

OverWatch™ Standalone Application

User Guide



OverWatch™ MIL KIT



OverWatch™ Overview



OverWatch™ Provides persistent video surveillance at the tactical edge. Networked to stream video through a tethered connection or broadcast over an encrypted tactical radio network. OverWatch™ will present a live view of the battlespace from a fixed or concealed position.

OverWatch™ reduces the risk of exposure and detection by allowing the user to leave the system behind and access the video stream remotely through Mobile Tactical & Command Post Systems. The system can create tactical video from any connected optic or video source.

OverWatch™ is a low-voltage capability powered through a micro USB connection or tethered to standard military batteries for extended operations. The system provides automatic network routing and multicast support for rapid deployment and ease of use.

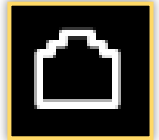
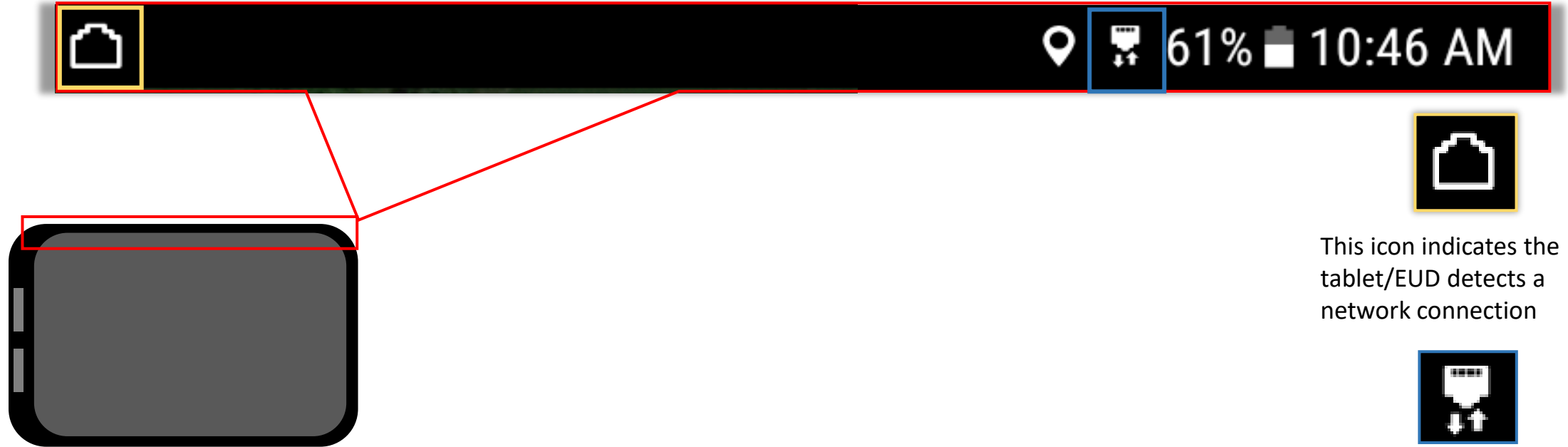


Before We Begin...



This document assumes the following:

1. The Reader has followed the steps found in the OverWatch™ Setup Guide
2. The Reader has the system set up and the EUD is receiving an IP Address from the OverWatch™ System.



This icon indicates the tablet/EUD detects a network connection



This icon indicates the tablet/EUD is receiving an IP address from the OverWatch™ System

OverWatch™ Standalone Table of Contents



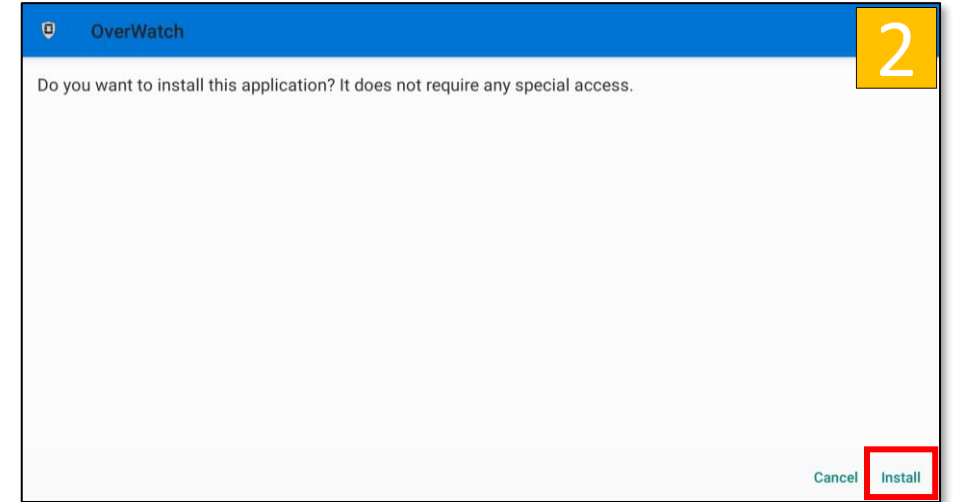
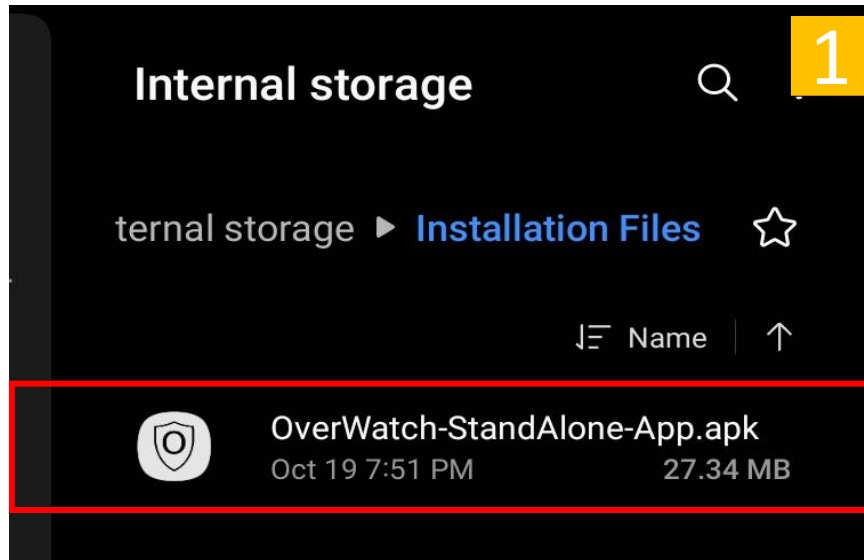
Install OverWatch™ Standalone App.....	7
Allow App Permissions.....	8
Initial Sensor Setup.....	9
User Interface.....	10
Motion Detection.....	11
Camera Status Matrix.....	12
Select Sensor Source.....	14
Hand Jam Sensor Source.....	15
Files Overview.....	17
Files Recordings.....	18
Files Snapshots.....	20
Settings Overview.....	23
Motion Alert Settings.....	24
Snapshot File Type.....	25
Orientation.....	26
JPG Compression.....	27
Application Information.....	28
User Guide.....	29
Setup Guide.....	30
Board Configuration.....	31

OverWatch™ Standalone Table of Contents cont.



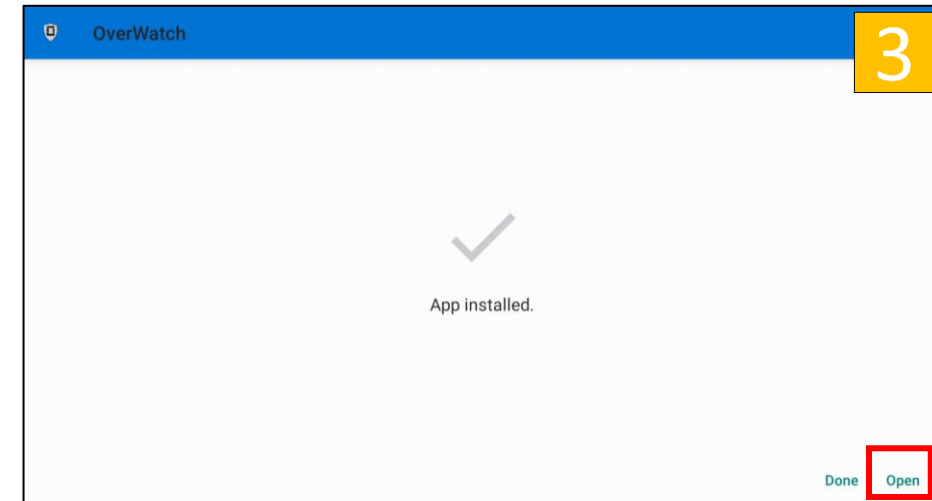
Configuration Overview.....	33
Connect to Board.....	34
Camera Label.....	36
Camera Configuration.....	38
Motion Alert Settings.....	40
SA Network Settings.....	42
SA Information.....	44
Network Settings.....	46
TCP Address.....	48
Add TCP Address.....	49
Factory Reset.....	50

Install OverWatch™ Standalone App

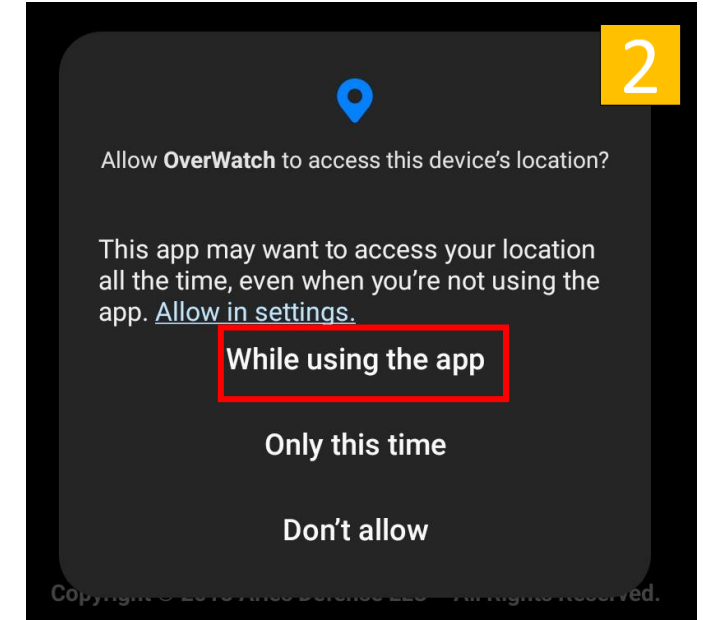
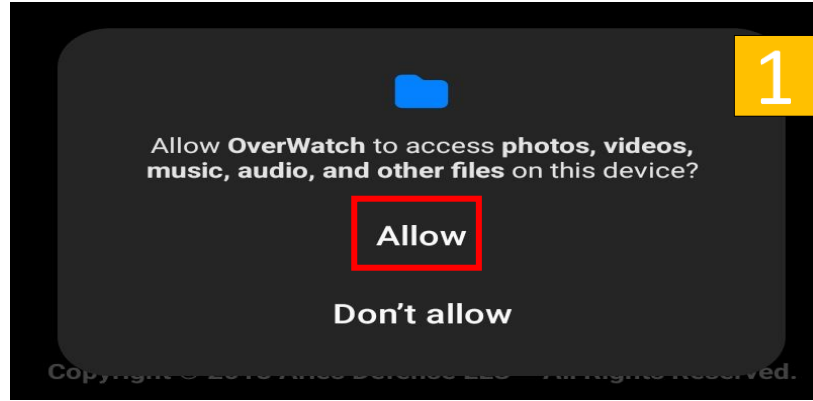


1. **Tap** the OverWatch Standalone APK file to begin installation.
2. Review the Permissions Statement then **tap Install**.
3. **Tap Open** once the installation is complete.

Note: The actual APK name may change. Also you may have to adjust the security settings on your device to install this application.



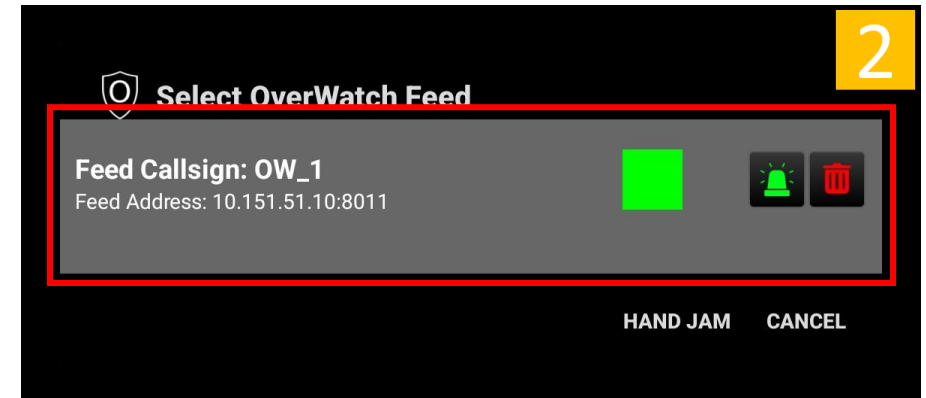
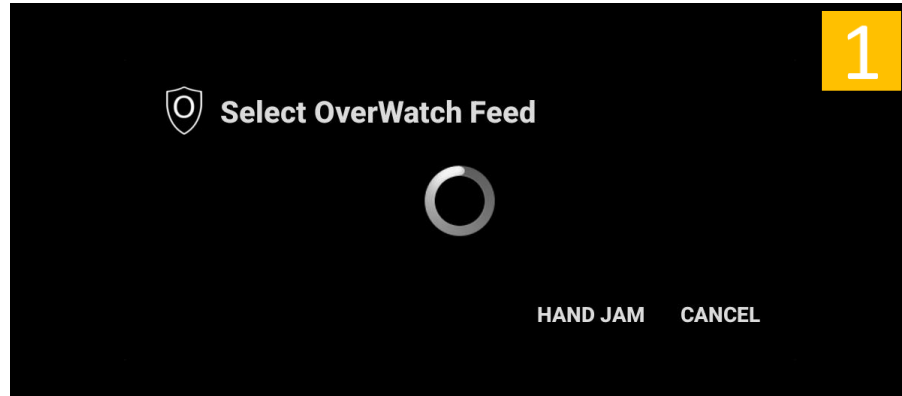
Allow App Permissions



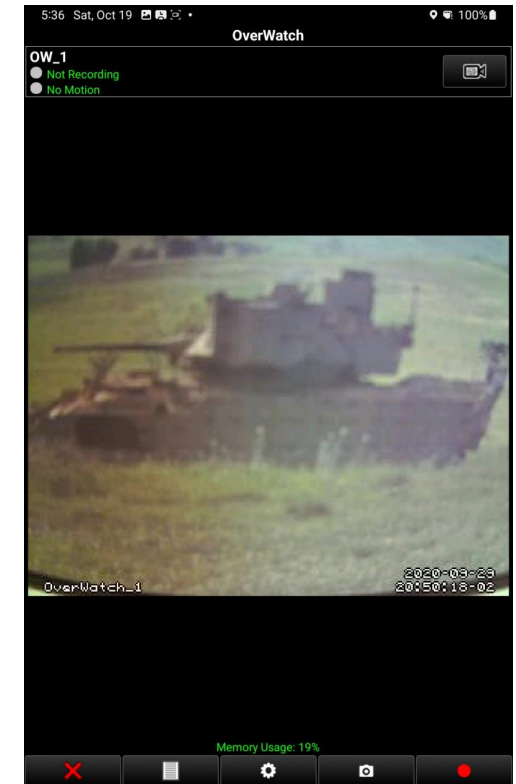
1. **Tap Allow** when prompted to set “Allow OverWatch to access photos, media, and files on your Device?”.
2. **Tap Allow** when prompted to set “Allow OverWatch to access this device’s location?”

Failing to allow these permissions will limit / prevent proper functionality of the OverWatch™ System.

Initial Sensor Setup



1. Upon initial set up OverWatch will look for all OverWatch systems on the network:
2. *Select* your desired feed and it will start streaming.



OverWatch™ Standalone User Interface



ow1
● Not Recording
● No Motion

ow1 = Camera Name **Not Recording
No Motion** = Camera Status

Memory Usage: 13%
Current memory utilization on the end user device (EUD)

OverWatch™ 01
Camera Label

**2019-01-20
14:57:07-14**
Current Time Stamp

Take a Snapshot of the Current Camera View

Record the Current Camera View

Close the App

View the Snapshots and Recordings

Toggle the OverWatch™ Preferences

OverWatch™ Motion Detection



The Camera detects motion and begins to record if that feature has been turned on. Enabling this feature is discussed in the Preferences/Settings Section of the manual.



The OverWatch™ System will draw a box around the area where motion is detected. The box will follow the “object” until it is out of view from the camera or until the system no longer detects motion.

OverWatch™ Camera Status Matrix



No Motion Detected	Motion Detected not recording	Motion Detected Auto recording
ow1 ● Not Recording ● No Motion	ow1 ● Not Recording ● Motion Detected	ow1 ● Recording ● Motion Detected

No Motion Detected -- Motion has not been detected by the OverWatch™ system

Motion Detected -- Motion has been detected by the OverWatch™ System

Recording -- The OverWatch™ system is recording camera footage while there is motion detected



OverWatch™ Standalone: Select Source

OverWatch™ Standalone: Select Source



Select Source



Active Feed

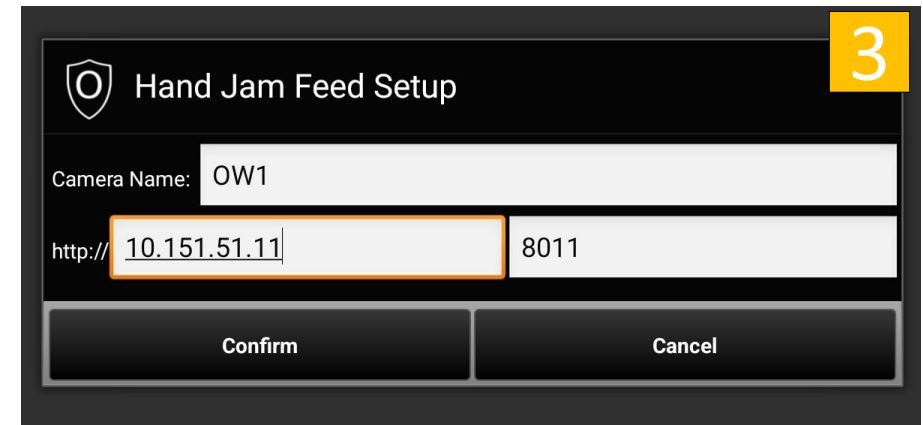
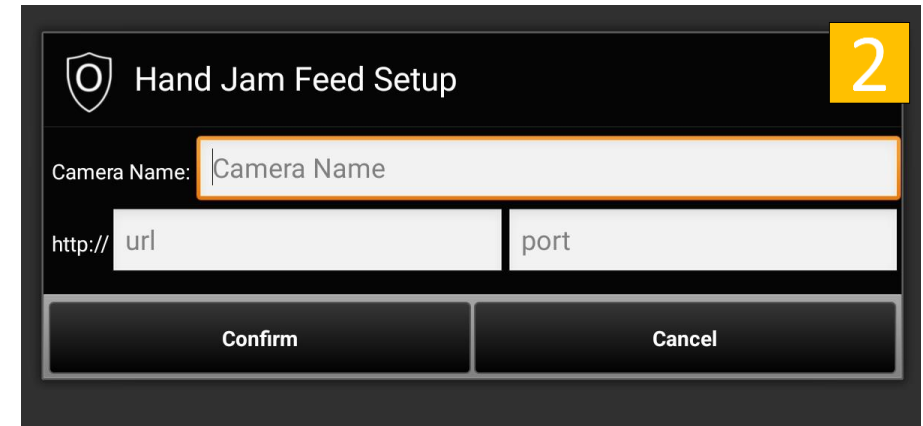
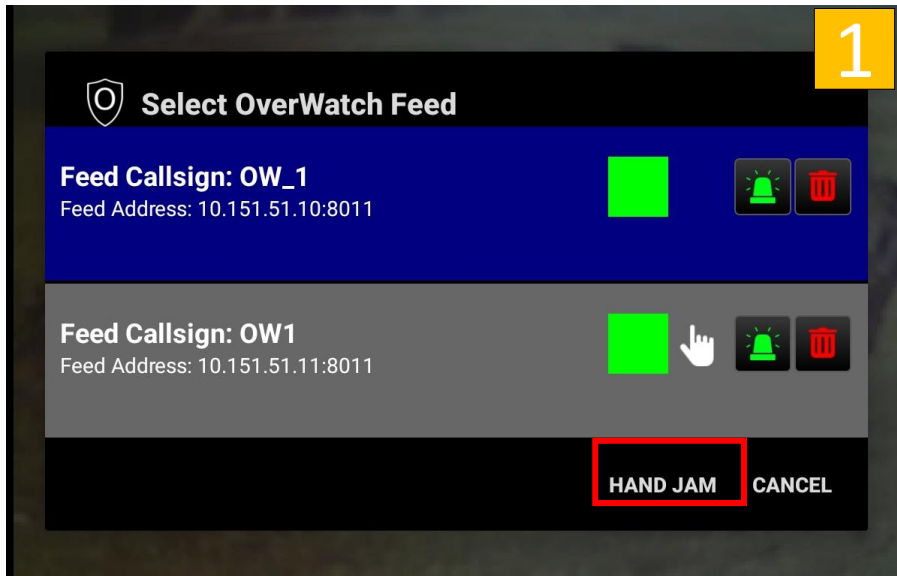
Subscribe Alerts

Delete Feed

Hand Jammed

Stale Feed (after 5 minutes of inactivity)

OverWatch™ Standalone: Hand Jam Sensor Feed





1. **Select** Hand Jam
2. **Enter** Required Fields
 - Camera Names are user defined.
 - The Default Camera URL is:
10.151.51.10.
 - The Default Port is 8011.
3. **Tap** Confirm to continue.

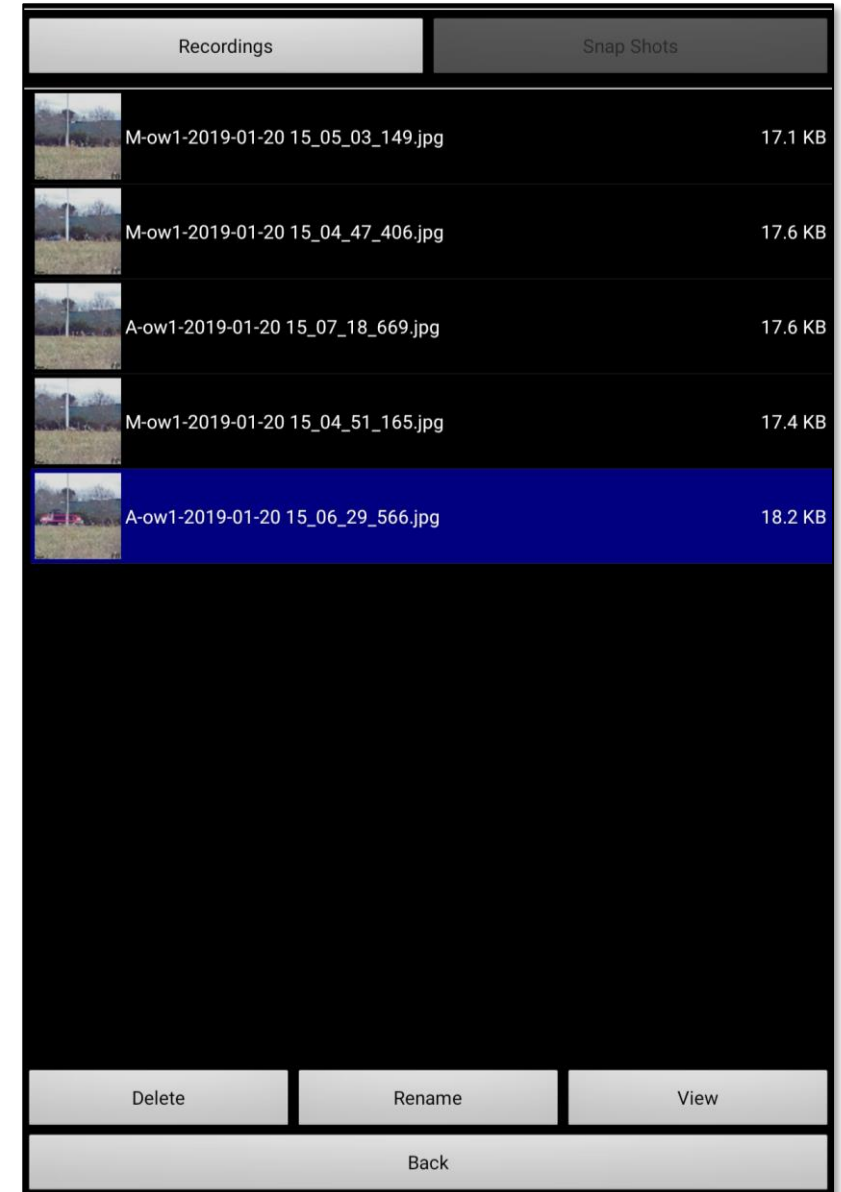


OverWatch™ Standalone: Files

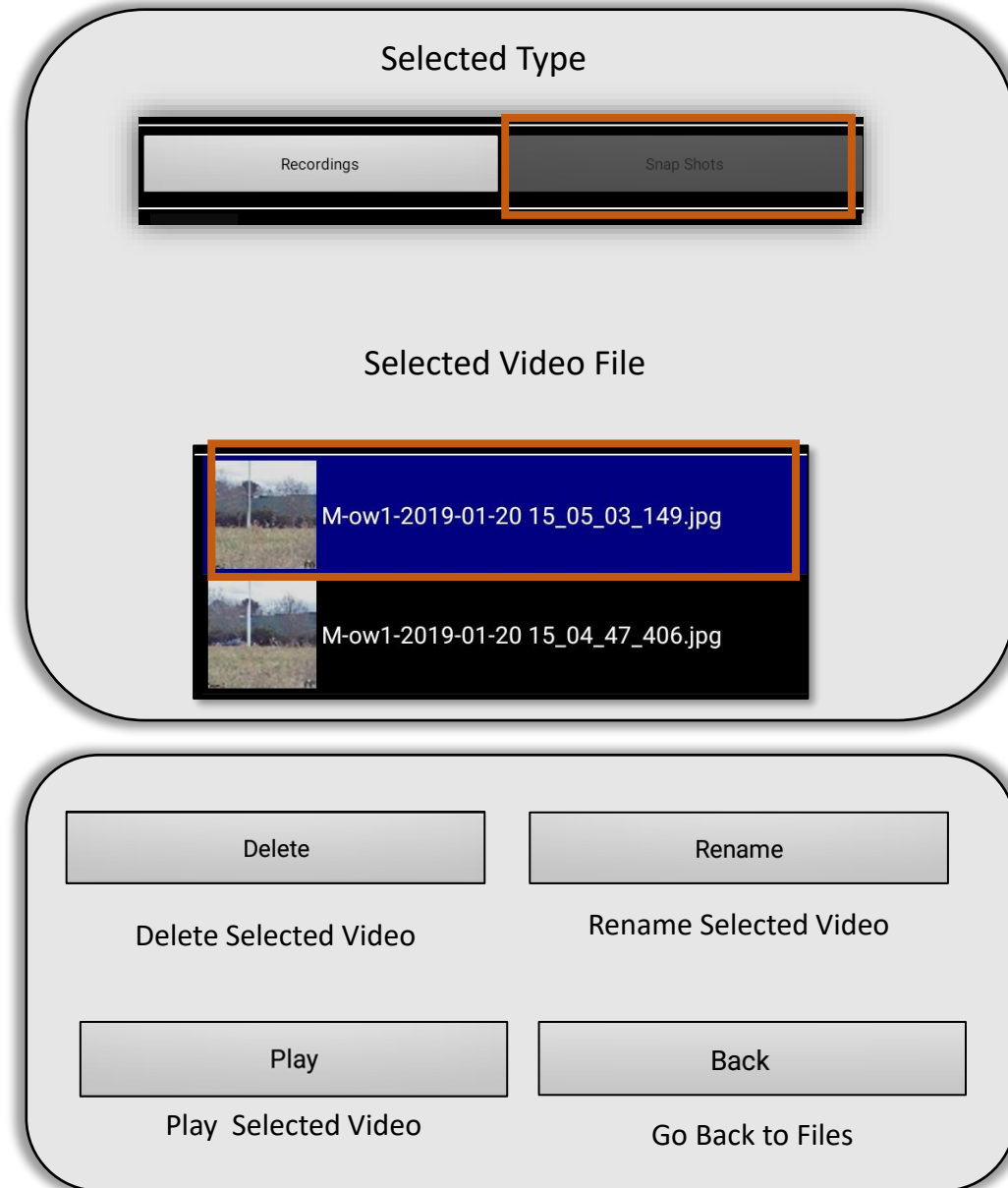
OverWatch™ Standalone: Files Overview



The OverWatch Files allows users to view snapshots and recordings. These files are either manually created using the snapshot or record buttons   from the main interface or by toggling the OverWatch™ settings to automatically record when motion is detected. Files tagged with A_ were automatically captured and files with M_ were manually captured.



OverWatch™ Standalone: Files - Recordings



OverWatch™ Standalone: Files – Recordings (Cont...)



Video Recording File Syntax

M ow1 2019-01-20-15_05_26_833 MP4

1. A - Automatic Recording / M – Manual Recording
2. Camera Name
3. Date Time Stamp
4. File Extension

1 of 7

Current file of total files

Video Progress Bar

Previous Next






Go to Previous Video Go to Next Video

Play / Stop Video Back

Go Back to Files

OverWatch™ Standalone: Files - Snapshots





Recordings	Snap Shots
	M-ow1-2019-01-20 15_05_03_149.jpg 17.1 KB
	M-ow1-2019-01-20 15_04_47_406.jpg 17.6 KB
	A-ow1-2019-01-20 15_07_18_669.jpg 17.6 KB
	M-ow1-2019-01-20 15_04_51_165.jpg 17.4 KB
	A-ow1-2019-01-20 15_06_29_566.jpg 18.2 KB

Delete	Rename	View
Back		

Selected Type

Recordings	Snap Shots
------------	------------

Selected File

	M-ow1-2019-01-20 15_04_51_165.jpg
	A-ow1-2019-01-20 15_06_29_566.jpg

Delete	Rename
Delete Selected Snapshot	Rename Selected Snapshot
View	Back
Play Selected Snapshot	Go Back to Files

OverWatch™ Standalone: Files – Snapshots (Cont...)



Video Recording File Syntax

A ow1 2019-01-20-15_06_29_566 JPG

- 1
- 2
- 3
- 4

1. A - Automatic Snapshot / M – Manual Snapshot
2. Camera Name
3. Date Time Stamp
4. File Extension

5 of 5

Current file of total files

Previous Next

Go to Previous Snapshot Go to Next Snapshot

Back

Go Back to Files



OverWatch™ Standalone: Settings

OverWatch™ Standalone: Settings Overview

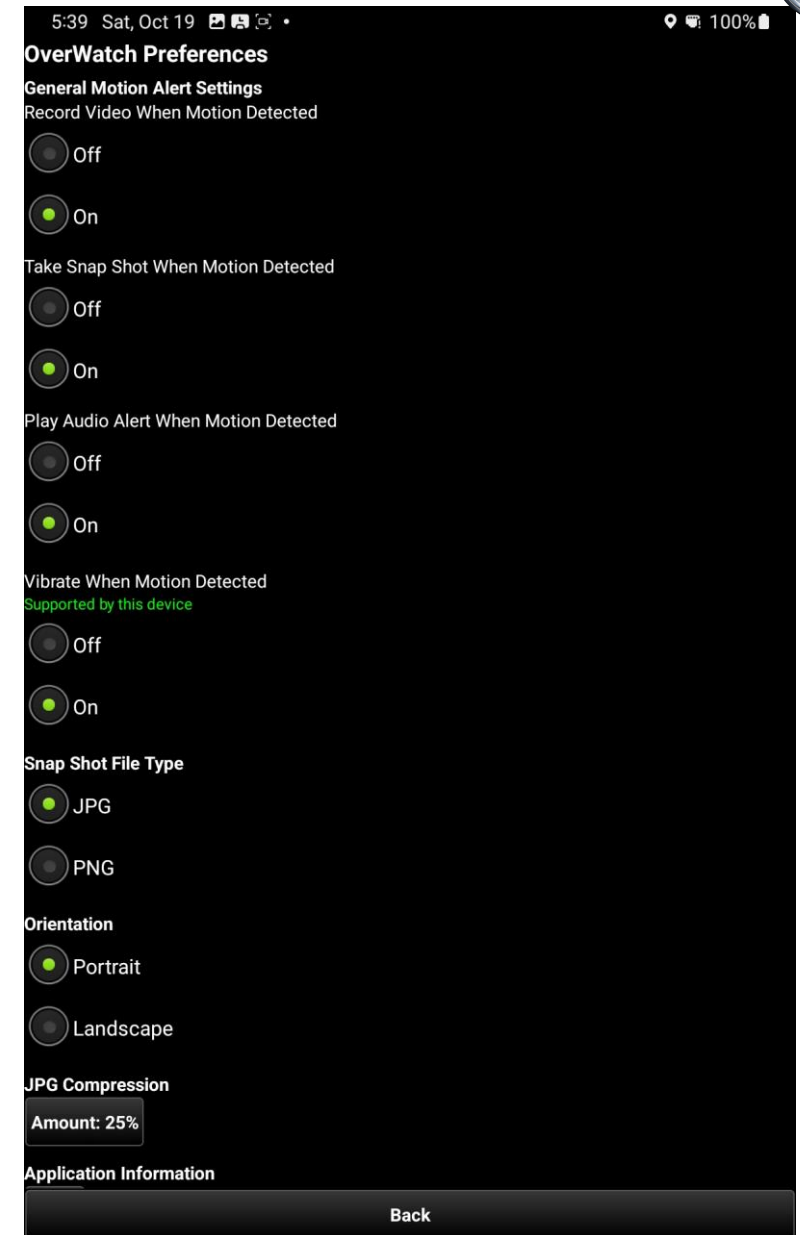


Tap Settings on the Main Interface to open the OverWatch™ Preferences Window. Configuring the preferences options in this section assumes the user has done this step.

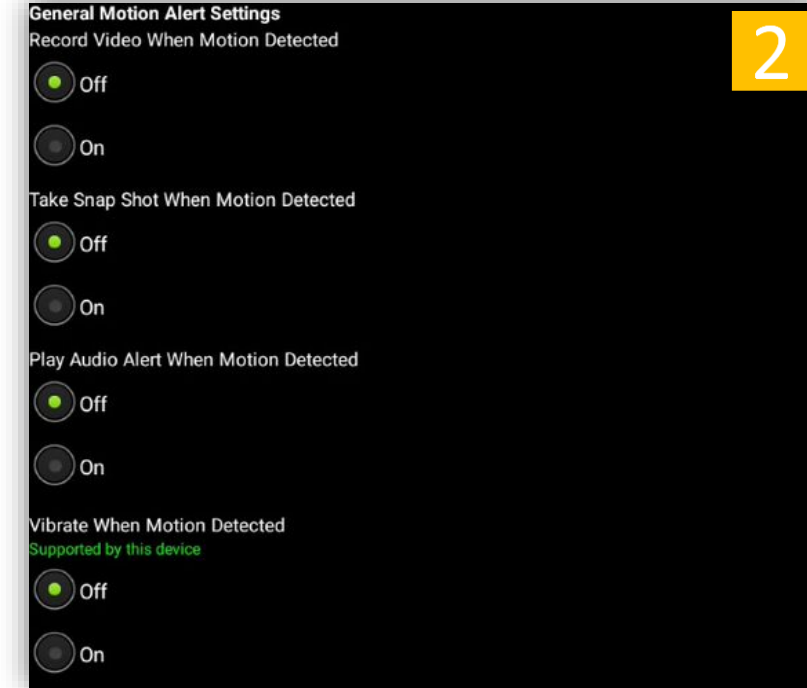
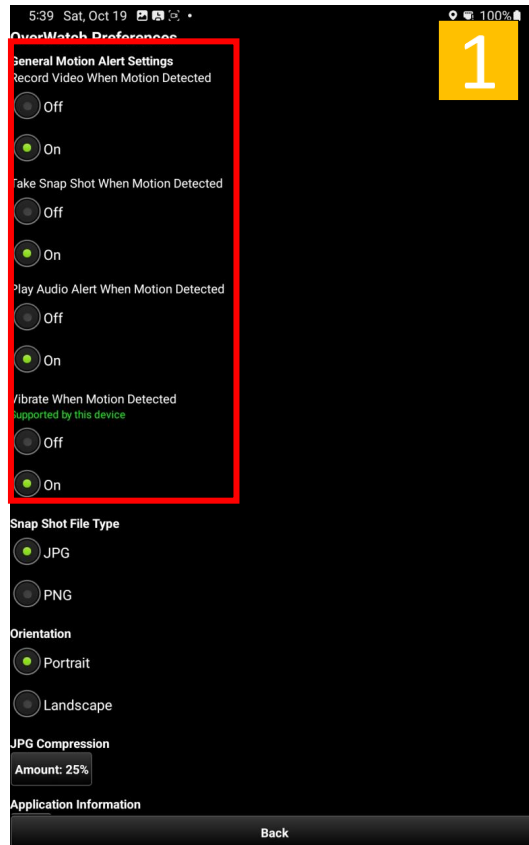
The OverWatch™ Settings (aka Preferences) allows the user to:

- Modify Camera Names
- Change IP Addresses and Ports
- Toggle Motion Alert Settings
- Modify Snapshot Settings
- Adjust the Orientation of the OverWatch™ App
- Configure the Settings on the OverWatch™ board (**ADVANCED**)*

*This should be done with extreme caution!



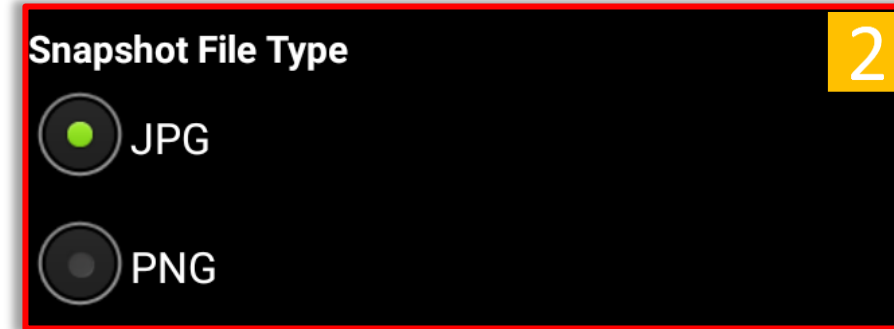
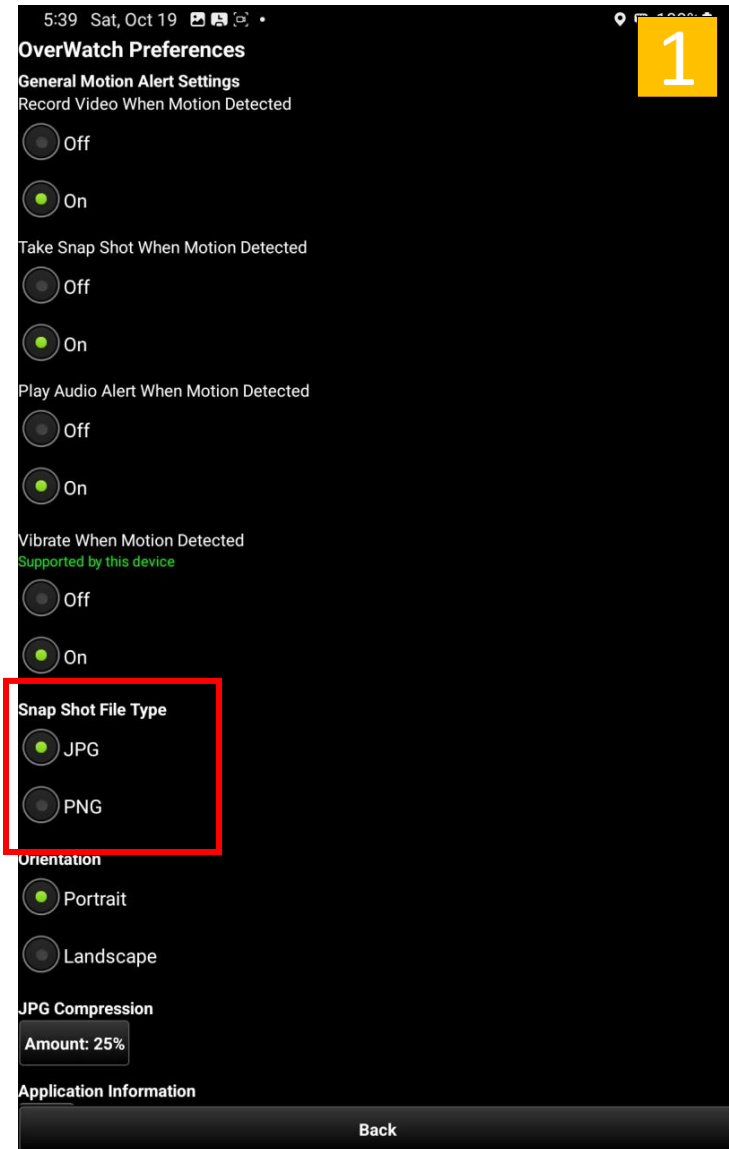
OverWatch™ Standalone: Settings – Motion Alert Settings



1. Locate the General Motion Alert Settings.
2. ***Toggle Camera Motion Alert Settings*** from Off to On as desired. ***Tap Back*** at the bottom of the “OverWatch Preferences” screen to return to the OverWatch Main” screen.

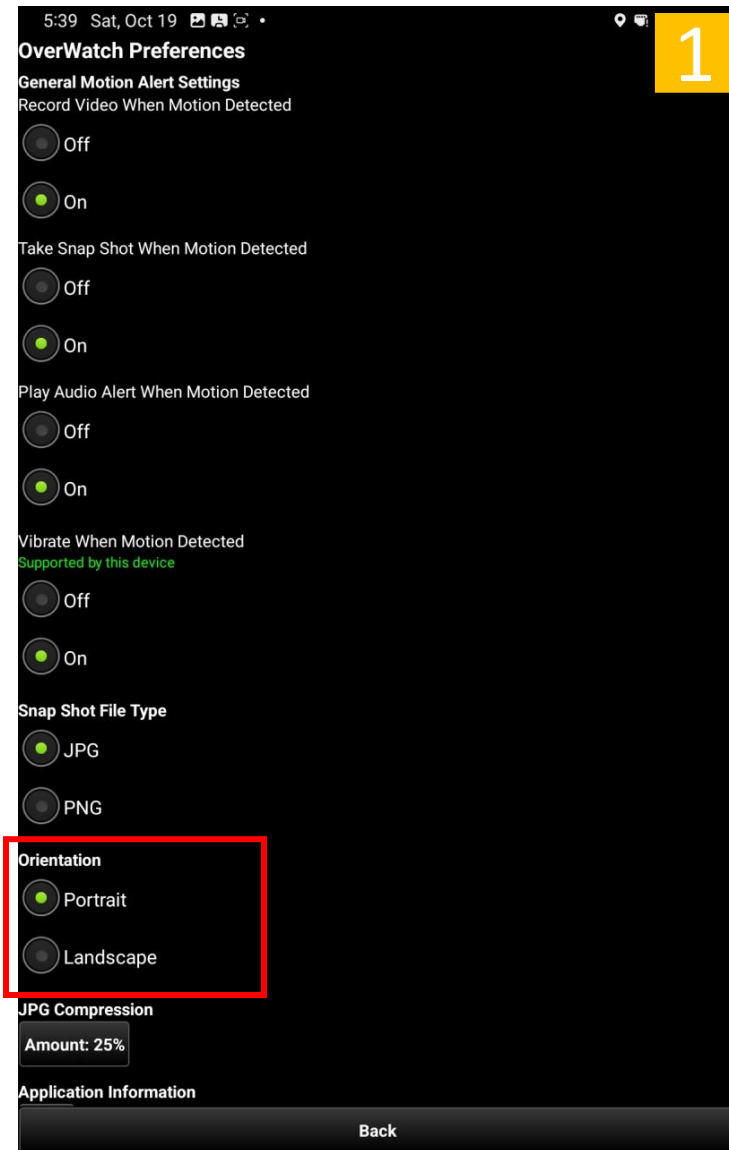
The OverWatch™ App provides visual, haptic, and audio alerts to users when the system detects motion.

OverWatch™ Standalone: Settings – Snapshot File Type



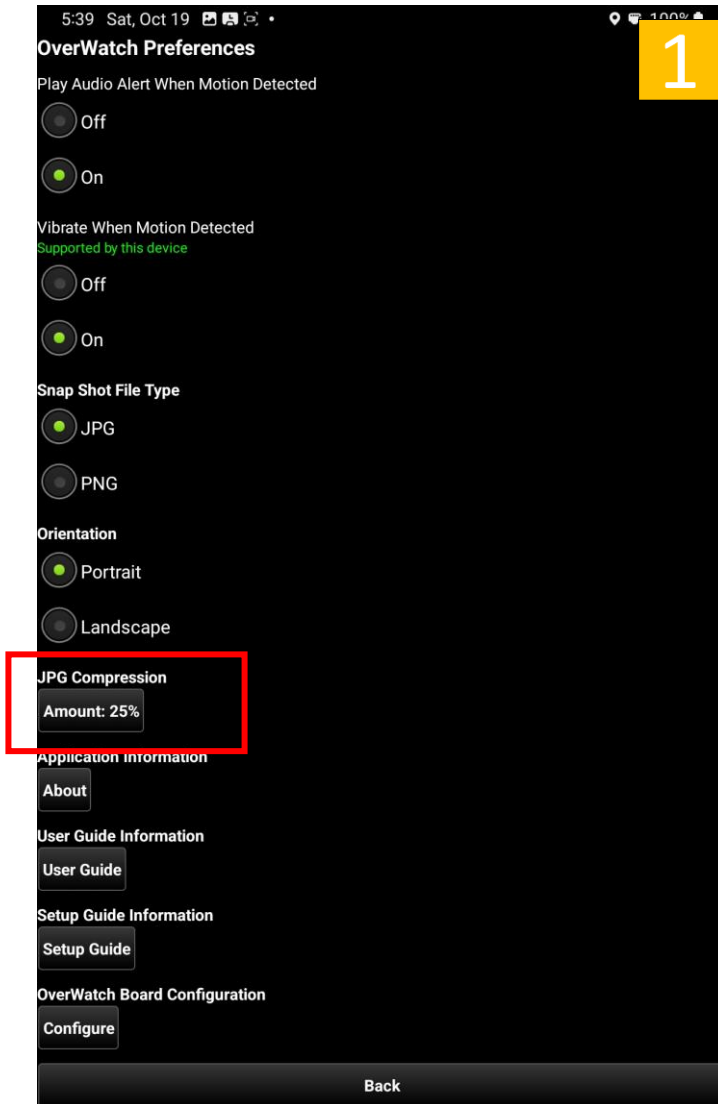
1. Locate Snapshot File Type.
2. **Tap** JPG or PNG to change the snapshot file type. The default value is JPG. **Tap** Back at the bottom of the “OverWatch Preferences” screen to return to the “OverWatch Main” screen.

OverWatch™ Standalone: Settings – Orientation



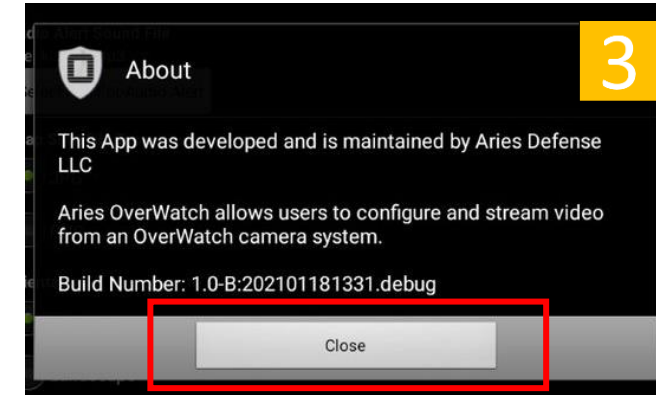
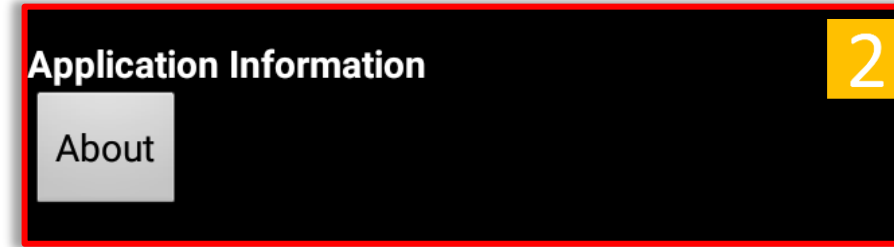
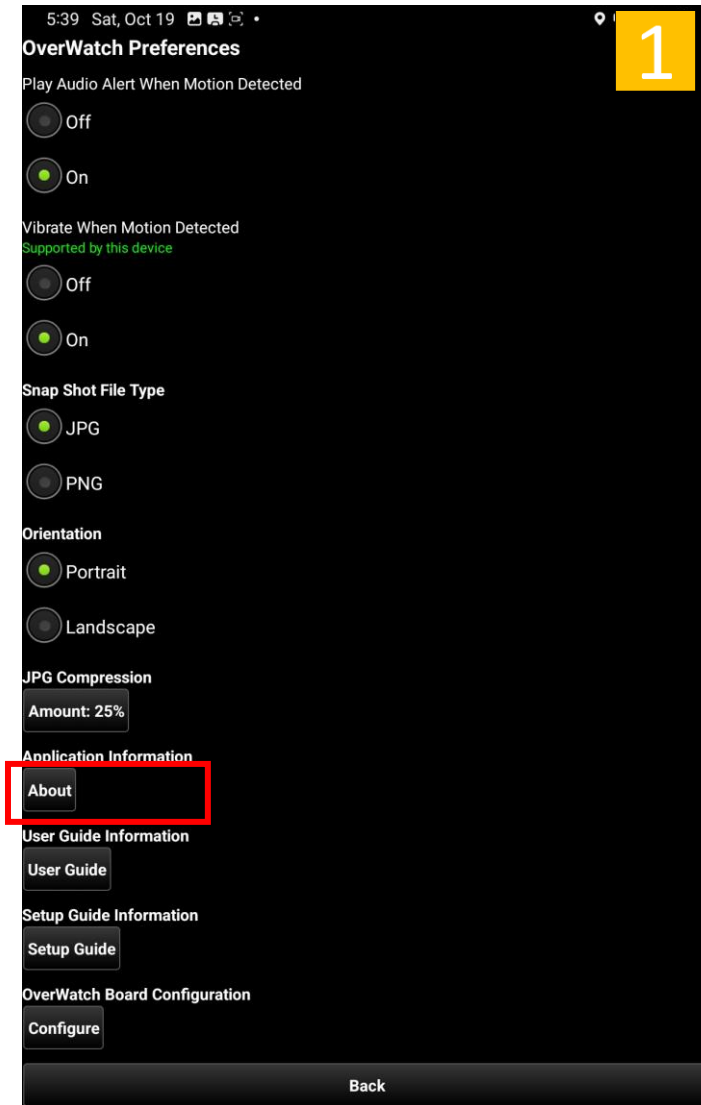
1. Locate Orientation.
2. **Tap Portrait** or **Landscape** to change the orientation of the app. The default value is Portrait. **Tap Back** at the bottom of the “OverWatch Preferences” screen to return to the “OverWatch Main” screen. You will have to restart the app to apply the orientation change.

OverWatch™ Standalone: Settings – JPG Compression



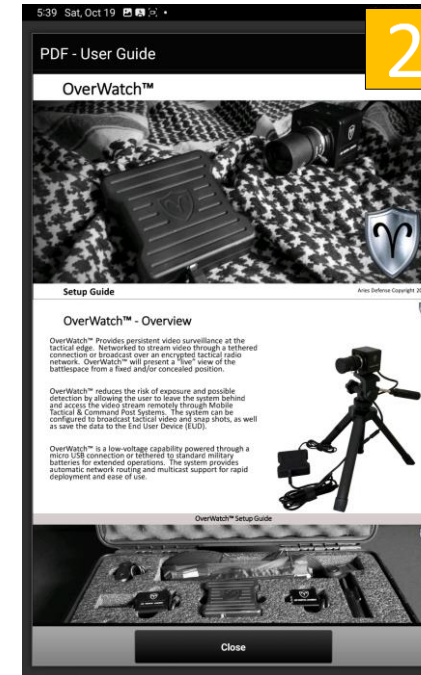
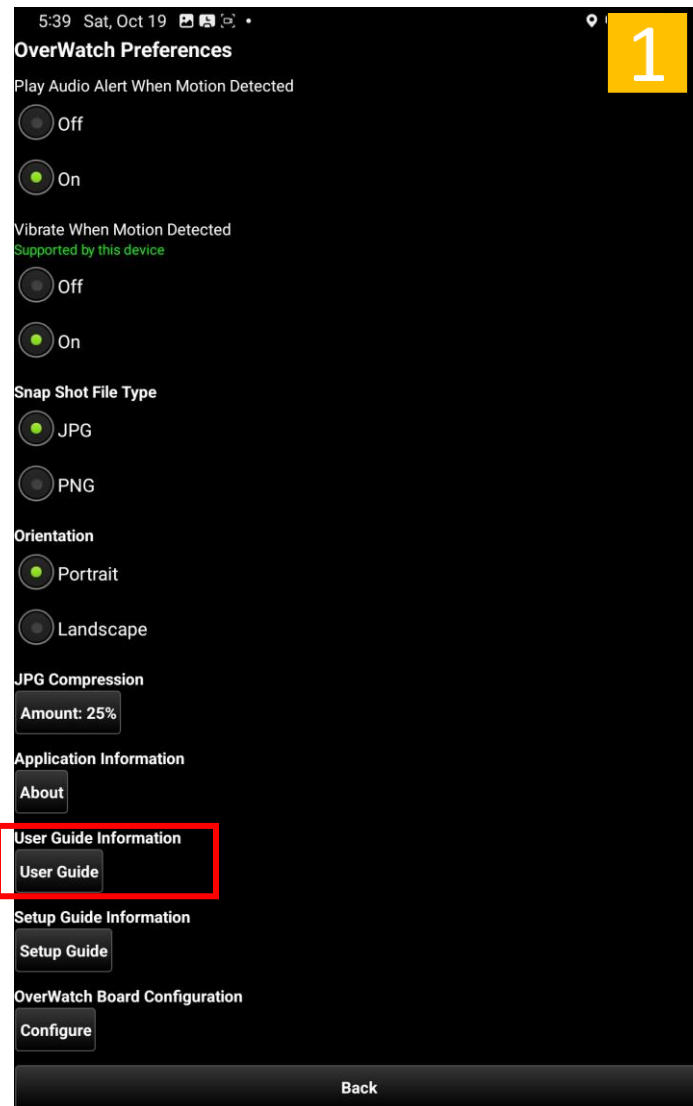
1. Locate JPG Compression
2. **Tap Amount** to change the compression amount of the JPG snapshots.
3. Enter the new compression value. The default value is 25%. **Tap Confirm** to accept the new value or **Cancel** to disregard. **Tap Back** at the bottom of the “OverWatch Preferences” screen to return to the “OverWatch Main” screen.

OverWatch™ Standalone: Settings – Application Information



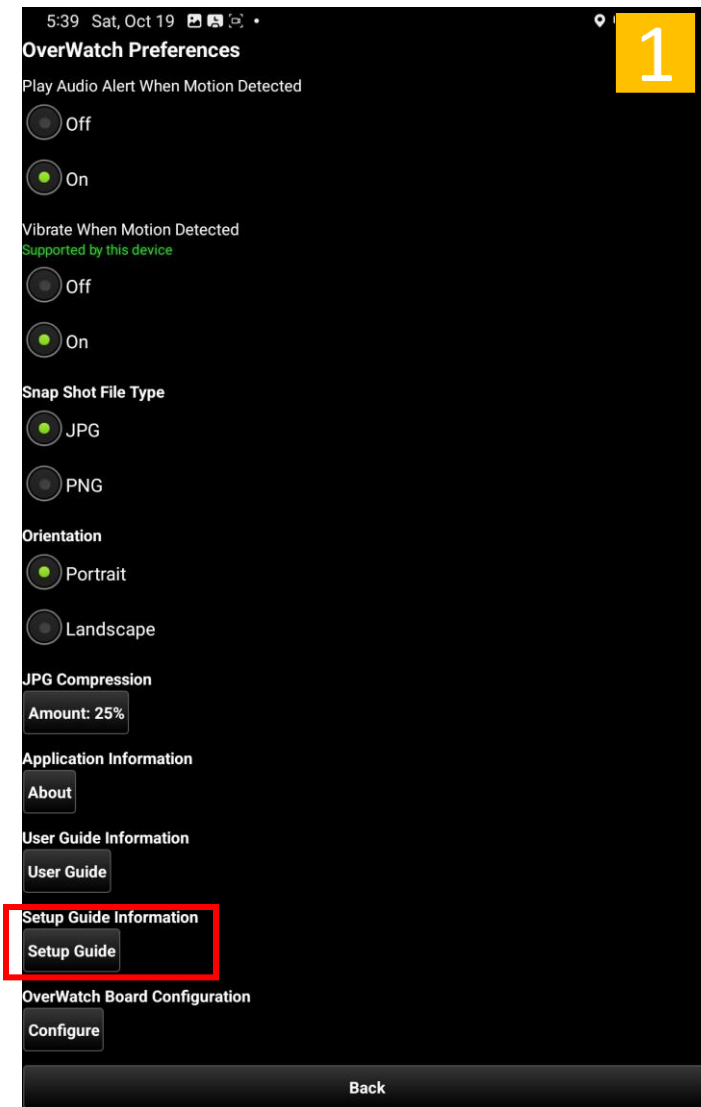
1. Locate Application Information.
2. **Tap About** to view the Application Information.
3. **Tap Close** to exit the About window. **Tap Back** on the bottom of the “OverWatch Preferences” screen to return to the “OverWatch Main” screen.

OverWatch™ Standalone: Settings – User Guide



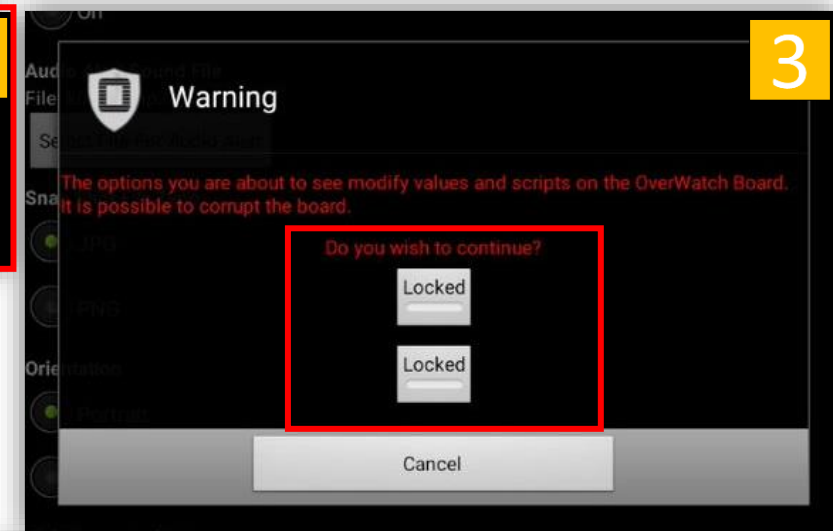
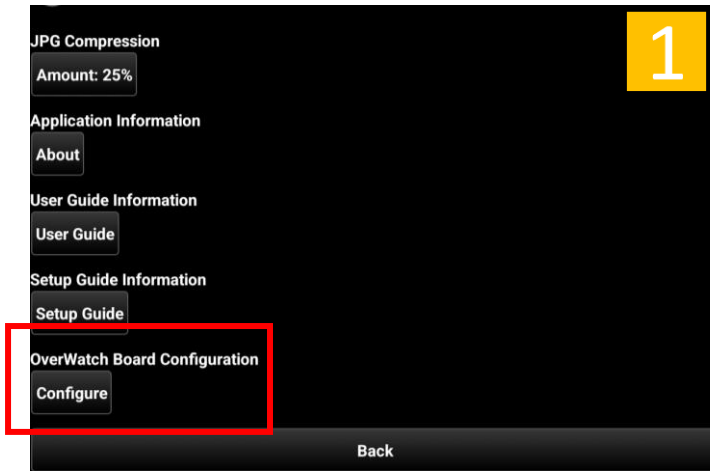
1. **Tap Guide** to view the User Guide.
2. **Tap Close** to exit the User Guide window. **Tap Back** on the bottom of the "OverWatch Preferences" screen to return to the "OverWatch Main" screen.

OverWatch™ Standalone: Settings – Setup Guide



1. **Tap Guide** to view the Setup Guide.
2. **Tap Close** to exit the Setup Guide window. **Tap Back** on the bottom of the “OverWatch Preferences” screen to return to the “OverWatch Main” screen.

OverWatch™ Standalone: Settings – Board Configuration



1. Locate OverWatch Board Configuration.
2. **Tap** Configure
3. Read the warning message then **Tap** both Locked Buttons to set them to Confirm then tap Continue enter the Configuration Menu.
WARNING Entering in invalid settings could potentially render the system inoperable.



OverWatch™ Board Configuration

OverWatch™ Board Configuration - Overview



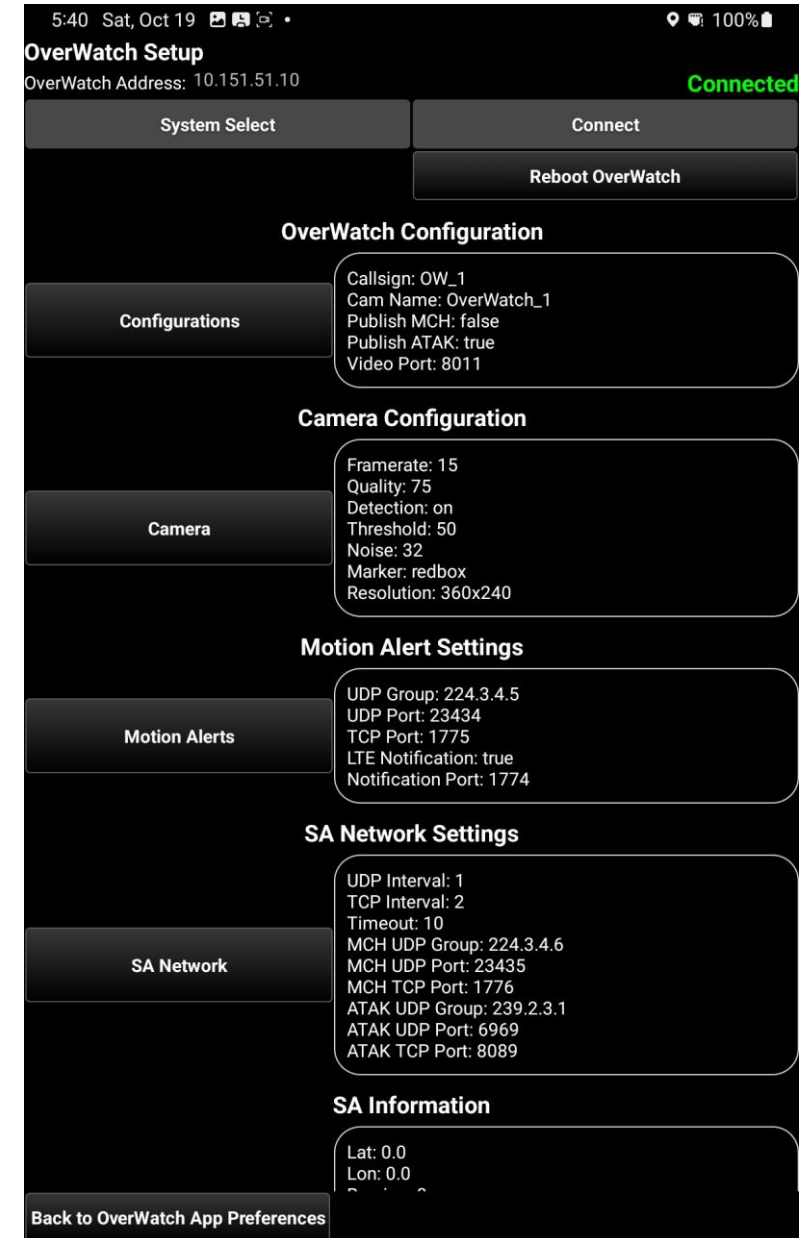
Please see “OverWatch™ Settings – Board Configuration” and follow the steps to access the Board Configuration Menu. Configuring the preferences options in this section assumes the user has done this step.

The OverWatch™ Board Configuration allows the user to:

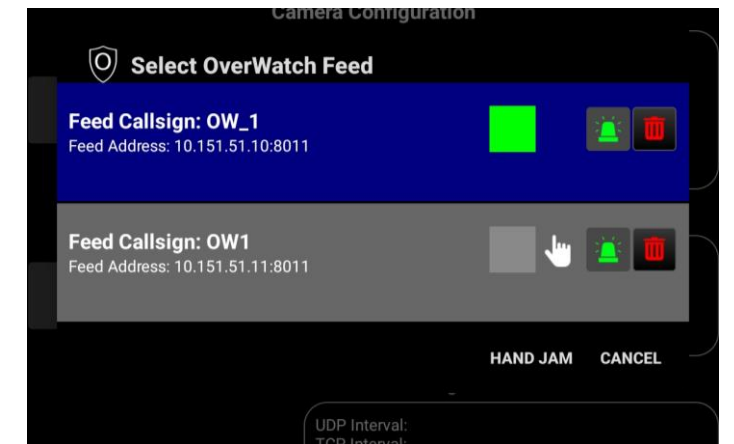
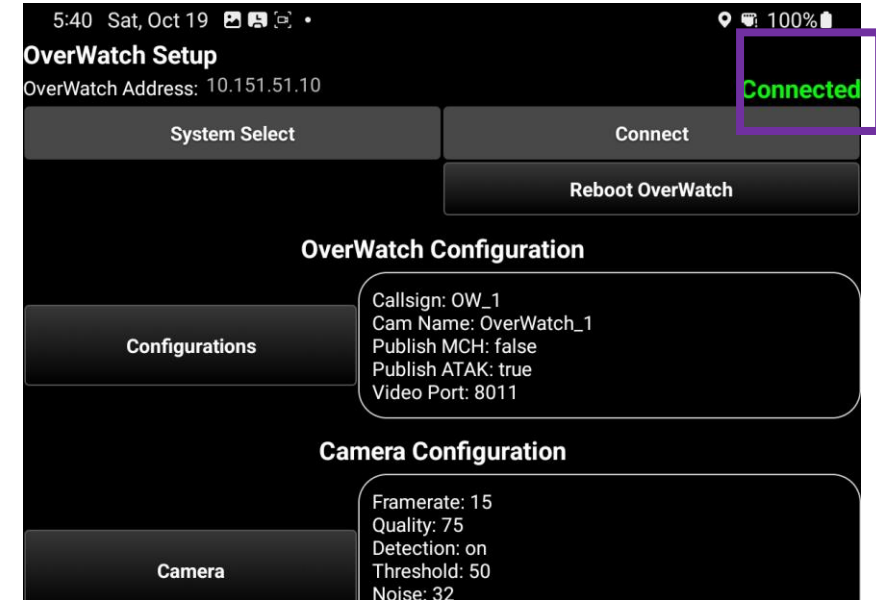
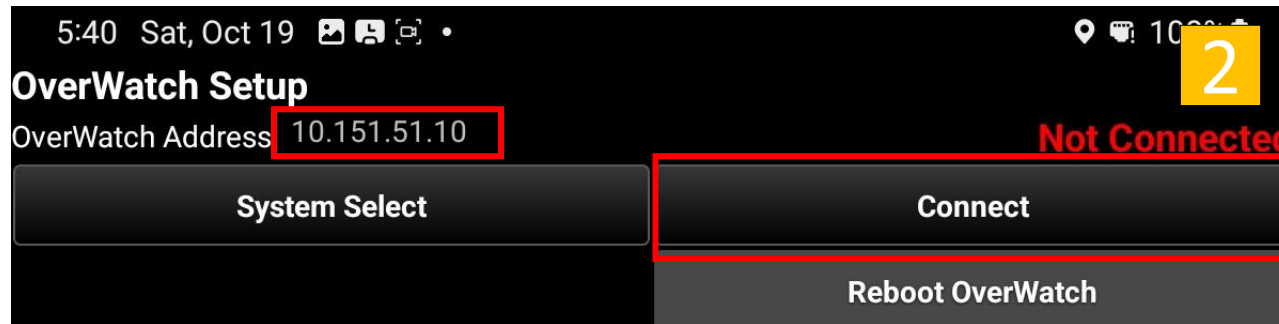
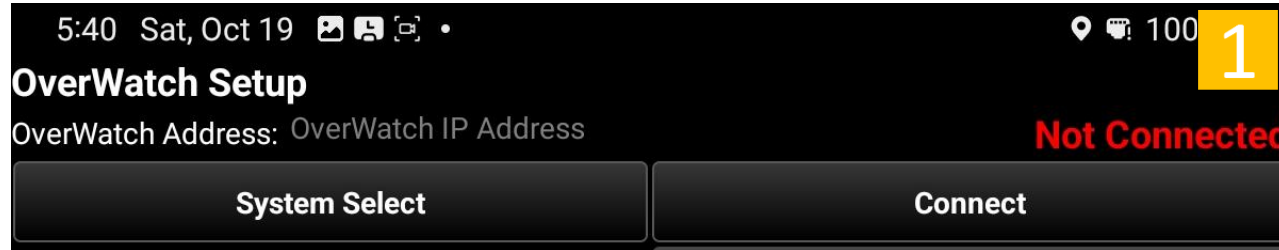
- Set Camera Label
- Adjust Camera Framerate
- Toggle Motion Detection, Threshold, and Noise Level
- Change Motion Marker
- Modify IP Address, Netmask, Gateway and Ports

****IMPORTANT**** After the configurations have been altered the board must be rebooted. This can be done by **taping** the **Reboot OverWatch™ Button**. Close the OverWatch™ App and relaunch once the EUD receives a DHCP IP Address from the OverWatch™ Board.

Proceed with caution



OverWatch™ Board Configuration – Connect to Board



1. Select the feed of the OverWatch™ to configure. The Default IP Address is 10.151.51.10.
2. **Tap Connect.**

Connection Status:

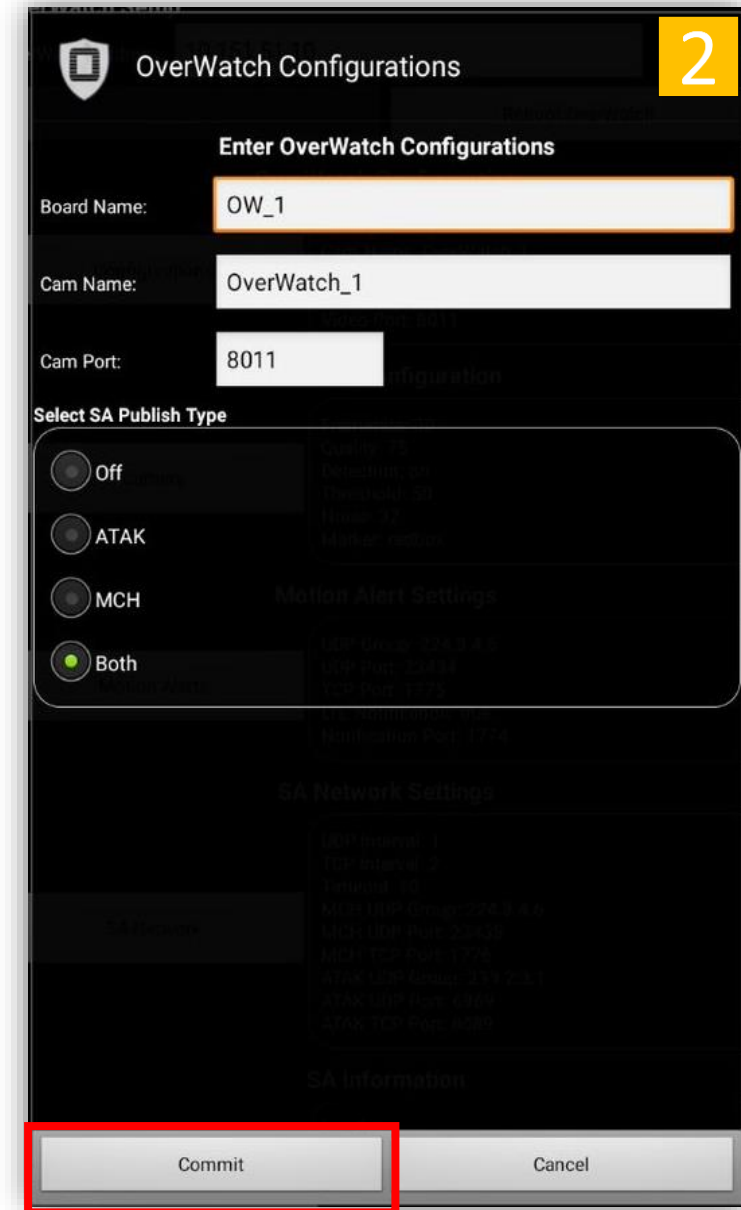
- Not Connected** – The OverWatch™ App is not logged into the Board
- Connecting...** – The OverWatch™ App is trying to establish a logon session
- Connected** – The OverWatch™ App is currently logged into the board.



OverWatch™ Board Configuration

OverWatch™ Configuration

OverWatch™ Board Configuration – Camera Label



1. Locate and **tap** Configurations Button under OverWatch™ Configuration.
2. Toggle the new OverWatch™ Configurations settings then **tap** Commit.

The SA Publish type will send situational awareness ports to either ATAK or MCH but can be set to publish to both (default setting)

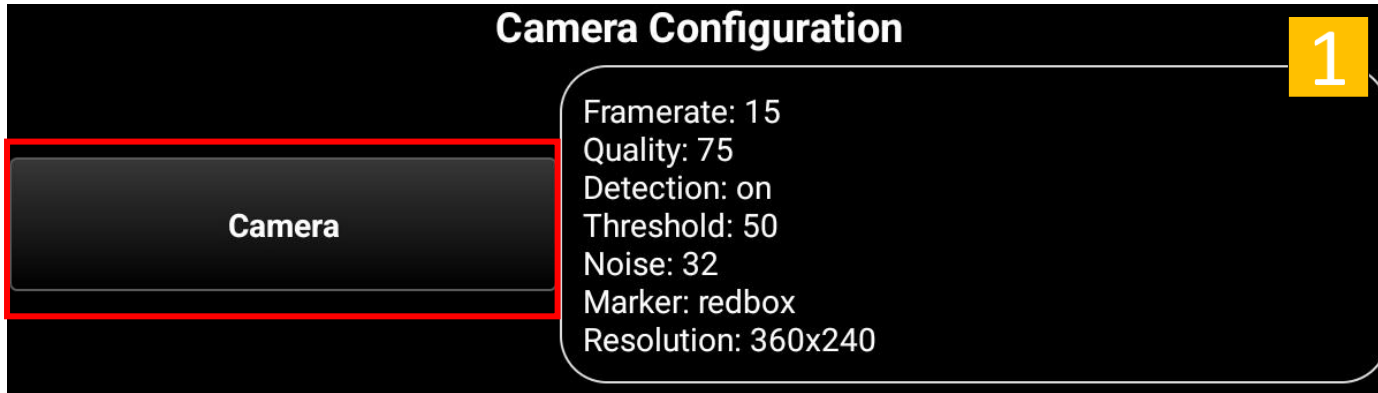
You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.



OverWatch™ Board Configuration

Camera Configuration

OverWatch™ Board Configuration – Camera Configuration



1. **Tap** the Camera button to modify the camera configuration settings
2. Toggle the new Camera Configurations settings then **tap** Commit.

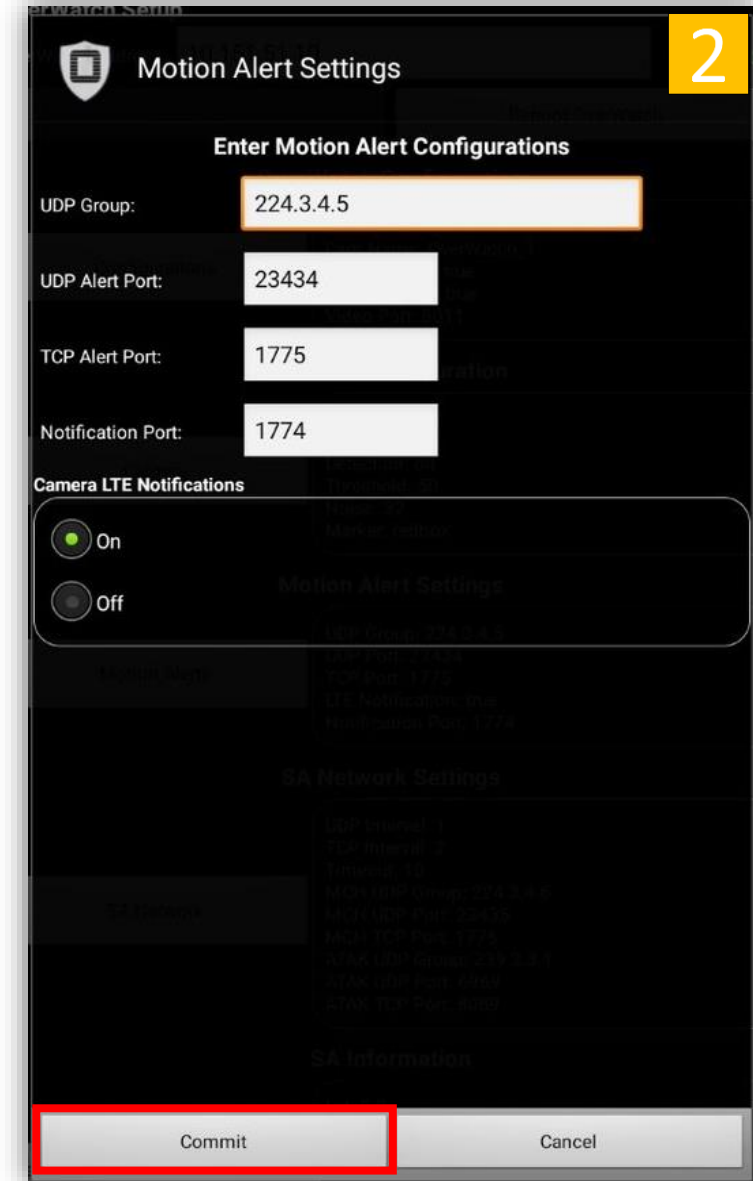
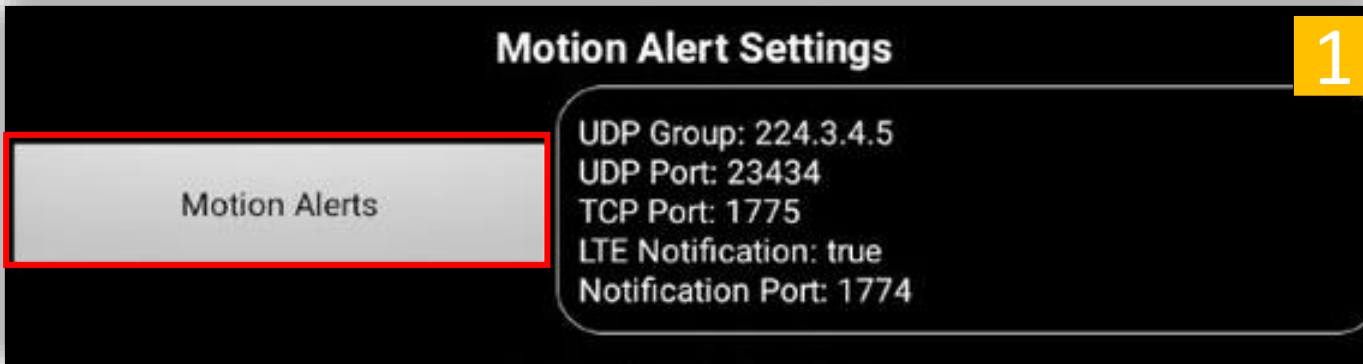
You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.



OverWatch™ Board Configuration

OverWatch™ Motion Alert Settings

OverWatch™ Board Configuration – Motion Alert Settings



1. Locate and **tap** Motion Alerts Button under OverWatch™ Configuration.
2. Toggle the new Motion Alerts Configurations settings then **tap** Commit.

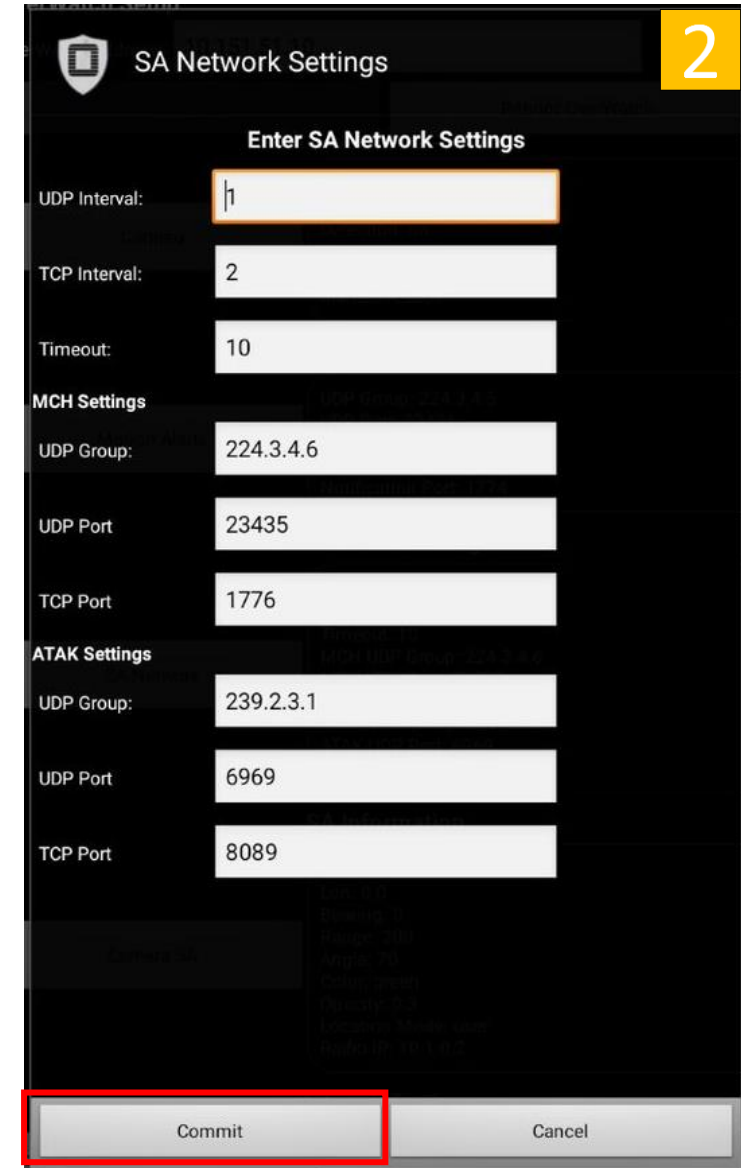
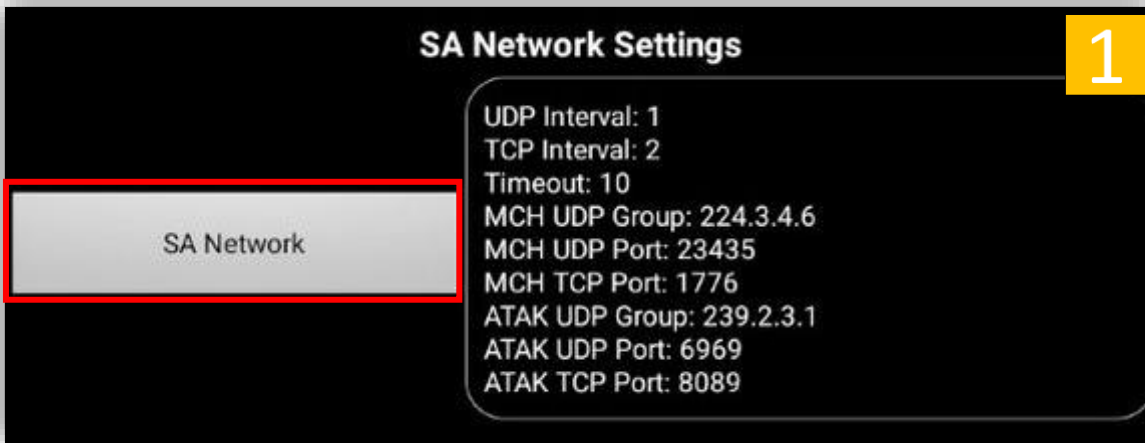
You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.



OverWatch™ Board Configuration

OverWatch™ SA Network Settings

OverWatch™ Board Configuration – SA Network Settings



1. Locate and **tap** SA Network Button under OverWatch™ Configuration.
2. Change the new SA Network settings then **tap** Commit.

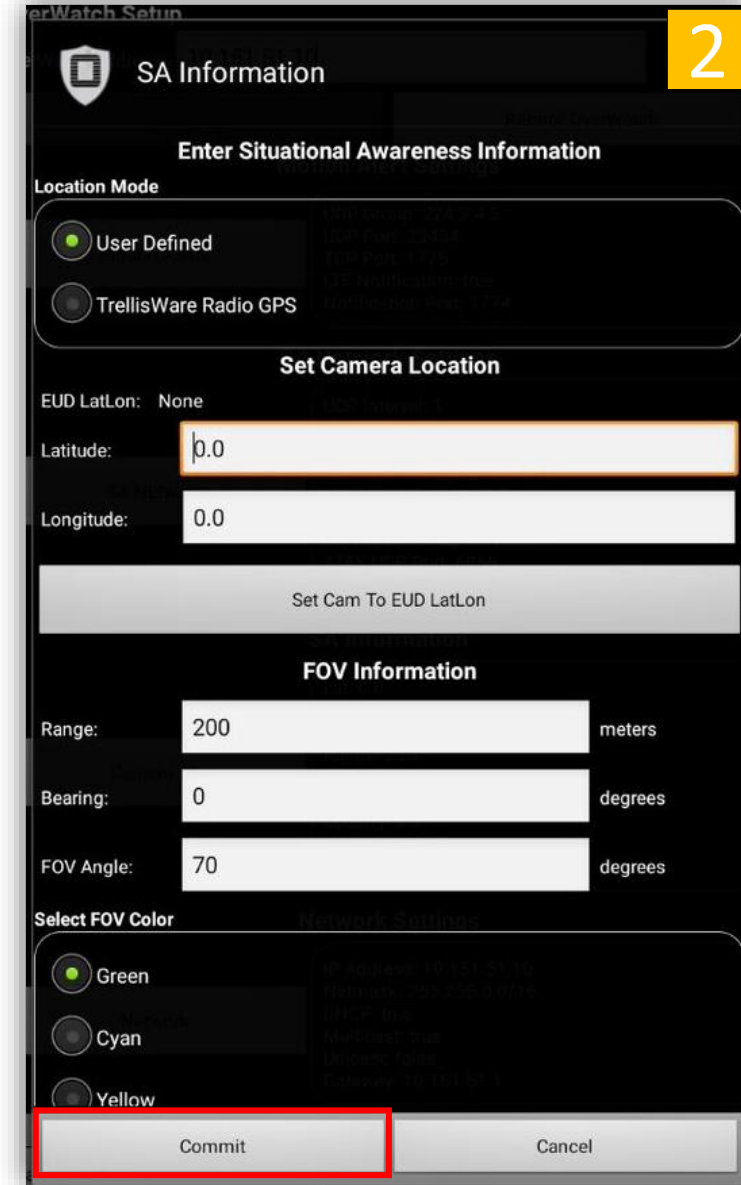
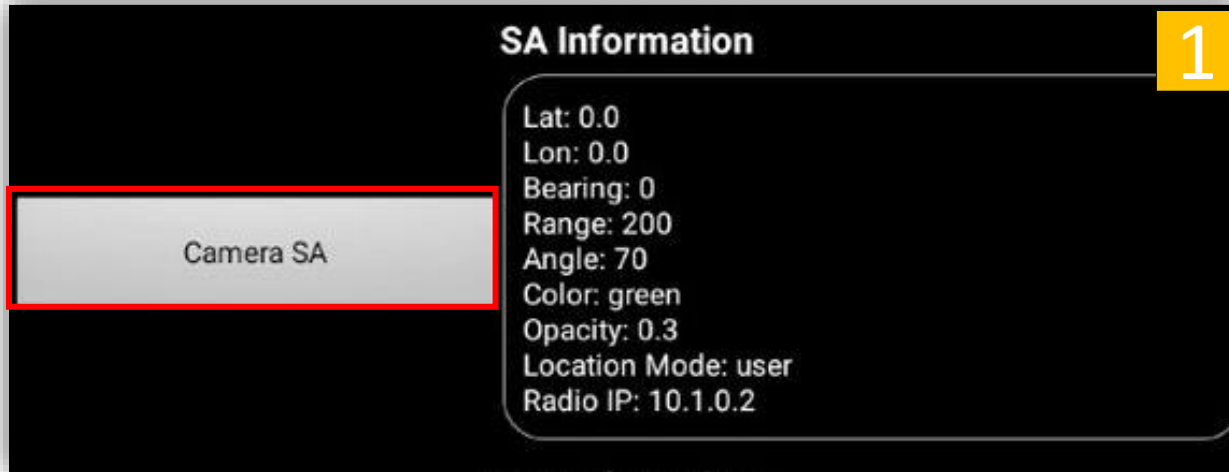
You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.



OverWatch™ Board Configuration

OverWatch™ SA Information

OverWatch™ Board Configuration – SA Information



1. Locate and **tap** Camera SA under OverWatch™ Configuration.
2. Toggle the new Camera Sa Information then **tap** Commit.

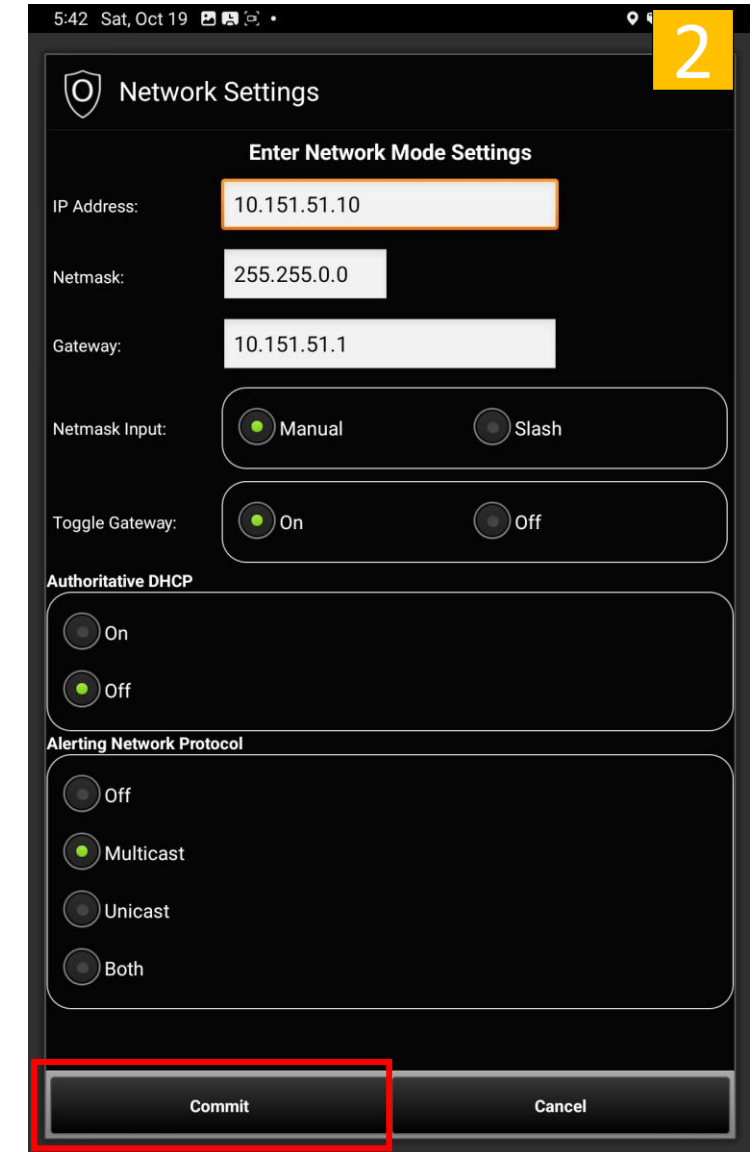
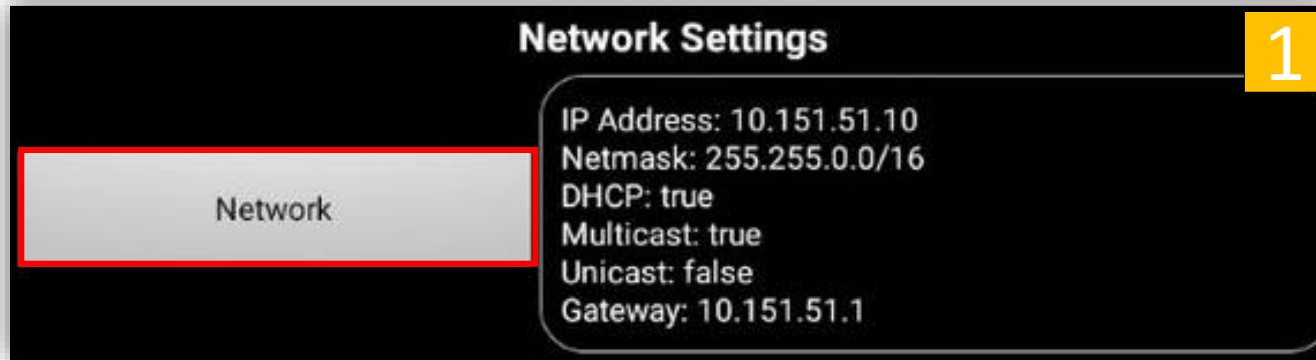
You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.



OverWatch™ Board Configuration

OverWatch™ Network Settings

OverWatch™ Board Configuration – Network Settings



1. Locate and **tap** Network Button under OverWatch™ Configuration.
2. Toggle the new Network settings then **tap** Commit.

If your network setup requires a Gateway select either Unicast or Both under Network Protocol.

You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.



OverWatch™ Board Configuration

OverWatch™ Other Settings

OverWatch™ Board Configuration – TCP Address



1

TCP Addresses

1. Locate and **tap** the TCP Addresses button under OverWatch™ Configuration.
2. This menu will allow the user the ability to Add, Remove, and Commit IP addresses to receive TCP based alerts.

You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.

2

TCP Alert IP Addresses

Remove All

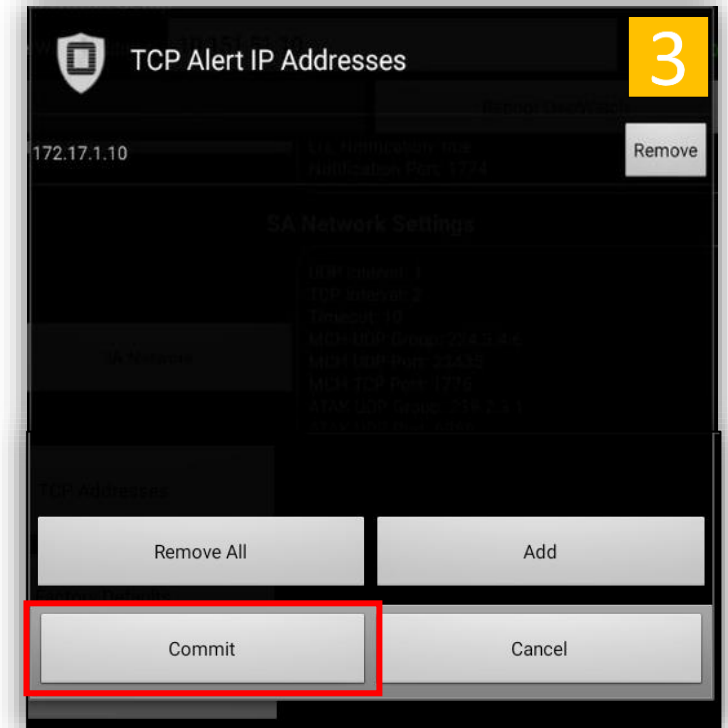
Add

Commit

Cancel

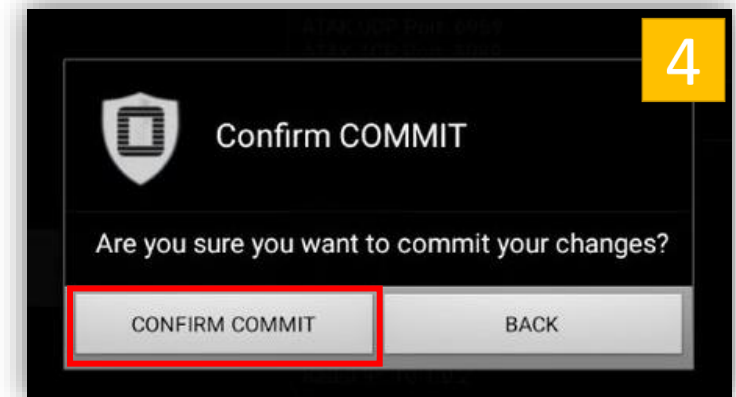
Button	Description
Remove All	Remove All IP Addresses in the list
Add	Add an IP address to receive TCP Alerts
Commit	Commit newly added TCP Addresses
Cancel	Cancel current actions.

OverWatch™ Board Configuration – Add TCP Address

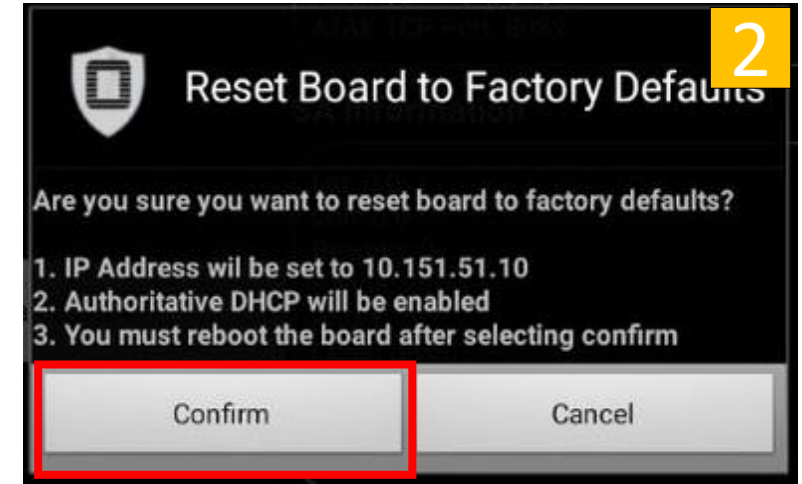
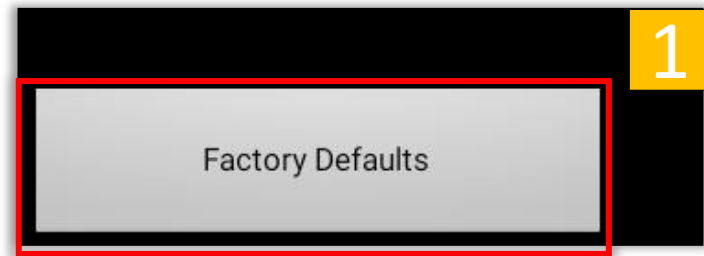


1. Locate and **tap** the Add button under TCP Alert IP Addresses Menu.
2. **Enter** an IP address to receive TCP Alerts then tap Confirm.
3. **Tap** Commit and then Confirm Commit to add the IP address

You may continue to make changes to the board. When finished **Tap** the Reboot OverWatch™ button.



OverWatch™ Board Configuration – Factory Reset



1. Locate and **tap** Factory Defaults Button under OverWatch™ Configuration.
2. Read the items and make sure you are ready to reset the board and then **tap** the Confirm Button

