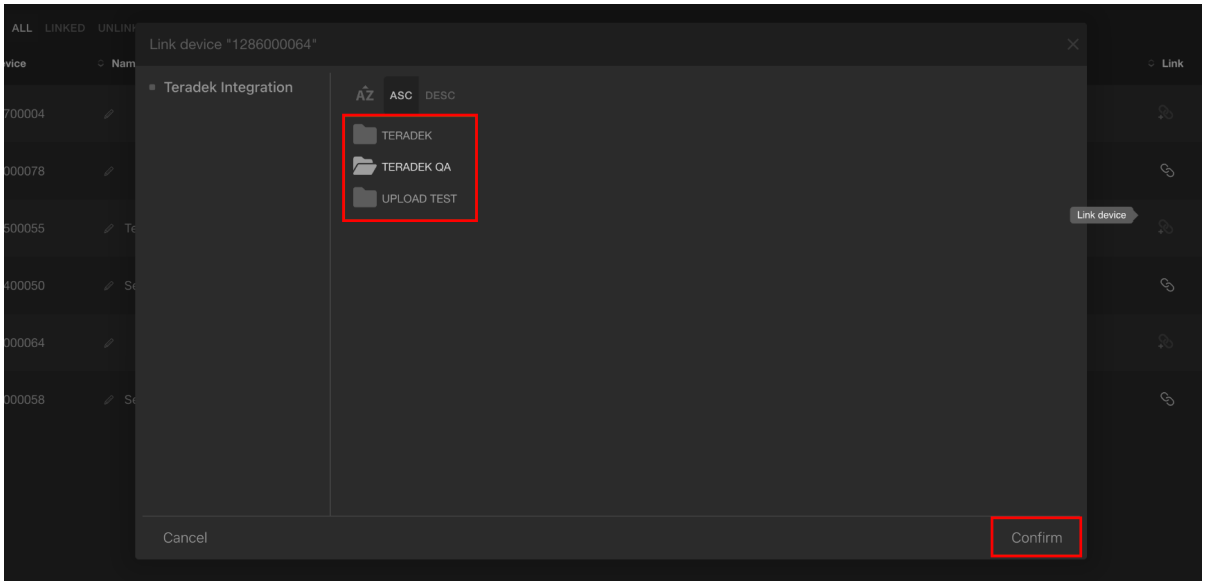


5. Return to the PIX section in the Serv web UI and click **PIX Device Manager.** Click the link icon that corresponds to your device.

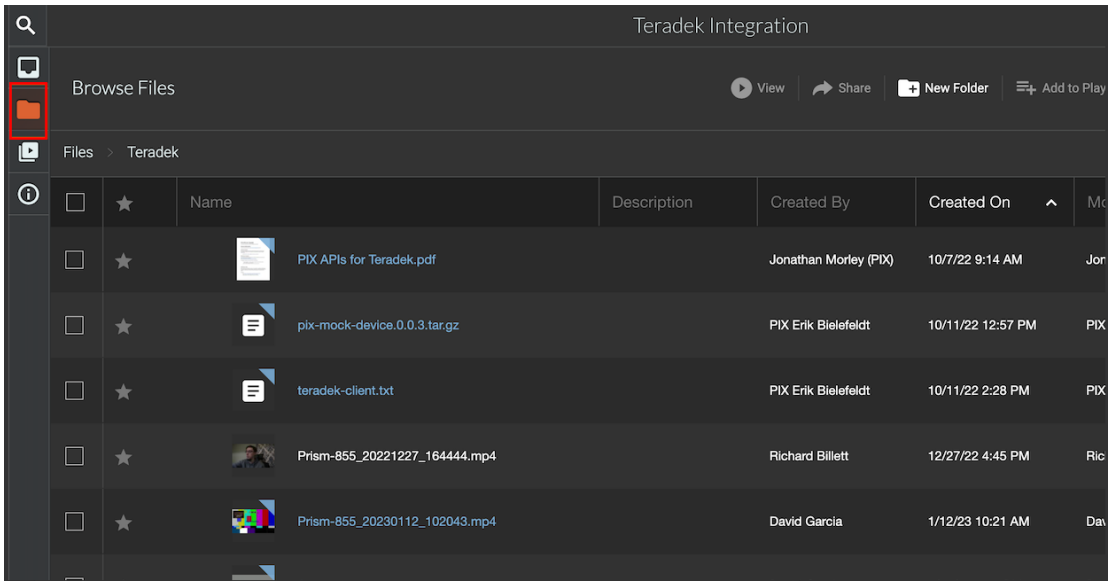




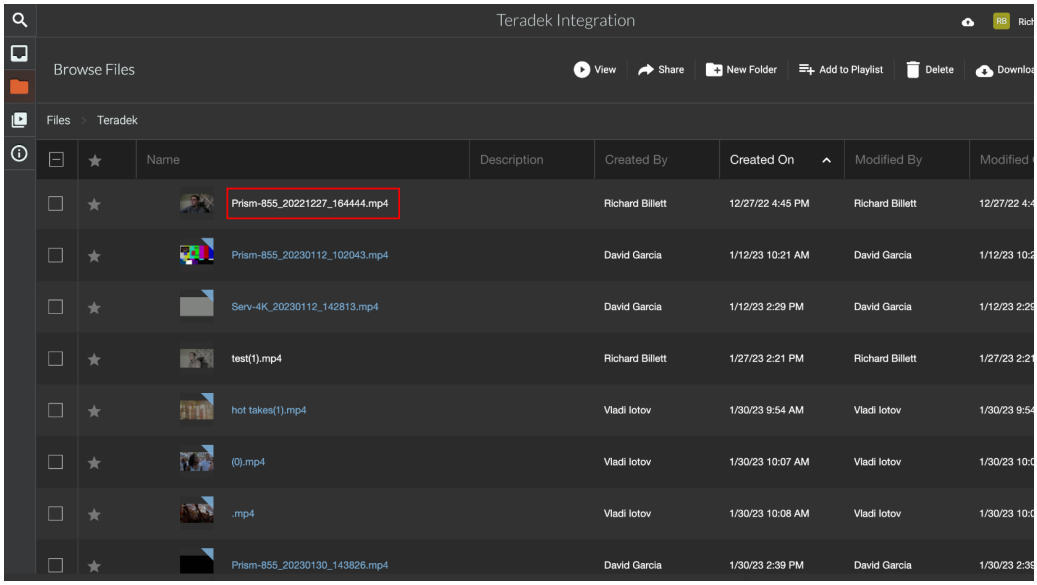
6. Select the project name, then select the folder to which you want your files to be delivered. Click **Confirm.**



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.


Teradek Integration
Browse Files
View
Share
New Folder
Add to Playlist
Delete
Files
Teradek
Name
Description
Created By
Created On
Modified By
Prism-855_20221227_164444.mp4
Richard Billett
12/27/22 4:45 PM
Prism-855_20230112_102043.mp4
David Garcia
1/12/23 10:21 AM
Serv-4K_20230112_142813.mp4
1/12/23 2:29 PM
test(1).mp4
1/27/23 2:21 PM
hot takes(1).mp4
Vladi Iotov
1/30/23 9:54 AM
(0).mp4
1/30/23 10:07 AM
.mp4
1/30/23 10:08 AM
Prism-855_20230130_143826.mp4
1/30/23 2:39 PM

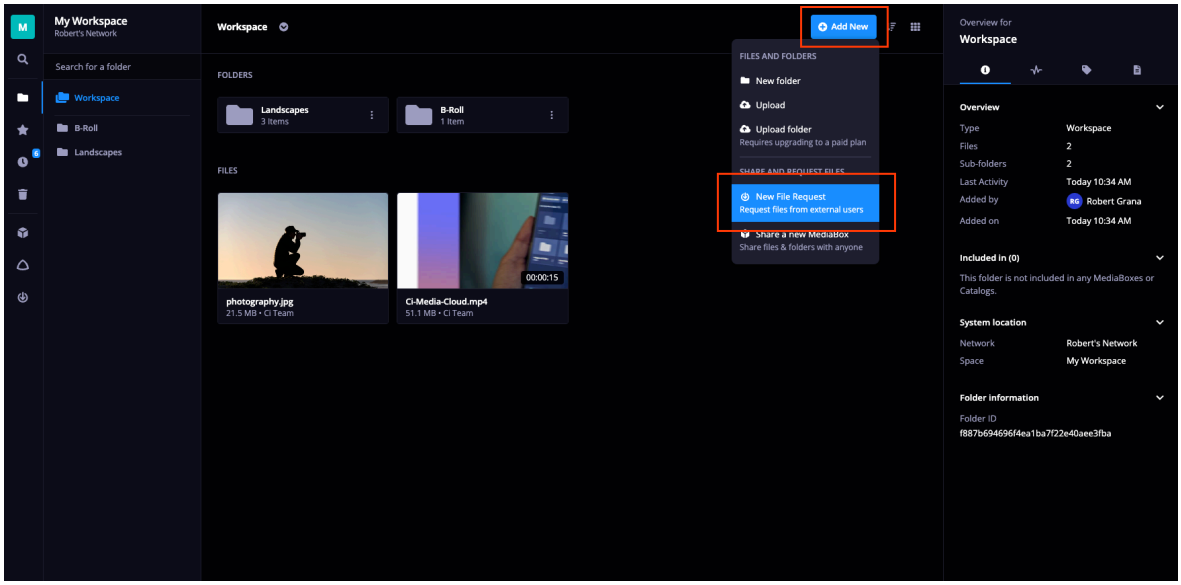
Sony CI

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

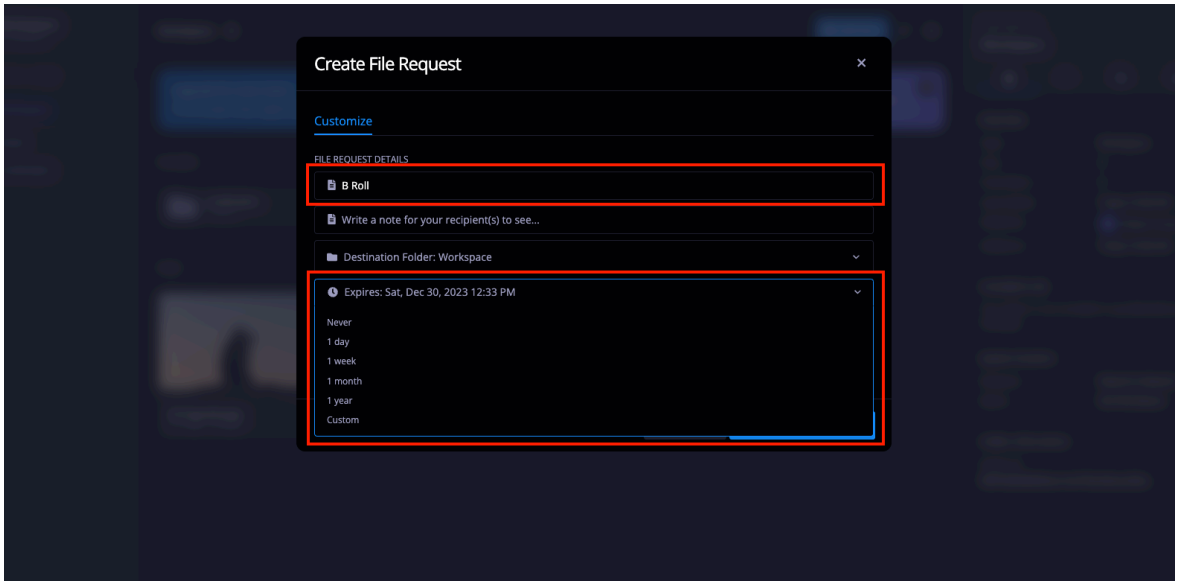
- Remote Collaboration and Live Notes
- Review and Instant Editorial
- Automatic OCF Sync
- Continuity Across Imaging Chain
- Accurate Review on all Screens

Connect to Sony Ci

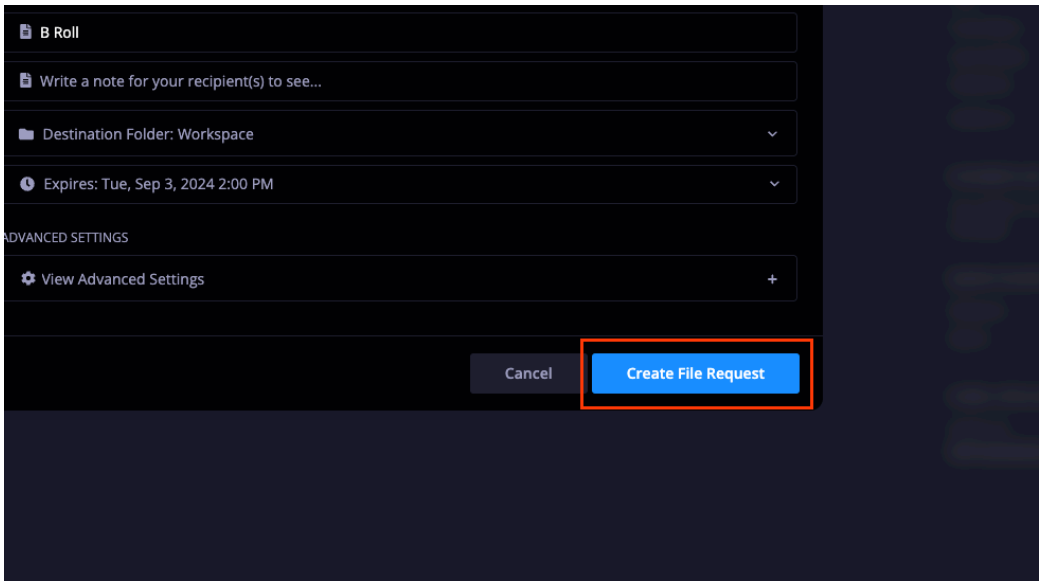
1. Log in to your Sony Ci account.
2. From the workspace, click **Add New**, then select **New File Request**.



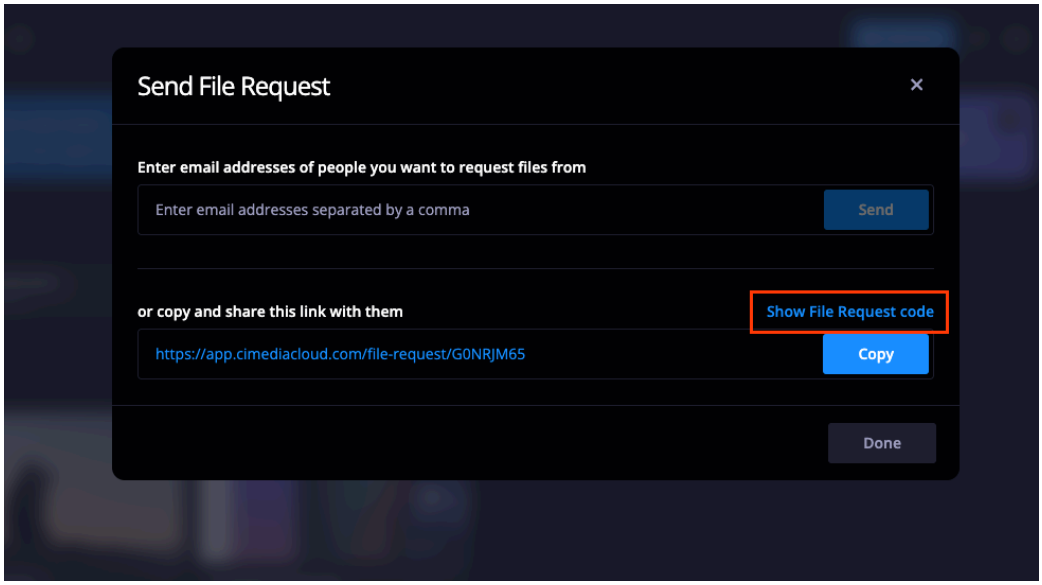
3. Create a name for your encoder/camera, and enter a time frame or expiration date.



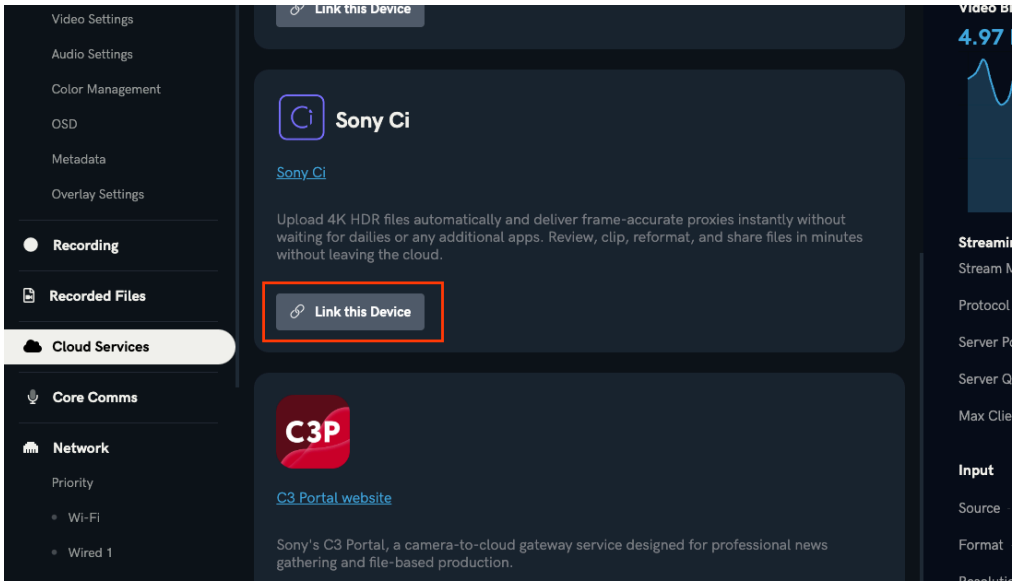
4. Click the **Create File Request** tab.



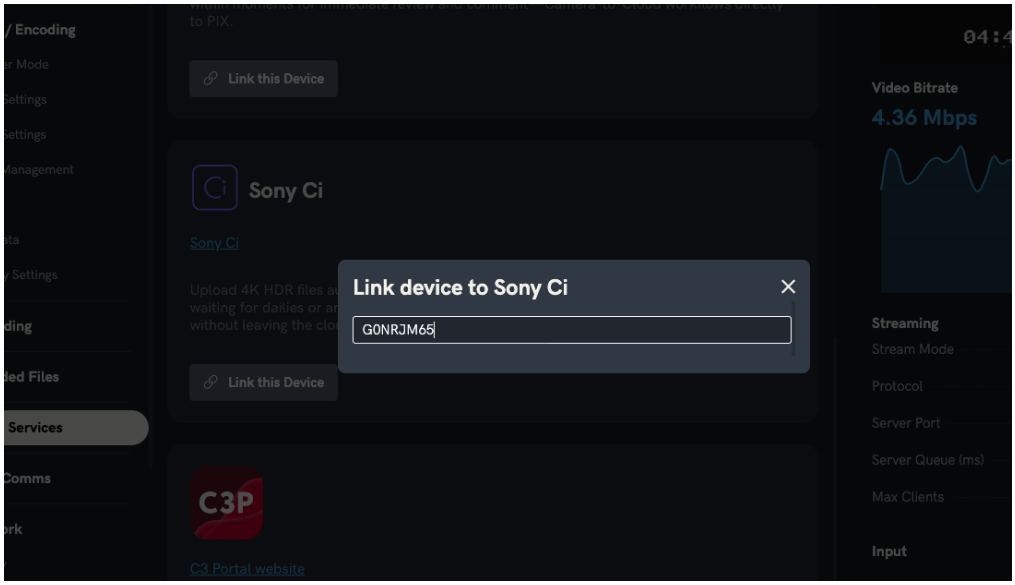
5. Click **Show File Request Code**, then click the **Copy** tab.



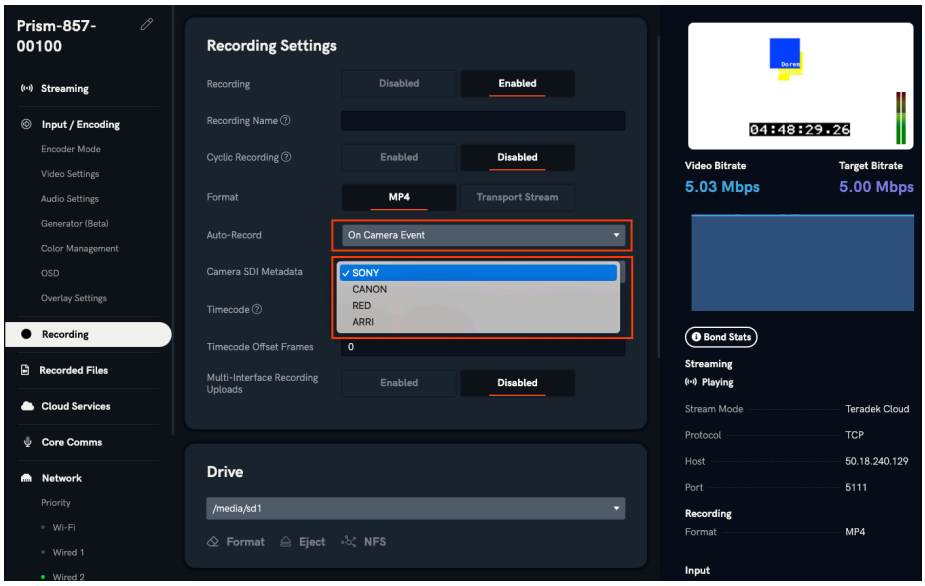
6. Return to the Serv web UI **Cloud Services** section, scroll down to **Sony Ci**, then click the **Link this Device** tab.



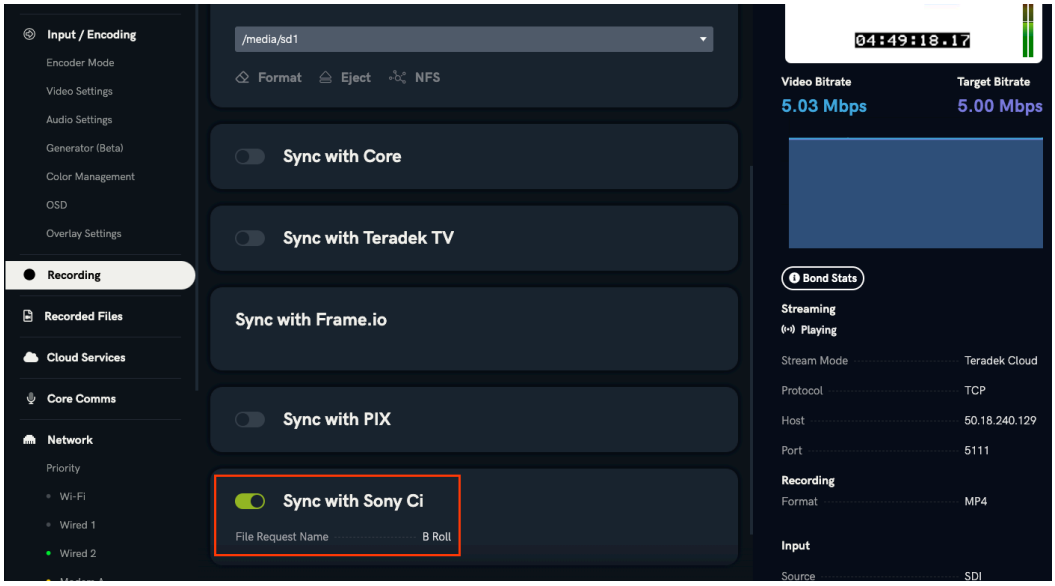
7. Paste the **File Request Code** in the corresponding field.



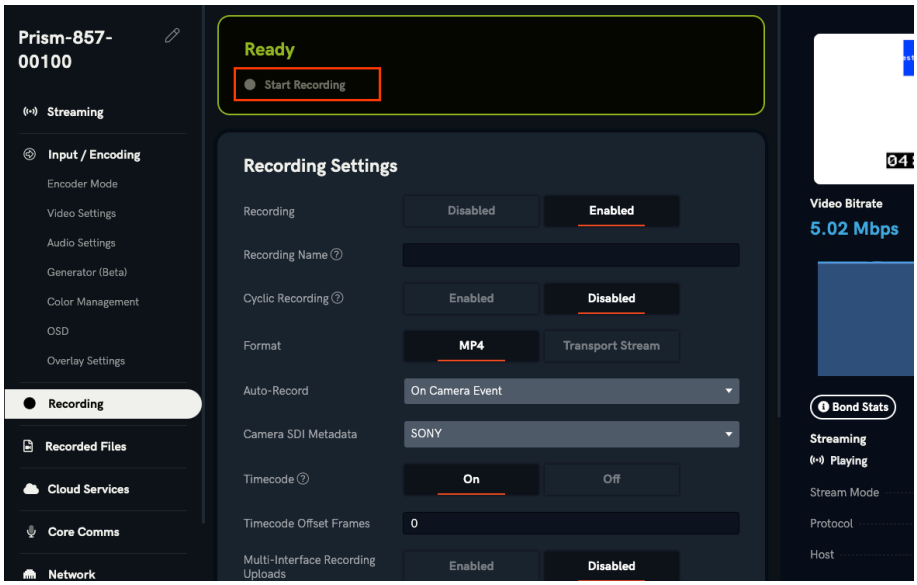
8. In the **Recordings** tab, set **Auto-Record to On Camera Event** and the **Camera SDI Metadata** to the camera you plan to use. Then click **Save**. **NOTE:** Ensure that there is an SD card installed.



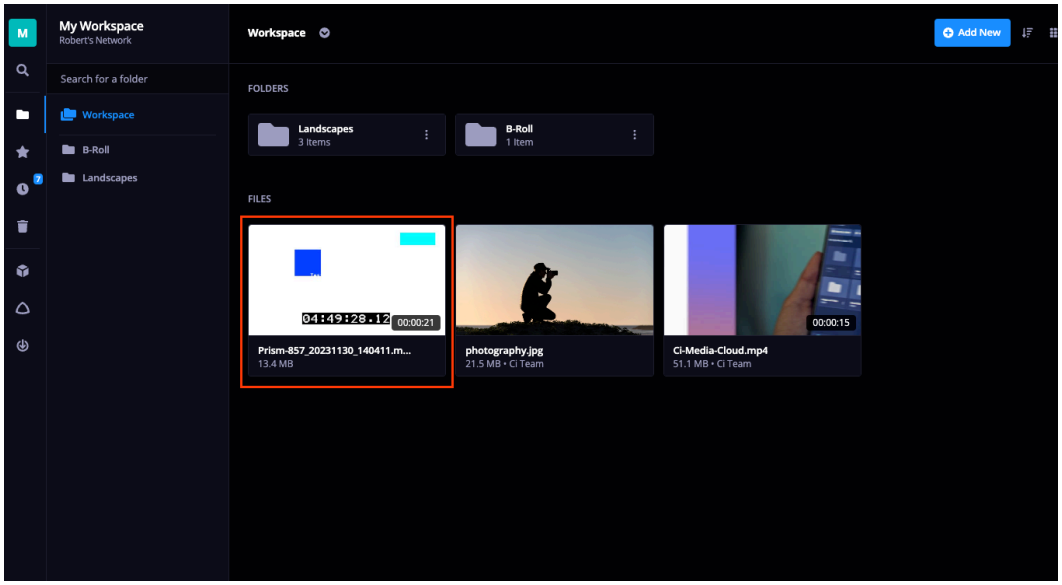
9. Turn on **Sync with Sony Ci.**



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 Serv's web UI.

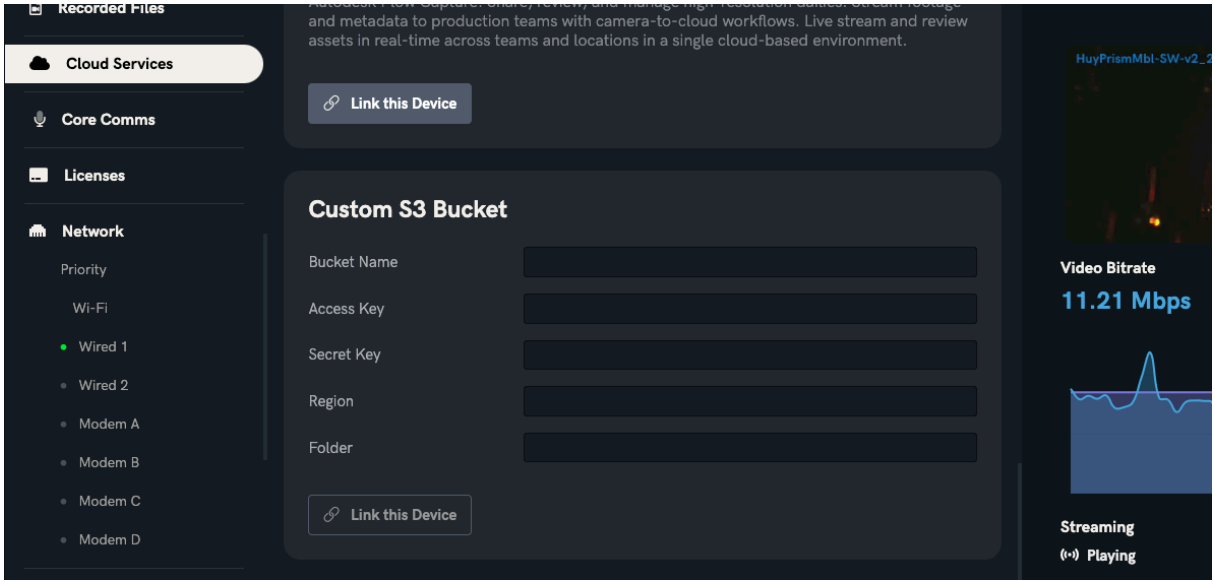

My Workspace
Robert's Network
Search for a folder
Workspace
B-Roll
Landscapes
Workspace
Add New
FOLDERS
Landscapes
3 Items
B-Roll
1 Item
FILES
04:49:28:12
00:00:21
Prism-857_20231130_140411.m...
13.4 MB
photography.jpg
21.5 MB • Ci Team
00:00:15
Ci-Media-Cloud.mp4
51.1 MB • Ci Team

Amazon (AWS) S3 Bucket

Serv devices now support the use and configuration of Amazon S3 buckets, enabling Serv devices to sync recorded files for both on-set and remote playback. Amazon S3 is an object storage service that stores data as objects within buckets, with each object uniquely identified by a key (or key name) within the bucket.

Configure an S3 Bucket

1. Click the **Cloud Services tab**, then scroll down to the S3 Bucket section.



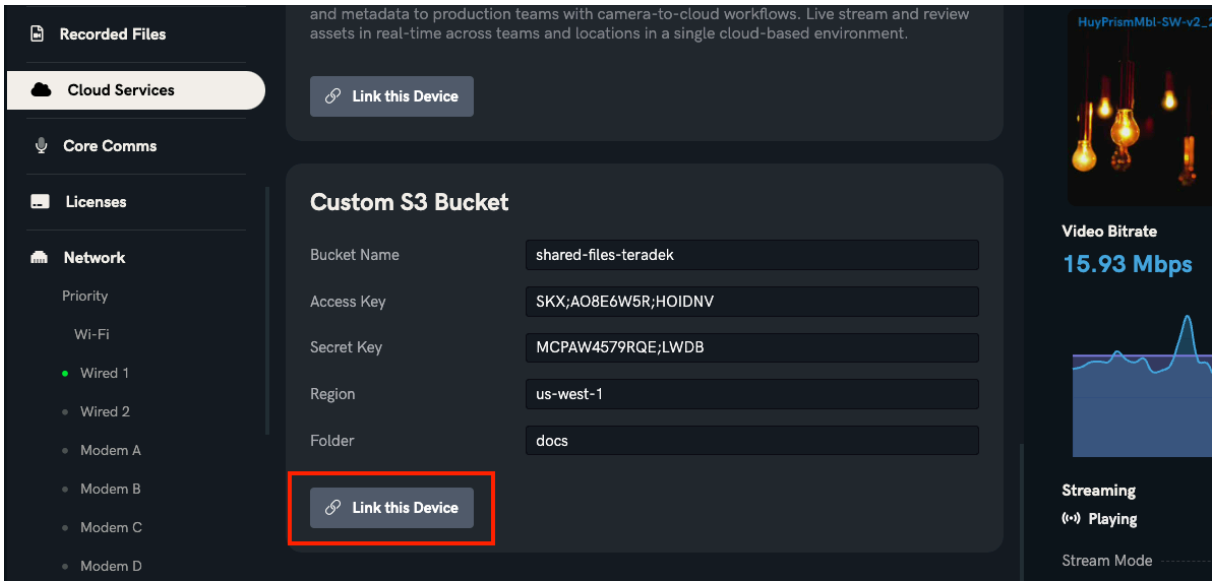
2. Enter the S3 **Bucket Name**, **Access** and **Secret Keys**, **Region**, and **Folder**.

DESCRIPTIONS

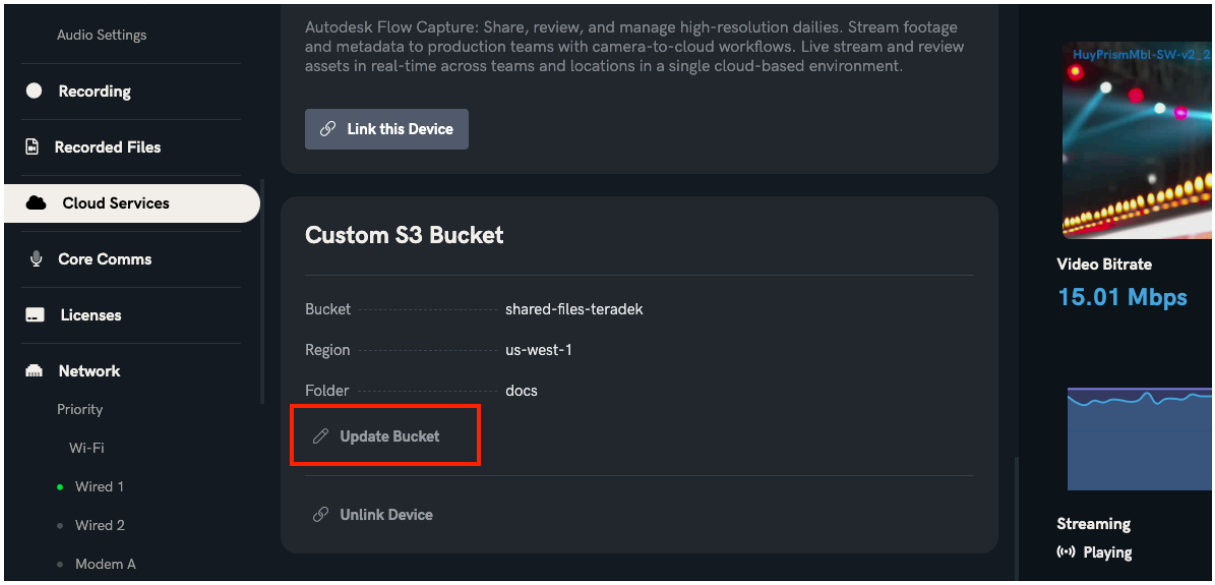
- **Bucket Name**: S3 organizes everything into top-level buckets, and the name must -**exactly**- match the one you want to use and have the IAM user associated with it by *policy* or by *ACL*.
- **Access Keys and Secret Keys**: Create an IAM user with **AmazonS3FullAccess** or similar permissions, and an associated access key and secret. For more information on Access and Secret Keys, click **here**. Your permissions may vary depending on your organizations policies and procedures.
- **Region:** Use the short name of the S3 bucket's region. For example, if the region you selected in S3 says "US West (N. California) us-west-1," the region is "us-west-1." For information about AWS regions click here.

- **Folder**: You can specify any folder name you like (or leave it blank). The folder will be created inside the bucket you specified above.

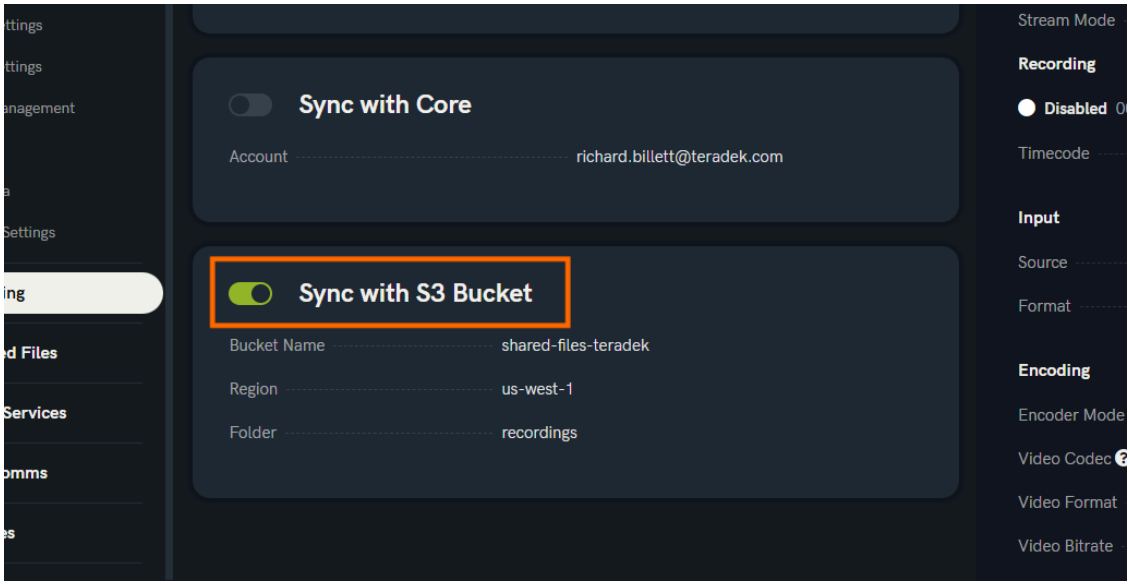
3. Once all the fields have been populated, click **Link this Device.**



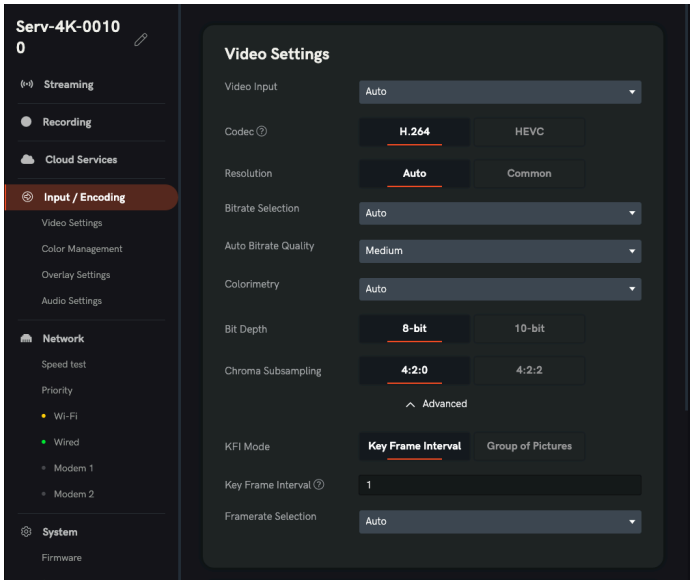
After the initial configuration, you can modify or change the bucket name, folder, or region without re-entering the keys by clicking **Update Bucket**.



To turn **File Sync** on or off, click the **Recording** tab to access the **Sync with S3 Bucket** toggle.



Video and Audio Settings



- **Video Input (Serv 4K)** - Select **SDI** or **HDMI** as the source of the video input, or select **Auto** to automatically detect the type of video input.
- **Codec (Serv 4K)** - Select either **HEVC** or **H.264** compression formats.
- **Resolution** - **Serv 4K:** Maintain the input's native resolution (**Auto**), or select one from the list of commonly used resolutions (**Common**). **Serv Micro:** Select Auto to maintain the input's native resolution, or select from the list of commonly used resolutions
- **Bitrate Selection** - Select your stream's target bitrate from a list of bitrate figures (**List**), or manually enter a custom bitrate (**Custom**). You can also select **Auto** to automatically match the video input's bitrate. Lower bitrates require less bandwidth and may allow for a more stable stream. Higher bitrates offer better video quality, but require more network bandwidth.

- **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. **NOTE: 4K inputs will be streamed at Full HD resolution when 10-bit encoding is selected.**
- **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. **4:2:2** has half of the chroma (intensity) of 4:4:4 video and reduces the bandwidth of an uncompressed video signal by one-third with little to no visual difference. **4:2:0** has one quarter of the chroma of 4:4:4 and reduces bandwidth of an uncompressed video signal by half.

Advanced Settings

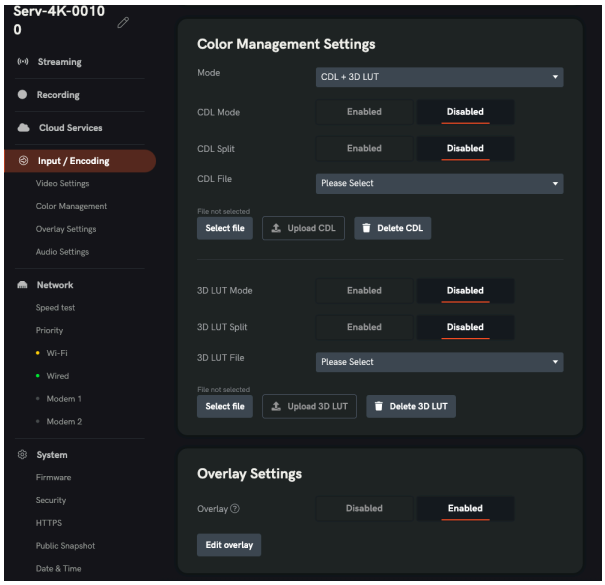
- **KFI Mode** - Select either **Key Frame Interval** or **Group of Pictures** mode.
- **Key Frame Interval** - Adjust the amount of time between full picture refreshes (Key Frame Interval), or the amount of frames (GOP Length).
- **Frame Rate Selection** - Set the encoder frame rate to the exact figure or a fraction of the input frame rate.

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.

Color Management and Overlay Settings (Serv 4K)

Serv 4K's Color Management menu lets you manage and apply different looks to incoming video signals using 3D LUT and CDL files saved to your Serv 4K from your computer. You can also link Serv 4K to your LiveGrade account using Serv 4K's web UI.



Color Management Settings

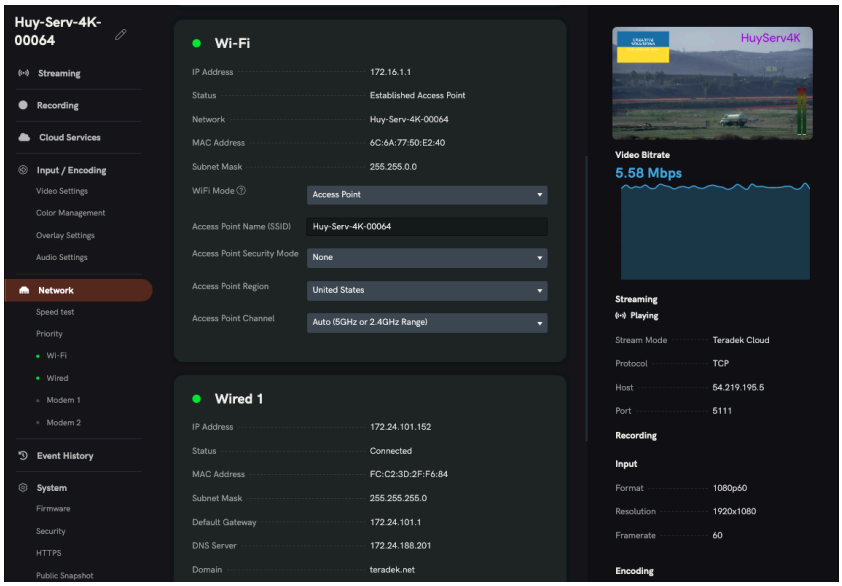
- **Mode -** Select either **CDL + 3D LUT** or **LiveGrade** for your color management mode.
- **CDL Mode - Enable** or **disable** a CDL preset. Enabling CDL mode allows Serv 4K to apply the preset to your preview.
- **CDL Split -** Enable the preview window to display a split screen; one side showing 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 Serv 4K 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 Serv 4K to apply the preset to your preview.
- **3D LUT Split -** Enable the preview window to display a split screen; one side showing the 3D LUT preset applied to the preview, and the other side without.
- **3D LUT File -** Select a 3D LUT file to apply to the video preview. 3D LUT files must first be uploaded to Serv 4K from your computer by clicking **Select file**, then **Upload 3D LUT**. To delete a file, click **Delete 3D LUT**.

Overlay Settings

- **Overlay** - **Enable** or **Disable** the overlay of graphics and other media on top of your video to share information, select a file to overlay onto your video stream, and adjust the image's location.

Network Configuration

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



WI-FI CONFIGURABLE OPTIONS

- **WIFI Mode**
  - **Access Point (AP):** Serv acts as its own dual-band access point, allowing you to connect your device directly to Serv's AP network, and for bonding multiple cellular devices for increased bandwidth.
    - Access Point Name (SSID)
    - Access Point Security Mode
    - Access Point Region
    - Access Point Channel
  - **Client:** Your Serv and mobile device connect to the same local wireless network. Client Mode is typically used for normal WiFi operating and connecting to your local router
    - Auto Connect to saved networks (enable/disable)

- IP Mode -
  - **Dynamic (DHCP):** When set to DHCP, Serv 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.
- Wi-Fi Scan
- Saved Networks
- + Add network

WIRED CONFIGURABLE OPTIONS

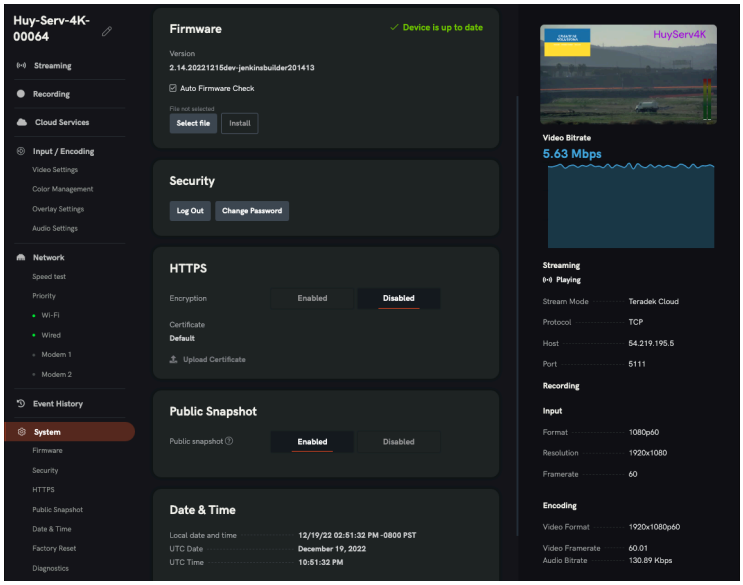
- **IP Mode**
  - **Dynamic (DHCP):** When set to DHCP, Serv requests an IP address and configuration from the network's DHCP server.
  - **Static:** When set to Static, you will need to manually configure the IP address, subnet mask, gateway, and DNS server to connect to the network.
- **MTU** - MTU (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.

MODEM CONFIGURABLE OPTIONS

- **APN (Access Point Name)**
- **PIN**
- **Authentication (Node II/USB Modem only) -**
  - **Auto**: The modem is automatically detected and configured. Serv 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).
- **MTU** - 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.

System Configuration

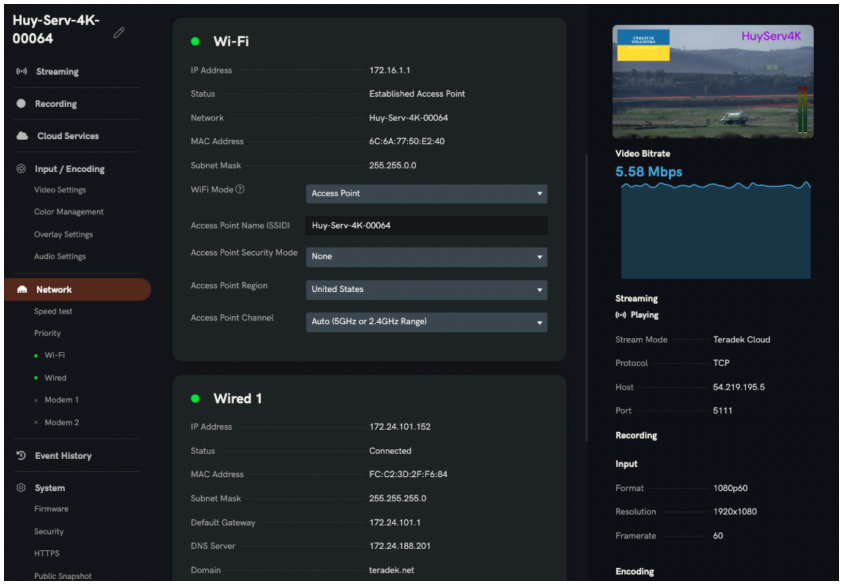
Essential system functions, including factory reset, firmware upgrade, and diagnostics reports can be performed from the System menu in the web UI.



- **SYSTEM/ABOUT -** Displays Serv's model and serial number, along with the following configurable options:
  - **Restart Streaming Service:** Restart your streaming platform.
  - **Reboot:** Restart Serv
  - **Factory Reset:** Restore Serv to its original settings
- **FIRMWARE** - Check for new updates and upgrade Serv'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 synchronize the time and date automatically.
- **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.

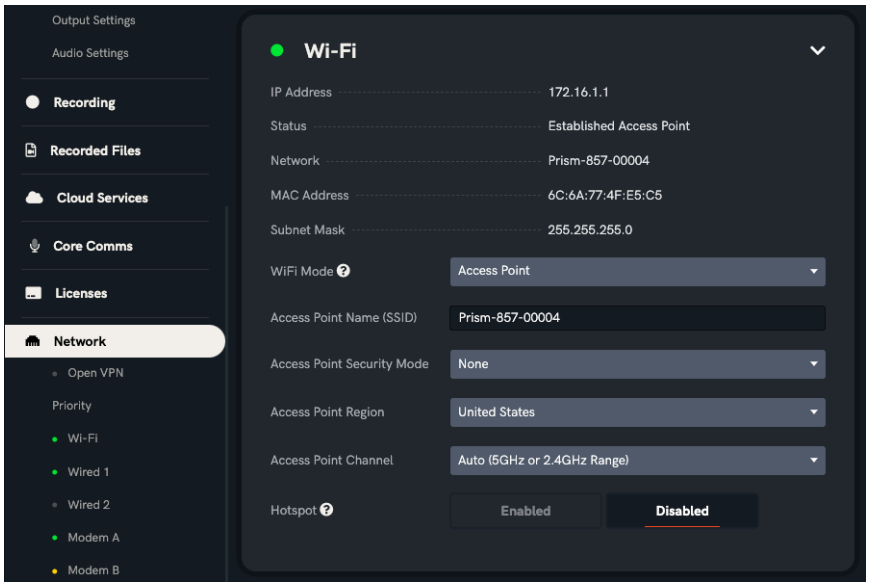
Network Configuration (new)

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



Configurable Options

WiFi

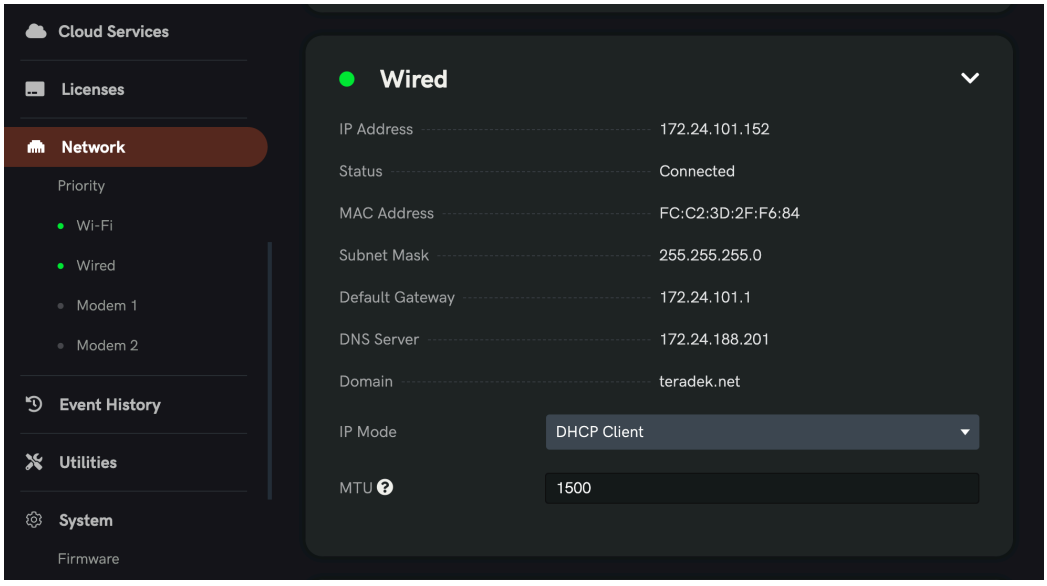


- **WiFi Mode**
  - **Access Point (AP):** Serv acts as its dual-band access point, allowing you to connect your device directly to Serv's AP network, and for bonding multiple cellular devices for increased bandwidth.
  - **Client:** Serv and your mobile device connect to the same local wireless network. Client Mode is typically used for normal WiFi operating and connecting to your local router.
- **Access Point Mode Options:**
  - **Access Point Security Mode**
    - WPA
    - WPA2
    - WPA/WPA2
  - **Access Point Region**
    - United States
    - Europe
    - Japan
    - China
    - South Korea
  - **Access Point Channel**
    - Select a range or a specific channel/frequency
  - **Hotspot**

    - Hotspot feature (Enable or Disable)
    - Hotspot Interface (available when Hotspot is enabled):
        - Auto
        - Wired 1
        - Wired 2
        - Modem A
        - Modem B
        - Modem C
        - Modem D

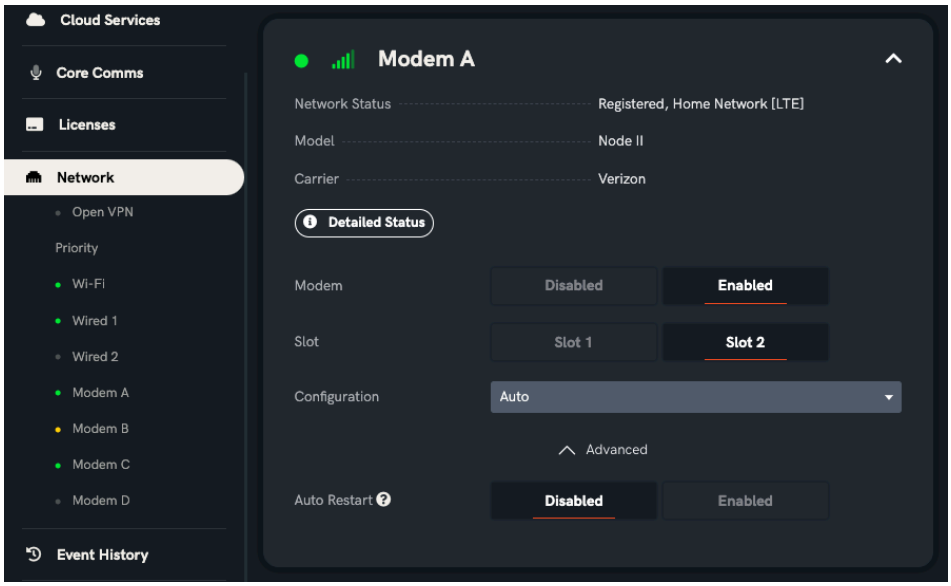
- **Client Mode Options:**
    - Auto Connect to Saved Networks (Enable or Disable)
    - IP Mode -
        - **Dynamic (DHCP):** Serv requests an IP address and configuration from the network's DHCP server when set to DHCP.
        - **Static:** When set to Static, you must manually configure the IP address, subnet mask, gateway, and DNS server to connect to the network.
    - Wi-Fi Scan
    - Saved Networks
    - + Add network

Wired



- **Dynamic (DHCP):** Serv requests an IP address and configuration from the network's DHCP server when set to DHCP.
- **Static:** When set to Static, you must manually configure the IP address, subnet mask, gateway, and DNS server to connect to the network.

Modem



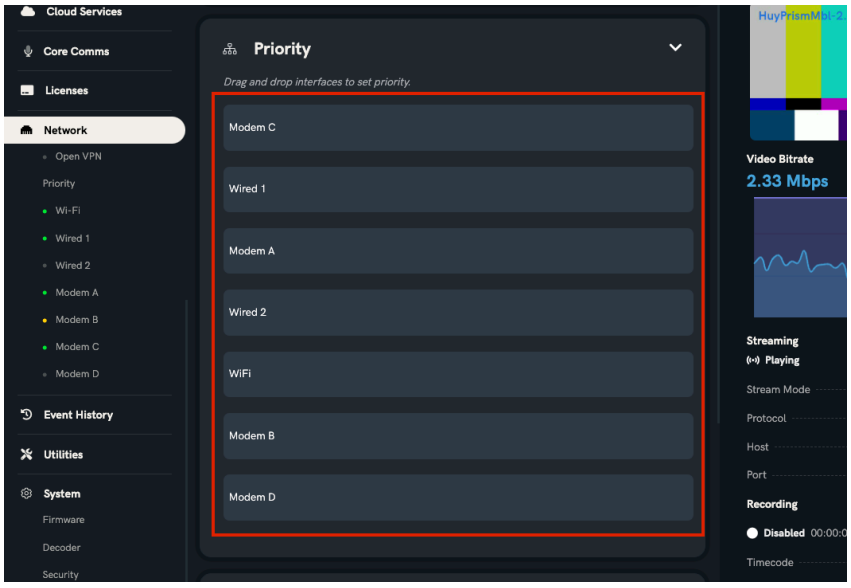
- **Modem** - Enable or Disable the use of the selected modem
- **Slot 1/2** - Select which SIM card you want to use.
  - **Node II** supports up to two SIM cards from most providers (including **Teradek Data** SIM cards) and can operate on most LTE/4G/3G data bands. With dual SIM slots, you can swap from one provider to another without unplugging the Node II. **Only one SIM card can be used at a time.**
  - **Node 5G** supports one SIM card from most providers (including **Teradek Data** SIM cards)and has a built-in **Teradek Data eSIM** for a total of two connections. Teradek Data eSIM cards provide high-speed native and multi-carrier coverage with automatic network switching so you always have the best connection at any location.
- **Configuration** - Select a configuration type:
  - Auto
  - Custom
  - Terfadek Standard Data
  - Teradek Priority Data
  - Teradek Priority Data Europe
  - Teradek Priority Data Japan
  - Teradek Priority Data
  - Teradek Data Tier 1

WiFi HotSpot Setup

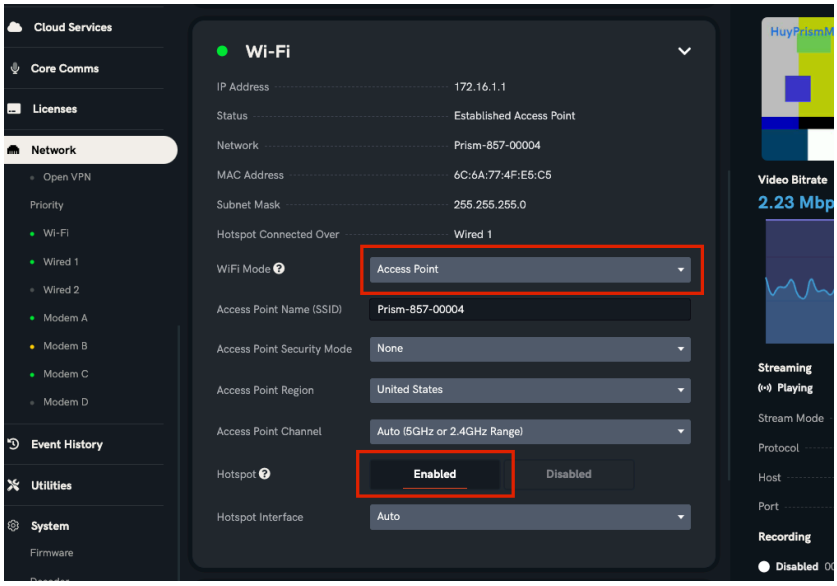
Serv's **Wi-Fi Hotspot** feature lets you turn your device into a wireless hotspot, sharing your Internet connection with smartphones, tablets, laptops, and other devices. WiFi Hotspot keeps you and others connected on the go, in areas without stable internet, or when multiple devices need to connect.

1. Connect and enable the modem(s) you will be using.

2. Click the **Priority** tab, then drag and drop your preferred interfaces to the top so they have the highest priority, and then align the fallback options below.

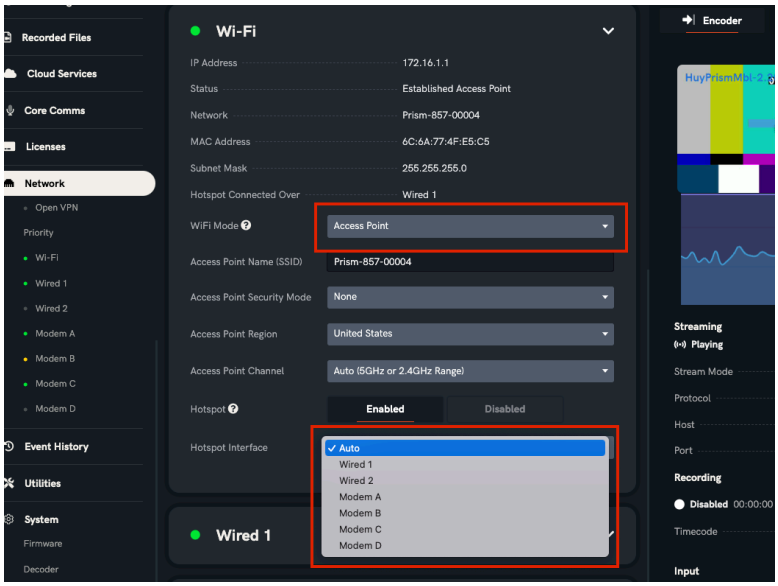


3. Open the **WiFi** tab to ensure the **WiFi Mode** is set to **Access Point**, then enable the Hotspot feature.



4. Select a **Hotspot Interface** option:

- Select **Auto** to use the highest priority interface and fall back to another interface if the current one is unavailable. **NOTE: It will NOT switch back to the higher priority interface if it is connected again**. To return to the higher priority interface, users must disable and then re-enable the hotspot, select a different interface, and then return to **Auto**.
- Selecting one of the **Wired** or **Modem** options will only use that specific interface and will have no fallback capability.
  - **WiFi** is not an option on the **Hotspot Interface** drop-down list.
  - Hub interfaces will only be displayed if a hub is connected.
  - All other interfaces will be displayed regardless of their connected status.



5. Connect a mobile device (iPhone, iPad, Android phone, etc.) to your Access Point and check if you have an internet connection.

Serv 4K

VIDEO	
Video Inputs	**1x** 12G/6G/3G/HD/SD-SDI (75 Ω BNC) **1x** HDMI 2.0 Type-A receptacle
Video Outputs	**1x** 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**
VIDEO PROCESSING	
Video Compression	**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)
Number of Encoded Streams	Up to one 4KDCI p60 4:2:2 10bit
Color Correction	CDL/1024 1D LUT (supports 10-bit color) 33x33x33 3D LUT (supports 10-bit color)
Bonding	Simultaneous bonding over up to 7 networks: • Ethernet • Wi-Fi • USB cellular modem • Up to 4 cellphones (iOS or Android)

Recording	Full-size SD/SDXC (class 6 and above) formatted exFAT, USB formatted FAT32, NFS
PROTOCOL SUPPORT	
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Supported Video Transport Protocols	Secure Reliable Transport (SRT), AirMix, Teradek bonding
Remote	Teradek Core
Cloud Services	Teradek Core, Frame.io, Sony Ci, PIX
AUDIO	
Audio Support	Stereo, 5.1 surround sound
Audio Compression	AAC-LC
Audio Input	3.5mm TRRS Stereo Line Level Analog or Microphone in, adjustable gain
Audio Output	3.5mm TRRS Stereo Headphone output
Supported Audio Bitrate	N/A
PHYSICAL ATTRIBUTES	
Dimensions	6.25”W x 3.6”D x 1.4”H [150 x 107 x 36mm]
Weight	1 lb [476g]
Construction	Milled aluminum
Mounting Options	Can be mounted horizontally or vertically with 1/4” 20 mounting holes
INTERFACES	
Configuration Interface	Feature-rich Web UI for local device management, configuration, and control, Intuitive iOS/Android configuration app (Teradek Serv), OLED Status Display w/ Nav control buttons, Core for cloud-based device management
USB Interface Functionality	**2x** Powered USB-C host ports with 3G/4G modem support

Ethernet	10/100/1000 BASE-T Gigabit Ethernet (RJ45)
Wireless	**WiFi:** 2.4/5GHz 802.11 a/b/g/n/ac/ax MiMo
Wi-Fi Channel Selection	N/A
Mobile App	Teradek Serv for iOS and Android devices
Switches	On/Off switch
POWER	
Power Input	2-pin circular locking connector
Voltage	6-28V DC
Power Consumption	18W

Serv Micro

VIDEO	
Video Inputs	**1x** HDMI 2.0 Type-A receptacle
Video Outputs	**1x** HDMI 2.0 Type-A receptacle
Supported Resolutions	**1080p** 23.98/24/25/29.97/30/50/59.94/60 **1080i** 50/59.94/60 **720p** 50/59.94/60
VIDEO PROCESSING	
Video Compression	**ISO MPEG-4 Part 10:** Advanced Video Coding (AVC)/ITU H.264 **AVC:** Main
Supported Video Bitrate	300 Kbps to 15 Mbps
Video Format Conversion Support	Built in video scaler and deinterlacer
HDR Support	N/A
Number of Encoded Streams	N/A
Color Correction	N/A
Bonding	Simultaneous bonding over up to 7 networks: • Ethernet • Wi-Fi • USB cellular modem • Up to 4 cellphones (iOS or Android)
Recording	Full-size SD/SDXC (class 6 and above) formatted exFAT, USB formatted FAT32, NFS
PROTOCOL SUPPORT	
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP
Supported Video Transport Protocols	Secure Reliable Transport (SRT), AirMix, Teradek bonding
Remote	Teradek Core

Cloud Services	Teradek Core, Frame.io, Sony Ci, PIX
AUDIO	
Audio Support	N/A
Audio Compression	AAC-LC
Audio Input	Embedded audio input (2 channel), Analog line or Microphone in (2 channel)
Audio Output	N/A
Supported Audio Bitrate	48Kbps to 512Kbps
PHYSICAL ATTRIBUTES	
Dimensions	4.1”W x 2.9”D x 1.1”H [105 x 75 x 28mm]
Weight	190g (6.7 Oz)
Construction	Machined aluminum and ABS Plastic
Mounting Options	Can be mounted horizontally or vertically with 1/4” 20 mounting holes
INTERFACES	
Configuration Interface	Feature-rich Web UI for local device management, configuration, and control, Intuitive iOS/Android configuration app (Teradek Serv), OLED Status Display w/ Nav control buttons, Core for cloud-based device management
USB Interface Functionality	USB type A (host) for 3G/4G modem support
Ethernet	10/100/1000 BASE-T Gigabit Ethernet (RJ45)
Wireless	WiFi 6: Dual Band MIMO 802.11 IEEE a, b, d, e, g, h, i, k, n, r, u, v, w, ac, ax
Wi-Fi Channel Selection	**Auto with 3 modes:** 2.4 or 5 GHz, Auto (2.4 GHz only), Auto (5 GHz only) **Manual:** Configurable to specific channels
Mobile App	Teradek Serv for iOS and Android devices
Switches	On/Off switch

POWER	
Power Input	2-pin circular locking connector
Voltage	6-28V DC
Power Consumption	18W