Operating Manual

v.3.17.5

Bounce Viewer Android App

(Android App version 3.17.5 or higher)



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http://www.bounceimaging.com

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What's new?

- Android 11+ support: apps with Android 11+ devices can now connect to our cameras.
- Pre-recorded commands: added additional pre-recorded commands that can be played in our cameras. Available languages: arabic, dutch, english, farsi, german, iraqi, kurdish, russian, somali, sorani, spanish, swahili, syrian and turkish.
- MP4 Export: Users can now export the videos from history and save them to the device gallery to access them in MP4 format from other Apps.
 - Find out more here: MP4 Export
- Video Size: Videos now list file size on history.
- Client Mode: When set to client mode, the camera will connect to an existing wifi network, this network can be then used for streaming.
 - Client Mode Option can be set to be visible from the advanced settings.
 - Users can select the "Remember this Camera" option to store the information from discovered cameras in the mobile device.
- FIPS 140-2: Security has been improved to meet FIPS 140-2 requirements for HTTPS, TLS and RTSPS.
- Thermal Overlay Controls: If the camera has a thermal sensor, it can be controlled from the camera video player.
 - Find out more here: <u>Thermal Overlay Control</u>
- Extra Illumination Controls: If the camera has an external light, it can be controlled from the camera video player.
 - Find out more here: <u>LED controls if the camera has an extra light.</u>

Before you begin

Make sure your camera is charged, using **ONLY** Bounce Imaging approved chargers. A steady red light will indicate the ball is charging properly and will turn off when charging is complete (make sure the camera is OFF when charging).



Bounce Explorer 2.0 and Recce 360 (Use the supplied charger or a USB C - PD charger that can provide 12V or 15V):



Bounce Explorer 2.0 mini and Recce 360 mini (Use the supplied charger or a USB C - PD charger that can provide 12V or 15V). The green light will indicate charging status.



How to download the Bounce Viewer App

There are multiple ways to install the Bounce Viewer app:

- 1. In case you have received a customized APK, it can be sideloaded onto the Android device. This APK might be delivered separately as a download link, on a USB drive, or on a CD-ROM.
- 2. Install from the Google play store. Search for "Bounce Viewer" in the Google Play or use this link: http://play.google.com/store/apps/details?id=com.bounceimaging.bounceviewer or use the QR code:



How to turn ON the Explorer Camera

Disconnect your camera from the charger. Find the power switch, opposite from the charger opening. Switch the power switch to ON (red).



For USB-C cameras, long-press the power button (shown below), the camera will vibrate once if the camera is turned ON and 3 times if the camera is turned OFF.



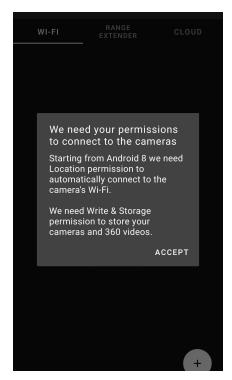


How to connect to a camera using its Wi-Fi

This section shows how to connect using the camera's Wi-Fi. This is the regular way to connect. Your Android device must be connected to the camera's Wi-Fi in order to receive video. Once you have saved the camera information in the app, it will automatically connect to the Wi-Fi and start receiving video.

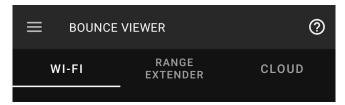
Save the camera information

- 1. Open the Bounce Viewer App.
- 2. Accept the Storage and Location permissions. Storage permissions are needed in order to store your cameras and the videos recorded with it. Location permission is needed in Android 8+ to be able to <u>automatically</u> connect to the camera's WiFi.

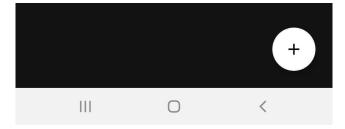


- 3. After granting permissions, you will be shown with the **Connect** screen. This screen has 3 tabs:
 - **a. Wi-Fi:** this is the regular way to connect. Connect to your camera via its Wi-Fi. Your Android device will automatically connect to the camera's Wi-Fi and start receiving video.
 - b. Range Extender: used to connect using our Range Extender accessory. The Range Extender is connected via USB to the Android device and via Wi-Fi to the camera. The Android device doesn't need to be connected to the camera's Wi-Fi.

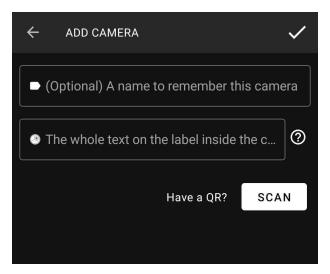
- **c. Cloud:** receive 360 video from the internet. If you have a Bounce Imaging's cloud subscription you can stream video from your cameras to the cloud and receive it anywhere in the world.
- 4. Make sure you are on the **Wi-Fi** tab.



5. To connect to a camera, you need to tell the app which is the Wi-Fi SSID using the QR it came with. Click the (+) icon at the bottom right.



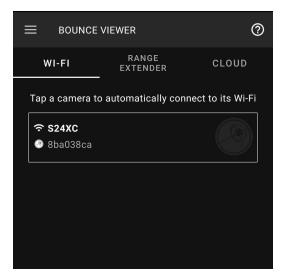
6. Enter an optional name to remember the camera and then click SCAN.



7. Point the camera to the QR code located **under the lid of the case** as shown below. Then click the **CHECK** button at the top right.

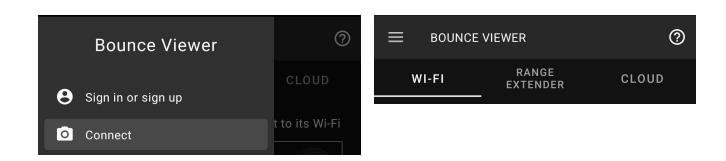


8. The camera will now appear under the Wi-Fi tab.

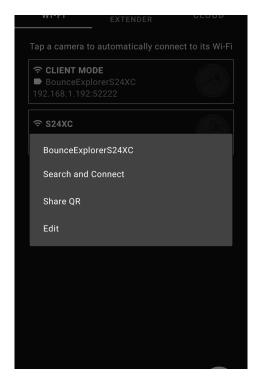


Start connecting automatically

1. Open the **Connect** screen and make sure you are on the **Wi-Fi** tab.



2. Tap the camera you want to connect to and click **Search and Connect**. You can also edit its name, rescan the code, share or delete it.



3. The app will now connect automatically to the camera's Wi-Fi and start receiving video. Make sure you are in the camera's Wi-Fi range so the device can connect to its Wi-Fi.

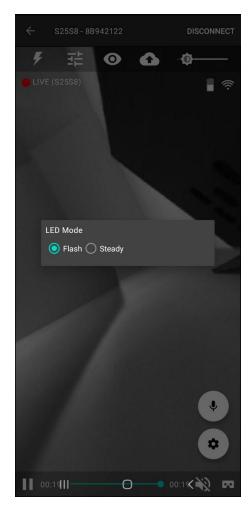
Camera Player Options

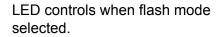


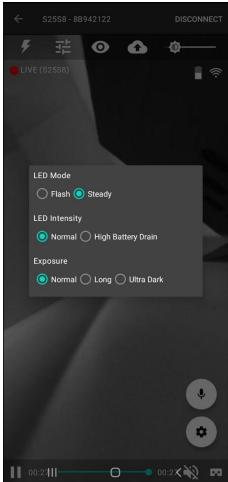
#	Description
1	Disconnects from the camera and returns to the Camera Connect screen.
2	Disconnects from the camera and stays on the same screen where you can review the received video. You can also check recorded videos in the History screen.
3	Turns ON/OFF the camera LED. Turns yellow if the camera LEDs are ON.

	Long press to open additional LED settings.
4	Shows additional camera settings including HQ, Battery Saver, Single camera mode and Motion detection.
5	Shows additional view options including 4-panel mode, Wide angle and Dog Mode and Thermal Overlay Controls (if available on camera).
6	Open the Cloud Streaming Options. Allows you to start streaming to the cloud either from the phone or a 4G/Unleashed Explorer.
7	Changes the video brightness.
8	Resumed status. Shows 2 states: LIVE when the player is resumed and PAUSED otherwise. Also shows the SSID of the camera you are connected to. Only visible when the camera is connected and receiving video.
9	Battery level of the connected camera.
10	Connection status. The icon is filled-white if the connection is established and it will show a red animation if the connection was lost.
11	Keep pressed to send audio over to the camera using the Android device microphone. Only available for cameras with speaker.
12	Shows additional options. Depending on the Explorer version and app version could include: Play siren, Pre-recorded Commands, Software updates, Client/AP mode, Share camera QR and Help.
13	Resume/Pause the current video.
14	Playback controls. Used to navigate to a different position in time of the current video.
15	Mute/Unmute the audio received from the camera. Only available for Tactical Audio and Unleashed cameras.
16	Turn ON cardboard mode. Explore using VR goggles.

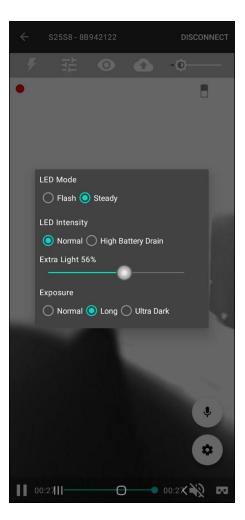
3. Long press to open additional LED settings.





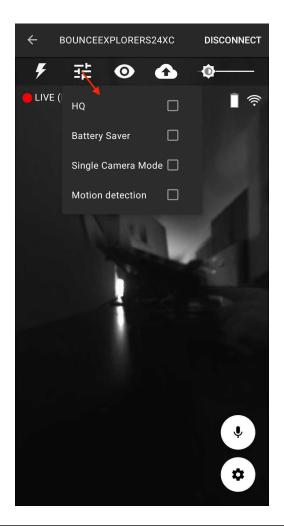


LED controls when steady mode selected. LED Intensity and Exposure can be set.

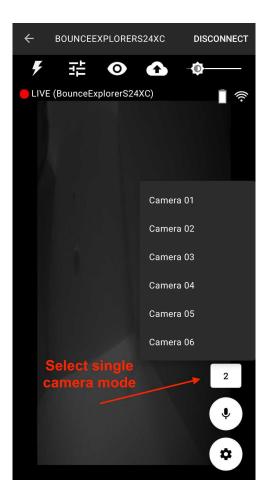


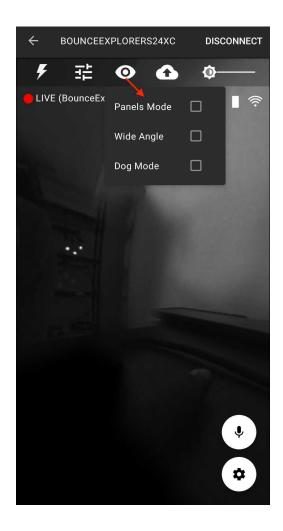
LED controls if the camera has an extra light.

Option	Description
LED Mode	Flash: LEDs will be intermittent when on. Steady: LEDs will be permanent when on.
LED Intensity	Changes the intensity of the LEDs when on.
Exposure	Changes the exposure. Longer exposures allow you to see in darker environments.

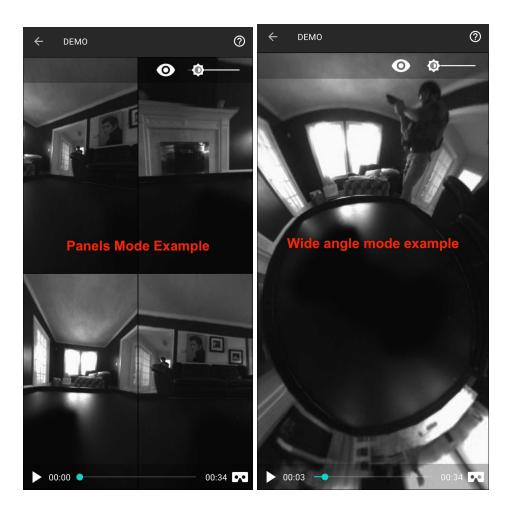


Option	Description
HQ	Turn ON/OFF the camera HQ Mode. HQ mode doubles image resolution. Turns yellow if ON.
Battery Saver	Turn ON/OFF the camera Battery Saver mode to increase the battery life by decreasing the frame rate. Turns yellow if ON.
Single camera Mode	When single camera mode is enabled, the camera only sends the image from one of the lenses. You can select which camera.
Motion Detection	Enables/Disables real time motion detection on the video.



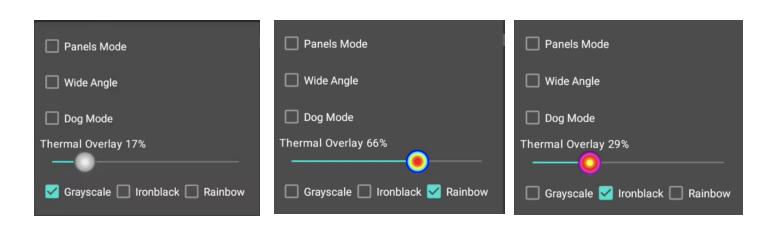


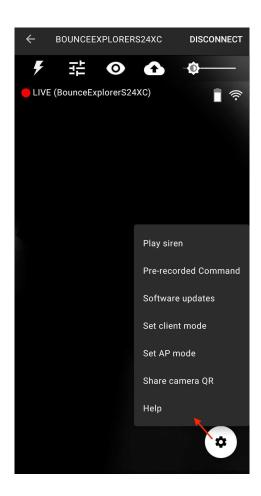
Option	Description
Panels Mode	Splits the video into 4 different panels where you can point each panel to a different direction of the panorama.
Wide Angle	Increases the field of video allowing you to see more areas of the video at the same time.
Dog Mode	When enabled, the video won't self stabilize horizontally, the video will rotate with the camera.



Thermal Overlay Control

In case the camera has a thermal sensor, the controls will show when selecting the eye icon. User can control the sensor by dragging the seekbar to adjust intensity and selecting the desired color map as the following images show:





Option	Description
Play siren	Plays a siren sound from the Explorer camera
Pre-recorded command	Let the user select a pre-recorded command (available in 14 different languages) to play from the Explorer camera
Software updates	Check the Explorer software for updates. Only available for specific app versions.
Set client mode	Configures the Explorer camera to connect to an existing Wi-Fi instead of creating its own. Only available for specific app versions.
Set AP mode	Configures the Explorer camera to raise its own Wi-Fi. Only available for specific app versions.
Share QR	Shows the connected camera QR code

Help Shows additional help	
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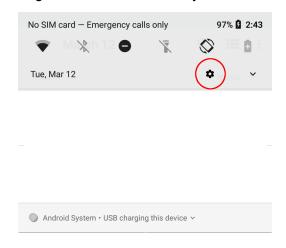
How to connect to a camera using a Range Extender

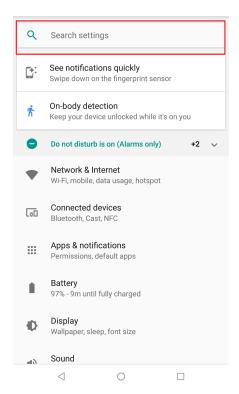
- Each extender can only be paired with one camera at a time. When you receive your Range Extender it comes pre-configured with one camera.
- If you are having problems connecting to yours or don't know which camera it is paired to you can contact us and we will gladly help you reconfigure your extender.

How to check Range Extender compatibility

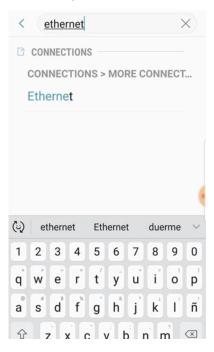
To use the Range Extender you need an Android device capable of setting a static IP to the Ethernet interface. Follow these steps to check if your device is compatible.

- 1. Turn the Range Extender ON and connect it to the Android device as shown in the section **How to use** the Range Extender.
- 2. Go to the Android device Settings and search for the keyword "Ethernet"



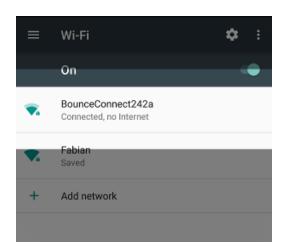


3. If your device shows the Ethernet options, your device is compatible.



How to use the Range Extender

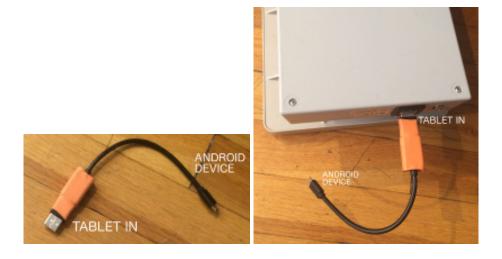
 Turn your paired Bounce Imaging Explorer camera ON and make sure its Wi-Fi is visible (You don't need to connect the Android device to it)



2. Turn the Range Extender ON



3. Find the Android cable and connect it to the extender as shown below

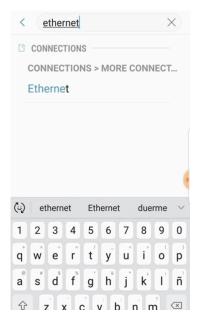


4. Connect the Android cable to the Android device as shown below



- 5. Now you need to set the static IP of the Ethernet interface in the Android device settings.
- 6. Open the **Android Settings -> Ethernet**. The location depends on the Android device. It could be right next to the Wi-Fi/Bluetooth settings or you can look for it under Advanced Network Settings -> Ethernet. You can also search for "Ethernet".





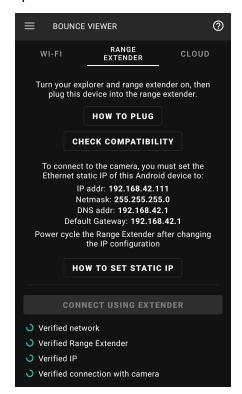
7. Change the IP settings to be Static as shown here:



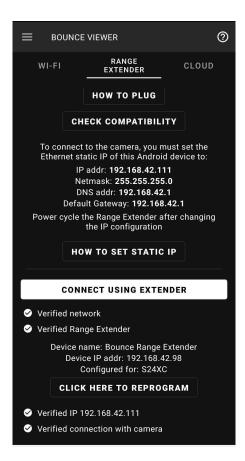
8. Save and make sure the Ethernet network is enabled (on).



9. Open the Bounce Viewer app. Open the Connect screen and the Range Extender tab.



10. After setting the static IP, the app now can detect the Range Extender. Scroll down and tap Connect using Extender.



11. You are now connected using the Range Extender. You can confirm if you see this icon in the screen:





- 12. You can also turn your Android device Wi-Fi OFF to confirm you are connected using the Range Extender.
- 13. <u>To re-configure/reprogram</u> the Range Extender, first set the static IP as instructed in the app to detect the Range Extender and its current configuration. The app will tell you if you need to change the static-ip configuration to be able to re-configure.

Cloud Streaming Service

Share real-time 360 video with team members or a command center anywhere. Plans start at \$35/month or \$385/year. Contact sales@bounceimaging.com to learn more.

How to sign up and confirm your account

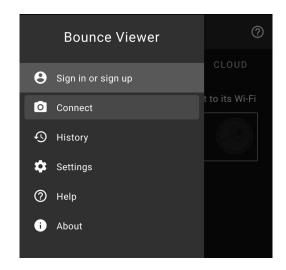
You must have a confirmed account in order to stream to the cloud or receive the stream in the app.

- 1. Enter https://cloud.bounceimaging.com/users/sign_up and fill the form. Your password must be at least 8 characters long.
- 2. You will receive an email with a link to confirm. Click it.
- 3. Your account is now created and confirmed. You can now login.

How to login

In order to upload or download streams to the cloud, you must login.

- 1. Open the app Menu and select **Sign in/Sign up.**
- 2. Enter your email and password.

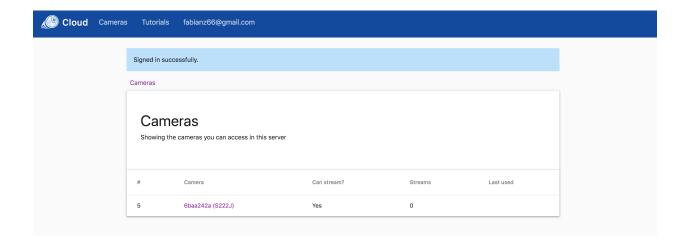


Who can receive and upload videos to the cloud?

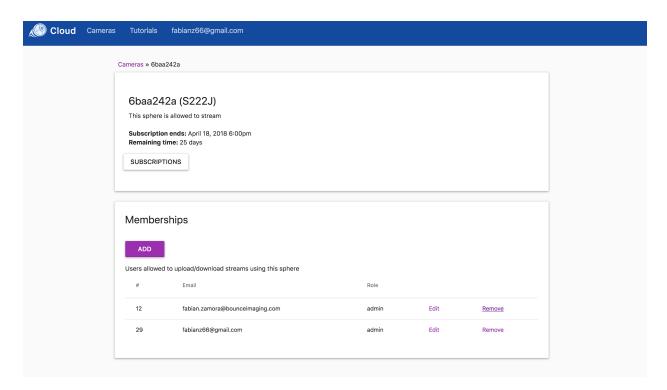
Each camera has a list of **members**. Members are users allowed to upload and download video from it. Members can be **regular** or **admin**. Both can upload and download video, but **admin** members can add (or remove) other members.

How to add members to a camera

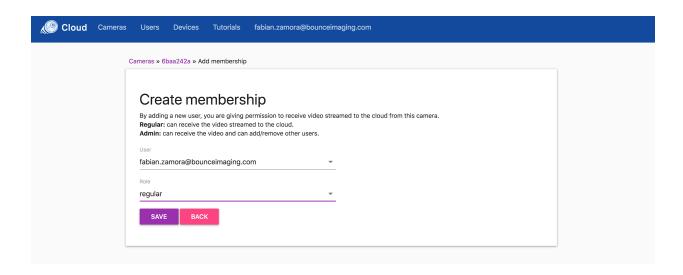
- 1. Login at https://cloud.bounceimaging.com/users/sign_in
- After login you will be redirected to the cameras management screen
 https://cloud.bounceimaging.com/spheres. In here, you will see the cameras you are member of, as seen below:



- a. If you don't see your camera listed, contact us at help@bounceimaging.com.
- 3. Open the **camera screen** by clicking the serial number of the camera.
- 4. To add a member to the camera, click the ADD button under the Memberships section.
 - a. If you don't see the ADD button it means you are not an admin member of the camera. If you think this is a mistake, contact a member admin of the camera or contact us at help@bounceimaging.com.



5. In the **create membership screen**, add the email of the user you want to add. **The email must be of a** previously created and confirmed user.



6. The new user is now able to upload and download videos using the camera.

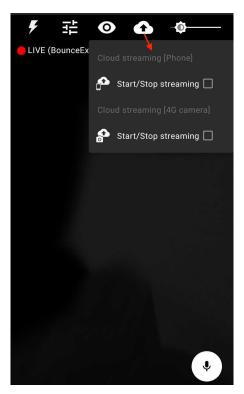
How to stream to the cloud using an Android device

Requirements

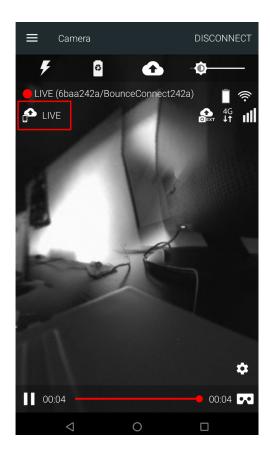
- Android phone or tablet with cellular network (4G/LTE) and Android version 6.0 or later
- Bounce Viewer app for Android version 3.0.0 or later
 - http://play.google.com/store/apps/details?id=com.bounceimaging.bounceviewer
- Bounce camera with software version M1.0.9/I1.0 , 1.6.20 or later
- You must have a user in https://cloud.bounceimaging.com and a valid subscription for your camera.
 Contact sales@bounceimaging.com to get a valid subscription.

How to start uploading video

- 1. Login with your Bounce Imaging account
- 2. Connect to the camera locally using the camera's WiFi or Range Extender.
- 3. Once connected, find and tap the cloud button as shown below:



- 4. Under the **Cloud streaming [Phone]** section, tap the option **Start/Stop streaming**. This will try to start streaming to the cloud using the phone cellular network. Make sure you are logged in with a member of the camera in order to be able to stream.
- 5. When successfully streaming to the cloud, you will see a **LIVE** indicador with a **cloud+phone** icon at the left of the screen as shown below:



6. **To stop**, click the **cloud button** and tap the option **Start/Stop streaming** again . The LIVE indicador will no longer be visible on the screen.

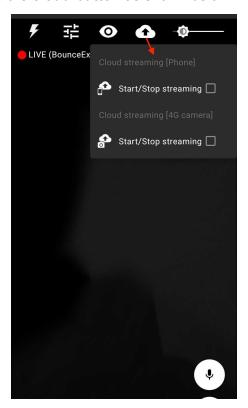
How to stream to the cloud using an Explorer Unleashed (4G)

Requirements

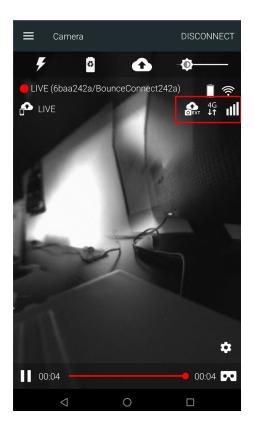
- Bounce Viewer app for Android version 3.0.0 or later
 - http://play.google.com/store/apps/details?id=com.bounceimaging.bounceviewer
- Bounce camera with software version M1.0.9/I1.0, 1.6.20 or later
- You must have a valid subscription for your camera. Contact <u>sales@bounceimaging.com</u> to get a
 valid subscription.

How to start uploading video

- 1. Connect to the camera locally using the camera's WiFi or Range Extender.
- 2. Once connected, find and tap the **cloud button** as shown below:



- 3. Under the **Cloud streaming [4G camera]** section, tap the option **Start/Stop streaming**. This will try to start streaming to the cloud using the sim card inside the camera.
- 4. When successfully streaming to the cloud, you will see the status of the streaming as shown below:

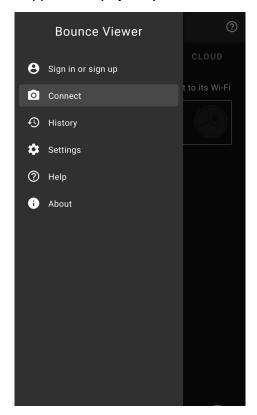


5. To stop, click the cloud button and tap the option Start/Stop streaming again.

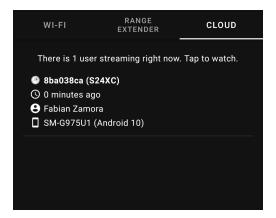
How to connect/receive video from a camera using the cloud

To receive the video streamed over the cloud from a camera, you must be logged in with a user account that is a member of the camera. (refer to How to add members to a camera)

1. Go to the camera screen of the app. Menu (top left) -> Cameras:



2. Click Connect and select the Cloud tab. You will see the available streams you have access to.

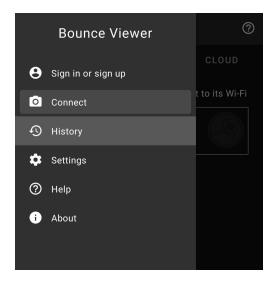


3. Tap on the stream you want to connect to.



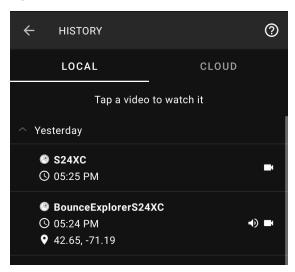
History videos

1. Open the app Menu and select History

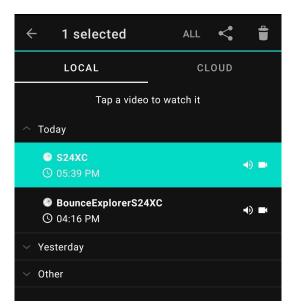


2. You have 2 tabs:

- **a.** Local: the videos you have stored in your Android device memory. By default all videos are saved when received, you can turn this off in the app settings.
- **b.** Cloud: the videos stored in the cloud using Bounce Imaging cloud streaming service. You can access them from any Android or iOS device.



- 3. Select the **Local** tab. You will see all the videos in the storage of the Android device.
- 4. Long-press a video to delete it or share it.



5. **Tap** a video to **watch** it.

History Player Options



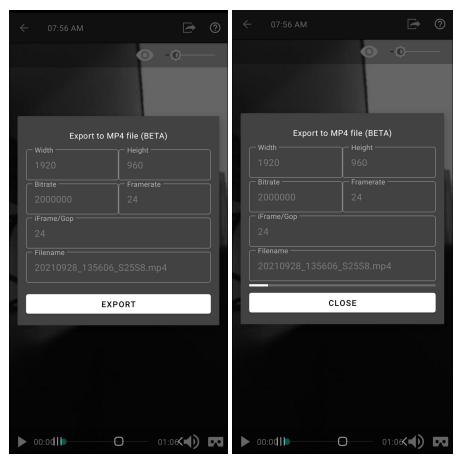
#	Description	
1	Return to the History Videos screen.	
2	Export video to mp4 format and save it to the device gallery so that it can be accessed from other Apps.	
3	Show additional help	
4	Shows additional view options including 4-panel mode, Wide angle and Dog Mode. You can refer to Camera Player Options .	
5	Changes the video player brightness.	
6	Resume/Pause the current video.	
7	Playback controls. Used to navigate to a different position in time of the current video.	

8	Mute/Unmute the audio received from the camera. Only available for Tactical Audio and Unleashed	
	Cameras. Turn ON cardboard mode. Explore using VR goggles.	
9		

MP4 Export

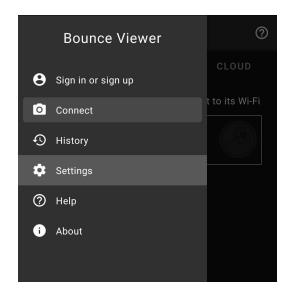
In order to export the video to mp4 format:

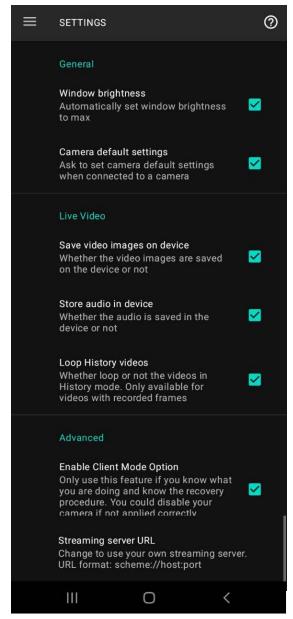
- 1. Press the export icon next to the question mark on the upper right corner.
- 2. Select the Export Button, either wait for the export to complete or press the Close button and you will get a notification once the export is completed.



App Settings

1. Open the app Menu and select **Settings**



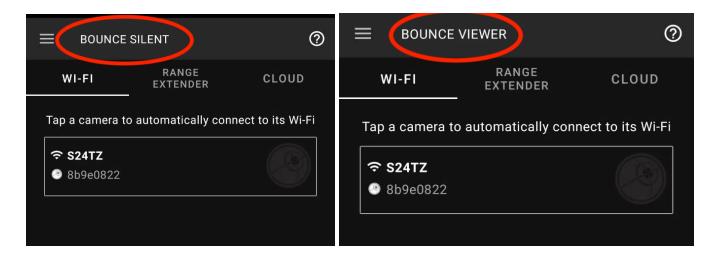


Available Settings

Setting	Description
Window brightness	Allow the application to set the brightness automatically to max. Default is ON.
Save video images on device	Save the images of the received video locally on the device storage. Default is ON.
Store video audio on device	Save the audio of the received video locally on the device storage. Default is ON.
Loop History Videos	When looking at a video in History, restart the video when it finishes.
Enable Client Mode	This makes the "Set Client Mode" option visible in the gear icon menu of the camera viewer. Default is OFF.
Streaming server URL	This option allows changing the default streaming server to a custom one.

Silent Mode

When Silent mode is enabled, the app won't share any analytics data (useful to debug problems and provide a better user experience) with any server. This mode is disabled in the Bounce Viewer app available in the Google Play Store and can't be enabled. Bounce Imaging provides a separate APK with silent mode enabled (can't be disabled) called Bounce Silent. You can find out if you have Bounce Viewer or Bounce Silent by looking at the title in the action bar of the app, as shown here:

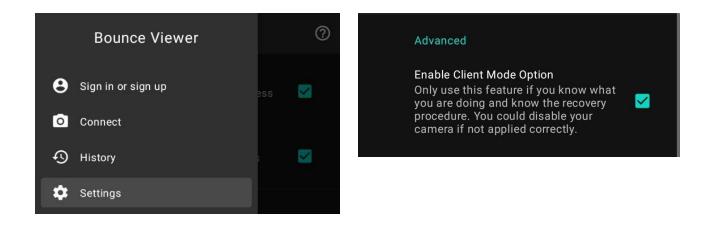


Switching to wifi client mode

The camera must be in normal (AP) mode at this point.

1. Set Client mode option to visible from Advanced settings:

Go to Settings, scroll down to Advanced, and check the Enable Client Mode Option.



2. Connect app

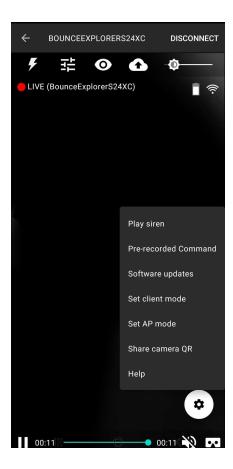
Connect to the camera from the app as in How to connect to a camera using its Wi-Fi.

3. Verify camera operation

Make sure video data is received from the camera.

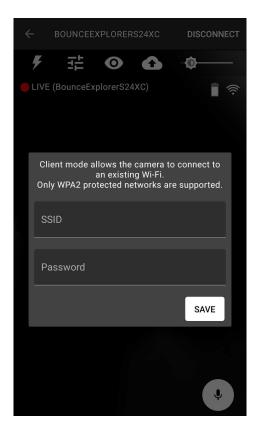
4. Open settings menu

To enable client mode, open the additional settings from the gear icon.



5. Configure as client

Click "Set client mode" and enter the SSID and passphrase of the network to connect to. Note that only WPA/WPA2 is supported (not WEP and open).



After selecting *SAVE*, a confirmation is displayed. After power cycling the camera, the new wifi configuration will be applied.

6. Test wifi client mode

After setting the wifi client configuration and mode and power cycling the camera, the camera will not raise a hotspot anymore.

a. Connect Android device to target wifi network

Now connect the Android device to the target wifi network using the same ssid/password as specified above.

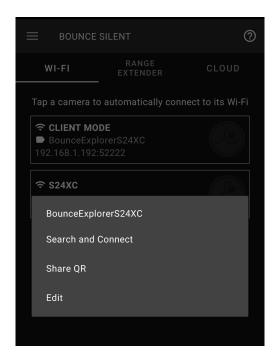
b. Wait for the Bounce Viewer app to display the camera

When the Bounce Viewer app is connected to a network, it will search the cameras in client mode and show them at the top of the list in the Wi-Fi tab.



c. Receive data from camera

Tap the camera in CLIENT MODE and then click "Search and Connect". The app will start receiving video from it.



7. Save Camera Details locally on the device.

Switching to wifi hotspot/access point mode

The camera must be in wifi client mode at this point.

1. Connect app to camera

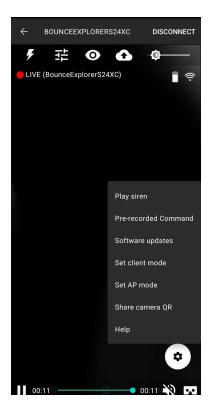
Connect to the camera from the app as in Test wifi client mode

2. Verify camera operation

Make sure video data is received from the camera.

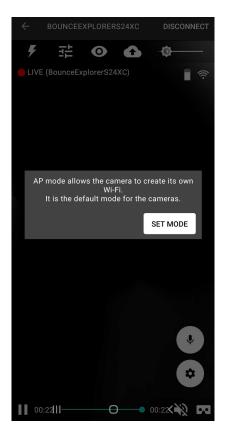
3. Open settings menu

To enable AP mode, open the additional settings from the gear icon.



4. Configure as AP

Click "Set AP mode" then click "Set mode". You will see a confirmation message. After power cycling the camera, the new wifi configuration will be applied.



5. Test wifi AP mode

After setting the wifi access point mode and power cycling the camera, the camera will now raise an access point again.

To test the camera operation, connect to the camera as in How to connect to a camera using its Wi-Fi.

Switching to Access Point Mode (Wi-Fi hotspot) without the app or client network.

In case you want to revert to access point mode (camera creating its own Wi-FI) but for some reason you can't connect to the camera with the Bounce Viewer app (no access to the currently configured client network for example) you can do it by by power cycling the camera in a certain pattern:

- Use a stopwatch to measure the ON time. Start the stopwatch at the same time you start turning the camera ON.
- Do this 3 times:
 - Power ON the camera and leave it ON for 30 seconds. Exactly at second 30 press the power button to turn the camera OFF.
- After the fourth time the camera is turned on, the access point will be enabled again.

Troubleshooting

1. If your device keeps disconnecting: Make sure the Battery Saver Mode of your Android device is turned **OFF.** If the problem persists, please contact us at help@bounceimaging.com.

