VidiU

VIDIU AND VIDIU PRO
REFERENCE GUIDE

TERADEK

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INTRODUCTION

Thank you for purchasing Teradek's VidiU, the ultimate entry-level streaming solution for HDMI video sources. This reference guide is for both VidiU and VidiU Pro encoders; save where otherwise noted, operations are identical. VidiU and VidiU Pro deliver high definition live streaming video with the quality and reliability expected in traditional HD broadcast. VidiU features native integration with some of the most popular video platforms, offering a seamless streaming experience. Use this reference guide to enhance your usage and knowledge of VidiU or VidiU Pro.

Support Resources
In addition to this reference guide, there are a number of resources available for more information on the VidiU's features and operation. For tips, information, and all the latest available firmware and software updates, visit Teradek's support forum at https://support.teradek.com. If you are unable to find what you are looking for online, please contact Teradek's support staff at support@teradek.com | Phone: (888) 941-2111 Ext. 2 (available M-F 5am-6pm PST).

Disclaimer
This manual is intended for user information only. Every effort has been made to ensure that the contents within are accurate at the time of printing, and that updates are made in a timely manner. Teradek cannot be held responsible for inaccuracies, typographical errors, or out-of-date information contained within this manual.
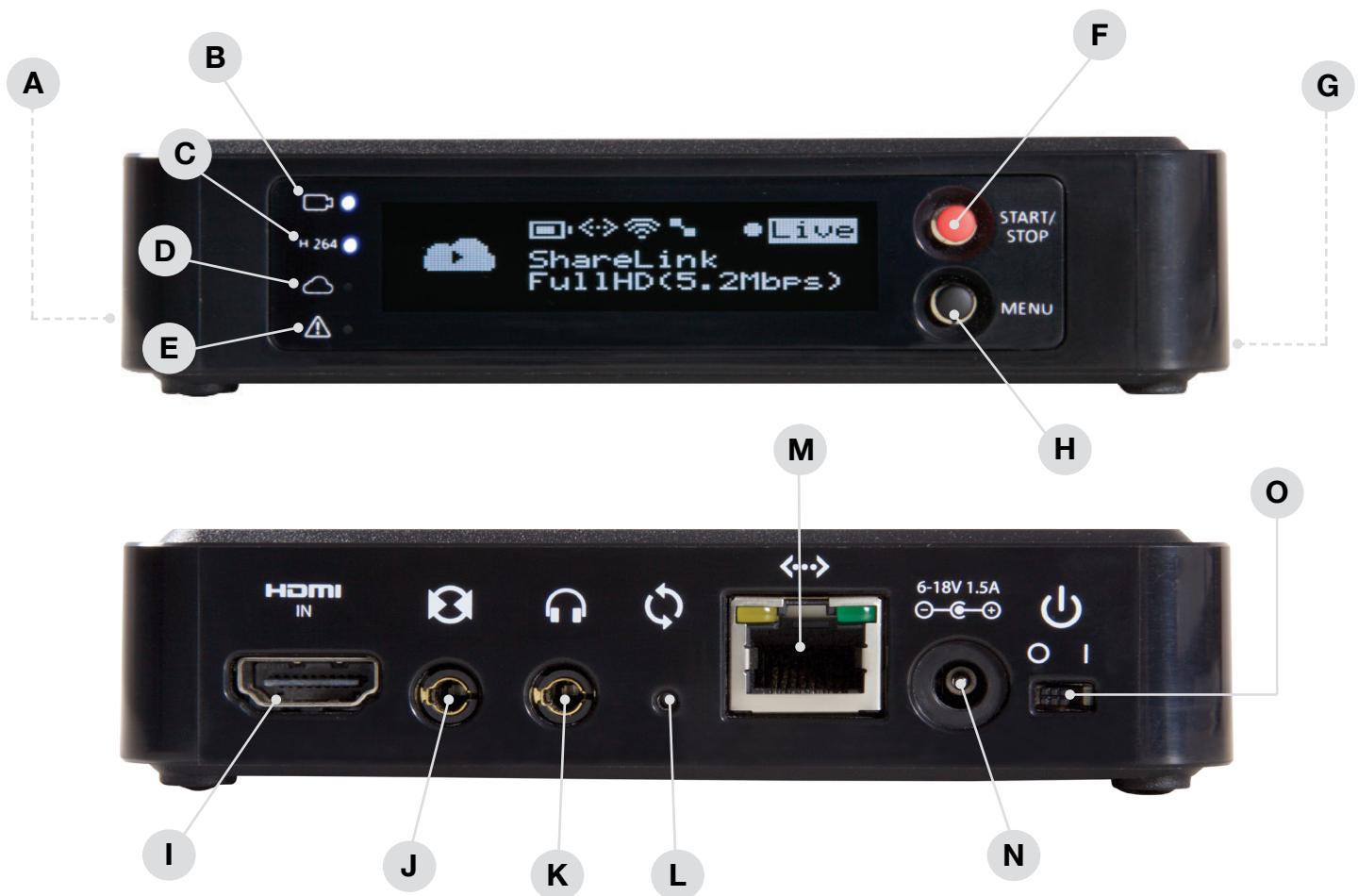
Warning
Teradek VidiU products contain no user serviceable parts. Disassembly, modification, or removal of any of the device's components may void your warranty. Please visit http://store.teradek.com/pages/warranty-information for up-to-date warranty terms and conditions.

PHYSICAL PROPERTIES (VIDIU)

A. Power Switch (Side)
B. USB Port (Side)
C. Headphone Output (Side)
D. Video Input Status
E. Encoder Status
F. Broadcast Status
G. Warning Indicator

H. Start/Stop Joystick
I. Menu Joystick
J. HDMI Input
K. Mic/Line Input
L. Reset Button
M. Ethernet
N. Power Input

PHYSICAL PROPERTIES (VIDIU PRO)

ShareLink
FullHD(5.2Mbps)

START/
STOP

MENU

HDMI
IN

6-18V 1.5A

A. SD Card Slot (side)   I. HDMI Input
B. Video Input Status   J. MIC/Line Input
C. Encoder Status   K. Headphone Output
D. Broadcast Status   L. Reset Button
E. Warning Indicator   M. Ethernet
F. Start/Stop   N. DC Input
G. USB Port (side)   O. Power Switch
H. Menu Joystick

GETTING STARTED

There are three key steps to going live with VidiU:

1. **Power your device**
2. **Connect VidiU to a network**
3. **Choose your streaming platform**

POWER YOUR DEVICE

1. To power your VidiU or VidiU Pro, connect the AC adapter to the DC input (Fig. 2-1) located on the back of the device, then turn the power switch to the On position. VidiU begins to boot as soon as the power is activated.

2. Turn on your video source, then connect it to VidiU using the HDMI input, also located on the back of the device (Fig. 2-2).

3. Use the enclosed hot shoe mount and a 1/4"-20 screw to mount the VidiU to your camera, tripod mount, or other accessory mount, if desired.

4. Once the VidiU has booted, verify that the Video Input Status and Encoder (H.264) LEDs are blue (Fig. 2-3).

Fig. 2-1

Fig. 2-2

Fig. 2-3

START/STOP AND MENU JOYSTICKS

Use the Start/Stop and Menu Joysticks (Fig. 2-4) to navigate the Front Panel Interface.

Start/Stop:
● (button press): Start/Stop broadcasts, exit menu screens

Menu:
▶,● (button press): Confirm selection, open selected menu

▲,▼, ▶, ◀: Select menu items, change status screen on main display, select characters.

Fig. 2-4

CONNECT TO A NETWORK

You can use the VidiU app, the Web User Interface (Web UI), or the front panel interface to connect VidiU to a network. Select one of the following options.

Using the VidiU App

The VidiU iOS application allows you to remotely monitor and configure VidiU. Download the VidiU iOS app from the App Store, then choose one of the following methods to get VidiU online.

Connect VidiU to an Ethernet Network:

1. Plug an Ethernet cable into VidiU's Ethernet port (Fig. 2-5) and attach it to an Internet–connected Ethernet switch or router.

2. Connect your iOS device to VidiU's Access Point network (pg. 24): VidiU–XXXXX (serial number of the device).

3. Open the app and select VidiU, then verify that the connection status shows Online (Fig. 2-6).
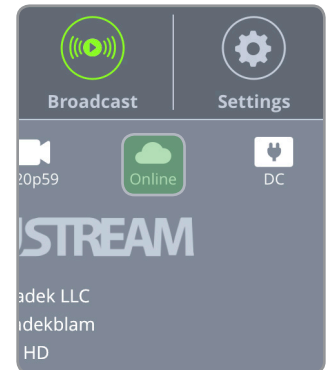

Fig. 2-5

Fig. 2-6

Connect VidiU to a Wi-Fi Network:

1. Connect your iOS device to VidiU's Access Point network, then select the VidiU.

2. Navigate to the **Settings** menu, select **Network**, then select **Wireless.**

3. Select **Client Mode**, then tap **Scan for Networks** (Fig. 2-7).

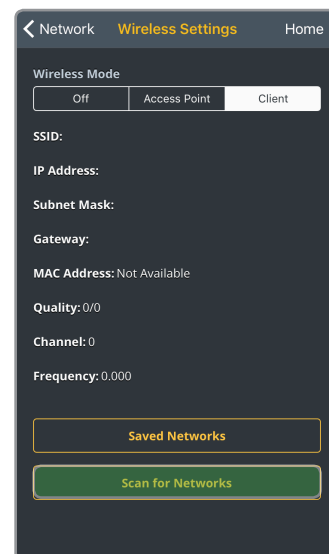4. Select a network, then connect your iOS device to that network.

Fig. 2-7

Connect using your phone's data plan:

1. Connect your iOS device to VidiU's Access Point network (pg. 24): VidiU–XXXXX (serial number of the device).

2. Open the VidiU app and select VidiU with the corresponding serial number under the list of Wi-Fi devices.

3. When prompted, click **Yes** to use your cellular data plan (Fig. 2-8).

Using the Front Panel Interface

Connect to a Wired Network:

1. Plug an Ethernet cable into VidiU's Ethernet port (Fig. 2-9) and attach it to an Internet–connected Ethernet switch or router.

2. Once the device is connected to the network, VidiU's front panel interface will indicate that it's '**Ready**.'

3. Using the Menu Joystick, navigate to the **Network** menu, then select **Wired**.

4. Once the device is configured and connected to the network, VidiU's IP address is displayed.

To access the Web UI:
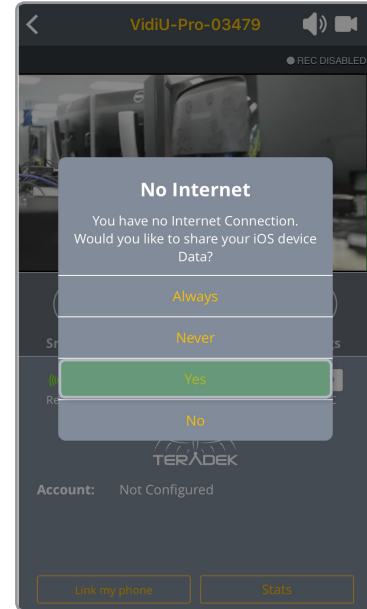5. Open a web browser and enter VidiU's IP address in the navigation bar (Fig. 2-12).

Fig. 2-8

Fig. 2-9

Connect to a Wi-Fi Network:

1. Using the Menu Joystick, navigate to the **Network** menu, then select **WiFi**.

2. Launch **Client Mode**, then select **Scan for Networks**. Select a Wi-Fi Network, then enter your credentials.

3. Once the device is configured, select [INFO] to view the IP address (Fig. 2-10).

To access the Web UI:
4. Open a web browser and enter VidiU's IP address in the navigation bar (Fig. 2-12).

Fig. 2-10

Connect using a 3G/4G USB Modem:

1. Insert a compatible 3G/4G USB modem into the USB port (Fig. 2-11) and wait for the cellular reception icon (4 bars) to appear.

2. To confirm the modem is connected, navigate to the **Network Settings** menu and select **USB Modem.***

To access the Web UI:
3. Connect your computer to VidiU's AP network.

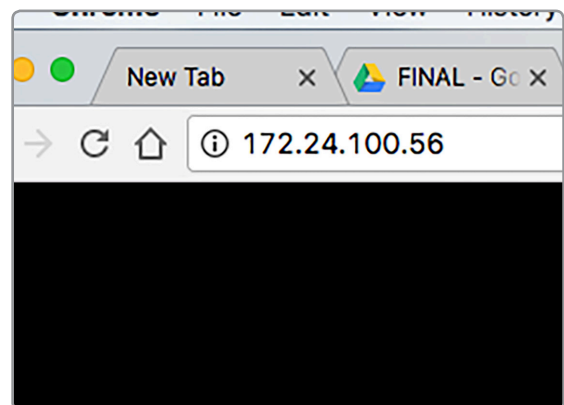4. Open a web browser and enter VidiU's IP address in the navigation bar (Fig. 2-12).

Fig. 2-11

Fig. 2-12

CHOOSE YOUR PLATFORM

VidiU and VidiU Pro are capable of broadcasting to any compatible online video platform. VidiU offers integration with many popular video streaming platforms. Simply enter your credentials using the VidiU app, Web UI, or the front panel interface.

Connect to a Streaming Platform:

1. Go to **Settings**, select **Broadcast** (Fig. 2-13) then select **Platform** (Fig. 2-14).

2. Select a streaming platform (Fig. 2-15) and enter your credentials, or follow the on-screen prompts to authorize VidiU with YouTube or Facebook. *(For more detailed set up instructions, go to the Platform Settings section on pg.16.)*

3. Select a channel or event to stream to.

4. After configuring your device, you will be redirected to the **Settings** menu. Select **Done** on the upper right corner.

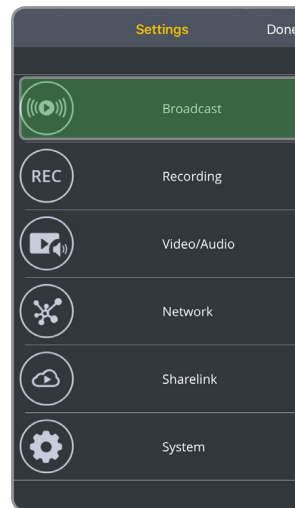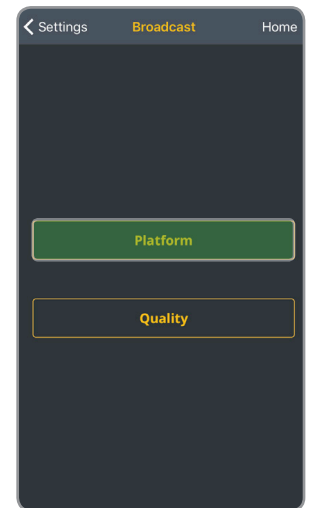5. Tap the '**Broadcast**' button to go live (Fig. 2-16).
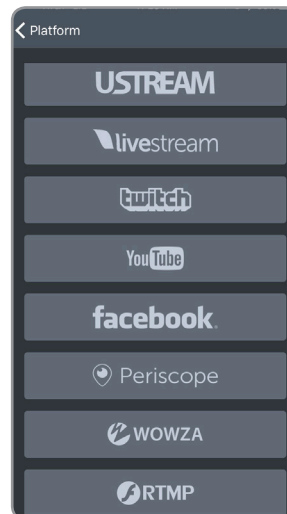

Fig. 2-13

Fig. 2-14

BROADCAST BUTTON:

 VidiU is ready to broadcast

 Broadcast is in session

 VidiU is not ready to broadcast
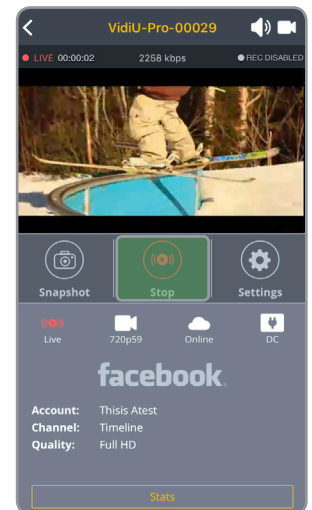

Fig. 2-15

Fig. 2-16

Internet Streaming with Live:Air Action

VidiU and VidiU Pro can be used for live production and monitoring with Live:Air Action. Use Live:Air Action to preview, monitor, and edit multiple video sources before broadcasting your video to one of the integrated platforms.

Connect and Broadcast using Live:Air Action

1. Connect your iPad to the same network as Cube.

   Live:Air Action or Live:Air Solo
   Live:Air Action is compatible with iPad Air 1 and newer. Live:Air Solo is compatible with both iPad and iPhone. Both apps are available in the iTunes App Store.

2. Launch the Live:Air Action app.

3. Tap the **Add New Source** button on the Preview Editor's bottom panel, then tap the **Teradek Device** button. Select a device (Fig. 2-11), then tap **Done**.

4. To configure a streaming destination, tap the ⚙ button in the upper right-hand corner, enter the **Broadcasting Destinations** page, then navigate to **Manage Destinations**>**Add a Destination** (Fig. 2-12). Select a platform, then enter your credentials (if applicable).

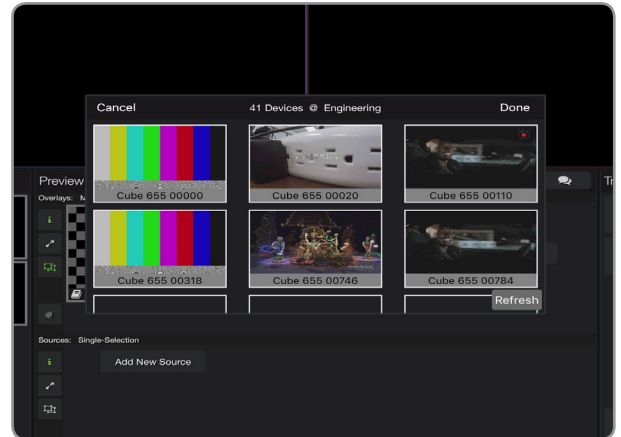5. To begin live streaming, tap the '**Go Live!**' button in the upper right-hand corner.
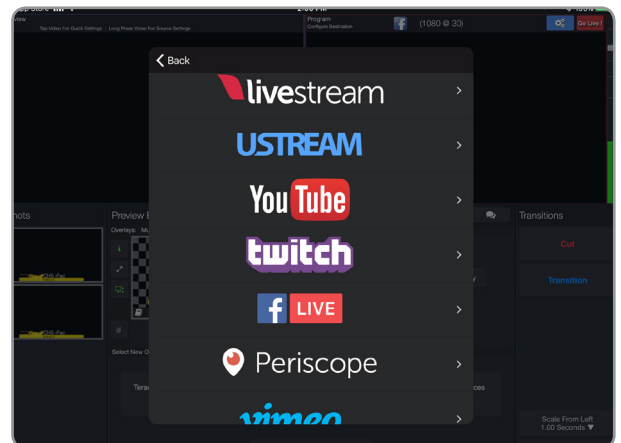

Fig. 2-11

Fig. 2-12

Fig. 2-19

SETTINGS OVERVIEW

Navigating the Settings Menu

The **Settings** menu allows you to customize and control VidiU or VidiU Pro's broadcast, audio/video, and network settings. Use the VidiU app, Web UI, or the front panel interface to access the **Settings** menu, then select a setting to modify.

Settings	Done

Return to the **Home** screen

Broadcast

BROADCAST
Modify **Platform** and **Quality** settings

Recording

RECORDING**
Enable recording and select a media storage option

Video/Audio

VIDEO/AUDIO
Adjust the Video and Audio input settings

Network

NETWORK
Choose a method of connecting to the Internet

Sharelink

SHARELINK**
Log in to your Sharelink account to increase bandwidth

System

SYSTEM
Perform factory reset, firmware upgrade,* and system diagnostics**

* Options available only while using the Web UI

** Features available only on VidiU Pro

VIDIU IOS APP SETTINGS DIAGRAM

BROADCAST

Quality — **Video** **Audio** **Framerate**

Platform*

Livestream
UStream
YouTube
Twitch
Facebook
Manual
Live:Air
Periscope
Wowza

Video:
Full HD
HD+
HD
High
Medium
Low
Mobile

Audio:
HD
High
Medium
Low
Mobile
Auto

Framerate:
High
Full
Half
Quarter

RECORDING — Enable/Disable Recording

VIDEO/AUDIO — **Widescreen** **Audio Source** **Audio Channel**

Widescreen:
Auto
Yes
No

Audio Source:
HDMI
Analog
Disabled

Audio Channel:
Stereo
Mono Left
Mono Right

NETWORK — **USB Modem** **Wired** **Wireless** **Speed Test** **Mobile**

USB Modem:
Auto
Preset
Custom

Wired:
Dynamic
Static

Wireless:
Access Point
Client
Off

Mobile:
Never
Always
Ask

SHARELINK — Purchase Plan Login

SYSTEM — **Factory Reset** — All Broadcast Network Cancel

* Settings options will vary, depending on the platform

WEB USER INTERFACE (WEB UI) SETTINGS DIAGRAM

BROADCAST

Quality → **Video** — **Audio** — **Frame Rate** — **Custom Bitrate**

Platform*

Livestream
Ustream
YouTube
Twitch
Facebook
Manual
Live:Air
Periscope
Wowza

Video:
Full HD
HD+
HD
High
Medium
Low
Mobile

Audio:
HD
High
Medium
Low
Mobile
Auto

Frame Rate:
High
Full
Half
Quarter

Custom Bitrate:
256000
192000
128000
96000
48000
32000
16000

VIDEO/AUDIO

Video Settings — **Widescreen**

Audio Settings — **Audio Source** — **Channel**

Overlay Settings — **Overlay**

Widescreen:
Auto
Yes
No

Audio Source:
HDMI
Analog
Disabled

Channel:
Stereo
Mono Left
Mono Right

Overlay:
Overlay Mode
Show Title
Title Text
Show Time
Font

SYSTEM

Firmware Upgrade
Password
System Time
Reboot
Factory Reset
System Diagnostics

NETWORK

General — **USB Modem** — **Wired** — **Wi-Fi**

General:
Speed Test

USB Modem:
Auto
Preset
Custom

Wired:
Dynamic
Static

Wi-Fi:
Off
Access Point
Client

RECORDING

Enable/Disable Recording

SHARELINK

Purchase Plan/Sign In

* Settings options will vary, depending on the platform

VIDIU FRONT PANEL INTERFACE SETTINGS DIAGRAM

BROADCAST

- **Quality** → **Video** → **Audio** → **Frame Rate** → **Adaptive Bitrate**
- **Platform***

Platform* options:
Livestream
Ustream
YouTube
Twitch
Facebook
Manual
Live:Air
Periscope
Wowza

Video:
Full HD
HD+
HD
High
Medium
Low
Mobile

Audio:
HD
High
Medium
Low
Mobile
Auto

Frame Rate:
High
Full
Half
Quarter

Adaptive Bitrate:
On/Off

RECORDING
Media
Format
Eject
Enable/
Disable

VIDEO → **Input** → **Widescreen** → **Overlay**

Widescreen:
Auto
Yes
No

Overlay:
Overlay
Text
Title
Time Stamp
Font
Location

AUDIO → **Source** → **Channel**

Source:
HDMI
Analog
Disabled

Channel:
Stereo
Mono Left
Mono Right

NETWORK → **Wired** → **Wi-Fi** → **USB Modem** → **Tools**

Wired:
Mode
[Info]

Wi-Fi:
Mode
[Setup]
[Info]

USB Modem:
[Info]

Tools:
Connections
Speed Test
Priority

SHARELINK
Enable/
Disable

SYSTEM
About VidiU
Firmware Updates
Factory Reset
Display Settings

* Settings options will vary, depending on the platform

Broadcast: Platform Settings

VidiU and VidiU Pro feature native integration with some of the most popular streaming platforms. Navigate to **Settings>Broadcast>Platform** (**Broadcast Settings>Platform** from the front panel), select one of several broadcast platforms, then enter your credentials or destination information.

> ### Integrated Platforms
> **Ustream** (pg. 16)   **Facebook** (pg. 19)
> **Livestream** (pg. 17)   **Wowza** (pg. 19)
> **Twitch** (pg. 17)   **Periscope** (pg. 20)
> **YouTube Live** (pg. 18) **RTMP/Manual** (pg. 20)

Ustream:

1. Select **Ustream** and enter your credentials (Fig. 3-1).

2. Select a channel to stream to (Fig. 3-2), or create a new channel at https://www.ustream.tv.

> **Channel List**
> The Ustream Channels list (Fig. 3-2) indicates which channels are available to stream to. Once you have entered our credentials, you will be prompted to select one of the available channels.
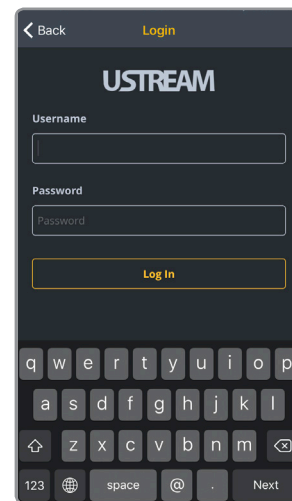
Fig. 3-1

3. After selecting a channel, return to the **Home** screen.

> **Auto Record and recorded files**
> Depending on your Ustream account level, broadcasts to your channel may be automatically recorded for viewing later. Enabling the '**Auto-Record'** setting triggers these recordings. Access permissions for the recorded files can be configured on your UStream account.

4. Tap the "Broadcast" button to go live (Fig. 3-3).
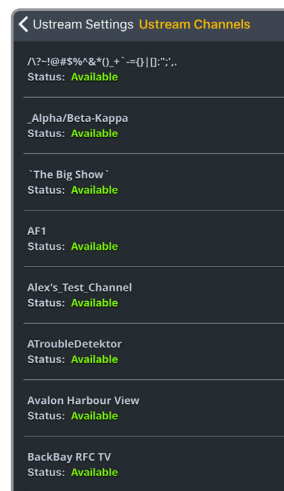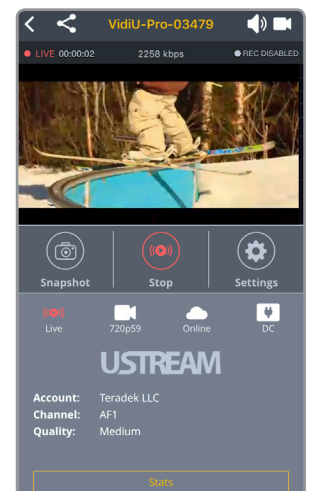
Fig. 3-2   Fig. 3-3

Livestream:

1. Select **Livestream** and enter your credentials (Fig. 3-4).

2. Select the event you wish to stream to (Fig. 3-5), or create a new event at https://livestream.com.

3. After selecting an event, return to the **Home** screen.

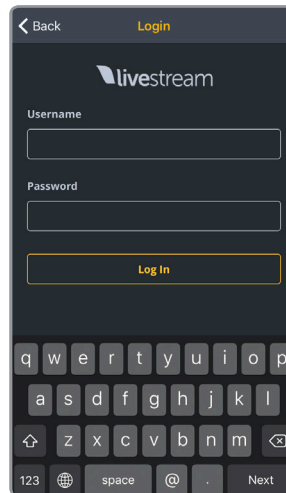4. Tap the 'Broadcast' button to go live, then choose whether or not to notify your followers.

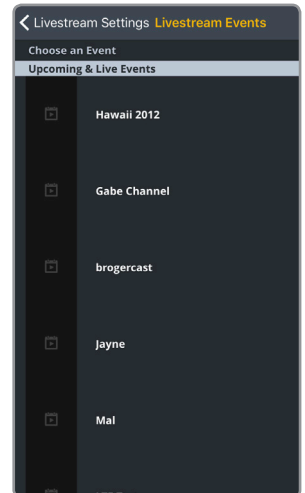> **Notify Followers**
> a. If broadcasting from VidiU's Web UI, you can notify your account's followers by toggling the '**Notify Followers**' switch to **On** before tapping the broadcast button.
> b. If broadcasting from the VidiU app (Fig. 3-6), you will be prompted to select whether or not to notify your followers after tapping the broadcast button.

5. When ending the broadcast, choose whether to **Post**, **Save**, or **Delete** the video from the event.

> **Post, Save, or Delete**
> **From the Web UI**: During your broadcast, you can select whether to **Post** the recorded video immediately, **Save** it for posting later, or **Delete** it from the event.
> **From the VidiU app** (Fig. 3-7): When ending your broadcast, you will be prompted to select whether to **Post** the recorded video immediately, **Save** it for posting later, or **Delete** it from the event.
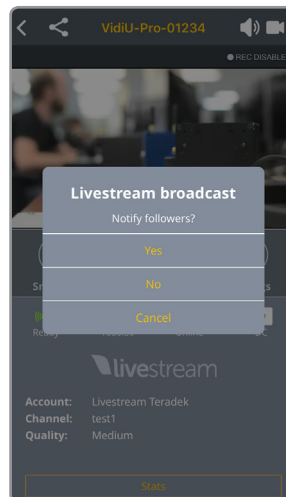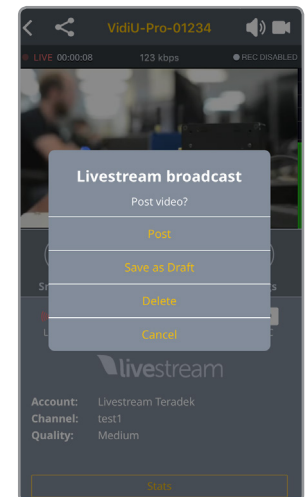
Twitch:

1. Select **Twitch**, enter your credentials (Fig. 3-8), then return to the **Home** screen.

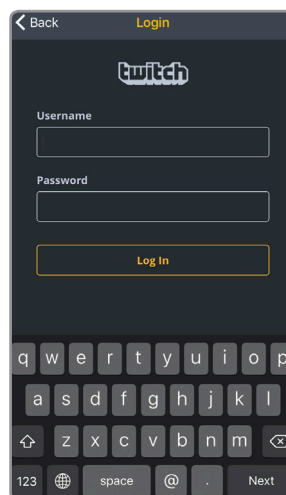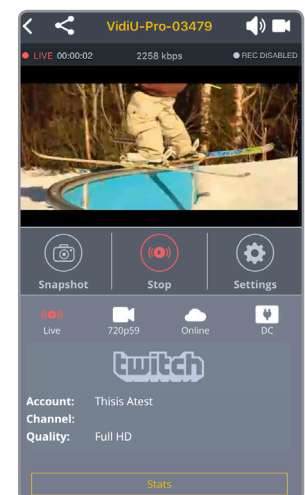2. To begin live streaming, tap the "Broadcast" button (Fig. 3-9).

Fig. 3-4

Fig. 3-5

Fig. 3-6

Fig. 3-7

Fig. 3-8

Fig. 3-9

YouTube Live:

1. Select **YouTube Live**.

2. Copy the authentication code generated for your device, go to http://www.google.com/device, then enter your credentials (Fig. 3-10). Enter the code, then allow VidiU to access your account.

3. Select an event, create a new event, or select 'Stream Now' (Fig. 3-11).

Fig. 3-10

> **Two types of Broadcast destinations**
> a. The 'Stream Now' destination is a continuously accessible public channel with a permanent URL. Streaming to the 'Stream Now' page is as simple as start and stop.
> b. Event destinations can be created, scheduled, started, and stopped. Every event comes with its own page URL, and once an event is finished it cannot be started again. After finishing an event, it is saved on its own page.

4. After selecting an event, return to the **Home** screen.

5. Tap the 'Broadcast' button (Fig. 3-12), then select whether to **Preview** the broadcast or to **Go Live**.

6. When ending the broadcast, choose either **Stop** or **Complete Event**.
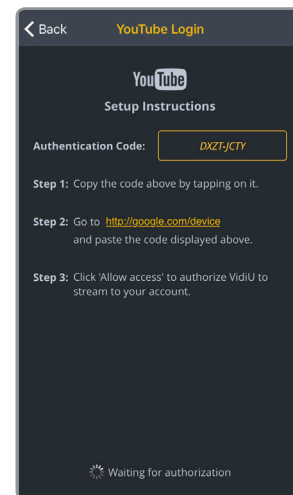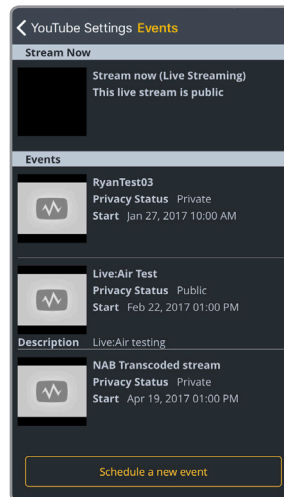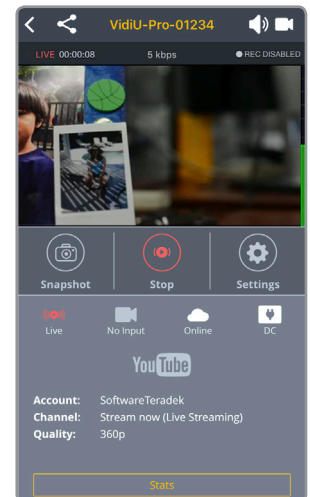

Fig. 3-11

Fig. 3-12

> **Four key stages in the life cycle of a broadcast**
> *Once you **start** Broadcast***:**
> **Preview** - Preview the video you intend to broadcast. Videos in preview state are visible on the event's Live Control Room page.
> **Go Live** - Makes your event visible on its own channel page. An event can not return to preview once it has gone live.
> *Once you **stop** Broadcast***:**
> **Stopped** - Broadcasts can be stopped and restarted at any time while the event is in the preview or Live state.
> **Complete Event** - You will no longer be able to broadcast to the event, but it will be saved on the event page for viewing.

Facebook:

1. Select **Facebook**.

2. Copy the authentication code generated for your device, go to https://www.facebook.com/device, then enter your credentials (Fig. 3-13). Enter the code, then allow VidiU to access your account.

3. Choose whether to stream to your timeline or to a specific page (Fig. 3-14), then return to the **Home** screen. You can also create a page to stream to from your Facebook account.

> **Streaming Destinations**
> **Timeline** - Broadcast the video to your personal timeline or "wall."
> **Page** - Broadcast the video to a page you manage.
> **Group** - Broadcast the video to a group you manage.
> **Event** - Broadcast the video to an event you created.
>
> **Privacy Settings**
> - Your Timeline privacy setting will be used if a less restrictive privacy option is chosen. (e.g. your timeline is set to Friends, but you set VidiU to 'All.' The post will be visible to friends).
> - Posts to Facebook pages are always public.

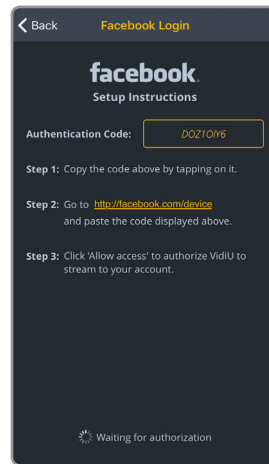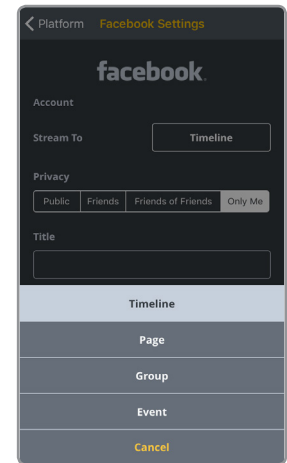4. Tap the 'Broadcast' button to go live (Fig. 3-15).
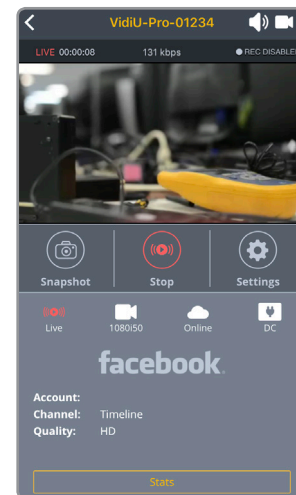

Fig. 3-13

Fig. 3-14

Fig. 3-15

Wowza:

1. Select **Wowza**.

Server Mode (Fig. 3-16):
  a. Enter the host server URL and stream name provided by the streaming service.
  b. Enter your credentials, select **Apply**, then return to the **Home** screen.

Cloud Mode (Fig. 3-17):
  a. Enter the connection code
  b. Enter your credentials, select **Apply**, then return to the **Home** screen.
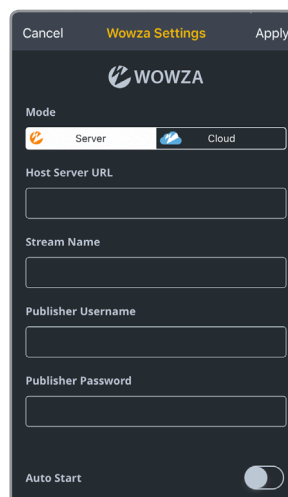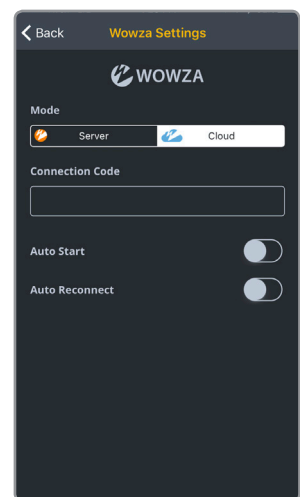
2. Tap the 'Broadcast' button to go live.

Fig. 3-16

Fig. 3-17

Persicope:

1. Select **Periscope**.

2. Copy the authentication code generated for your
   device, go to https://periscope.tv/auth, then enter
   your credentials (Fig. 3-18). Enter the code, then
   allow VidiU to access your account.

   > **Persicope and Twitter**
   > Periscope works in conjunction with Twitter. In order to use
   > Persicope, you must ceate an account with your Twitter
   > credentials, or by using your mobile phone number.

3. To post a link to your live stream on Twitter,
   enable the **Tweet Broadcast** feature (3-19).

4. Tap the **Broadcast** button to begin streaming
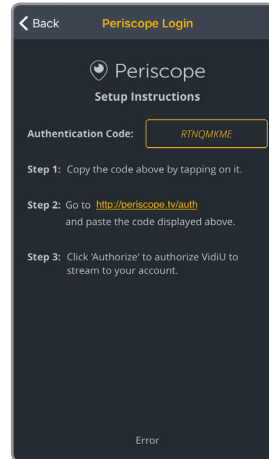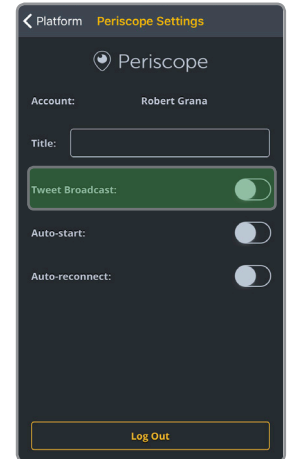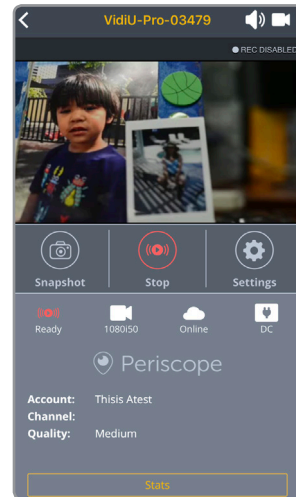   (Fig. 3-20).

RTMP (Manual):

VidiU can stream to other video platforms, CDNs, and
streaming servers using RTMP mode. RTMP is supported
by most video streaming platforms.

1. Select **RTMP** (**Manual** if using the Web UI).

2. Enter the URL and stream key/name (Fig. 3-21)
   information provided by the streaming service.

   > **URL and Stream Name/Key**
   > In order to stream to a broadcast platform other than a
   > platform already integrated into VidiU, you must obtain a
   > URL and stream key/name. Log into your account's settings
   > and retrieve the URL and stream key/name.

3. Enter your credentials (if applicable).

4. Select **Apply**, then return to the **Home** screen.

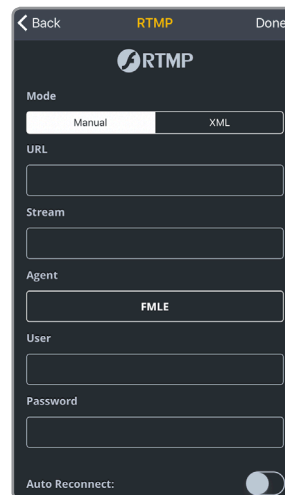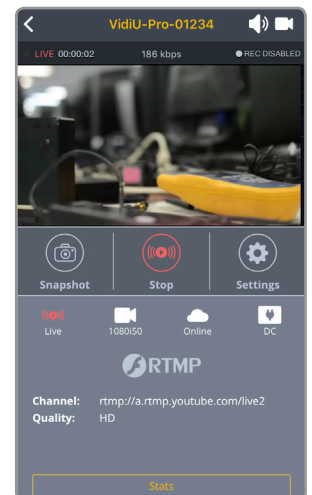5. Tap the 'Broadcast' button to go live (Fig. 3-22).

Fig. 3-18

Fig. 3-19

Fig. 3-20

Fig. 3-21

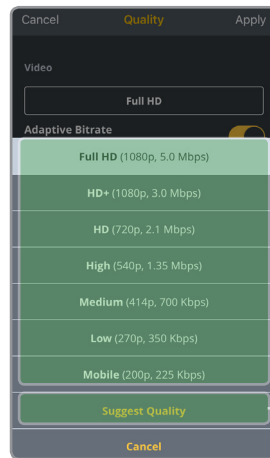Fig. 3-22

Broadcast: Quality Settings

The Broadcast Quality menu allows you to configure the video resolution, bitrate, frame rate, and the audio bitrate. Navigate to **Settings>Broadcast>Quality** (**Broadcast Settings>Quality** from the front panel), select **Quality**, then make a selection.

Adjusting Quality Settings:*

1. Select **Video**, **Audio**, or **Frame Rate**.

2. Select a Quality setting.

3. Select **Apply**, then return to the **Home** screen.

Video Quality Considerations
- The Video Quality settings combine video bitrate and resolution and will vary based on the bandwidth available and the platform used.
- Always select a video bitrate that is less than 70% of the total upload bandwidth available on the Internet connection. (i.e. if 5 Mbps is available, set the video to 3.5 Mbps or lower).
- Some platforms (i.e. YouTube) will automatically generate lower quality streams from a high quality input (transcoding), so the highest possible quality can be used. If the streaming platform does not transcode the video, consider that your viewers must have the available download bandwidth to view the stream.

Quality (Video selection screen)

| Cancel | Quality | Apply |

Video

Full HD

Adaptive Bitrate

- Full HD (1080p, 5.0 Mbps)
- HD+ (1080p, 3.0 Mbps)
- HD (720p, 2.1 Mbps)
- High (540p, 1.35 Mbps)
- Medium (414p, 700 Kbps)
- Low (270p, 350 Kbps)
- Mobile (200p, 225 Kbps)
- Suggest Quality
- Cancel

Quality (Audio selection screen)

| Cancel | Quality | Apply |

Video

Full HD

Adaptive Bitrate
Enabling will adjust bitrate to network conditions

Audio

- HD (256 Kbps)
- High (192 Kbps)
- Medium (128 Kbps)
- Low (96 Kbps)
- Mobile (48 Kbps)
- Auto (350 Kbps)

Quality (Framerate selection screen)

Adaptive Bitrate
Enabling will adjust bitrate to network conditions

Audio

HD

Framerate

- High (Up to 60 fps)
- Full (Up to 30 fps)
- Half
- Quarter
- Cancel

Video Quality settings correspond to the following bitrates and resolutions:
- **Full HD** - 5.0 Mbps 1920x1080
- **HD+** -   4.0 Mbps 1280x720
- **HD** -   2.0 Mbps 1280x720
- **High** -   1.25 Mbps 960x540
- **Medium** - 700 Kbps 736x414
- **Low** -   350 Kbps 480x270
- **Mobile** - 225 Kbps 360x200

Suggest Quality measures the current available bandwidth and recommends a quality setting based on the result.

Adaptive Bitrate *(previous screen)* measures the current available bandwidth and recommends a quality setting based on the result.
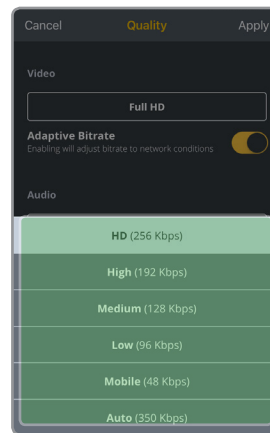
Audio Quality settings correspond to the following bitrates:
- **HD** -   256 Kbps
- **High** -   192 Kbps
- **Medium** - 128 Kbps
- **Low** -   96 Kbps
- **Mobile** -   48 Kbps
- **Auto** -   Audio quality is set based on video quality
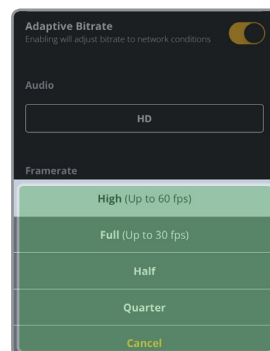
Frame Rates:
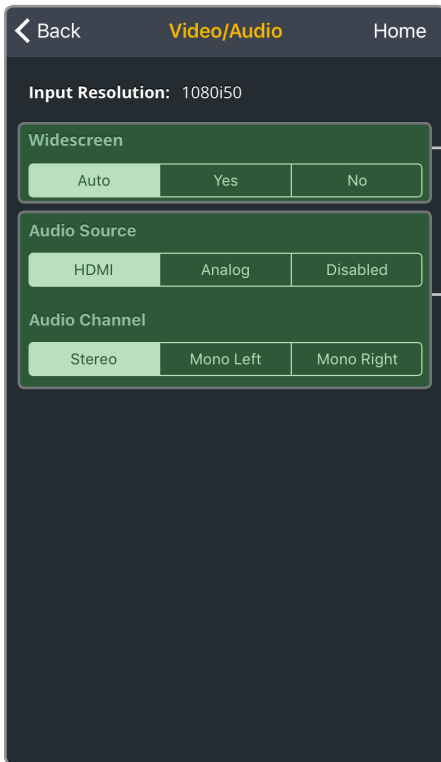- **High** -   Up to 50/60fps**
- **Full** -   24/30fps
- **Half** -   12.5/15 fps
- **Quarter** - 6/7.5 fps

* Steps apply to all Quality Settings.
** Some platforms do not support frame rates higher than 30fps

Video/Audio

The Video/Audio menu contains input source configuration and video overlay options. Navigate to **Settings>Video/Audio** (**Video Settings** or **Audio Settings** from the front panel), then tap the **Video/Audio** button.

Back	Video/Audio	Home

Input Resolution: 1080i50

Widescreen

Auto	Yes	No

Audio Source

HDMI	Analog	Disabled

Audio Channel

Stereo	Mono Left	Mono Right

Widescreen settings:
  Auto - HD (1080i, 720p) streamed video will have a 16:9 aspect ratio, and standard definition streamed video will have a 4:3 aspect ratio.
  Yes - Streamed video will only have a 16:9 aspect ratio
  No - Streamed video will only have a 4:3 aspect ratio.
    (for aspect ratio comparison, refer to Fig. 3-23)

Audio Source
  The audio source setting allows you to choose the source used for the audio stream. Select embedded **HDMI, Analog** audio,* or **Disable** audio for a silent stream**.**
Audio Channel
  Select either **Stereo**, **Mono Left**, or **Mono Right**.
Overlay Settings *(previous screen)*
  VidiU allows you to add a timer or scoreboard to your broadcast. Configure these options using the Overlay Settings menu.
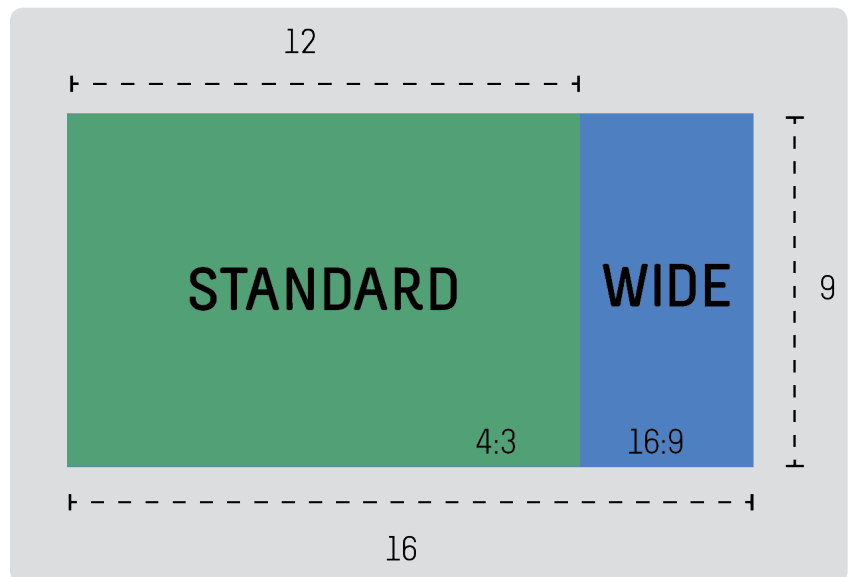
Fig 3-23: Aspect Ratio Comparison

* Audio level and volume are adjustable when Analog input is selected.

System

Essential system functions, including factory reset and firmware upgrade, can be performed from the System menu. Navigate to **Settings>System**(**System Settings** from the front panel), then make a selection.

Factory Reset

Restore VidiU to its original settings by selecting an option (**All, Broadcast, or Network**) to reset. Access the **System** menu and select **Factory Reset** (Fig. 3-24).

Firmware Upgrade

Upgrade VidiU's firmware to the lastest version.

> **Perform a Firmware Upgrade from front panel or VidiU app**
>   When you turn on VidiU, the device will automatically check for new firmware. If an update is available, follow the prompts to complete the update.
> **Perform a Firmware Upgrade from Web UI (Fig. 3-25)**
>   a. Download the latest firmware version from teradek.com.
>   b. Select **Firmware Upgrade**.
>   c. Upload the file from your computer and select **Upgrade**.
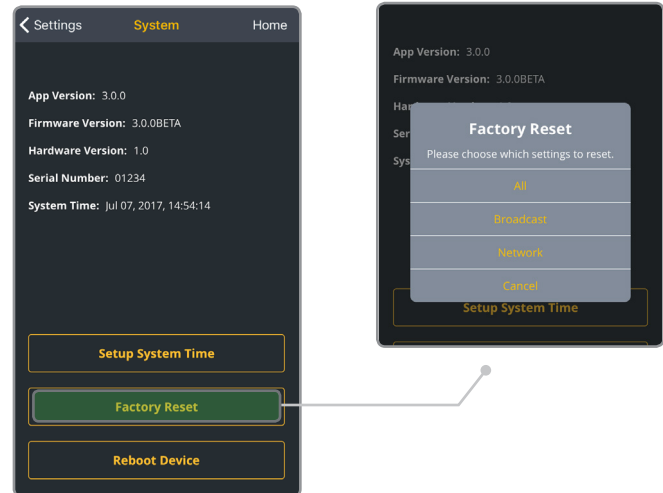
Fig. 3-24

Password*

Add, change, or delete the password.

Setup System Time

Select **Manual** mode to manually input the time and date, or select **NTP** to automatically synchronize the time and date.

Reboot Device

Restart your VidiU device by selecting **Reboot Device**.

System Diagnostics*

Generate a diagnostic report specific to your device. Diagnostic reports can be used by Teradek's support team to assist during troubleshooting.
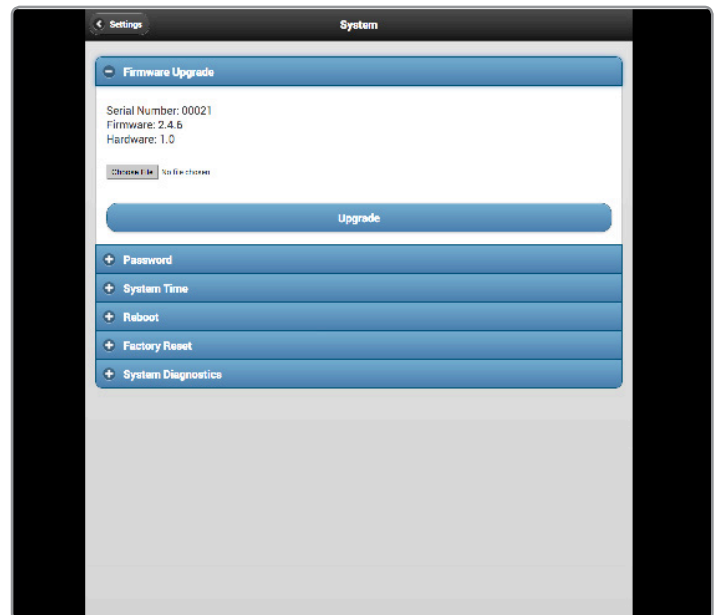
Fig 3-25: Web User Interface

* *Options available only while using the Web UI.*

Network

VidiU allows you to connect and stream to the Internet by utilizing one of several network interfaces. Navigate to **Settings>Network** (**Network Settings** from the front panel), then make a selection.

Wired

A wired Ethernet connection is typically the most reliable means for connecting to a network, as you don't have to deal with the instability of a Wi-Fi or cellular connection. Connect an Ethernet cable to VidiU (Fig. 3-26*), select **Wired**, (Fig. 3-27) then choose a configuration mode.

Fig 3-26*

IP Address Modes
Dynamic (DHCP): The connected router generates an IP address, allowing the Vidiu to be automatically configured.
Static: Manually configure the IP address settings if a DHCP server is not available, or if applications require a fixed address.
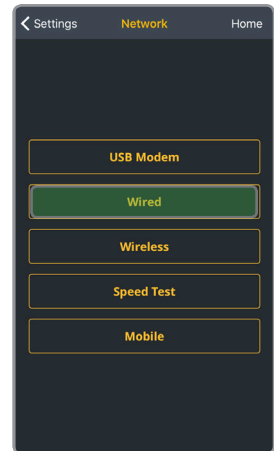

Fig 3-27

Wireless (Wi-Fi)

Although an Ethernet connection is the most reliable method of connecting to a network, a Wi-Fi connection may be more convenient, especially if an Ethernet connection is unavailable. There are two Wi-Fi modes available:

Wi-Fi Modes (Fig. 3-28)
Access Point (AP) Mode: VidiU acts as its own dual band access point, allowing you to connect your device directly to VidiU's AP network.
Client Mode: VidiU and your mobile device connect to the same local wireless network. Access **Client Mode,** scan for available networks (Fig. 3-29) or connect to a previously saved network, then enter your credentials. Additionally, you can enable VidiU to **Automatically Connect to Saved Networks**** by accessing the Wi-Fi dropdown menu from the **Web UI**, then toggling the corresponding switch to **On** (Fig. 3-30)**.**
  On - VidiU will connect to any saved network as soon as it becomes available.
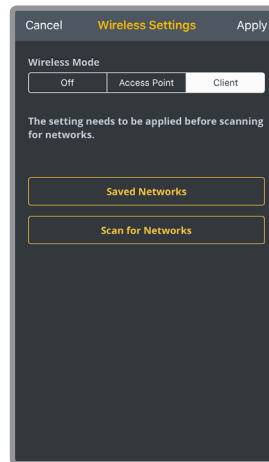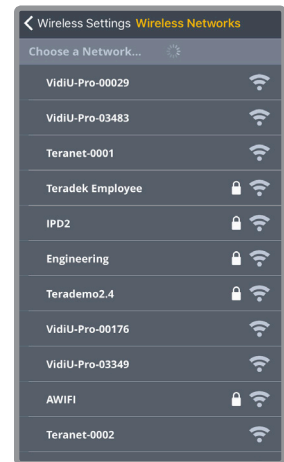 **Off** - VidiU will only connect to the most recently saved network
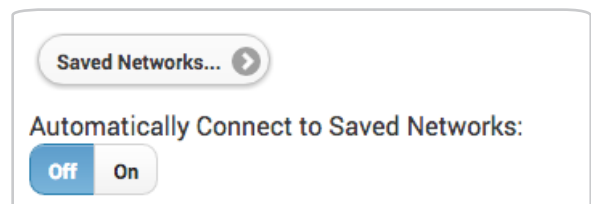

Fig 3-28

Fig 3-29

Fig 3-30

* Right LED (green) is a combined link/activity indicator.
  Left LED (yellow) does not illuminate.

** Feature available only while using the Web UI.

Network (cont.)

USB Modem

A USB modem allows you to broadcast wherever a cell connection is available. To configure VidiU while using a modem, connect to VidiU using AP mode (Page 24). Insert a compatible USB Modem to VidiU (Fig.3-31) and wait for the cellular reception icon (4 bars) to appear.

VidiU supports many modems worldwide using the 'Auto' setting. Visit http://support.teradek.com for more information about specific modem models.

Fig 3-31

> **Configuration Modes**
> **Auto** (default): The modem is automatically detected and configured.
> **Preset**: Contains configurations for modems that are supported but cannot be auto detected. User credentials are required if the modem account is password protected.
> **Custom**: Allows you to manually configure a modem if it's not automatically detected. Available configuration modes are **GSM**, **CDMA**, **Composite**, and **Ethernet**. Modes will vary based on the modem model and mobile network provider.

Mobile (only from the VidiU app)

When used with an iOS device, VidiU can utilize the device's data plan for Internet access. Connect your iOS device to VidiU's access point (AP) network, open the VidiU app, then select a mobile connection setting (Fig.3-32):

> **Mobile Connection settings***
> **Always** - If no other Internet connection is detected, VidiU will always utilize your mobile device's data connection
> **Never** - The VidiU app will not prompt you to share your phone's Internet connection
> **Ask (Yes/No)**- You will be asked whether or not to use your phone's data connection

** You can manage your Mobile Connection prompts from the **Mobile Settings** menu.*
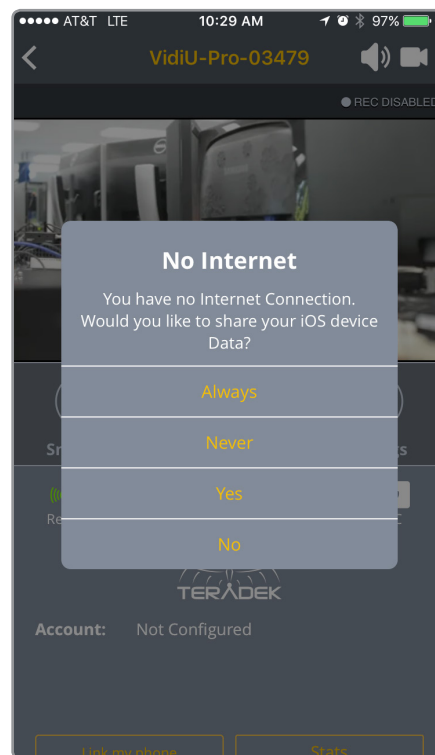

Fig 3-32

Recording (VidiU Pro only)

With VidiU Pro, you can record your broadcasts directly to an SD card or USB drive. Each recording is saved with the same resolution and bit rate set on the device. From the front panel interface, Web UI, or the VidiU app, go to your **Settings**, then select **Recording**.

1. Insert an SD card (Fig.3-33) or USB drive into the device.

2. Toggle the 'Enable/Disable Recording' switch to **Enable** (from the front panel interface's **Recording Settings** menu, select 'Enable').

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

Fig 3-33

Sharelink (VidiU Pro only)

Sharelink allows you to stream to multiple destinations simultaneously and remotely manage your VidiU Pro from anywhere in the world. Sharelink also increases your broadcast's bandwidth and reliability by bonding multiple Internet connections. To take advantage of these features, you'll need to purchase a Sharelink subscription, activate the Sharelink service, and authorize VidiU Pro.

Configure Sharelink using the VidiU app:

1. Select **Sharelink** from the bottom of the home screen. Tap **Learn More/Purchase Plan** to sign up for Sharelink, or tap **Login** if you already have an account (Fig. 3-34).

2. Once logged in, select **Device Browser** from the bottom of the screen, then tap the **Add to My Sharelink** button to add VidiU Pro to your Sharelink account (Fig. 3-35)

3. Select VidiU Pro, then tap **Yes** to link your iOS device's data when prompted.

4. To select a different server region, navigate to **Settings>Sharelink**, tap the **Region** button to display the available regions, then make a selection.
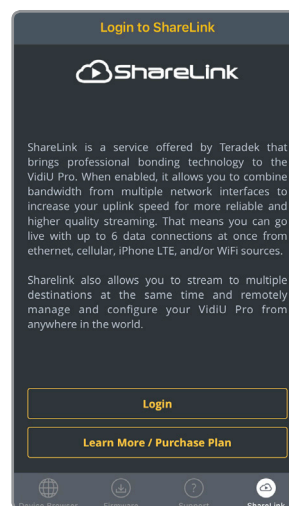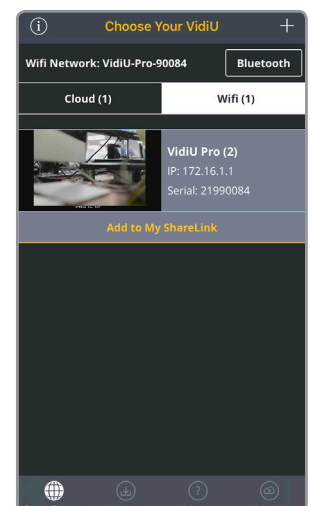

Fig. 3-34

Fig. 3-35

To configure broadcast channels:

1. Navigate to **Settings>Broadcast**, then select **Channels**.

2. Tap **Create new channel** (Fig. 3-36) to select a platform and enter your credentials. Repeat this step to pair additional channels (up to five channels at a time).

3. To pair channels that have already been configured, tap **Manage channels** (Fig. 3-36), select the channel(s) you wish to broadcast to (Fig. 3-37), then tap **Apply** on the upper right-hand corner.

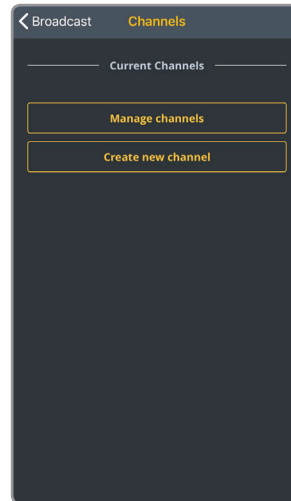4. Return to the Home screen, and tap the 'Broadcast'

Fig. 3-36
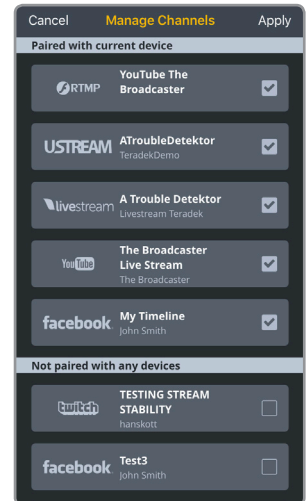
Fig. 3-37

To control VidiU Pro from the Sharelink dashboard:

1. Visit https://sharelink.teradek.com and log in to your account.

2. Tap the ⚙ icon to configure the broadcast quality, video/audio, and overlay settings, or to view connection stats (Fig. 3-38).

Fig. 3-38

3. To pair a new channel, select **Channels**, then tap **Add channel to stream** at the bottom of the screen.

4. Select a platform (Fig. 3-39), enter your credentials, than tap **Save**. Repeat this step to pair additional channels (up to five channels at a time).

Fig. 3-39

5. To pair channels that have already been configured, tap **Add channel**, select the channel(s) you wish to broadcast to (Fig. 3-40), then tap **Add** on the upper right-hand corner.

Fig 3-40

TROUBLESHOOTING

My firewall/router is blocking RTMP streaming.
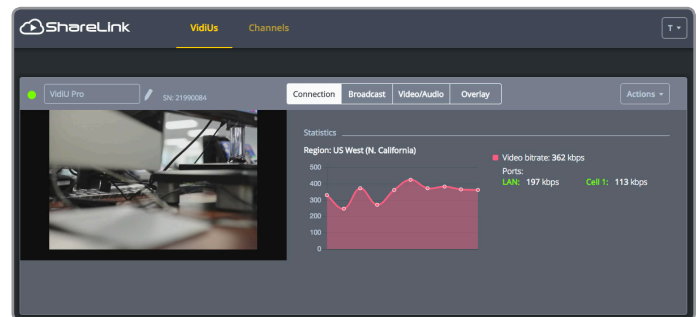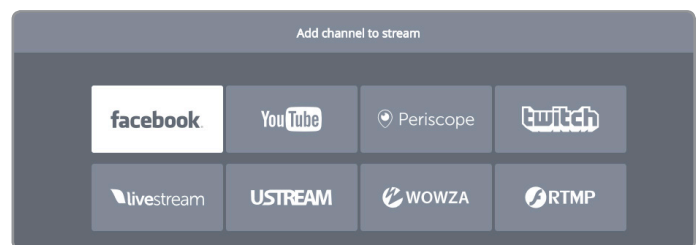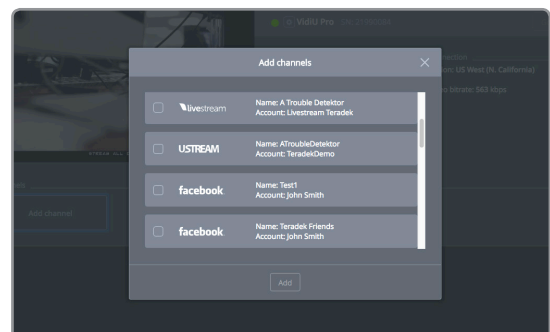VidiU and VidiU Pro use a set of ports for RTMP streaming. Make sure the required ports are allowed through your firewall or router. The list can be found at https://support.teradek.com/hc/en-us/articles/226177168.

What are the supported resolutions for each social media CDN?
Every live streaming platform's specifications are different, and generally change over time. Visit your streaming platform's website to find supported resolutions.

Why is my stream choppy?
The most common cause of stream delay is the resolution:bitrate ratio. While finding the correct ratio is determined by trial and error, here are some general recommendations:

> Full HD: 1920 x 1080 / 5.2 Mbps
> HD: 1280 x 720 / 2.2 Mbps
> High: 960 x 540 / 1.4 Mbps
> Medium: 736 x 414 / 796 Kbps
> Low: 480 x 270 / 446 Kbps
> Mobile: 360 x 200 / 273 Kbps

Lowering the quality of streams can also improve stream upkeep.

Why is my stream suddenly chopping while streaming?
Intermittent Wi-Fi connections can cause instability even when streaming over Ethernet. If you encounter issues while streaming over Ethernet, disabling Wi-Fi may help. To fix this:

> 1. Scroll to Network Settings.
> 2. Select Wi-Fi.
> 3. Select Client. Turn Client mode to Off.

Why does YouTube tell me my bitrate is too low?
VidiU and VidiU Pro are preconfigured to use adaptive bitrate which changes according to the user's bandwidth. This means that the bitrates can sometimes jump or dip depending on the stream, prompting a message from YouTube. While this operation is completely normal, it may cause a message to appear on the YouTube event control room page (pg. 21).

Why is Facebook Live not streaming my video?
Facebook Live has strict streaming specs that users must adhere to. The specs are as follows:

Video resolution:	720p max, 30fps
Keyframe interval:	2 seconds
Duration:	4 hours
Audio bitrate:	128Kbps

Configuring the VidiU via front panel is difficult.
We recommend using VidiU's web interface or the VidiU iOS app for configuring VidiU. It's much faster and simpler.
To connect with the iOS app, connect VidiU and your iOS device to the same wireless network. VidiU will automatically appear in the app.

To connect using the web interface, find your VidiU's IP address from the front panel. Type this address into your web browser. You will be connected to your VidiU and can change settings accordingly (see pg. 8).

I've pressed the Start/Stop button to go live, but my stream is not live.
Some streaming networks such as Periscope, YouTube events, and Facebook Pages may require additional steps to publish your stream.. This depends on the CDN's workflow. Remember to go live on both VidiU and destination page to fully start streaming (see **Platform Settings** on pg. 16).

TECHNICAL SPECIFICATIONS

	VIDIU		VIDIU PRO	
VIDEO				
Video Inputs	HDMI 1.4a: Full Size		HDMI 1.4a: Full Size	
Supported Resolution	1080p 23.98/24/25/29.97/30 1080i 50/59.94/60 720p 50/59.94/60 576i/p 480i/p		1080p 23.98/24/25/29.97/30 1080i 50/59.94/60 720p 50/59.94/60 576i/p 480i/p	
VIDEO PROCESSING				
Video Compression	H.264, baseline, and main profile		H.264, baseline, and main profile	
Supported Video Bitrate	250 Kbps to 5 Mbps		250 Kbps to 5 Mbps	
Supported Video Bitrate Details	Full HD: 5.2 Mbit/s HD+:3.0 Mbits/s HD:2.2 Mbit/s High: 1.4 Mbit/s Medium: 796 Kbit/s Low: 446 Kbit/s Mobile: 273 Kbit/s		Full HD: 5.2 Mbit/s HD+:3.0 Mbits/s HD:2.2 Mbit/s High: 1.4 Mbit/s Medium: 796 Kbit/s Low: 446 Kbit/s Mobile: 273 Kbit/s	
Supported Output Resolutions	**4:3**	**16:9**	**4:3**	**16:9**
	Full HD: 1440 x 1080 HD: 960 x 720 High: 720 x 540 Medium: 560 x 414 Low: 368 x 270 Mobile: 272 x 200	Full HD: 1920 x 1080 HD: 1280 x 720 High: 960 x 540 Medium: 736 x 414 Low: 480 x 270 Mobile: 360 x 200	Full HD: 1440 x 1080 HD: 960 x 720 High: 720 x 540 Medium: 560 x 414 Low: 368 x 270 Mobile: 272 x 200	Full HD: 1920 x 1080 HD: 1280 x 720 High: 960 x 540 Medium: 736 x 414 Low: 480 x 270 Mobile: 360 x 200
Video Format Conversion Support	Built-in video scaler and deinterlacer		Built-in video scaler and deinterlacer	
PROTOCOL SUPPORT				
Network Protocols	TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP		TCP/IP, UDP, HTTP, DHCP, NTP, SSL, IGMP	
Supported Video Transport Protocols	RTMP, Live:Air		RTMP, Live:Air	
Bonding	N/A		Sharelink	
Platform Integration	UStream, YouTube Live, Facebook, Livestream, Twitch, Periscope, Vimeo		UStream, YouTube Live, Facebook, Livestream, Twitch, Periscope, Vimeo	
AUDIO				
Audio Compression	AAC-LC, MPEG Layer 2		AAC-LC, MPEG Layer 2	
Audio Input	Embedded audio input, analog line or mic in, adjustable gain		Embedded audio input, analog line or mic in, adjustable gain	

	VIDIU	**VIDIU PRO**
AUDIO (cont.)		
Audio Output	Headphone output	Headphone output
Supported Video Bitrate Details	HD: 256kbps High: 192kbps Medium: 128kbps Low: 96kbps Mobile: 48kbps	HD: 256kbps High: 192kbps Medium: 128kbps Low: 96kbps Mobile: 48kbps
PHYSICAL		
Dimensions	3" W x 4" D x 1" H [76.2 x 101.6 x 25.4mm]	4.7" W x 3" D x 1.2" H [119.38 x 76.2 x 30.48mm]
Weight	5oz [141.75g]	5oz [141.75g]
Construction	ABS Plastic	ABS Plastic
INTERFACES		
Configuration Interfaces	OLED Display with joystick navigation buttons	OLED Display with joystick navigation buttons
Switches	On/Off and reset switch	On/Off and reset switch
Recording/Storage	N/A	SD/SDHC (class 6 and above) formatted FAT32, USB formatted FAT32
Desktop App	Feature-rich web UI for configuration and control	Feature-rich web UI for configuration and control
Mobile App	VidiU app for iOS	VidiU app for iOS
USB Interface Functionality	Powered USB 2.0 host port	Powered USB 2.0 host port
NETWORK		
Ethernet	10/100/1000 BASE-T Gigabit	10/100/1000 BASE-T Gigabit
Wireless	WiFi: Dual Band MIMO 802.11 a/b/g/n	WiFi: Dual Band MIMO 802.11 a/b/g/n
USB	USB 3G/4G Modem support	USB 3G/4G Modem support
RF Channel	Auto	Auto
POWER		
Power Input	6-12V DC Barrel Adapter	6-18V DC Barrel Adapter
Nominal Power Consumption	3W (while Charging: up to 10W)	4.5W (while charging: up to 10W)
Battery	Internal Rechargeable Lithium-ion Battery	Internal Rechargeable Lithium-ion Battery

FCC STATEMENT

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

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

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

EC DECLARATION OF CONFORMITY

Teradek LLC herby declares that the VidiU and VidiU Pro are in compliance with Directive 1999/5/EC. The full text of the EC Declaration of Conformity is available at the following internet address: **https://support.teradek.com/hc/en-us/articles/233429747-EC-Declaration-of-Conformity-for-CE-mark**