Manuals+ — User Manuals Simplified.

TERADEK Wave Live Streaming Endcoder/Monitor User Guide

Contents

TERADEK Wave Live Streaming Endcoder/Monitor

PHYSICAL PROPERTIES

- **A:** Wi-Fi antennas
- **B:** Power button
- **C:** Monitor display
- **D:** Sony L-series dual battery plate
- **E:** RP-SMA connectors
- **F:** USB modem port
- **G:** SD card slot
- **H:** USB-C power input
- **I:** Ethernet port
- **J:** HDMI input
- **K:** Mic/Line stereo input
- **L:** Headphone output

SMART STREAMING MONITOR

Teradek's Wave is the only live streaming monitor that handles encoding, smart event creation, network bonding, multistreaming, and recording – all on a 7" daylight-viewable touchscreen display. Wave delivers high definition live streaming video with the quality and reliability expected in traditional broadcasts and utilizes Wave's innovative project workflow: FlowOS.

WHAT'S INCLUDED

- 1x Wave Assembly
- 1x Wave Stand Kit
- 2x Wave Rosette w/Gaskets
- 1x PSU 30W USB-C Power Adapter
- 1x Ethernet Flat – Cable
- 1x Ultra Thin HDMI Male Type A (Full) – HDMI Male Type A (Full) 18in Cable
- 1x Neoprene Sleeve for 7 in. Monitors
- 2x Wave Thumbscrews
- 2x WiFi Antenna

POWER AND CONNECT

1. Connect power to Wave via the included USB-C adapter or attach one or both Sony L-series batteries to the built-in dual-battery plate on the back (D).
2. Press the Power button (B). Wave begins to boot as soon as the power is turned on.
   NOTE: Wave encoders are hot swappable between USB-C and L-series batteries. Both power source types can be connected together, but Wave will draw power from the USB-C power source by default.
3. Attach the two Wi-Fi antennas to the RP-SMA connectors (E).
4. Turn on your video source then connect it to Wave's HDMI input (J).
5. Once Wave has booted, the main screen will be displayed. From the main screen you can create an event by tapping the Create a new Event tab or the + icon, or by swiping left on the screen.
6. Use a hot shoe mount and a 1/4"-20 screw or any other mounting hardware to mount Wave to your camera, if desired.

MOUNTING

Wave has a three 1/4"-20 threaded holes: one on the bottom to mount on a camera, and two on each side to install the included stand kit.

MOUNT ON A CAMERA

1. Attach Wave to your camera's arm mount, then screw on to secure.
2. Orient the WiFi antennas so that each one has clear line–of–sight.
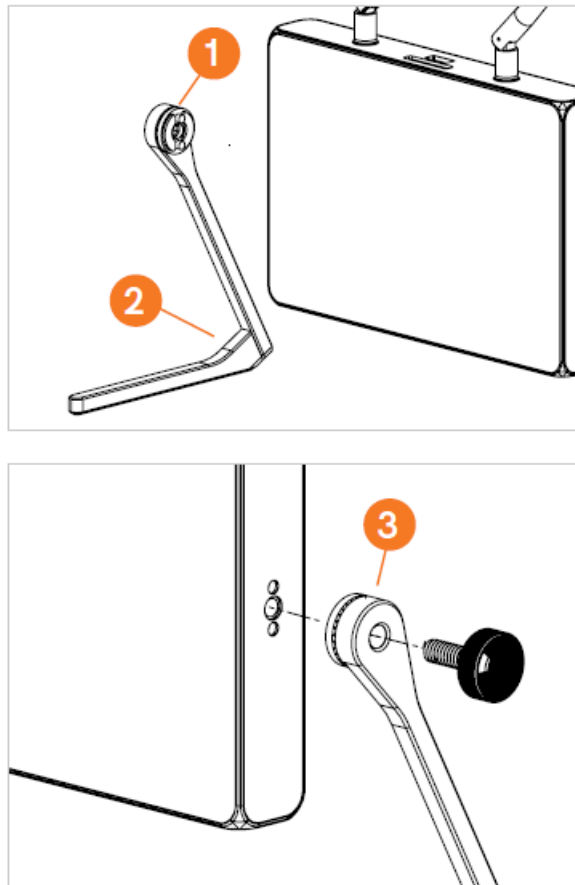
CAUTION:

DO NOT OVERTIGHTEN SCREWS. Doing so can damage Wave's chassis and internal components, voiding the warranty.

Wave can be mounted vertically on a camera.

STAND KIT INSTALLATION

1. Place a rosette disc over one of Wave's side mounting holes.
2. Affix one of the stands over the rosette disc so that the both rosettes are facing each other (1) and the feet are facing towards you (2).
3. Insert a thumbscrew through the stand and rosette disc and into the mounting hole (3), then slightly tighten the thumbscrew to secure the arm against the device. Ensure that the stand is loose enough in order to adjust the stands to your preference.
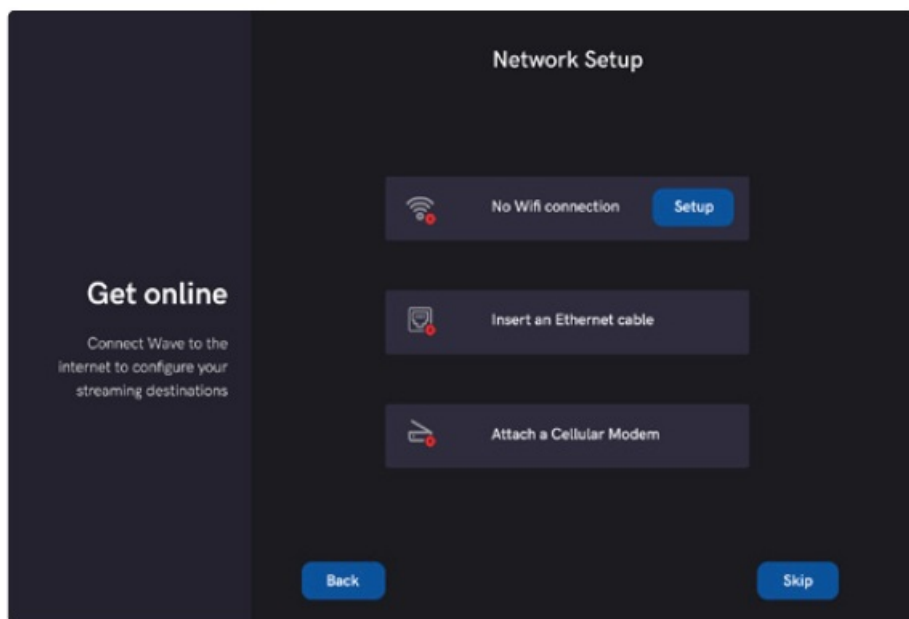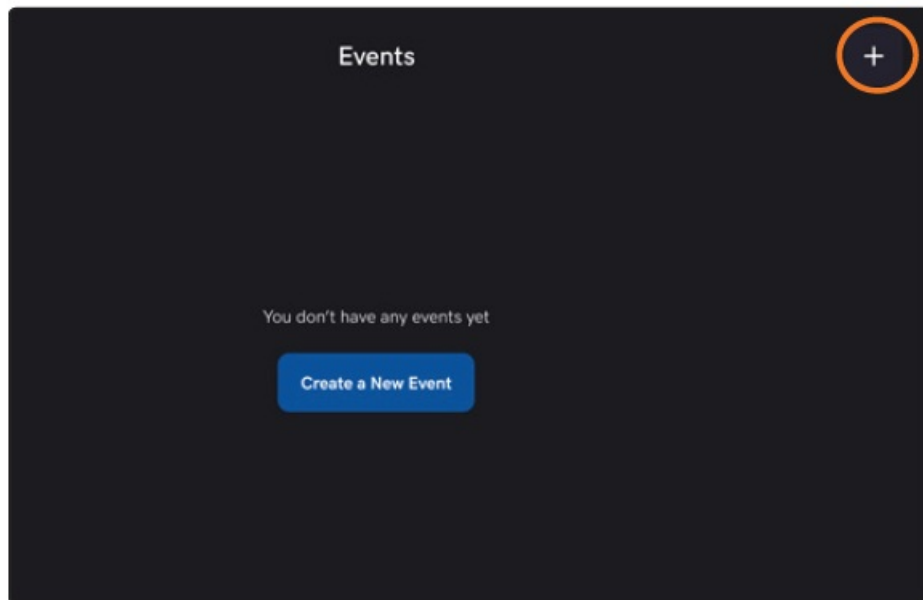
4. Repeat steps 1-3 for the opposite side, then tighten both thumbscrews.
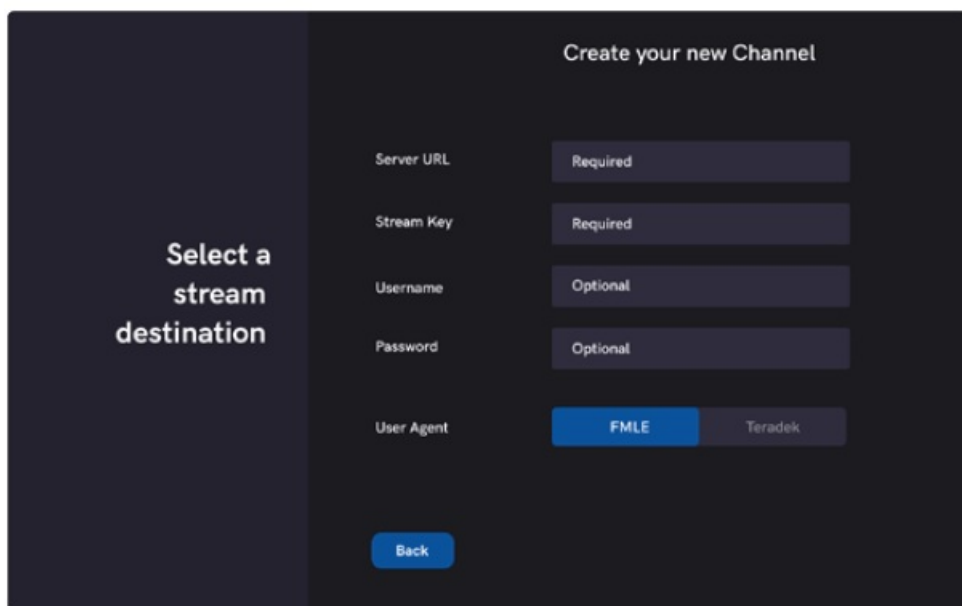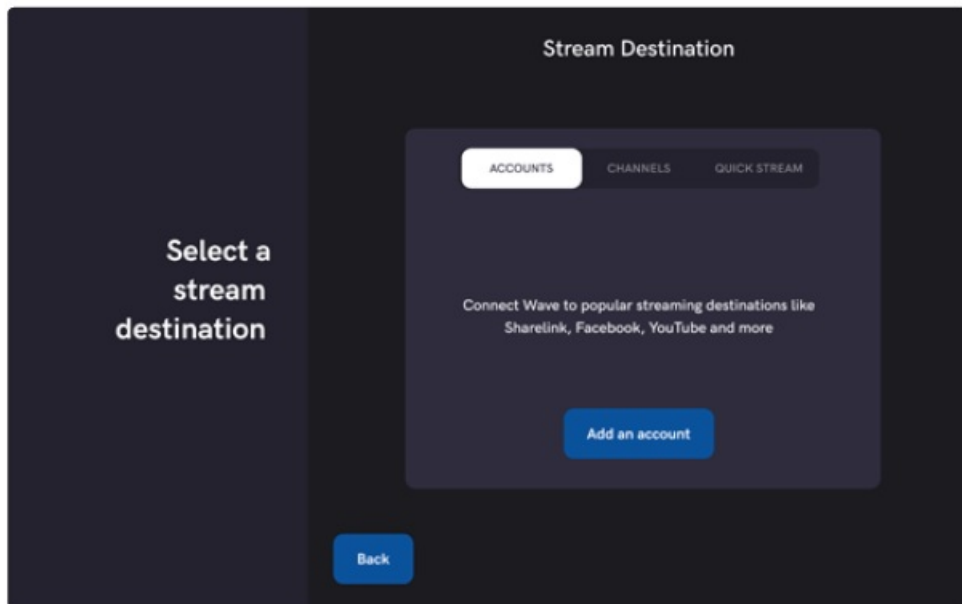
GET STARTED

1. From the main screen, tap the + icon to enter the Personalize your new Event screen.
2. Create a name for your event (optional), then select a thumbnail so that it's easily identifiable. Tap Next.
3. Select a method to connect to the internet:
   - WIFI – Tap Setup, select a network, then enter your password.
   - ETHERNET – Plug an Ethernet cable from an Ethernet switch or router.
   - MODEM – Insert a compatible 3G/4G/5G USB modem. Tap Next when done.
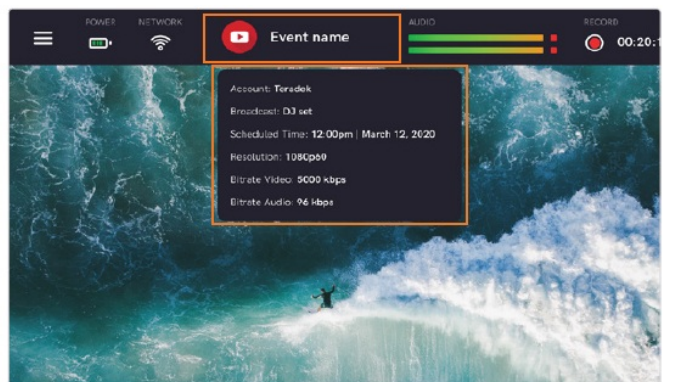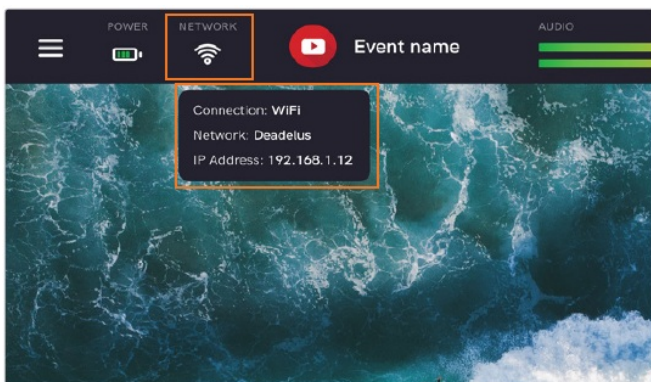   For more details on how to connect to a network, see page 12.

4. Select either streaming account, channel, or quick stream, then follow the prompts to authenticate your destination:

  - **ACCOUNTS** – Tap Add an account to configure a streaming destination, then follow the on-screen prompts to authorize Wave.
  - **CHANNELS** – Tap Add a channel to manually connect Wave to any RTMP platform using a server url and stream key.
  - **QUICK STREAM** – Quick stream is also for RTMP streaming, but Wave will not save the server URL, stream key, or your login credentials for any future events.

5. Select one of the configured accounts, channels, or quick stream destinations then enter all applicable information (title, description, start time, etc.).
   NOTE: Depending on the streaming destination you select, there may be additional settings required to begin streaming.

6. Select Enable or Disable Recording. If you select Enable, select a drive. Tap Next.

7. Adjust the video and audio quality settings then tap Finish to view the incoming video feed. Tap the Stream tab on the top right corner to begin streaming.
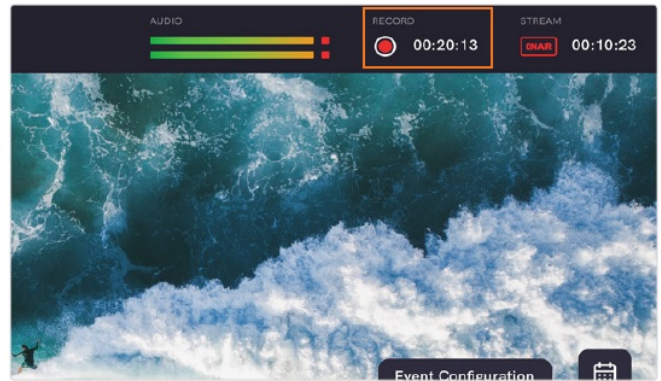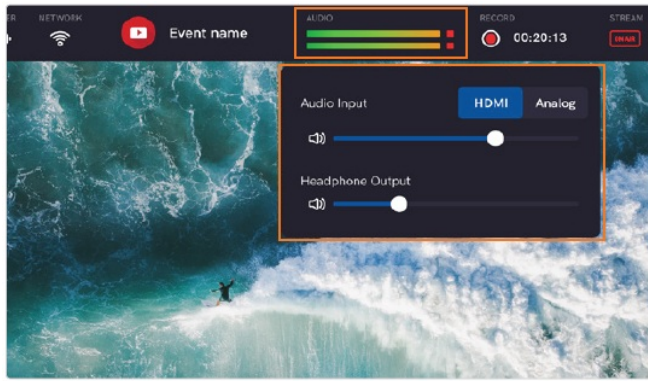
USER INTERFACE (UI) OVERVIEW

NETWORK
The Network drop-down tab displays the type of interface you are using (WiFi, Ethernet, or Modem) along with the corresponding IP address and name of the network, if applicable.

EVENT
The Event drop-down tab displays the event name and destination (streaming account) you are configured to

stream to. The Event tab also displays the resolution, video bitrate, and audio bitrate.
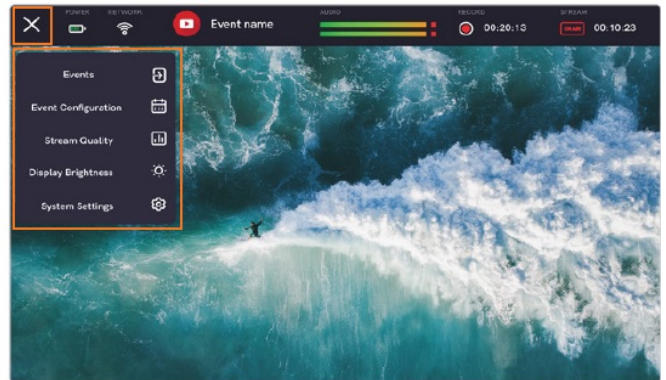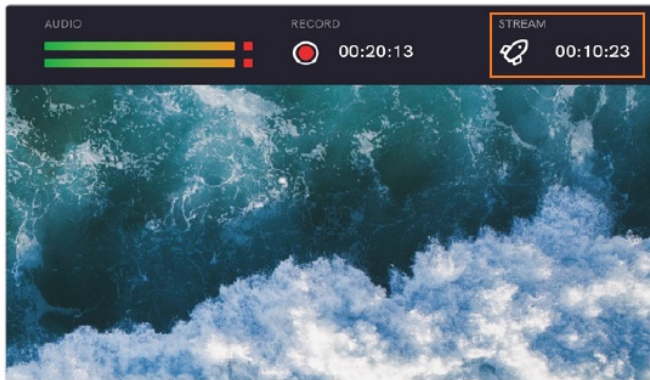

AUDIO
The Audio drop-down tab allows you to select an HDMI or Analog input, and adjust the Audio input and Headphone output volume.

RECORDING
Tap the Recording tab to Start or Stop your recording when Recording is enabled. If Recording is disabled, tap the tab to enter the Recording Settings, where you can either enable or disable the recording function and select a drive to record to.

STREAM
The Stream tab displays the status asnd duration of your stream. Tapping the Stream tab allows you to start or end your live stream (Go Live and Preview options available only when YouTube is selected as the destination).

SHORTCUT
The Shortcut tab provides access to the Event Configuration, Stream Quality, and System Settings menus. You can also adjust the display's brightness and monitor the stream quality via the pop up window.

NETWORK CONFIGURATION

Use Wave's display to configure and/or reconnect Wave to a network and get online.

CONNECT TO A WIFI NETWORK
Wave supports two wireless (Wi-Fi) modes; Access Point (AP) Mode (for bonding multiple cellular devices for increased bandwidth) and Client Mode (for normal Wi-Fi operating and connecting to your local router).

1. Tap the gear icon or swipe right on the display to enter the System Settings menu.
2. Select a wireless mode:
   - Access Point (AP) Mode – Connect your phone or laptop to Wave's network, Wave-XXXXX (XXXXX represents the last five digits of Wave's serial number).
   - Client Mode – Select Client, select one of the available networks, then enter your credentials for that

network.

3. Once connected, the display will list the network Wave is connected to in the Connected to field, along with the IP address. To access the web UI: Enter the network's IP address in your web browser's navigation bar.

CONNECT VIA ETHERNET

1. Plug an Ethernet cable from the Wave's Ethernet port to an Ethernet switch or router.
2. To verify that Wave is connected, tap the gear icon or swipe right on the display to enter the System Settings menu, then tap Wired to verify that Ethernet is set to DHCP and to reveal Wave's IP address. To access the web UI: Enter the network's IP address in your web browser's navigation bar.

CONNECT VIA USB MODEM

1. Insert a compatible 3G/4G/5G USB modem into slot 1 or 2.
2. Tap the gear icon or swipe right on the display to enter the System Settings menu, then tap Modem to verify it is connected.
3. To access the web UI: Connect your computer to Wave's AP network (see page 4), then enter the default IP address 172.16.1.1 in the navigation bar.

SHARELINK

Sharelink is Teradek's cloud platform that offers Wave users two major advantages: multi-destination streaming for broader distribution, and network bonding for a more robust internet connection. Broadcast your live productions to an unlimited number of streaming platforms simultaneously while monitoring your stream from anywhere in the world.

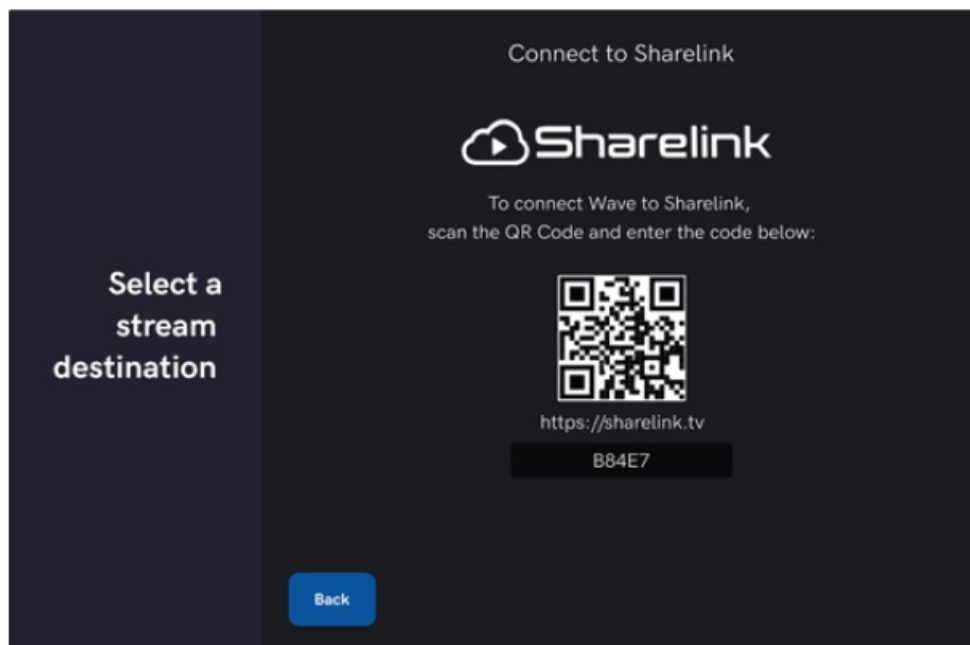**NOTE:** A subscription to Sharelink is required to bond Internet connections.

CREATING A SHARELINK ACCOUNT

1. Visit sharelink.tv and select a pricing plan that best suits your needs.
2. After selecting a plan and creating an account, return to the login screen and enter your credentials.

CONNECTING TO SHARELINK

1. Select Sharelink from the Streaming Accounts menu.
2. Copy the authorization code generated for your Wave, then navigate to the link provided.
3. Login to your Sharelink account, and select Add new Device.
4. 4 Enter the authorization code, then click Add.
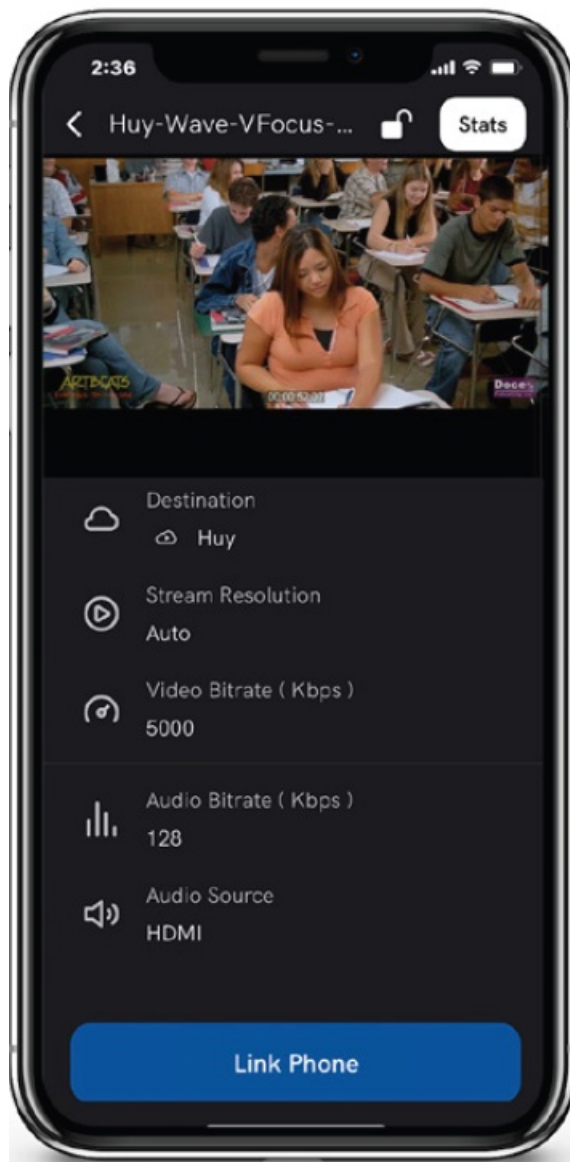
SUPPORTED CONNECTIONS

- Ethernet
- Up to two Teradek Nodes or 3G/4G/5G/LTE USB modems.
- WiFi (Client mode) – Connect to an existing wireless network or mobile hotspot
- WiFi (AP mode) – Connect up to four cellular devices with the Wave App

WAVE APP

The Wave app allows you to remotely monitor your stream's stats such as bitrate, bonding status, and resolution to ensure a stable stream. You can also enable hotspot bonding with multiple cellular devices for fast, reliable internet connectivity wherever you go. The Wave app is available for iOS and Android devices.

MAIN DISPLAY

- **Stats** – Tap the button at the top of the screen to display Wave's stats such as serial number, connections, runtime, IP Address, and network settings.
- **Info** – Displays the streaming destination, resolution, and output information.
- **Audio/Video** – Displays the current audio and video bitrate, input resolution, and video framerate.
- **Link/Unlink Phone** – Tap the Link/Unlink Phone tab to enable/disable the use of your cellular phone's data as an Internet connection.

RECORDING

Wave supports recording to an SD card or compatible USB thumb drive. Each recording is saved with the same resolution and bitrate set in Wave.

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

RECORDING CONSIDERATIONS

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

Teradek regularly releases new firmware versions to improve performance, add features, or fix **vulnerabilities.teradek.com**/pages/downloads contains all the latest firmware and software updates. Visit **support.teradek.com** for tips, information, and to submit help requests to Teradek's support team.

Documents / Resources

	TERADEK Wave Live Streaming Endcoder/Monitor [pdf] User Guide Wave Live Streaming Endcoder Monitor, Wave Live Streaming Endcoder, Wave Live Streaming Monitor, Monitor, Endcoder, Wave Live Streaming

References

- ☁ **Sharelink**
- ☁ **Creative Solutions Help Center**
- ⚡ **Downloads – Teradek**

Manuals+,