TVU Networks®

TVU Anywhere™
Quick Start

TVU Anywhere App

User Guide

iOS, Mac, and Android device support

Legal notices

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Specifications in this publication are subject to change. Contact TVU Networks Corporation for specifications that are critical to your application. Go to www.tvunetworks.com for the latest product information.

Related literature and media

The following list contains related literature and media:

Product data sheets

- TVU Anywhere Data Sheet

Hardware Set up and Operating manuals

- TVU Anywhere Quick Start User Guide
  (This document, part number: TVUAnywhere QSUG Rev C EN 06-2020)

Software Set up and User manuals

- TVU Token feature Quick Start User Guide

Media

How to use the Token feature in TVU Command Center:

https://youtu.be/KkvHNZiKJMU

FCC/CE Compliance

Federal Communications Commission (FCC) Regulation of Electronic News Gathering (ENG) Mobile Systems

The FCC provides specific policies and procedures related to radio frequency (RF) emissions in mobile and portable devices. The FCC outlines test requirements and specific test procedures based on the type of device. These test requirements and procedures can also cover Specific Absorption Rates (SAR) for RF.

TVU transmitter devices have always conformed to all applicable FCC regulations covering mobile systems for electronic news gathering. All required tests for TVU transmitter devices as outlined in the regulations were performed by a third-party testing lab, which issued a certificate of compliance for TVU transmitters. The certificate is applicable to both the FCC and CE. Additionally, the data modems used in TVU transmitters are commercially available off-the-shelf brands and have been FCC and carrier certified.

Contact us

Supporting documentation demonstrating TVU transmitters' compliance with the applicable FCC regulations is available upon request. Contact TVU Networks at +1.650.440.4812 for assistance and questions regarding approved modem cards for use with TVU transmitters.

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1   Introduction, setup, and base operation

Product overview

The TVU Anywhere app is designed to turn your portable smart device or laptop into a remote transmitter.

TVU Anywhere uses your device's 3G/4G/LTE wireless connection and available WiFi to transmit live video and audio remotely to a TVU receiver.

TVU Anywhere aggregates the available bandwidth in 3G/4G/LTE and WiFi connections to ensure a resilient transmission and superior picture. You can go live instantly and monitor and control the transmission from an easy-to-use interface.

You can select an optimal resolution and frame rate. By tapping the screen, you can automatically focus the camera or use the flash for nighttime transmissions. In addition, key status information such as real-time transmission rate and live streaming time are easily accessible on-screen.

The TVU Anywhere app offers a new theme with added features. To change themes, simply open your TVU Anywhere app, press Advanced > Setting, and enable the New Theme in the Setting screen.

Contents and features

TVU Anywhere Features:

- **New theme:** Choose the new TVU Anywhere user interface to access added features:

  - **Dual camera support:** Simultaneous use of both cameras in a Picture by Picture (PBP) or Picture in Picture (PIP) transmission. Dual Camera is supported on the following Apple devices: iPhone XS, XR, XS Max, 11, 11 Pro, 11 Pro Max and iPad Pro 3rd and 4th generations.

  - **Picture by Picture (PBP):** This new feature is enabled for Apple devices: iPhone XS, XR, XS Max, 11, 11 Pro, 11 Pro Max and iPad Pro 3rd and 4th generations with a front and rear facing camera. This feature supports a Picture by Picture (PBP) transmission.

  - **VFB:** The new return video feedback feature allows a user to view a video from a remote source.

  - **Remote Pan-and-Zoom:** A remote operator can control the camera's focus, brightness, and also pan-and-zoom

without intervention from the device operator in the field. This provides unprecedented control over camera framing and exposure without degradation of HD picture quality.

  - **TVU Token integration:** The Token feature is used in the field to pair your TVU Anywhere with your receiver without TVU support intervention. When the Token feature is activated, it can be accessed using the Command Center UI.

- **TVU's Inverse StatMux Plus (IS+) technology**: Aggregates your device's cellular wireless connection and available WiFi to transmit live video for outstanding picture quality.

- **User-friendly Interface**: Go live, monitor and control the transmission from an easy-to-use interface. Choose an optimal resolution and frame rate, automatically focus the camera or use the flash for nighttime transmissions. Key status information such as real-time transmission rate and live streaming time are provided.

- **Simultaneous Streaming and Recording**: Live stream video from TVU Anywhere while recording in the media directory of a smart device.

- **Integrated TVU Voice:** Utilize integrated VoIP technology for two-way conversation between a TVU receiver at the studio and a smart device in the field.

- **Support for DJI devices** – TVU Anywhere can be enabled for use with DJI drones and the DJI Osmo handheld camera.

- **Support for smart mobile devices** - iOS, Mac OS and Android devices.

- **Integrates with TVU Producer** - For Cloud-based video production.

- **Integrates with TVU Grid** - For live video switching, routing, and distribution to multiple locations.

- **Security** – TVU Anywhere offers the option of enabling AES encryption.

Quick Start guide

This Quick start guide provides instructions to complete the following tasks:

- Obtaining a TVU Anywhere license from TVU Networks
- Downloading and installing the TVU Anywhere app
- TVU Anywhere app functions
- Creating a hotspot connection to a TVUPack
- Using the TVU Anywhere app
- TVU Anywhere DJI integration
- Accepting a Token using the TVU Anywhere app

Before you begin

The TVU Anywhere app supports iOS, Android and Mac OS. (It's recommended using the latest system version.)

The recommended phone models are as follows:

- Samsung: S7, S9, S10, Note 8, and Note 9
- Huawei: Mate 10, Mate 20/20 Pro, Mate 30/5G, P20, and P30
- iPhone: 7/7P, 8/8P, X/XS Max, 11/11Pro/11 Pro max

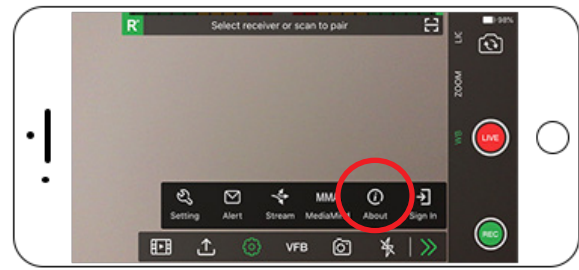# Installing the TVU Anywhere app to your iOS smart mobile device

The TVU Anywhere app is available free of charge from the app store. To download and register the TVU Anywhere app, complete the following steps:

1. From your mobile device, go to the App Store and enter **TVU Anywhere Pro** in the search field. Download and install the TVU Anywhere app to your smartphone or laptop.

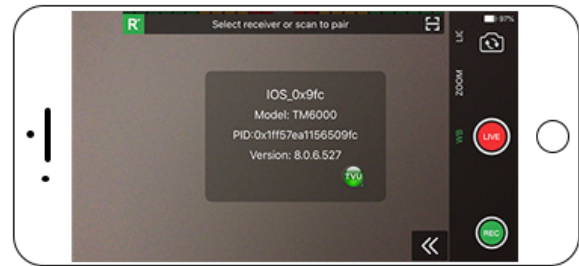2. Go to your Applications folder and launch the TVU Anywhere app.

TVU Anywhere app icon

3. Press the **double arrows** to open the feature bar.

4. Press the **Advanced** icon and select **About**.

Advanced setting (iPhone)

5. Locate and write down your device **PID** displayed in the pop-up window.

PID pop-up (iPhone)

Contact TVU Support to complete your registration. You will need to provide the following information:

- The device PID
- The receiver(s) name and PID

6. After the PID is successfully registered, you are now ready to begin streaming.

Installing the TVU Anywhere app to your Android device

The TVU Anywhere app is available free of charge from the Google Play Store. To download and register the TVU Anywhere app, complete the following steps:

1. From your mobile device, click the **Google Play** icon and enter **TVU Anywhere Pro** in the search field. Download and install the TVU Anywhere app to your smartphone.

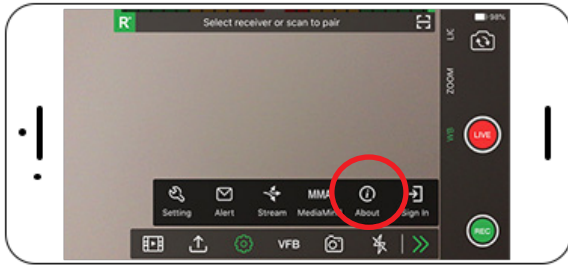2. Go to your Applications folder and launch the TVU Anywhere app.

3. *TVU Anywhere app icon*
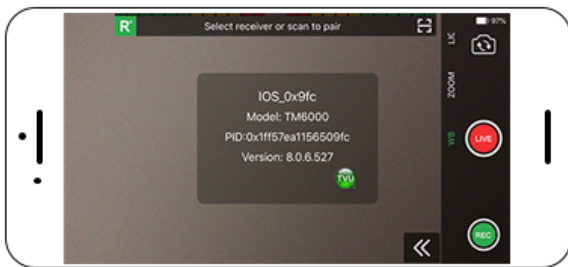
4. Press the **double arrows** to open the feature bar.

5. Press the **Advanced** icon and select **About**.

Advanced setting (Android)

6. Locate and write down your device **PID** displayed in the pop-up window.

PID pop-up (Android)

7. Contact TVU Support to complete your registration. You will need to provide the following information:

   • The device PID

   • The receiver(s) name and PID

8. After the PID is successfully registered, you are now ready to begin streaming.

Pairing your device with a TVU receiver

Contact TVU Support at +1.650.440.4812. TVU support will pair your TVU Anywhere app to the receiver that will receive your stream.

In addition, TVU Anywhere integrates with the TVU Command Center Token feature. Activating the Token feature allows an administrator to pair to a list of registered receivers using the Command Center user interface. For more information about the Token feature, refer to Appendix A of this Quick Start User Guide.

TVU Anywhere app functions

The TVU Anywhere application has the following functions:

Record button - The Record video function is used to record in Live or Standby mode.

Live button - Press the Stop Icon to Start and Stop the Live video function.

Upload icon - Use the Upload icon to upload your recorded content to a receiver.

Filmstrip icon - The filmstrip icon from the feature bar opens the PIP, PBP, and DCAM feature menu.

Select icon - Use the Select icon to select from a list of receivers you are registered to and can be paired with.

Scan icon - Use the Scan icon to scan the QR code of a receiver you would like to pair with.

Advanced icon - Use the Advanced icon to set your resolution and frame rate.

Focus - To focus on a specific area of the screen, tap the area and the camera will refocus in that area of the image.

Front and rear facing camera icon - Press this icon to switch between front and rear camera perspectives.

Camera icon - Allows you to capture a image in Live or Standby mode.

Flash icon - Press this icon to keep your phone flash On if needed.

Picture in Picture (PIP) icon - The PIP icon allows the user to transmit an overlay on top of their transmission.

DCAM menu - Dual Camera is supported on the following Apple devices: iPhone XS, XR, XS Max, 11, 11 Pro, 11 Pro Max and iPad Pro 3rd and 4th generations.

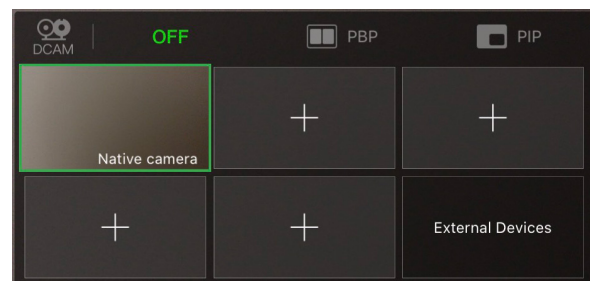**VFB icon** - This icon allows the user to initiate a return video feedback from a local SDI or Live source.

Beauty icon - Adjusts the lighting of an object. This feature also enhances a person's image by reducing facial imperfections.

Microphone - Select the desired mic (embedded mic, earphone mic or bluetooth mic)

New features

The TVU Anywhere app has the following new features:

DCAM menu

The dual camera feature is used to enable the Picture by Picture (PBP) or Picture in Picture (PIP) modes. Allowing simultaneous use of the front and rear facing cameras.

To use this feature, complete the following steps:

1. Press the **double arrows** to open the feature bar.

2. Press the **Filmstrip icon** to open the menu.

3. Place your iPhone in position to capture the front and rear facing images.

4. Press the **PBP icon** for side by side Picture by Picture, or the PIP icon to overlay video from the front camera onto the back camera video.

5. Click away from the menu to return to the main screen.

6. To move the placement of the PIP image, press and hold the PIP video and drag it to a new position.

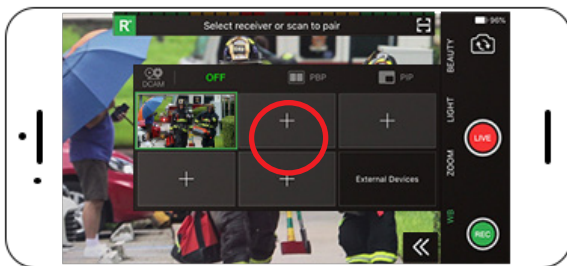Note: The PBP or PIP icons display green when active.

DCAM example

Playing recorded video into the stream

Below the DCAM menu bar is a grid of 6 boxes. Each box is a placeholder for a selected video which can be added to the live stream.
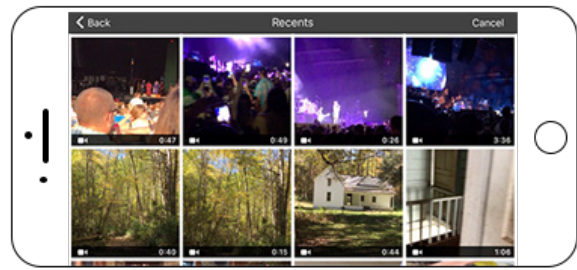
To add a video for live playout, complete the following steps:

1. Press the **double arrows** to open the feature bar.

2. Press the **Filmstrip icon** to open the menu.

3. Press the **plus (+)** in an empty box to activate the video selection window.
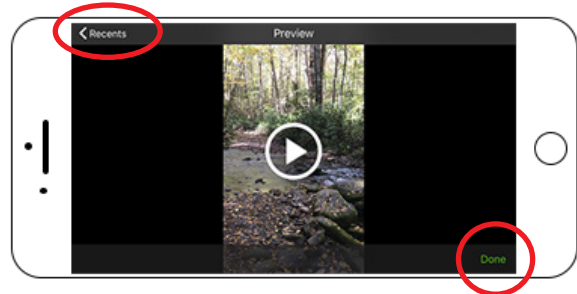

Activating a video selection window

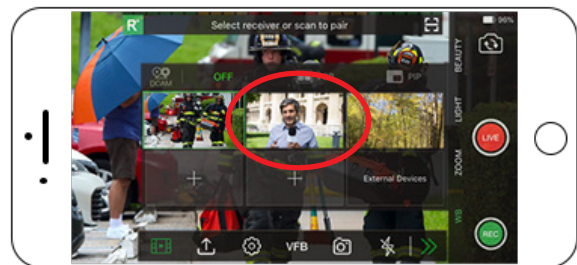The saved video menu opens.

Making a selection

4. Confirm your selection and press **Done** or the **Back** button to make another selection.
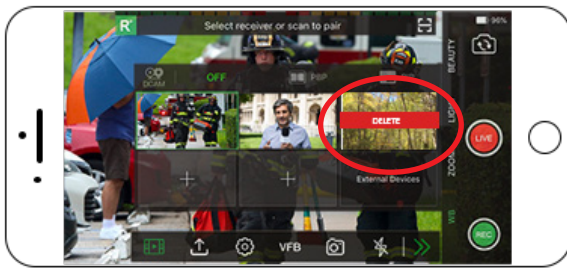

PIP video selected

5. To Play a video, tap the video thumbnail once and it will begin to play into the live stream. At the end of the clip it will return to the camera feed.

Note: Playing a video will cancel the PIP or PBP setting and the stream will return to the last used primary camera.

Playing a video

6. To delete a preselected video, press and hold one of the boxes that contains a video thumbnail. A red delete bar will appear.
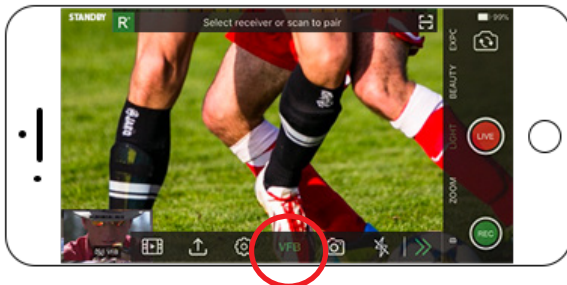
Video 'Delete' example

PIP Overlay example

VFB

This icon allows the user to initiate a return video feedback from a local SDI or Live source.
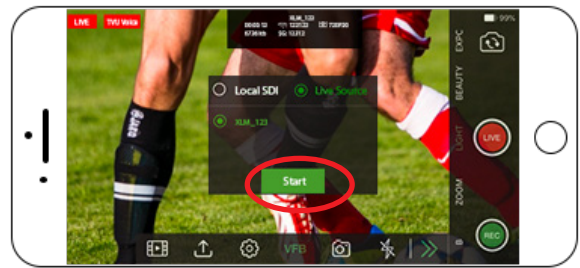
To use this feature, complete the following steps:

1. Press the **VFB icon** to open the menu.

VFB icon

2. Select the desired output and source from the pop-up menu. Then, press **Start**.

VFB icon

3. To stop the live transmission, press the **VFB icon** in the function bar. Then, press the red **Stop** icon.

Using the TVU Anywhere app
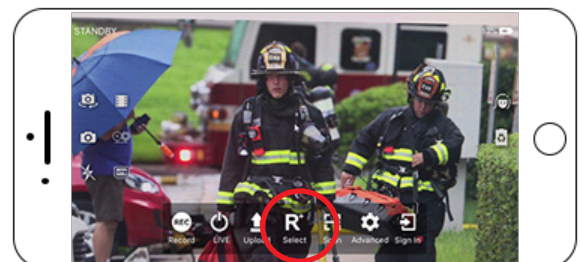
Choose your registered receiver

Complete the following steps to choose a registered receiver:

1. Launch the TVU anywhere app.

2. If you are running the new theme, Press the **receiver or scan to pair** drop-down menu.

3. Select the paired receiver from the list.

Choosing a receiver (new theme)

4. If you are not running the new theme, Press the **R** icon in the feature bar and select a receiver.

Choosing a receiver (legacy theme)

Going Live

After you have selected your receiver, the status indicator in the top left corner of the screen displays **"STANDBY"** until you go live with the receiver.

TVU Anywhere "STANDBY" status indicator

Live button

When you go live with the receiver, the status indicator changes to "**LIVE**" and displays the receiver you are currently transmitting to. In addition, the live streaming time and the transmission rate displays at the top of the screen.

If the status indicator reads **OFFLINE**, TVU Anywhere is not paired with a TVU receiver or the TVU receiver is not powered on and you cannot transmit live video.

The **"LIVE"** status indicator displays in the top left corner of the app when the Live transmission begins, as shown in the following graphic.

TVU Anywhere "LIVE" transmission status indicator

Record button

The Record video function can be used to record in Live or Standby mode.
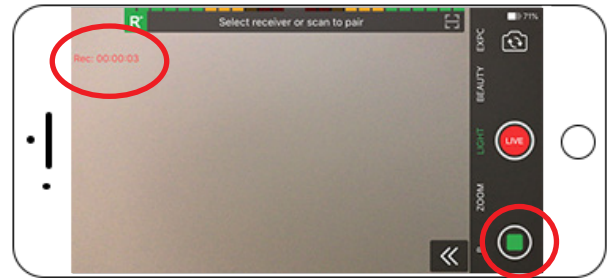
To record in live or Standby mode, complete the following steps:

1. Press the green **Rec button**.

Record button location

When you are recording, the Rec button turns to a green square and a counter starts in the top left of the screen.

Recording example

2. To stop the recording, press the **green square**. Your recording is saved to your smart device.
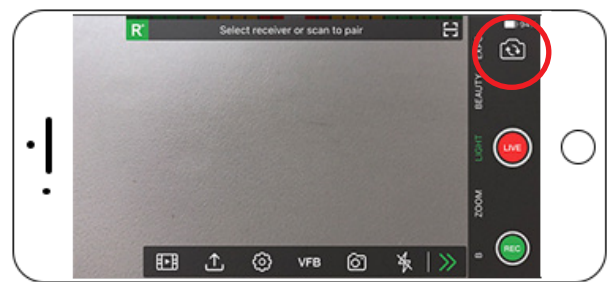
Reverse facing camera feature

This feature allows a user to switch between front and rear camera perspectives.

To use the reverse facing camera feature complete the following steps:

1. Press the **reverse camera icon**.

2. To return your camera to front facing, press the r**everse camera icon** once again.
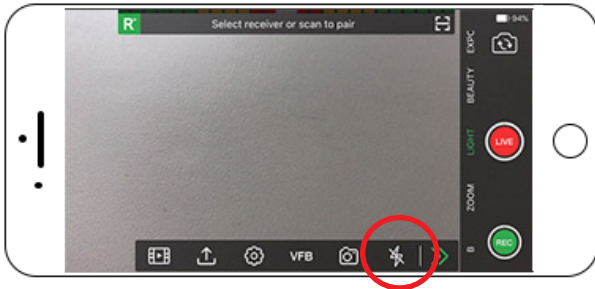

Reverse camera icon

Flash feature

The flash feature is used to turn on the flash for extra lighting when needed. To use the flash feature, complete the following steps:

1. To turn on the flash, press the **flash icon**.

2. To turn the flash function off, press the **flash icon** again.

Flash icon

Upload feature

You can use the Upload icon to upload your recorded videos and pictures to a receiver.
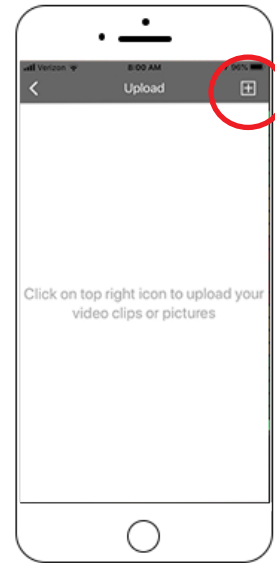
To upload your content to a receiver, complete the following steps:

1. Press the **Upload icon** in the feature bar.

Upload icon

2. The upload screen opens. Press the top right **plus (+)** icon to upload your video clips or pictures to the paired receiver.

Upload screen

White balance (WB) feature

The WB feature allows a user to adjust the white balance to an image.

To adjust the WB, complete the following steps:

1. Press **WB** in the sidebar.

2. Use the adjustment bars to correct the white balance.

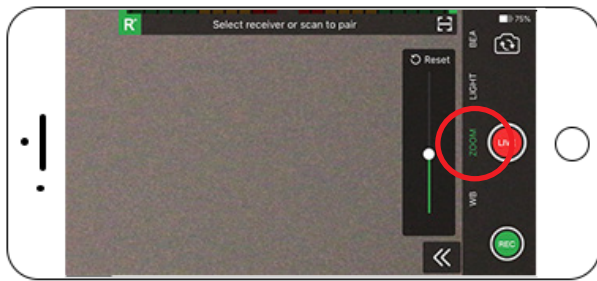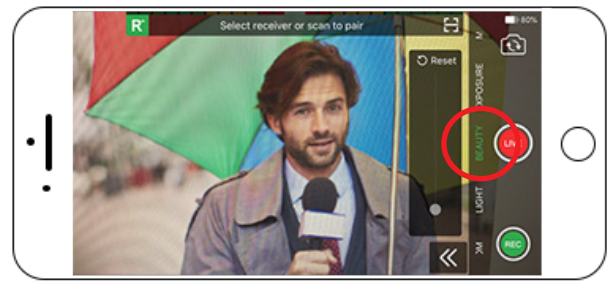3. To reset the white balance, press **Reset**.

WB setting

Zoom feature

The Zoom feature allows a user to zoom into a image.

To use this feature, complete the following steps:

1. Press **Zoom** in the sidebar.

2. Use the adjustment bar to magnify your image.

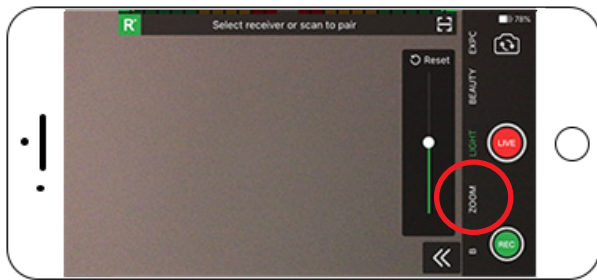3. To reset the magnification, press **Reset**.

Zoom setting

Beauty setting bar

Light (Brightness) feature

The Light feature allows a user to adjust the brightness of the overall image.

To adjust the brightness, complete the following steps:

1. Press **Light** in the sidebar.

2. Use the adjustment bars to adjust the brightness.

3. To reset the brightness, press **Reset**.

Light setting

Beauty feature

The Beauty feature adjusts applies a softend filter to the subject. This feature also enhances a person's image by reducing facial imperfections.

The Beauty feature is applicable to 720P and 480P settings.

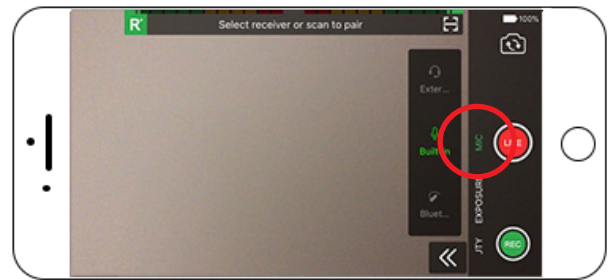To use this feature, complete the following steps:

1. Press **Beauty** in the sidebar.

2. To adjust the enhancement level, move the bar up to enhance the subject.

MIC feature

The MIC feature allows for manual selection of the source mmicrophone.

To use this feature, complete the following steps:

1. Press **MIC** in the sidebar. The MIC setting bar displays.

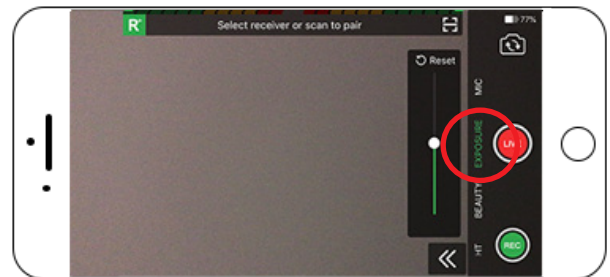*MIC setting*

2. Select **Exterior**, **Built-in**, or **Bluetooth**.

Exposure feature

The Exposure feature allows a user to adjust the exposure setting for the content.

To adjust the exposure, complete the following steps:

1. Press **Exposure** in the sidebar.

2. Use the adjustment bar to adjust the exposure setting.

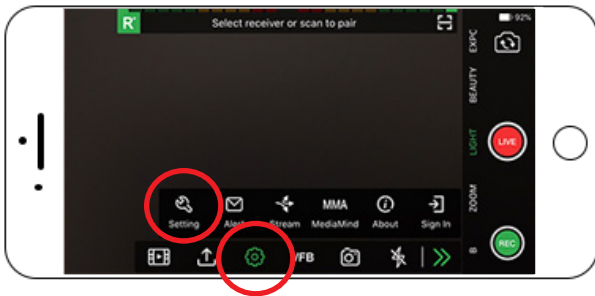3. To reset the exposure setting, press **Reset**.

Exposure setting
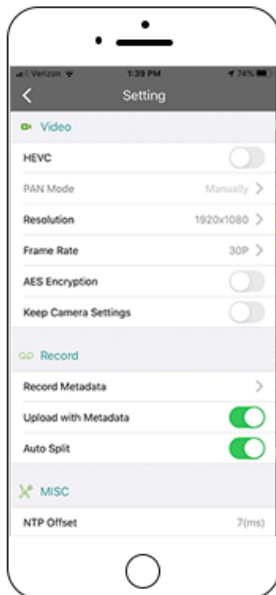
2   Advanced features

Advanced settings

To change resolution and frame rate settings, complete the following steps:

1. To access the setting window, press the **Advanced** icon in the feature bar and press **Setting.**

Advanced setting

The Setting screen opens. Settings information for Video, recording, NTP, IS+, external devices, and DJI can be accessed in this menu.

Advanced setting screen

2. Set the **Resolution** and **Frame Rate** that is optimal for the transmission.

Creating a hotspot connection to a TVUPack

Complete the following steps to create a hotspot connection to a TVUPack using the TVU Anywhere app:

1. Launch the TVU Anywhere app.

2. Tap the TVU One screen and swipe to the left until you see the QR Code screen as shown in *"TVU One QR screen"*.

TVU One QR screen

3. Press the **Scan** icon in the TVU Anywhere app. Orient the QR code inside of the app crop marks and press the **Scan** icon again.

TVU Anywhere DJI integration

This section describes additional TVU Anywhere applications, including:

•   Enabling TVU Anywhere for use with DJI drones and the DJI Osmo handheld camera

•   Using the TVU Token feature

•   Pairing the TVU Anywhere app with a registered receiver using the TVU One QR code menu.

Enabling TVU Anywhere for use with DJI drones and the DJI Osmo handheld camera

TVU Anywhere app (version 6.2.4.291 or later) supports the transmission of videos from a DJI drone and Osmo camera. This section introduces the methods for connection, disconnection, and registration. If you have any questions, contact TVU Support at +1.650.440.4812

The new TVU Anywhere Theme provides an overview of DJI and professional camera support.

Drone and camera support

ATTENTION: DJI account registration is required when using a DJI drone in China.

DJI account registration and bound is required when using a DJI Drone in China. Failure to do so will result in the Drone's video not being able to work with the TVU Anywhere app. You can go to the DJI official China website to register your DJI account using your phone number (do not use your e-mail address) as shown in *"DJI registration example (China)"*. The account information will be used when the device is active and will bind the DJI device to the TVU Anywhere app.

DJI registration example (China)

Supported DJI drone models and TVU Anywhere platforms

TVU Anywhere platforms:

· Hardware: iPhone 7 and above

· Software: iOS 10 and above

Models:

· Inspire1, Inspire Pro, and Inspire Raw

· Phantom 3 Standard, Phantom 3 Advanced, and Phantom 3 Professional

· Matrice 100, Matrice 600, and Matrice 600 Pro

· Mavic Pro, and Mavic Air

TVU Anywhere is not compatible with drone controller models that have an embedded display.

Using TVU Anywhere with a DJI drone

To use the TVU Anywhere app with the supported DJI drone, complete the following steps:
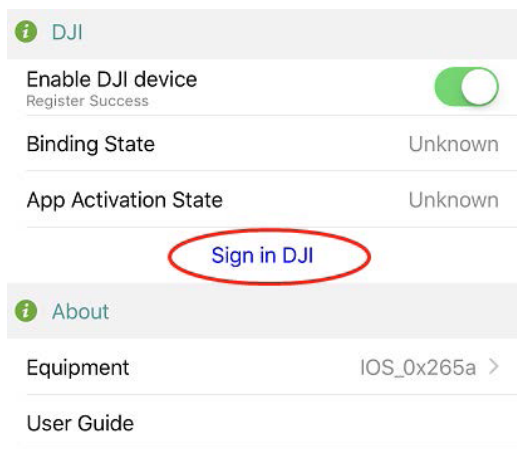
1. Download and install the latest version of TVU Anywhere app to your phone.

2. Turn on the DJI drone and drone controller.

You may test the drone and controller with the DJI Go app.

3. Connect the USB cable to the iPhone and drone controller. Then, launch the TVU Anywhere app.

4. Enable the DJI device in the TVU Anywhere app.

Once enabled, Video will automatically switch from the drone to the TVU Anywhere app. If the screen on the TVU Anywhere app does not display, make sure your DJI device is enabled in the TVU Anywhere app.

5. If you are operating the DJI drone in China, verify that the DJI account is activated and bound. Click **Sign in DJI** and enter the **account password** for binding and activating as shown in *"DJI account activation (China)".*

DJI account activation (China)

The Binding state and application activation state will display as "Bound" and "Activated" if the operation is successful as shown in *"DJI account activation success (China)".*

DJI account activation success (China)

Using TVU Anywhere with an Osmo handheld camera

To connect to the Osmo camera, complete the following steps:

1. Download and install the latest version of TVU Anywhere app to your phone.

2. Turn on the Osmo camera.

3. Enable the WiFi connection on your phone, and then search and connect the WiFi of the Osmo camera.

> Note: By default, the WiFi name is prefixed with Osmo, such as OSMO_24c4e4. And the password is 12341234.

4. After the WiFi connection is established, run the TVU Anywhere app on your phone.

   The TVU Anywhere will use the Osmo camera automatically, and you can use the Osmo camera to record or transmit videos.

Disconnecting TVU Anywhere from the Osmo handheld camera

To disconnect the Osmo camera, complete the following steps:

1. Close the Osmo camera or, disconnect from the Osmo camera WiFi.

2. When TVU Anywhere detects the disconnection, it will automatically switch to the build-in camera.

Partyline capability feature

The Producer Partyline capability feature integrates with version 9.0 of the TVU Anywhere App to provide video conferencing capabilities between multiple participants or remote participants in a live production. By using the TVU Anywhere App, all participants (or talent personnel) can video conference with each other.

A production initiator simply sends the TVU Anywhere app user a web link in the field to pair their device to the Partyline session. The Participants can see a return feed on the main screen indicating what is being broadcast.

The Partyline capability feature uses Real Time Interactive Layer (RTIL) technology to provide video conferencing capabilities for remote live production. For more information, refer to the *TVU Producer Partyline Quick Start User Guide*.

TVU Anywhere screen

A   Appendix - TVU Token feature overview

Pairing your device via the Token feature

Before TVU Anywhere can go Live, it must first be paired with one or more receiving devices. These pairings can be created on a self-service basis by utilizing the Token feature.

A Token comes in the form of a numeric or QR code, generated by your TVU system administrator, and provided to you. Entering this Token code will automatically pair your device with the appropriate TVU output receivers.

Important information about phone settings

Set your phone to forward any incoming calls. The call forward mode will not allow your TVU Anywhere app to close in the event you receive an incoming call.

> **Important: Do not set your phone to the Do not disturb or Airplane setting while you are using the TVU Anywhere app.**

Accepting a Token using the TVU Anywhere app

To accept a Token using the TVU Anywhere app, complete the following steps:

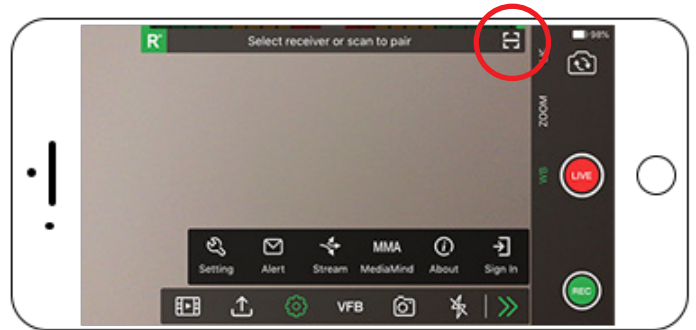1. Obtain the **Token** code from your administrator.

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2. To Scan or manually enter the Token code, open your TVU Anywhere app. Then, click the **Scan** icon in the receiver bar.
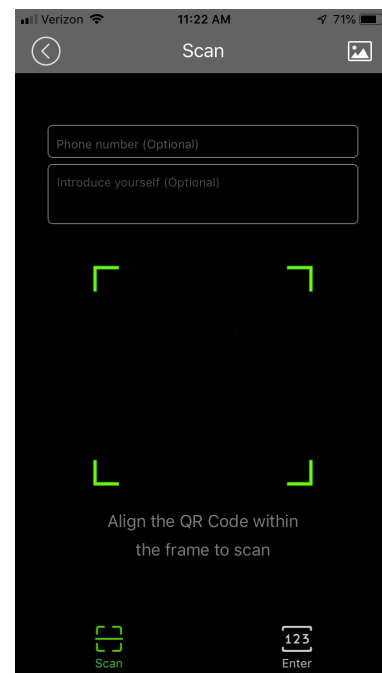
> **Note: There is a limit of 50 devices that can be used for each token QR code.**

> **You can accept the Token code using two methods. You may either scan a printed or displayed QR code, or enter the numeric token code manually. The manual method is highly recommended.**

TVU Anywhere receiver bar Scan icon

The Scan window displays.

Scan window

3. Continue with "Scan the Token QR code" on page 14, or "Manually enter the Token code" on page 14.

Scan the Token QR code

To scan your Token code, complete the following steps:

1. Click the **Scan** icon in the function bar. Then, press the green **Scan** icon at the bottom of the Scan window.

2. Type the optional information in the two top fields if desired.

3. Align the **Token QR code** inside of the green frame. The app reads the QR code. A 'Success' pop-up displays.

TVU Anywhere QR code scan

4. Your system administrator will have to approve your code before you can go Live.

5. To go live, click the **Live** icon in the function bar. If you are using the new theme, press the red **Live** button in the right panel.
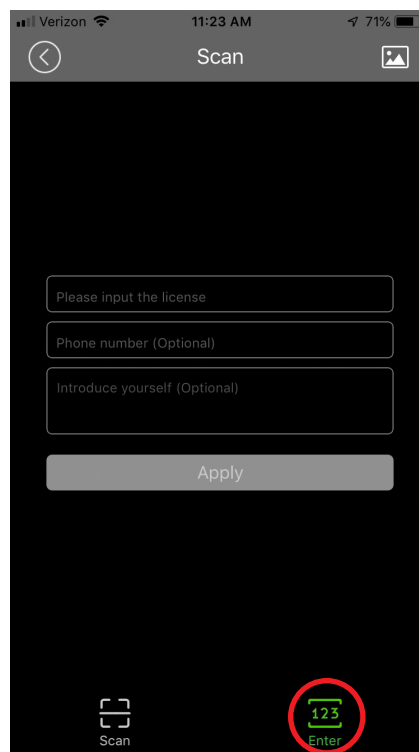

Live icon

Manually enter the Token code

To manually enter the Token code, complete the following steps:

1. Click the **Scan** icon in the function bar. Then, select the **Enter 123** icon.

2. Enter the **phone number** and introduction information in the fields at the top of the screen. This step is optional, but highly recommended.

3. Enter the **Token code** in the license field and click **Apply**. A 'Success' pop-up displays.

Manual Token code entry screen

4. Your system administrator will have to approve your code before you can go Live.

5. To go live, click the **Live** icon in the function bar. If you are using the new theme, press the red **Live** button in the right panel.

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