CheckPoints™ Standalone Application

Quick Reference Guide

CheckPoints™ Overview

CheckPoints™ provides persistent video surveillance at the tactical edge. Networked to allow for local Wi-Fi connections or Wi-Fi disabled to provide video through a closed network or encrypted tactical radio connection.

CheckPoints™ will give users a “live” view of their position from a fixed location.

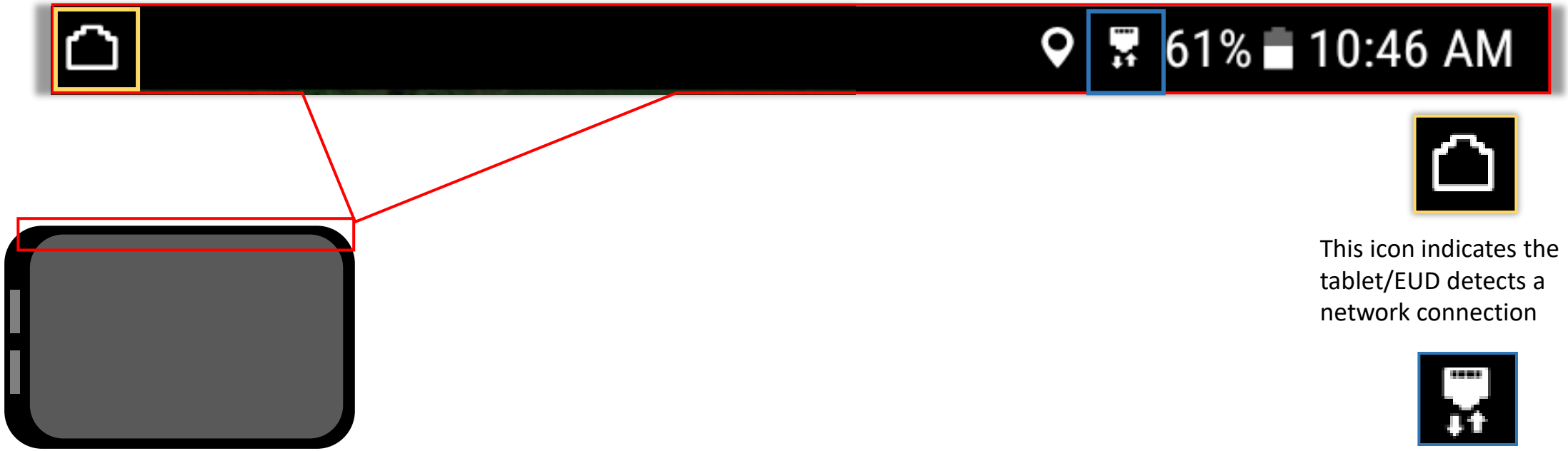
CheckPoints™ allows users to stream up to (2) video feeds through Mobile, Tactical & Command Post systems.

CheckPoints™ is a low-voltage capability designed for extended operations. The system provides automatic network routing for rapid deployment and ease of use. There is no configuration required and the tool has successfully integrated with APASS & KILSWITCH

Before We Begin…

This documents assumes the following:

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



This icon indicates the tablet/EUD detects a network connection

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

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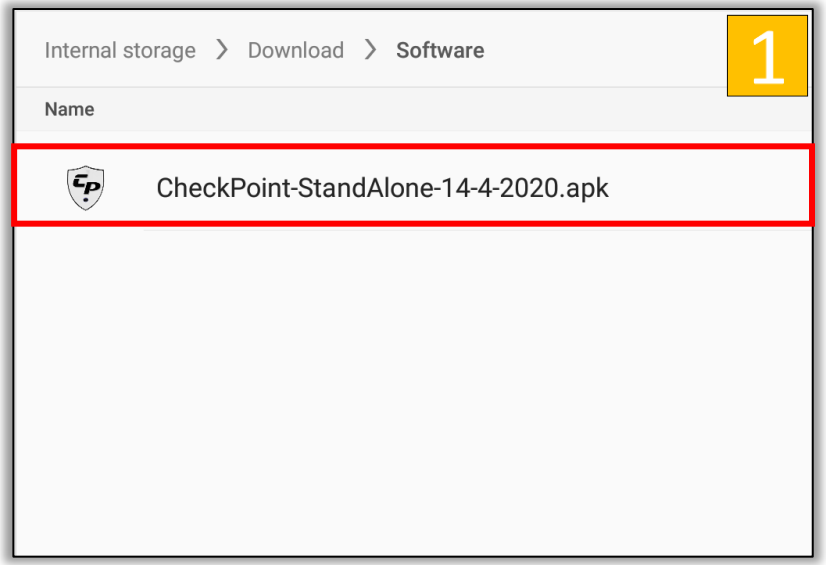
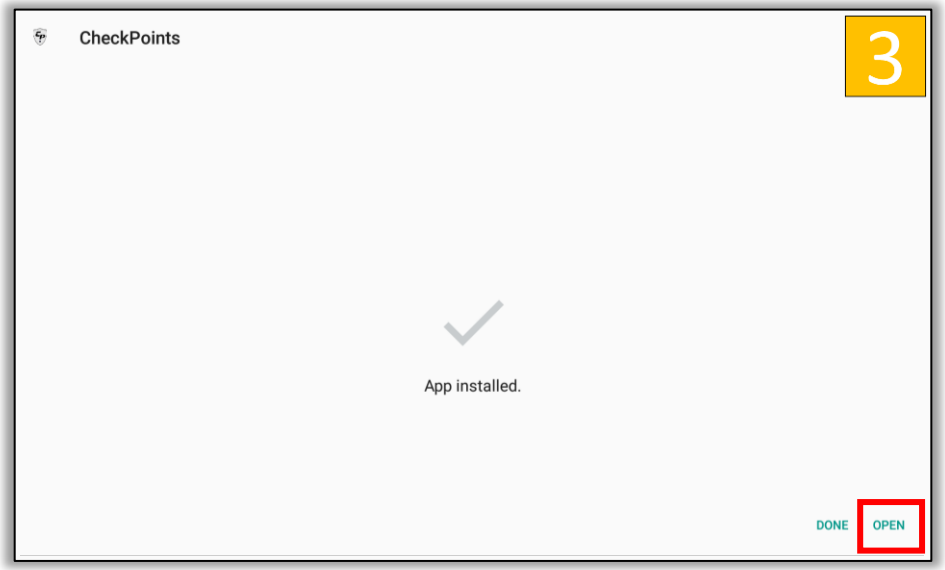
Install CheckPoints™ Standalone

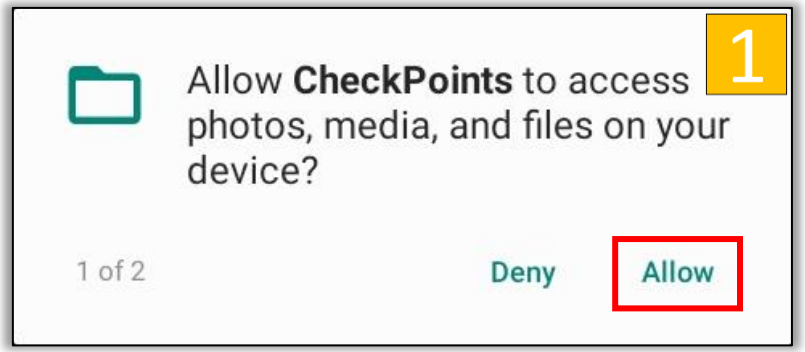


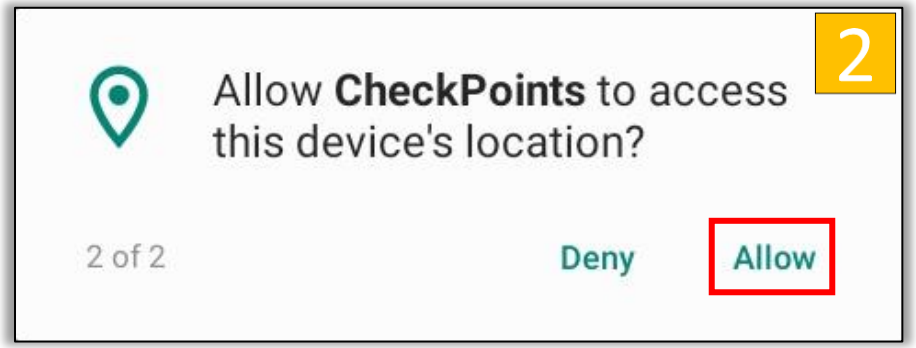
1. ***Tap*** the *CheckPoints™ Standalone APK* file to begin installation.
2. Review the Permissions Statement then ***tap*** *Install*.
3. ***Tap*** *Open* once the installation is complete.

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

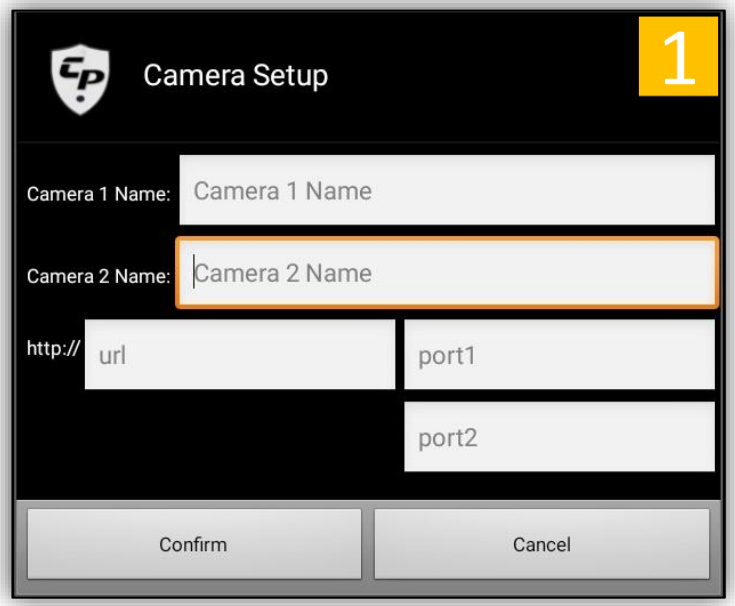


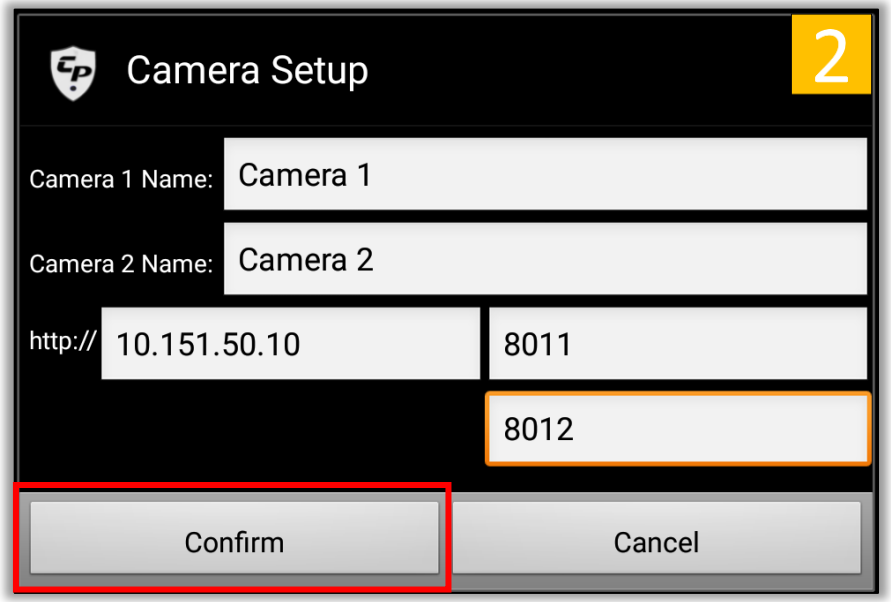


1. ***Tap*** *Allow* when prompted to set "Allow CheckPoints™ to access photos, media, and files on your Device?".
2. ***Tap*** *Allow* when prompted to set "Allow CheckPoints™ to access this device's location?"

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

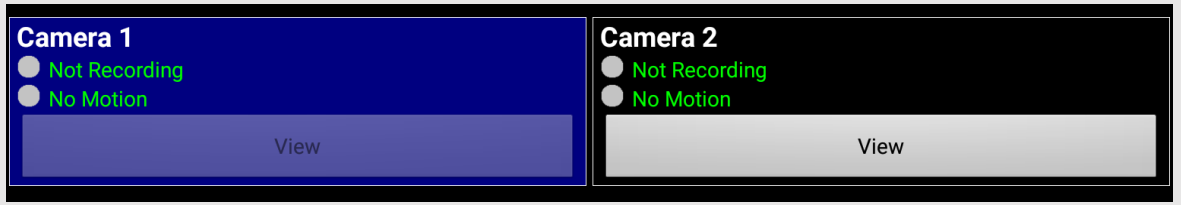
Initial Camera Setup





1. ***Enter*** the Camera Names, URL, and Camera Ports:
   - Camera Names are user defined.
   - The Default Camera URL is: 10.151.50.10.
   - The Default Ports are 8011 and 8012.
2. ***Tap*** Confirm to continue.

CheckPoints™ Standalone User Interface



View Camera 1
("Active" camera highlighted in blue)

View Camera 2

***Tap** <u>View</u>* under the camera name to change the active camera

Memory Usage: 23%

Current memory utilization on the end user device (EUD)

CheckPoints™ 01

Camera Label

Take a Snapshot of the Current Camera View

Record the Current Camera View

2020-04-28
14:42:50-06

Current Time Stamp

Close

Close the App

Files

View the Snapshots and Recordings

Settings

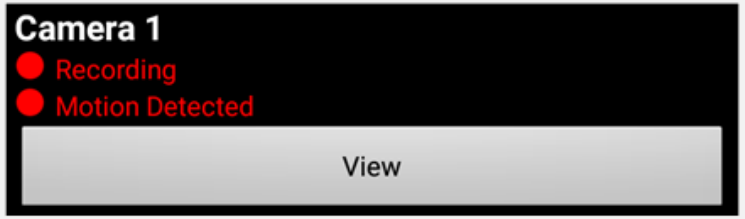
Toggle the CheckPoints™ Preferences

CheckPoints™ Motion Detection

Camera 1 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 CheckPoints™ 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.

CheckPoints™ Camera Status Matrix

	No Motion Detected	Motion Detected
Inactive Camera		
Active Camera		

Camera 1 Status Example

Inactive Camera – The camera not currently displaying its video stream

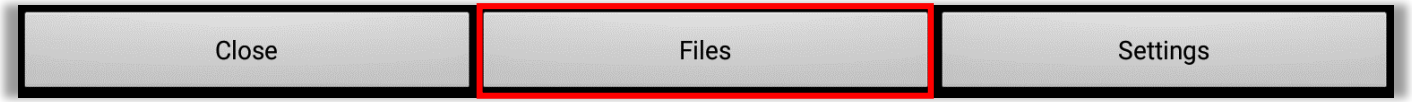
Active Camera – The camera (highlighted in blue) currently displaying its video stream

No Motion Detected – Motion has not been detected by the CheckPoints™ system

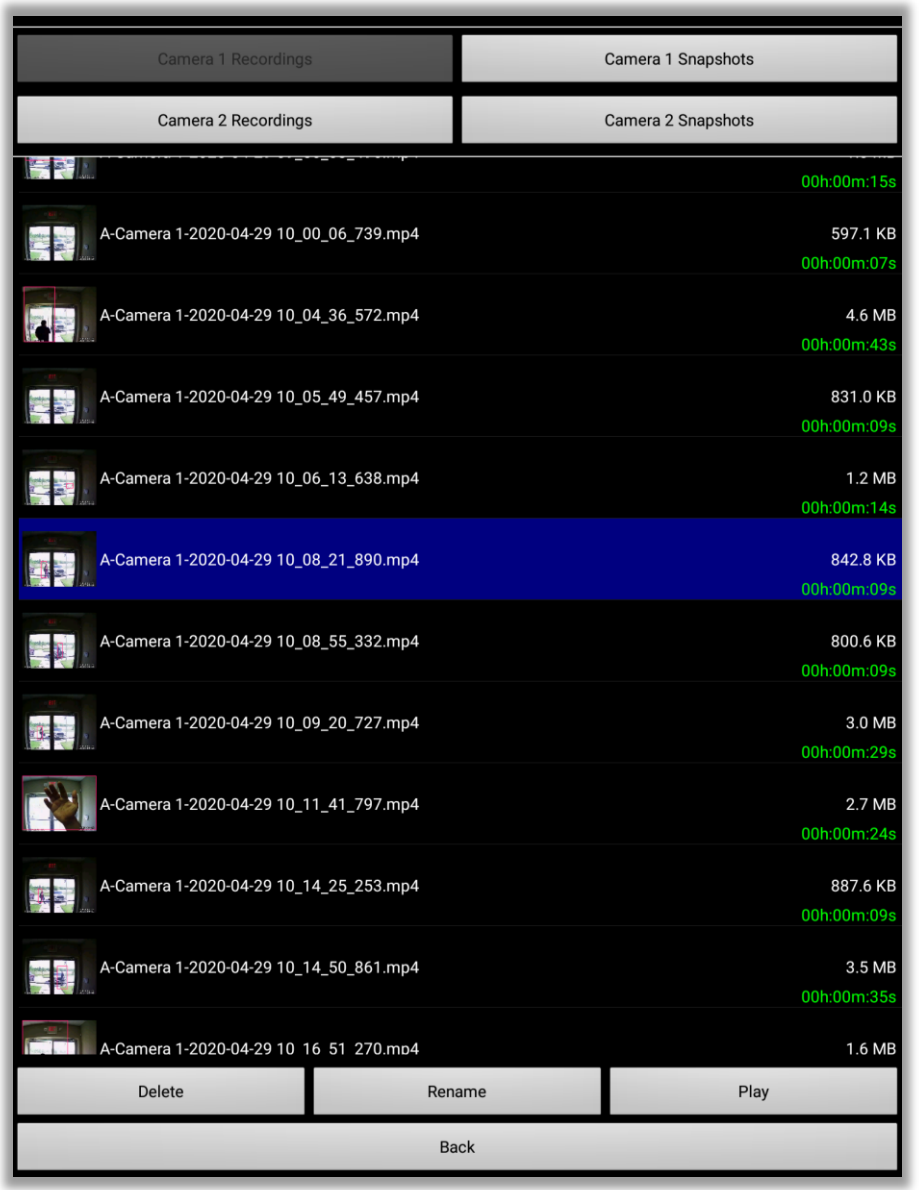
Motion Detected – Motion has been detected by the CheckPoints™ System

CheckPoints™ Standalone: Files

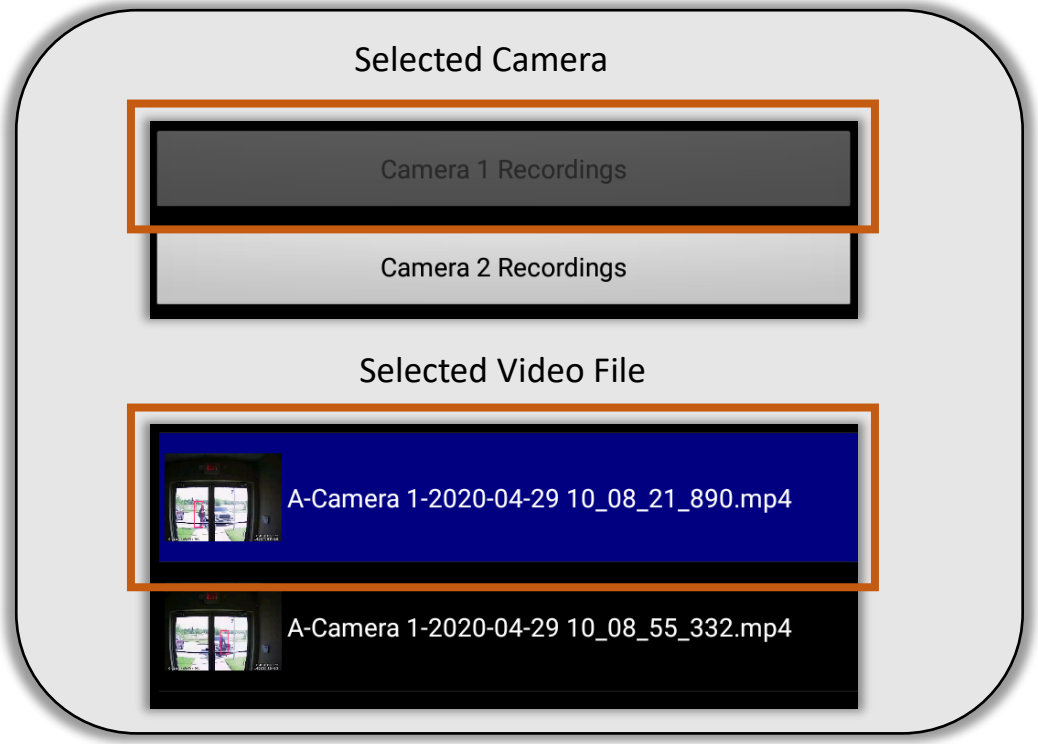
CheckPoints™ Standalone: Files Overview

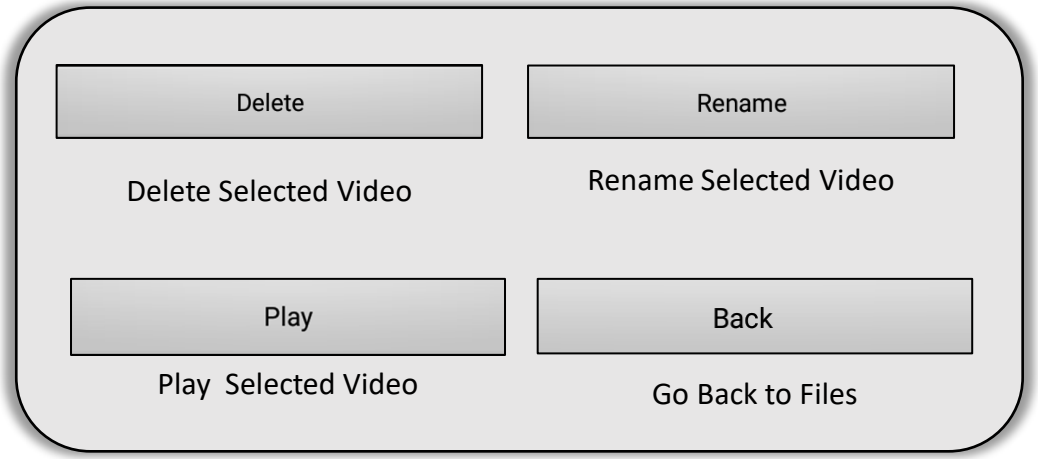


The CheckPoints Files allows users to view snapshots and recordings. These files are either manually created using the snapshot or record buttons from the main interface or by toggling the CheckPoints™ settings to automatically record when motion is detected. Files tagged with A_ were automatically captured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



CheckPoints™ Standalone: Files - Recordings





CheckPoints™ Standalone: Files – Recordings (Cont…)

Video Recording File Syntax

A	Camera 2	2020-04-29-11_07_55_292	MP4
M	Camera 2	2020-04-29-10_56_41_556	MP4

1 2 3 4

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

103 of 104

Current file of total files

Video Progress Bar

Previous

Go to Previous Video

Next

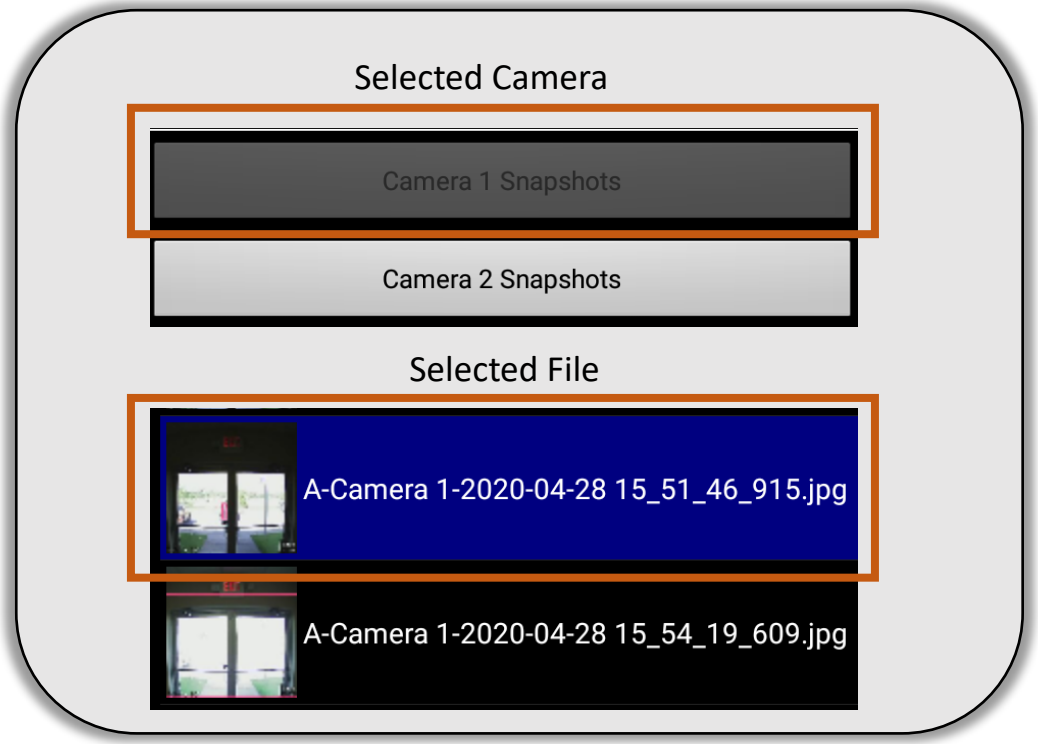
Go to Next Video

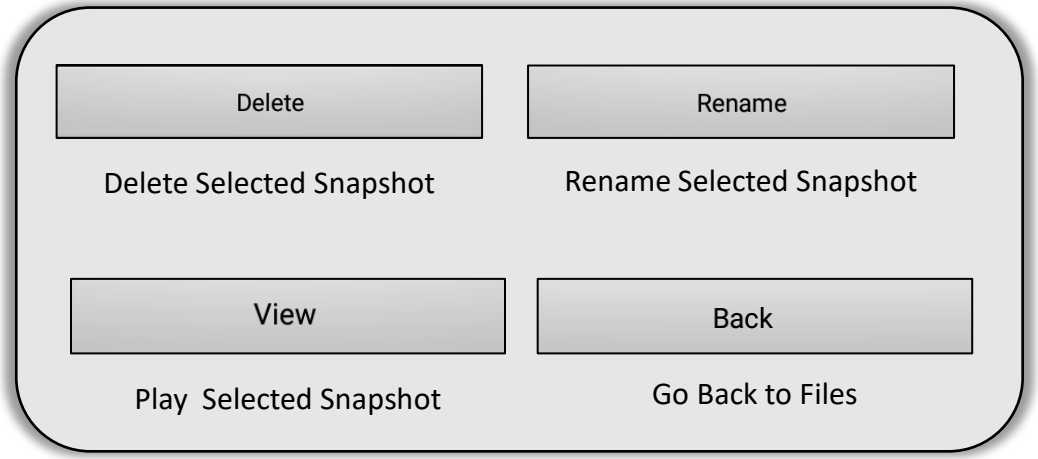
Play / Stop Video

Back

Go Back to Files

CheckPoints™ Standalone: Files - Snapshots





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

Video Recording File Syntax

A	Camera 1	2020-04-28-15_49_57_631	JPG
M	Camera 1	2020-04-19-10_56_46_354	JPG

1 2 3 4

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

97 of 120

Current file of total files

Previous

Go to Previous Snapshot

Next

Go to Next Snapshot

Back

Go Back to Files

CheckPoints™ Standalone: Settings

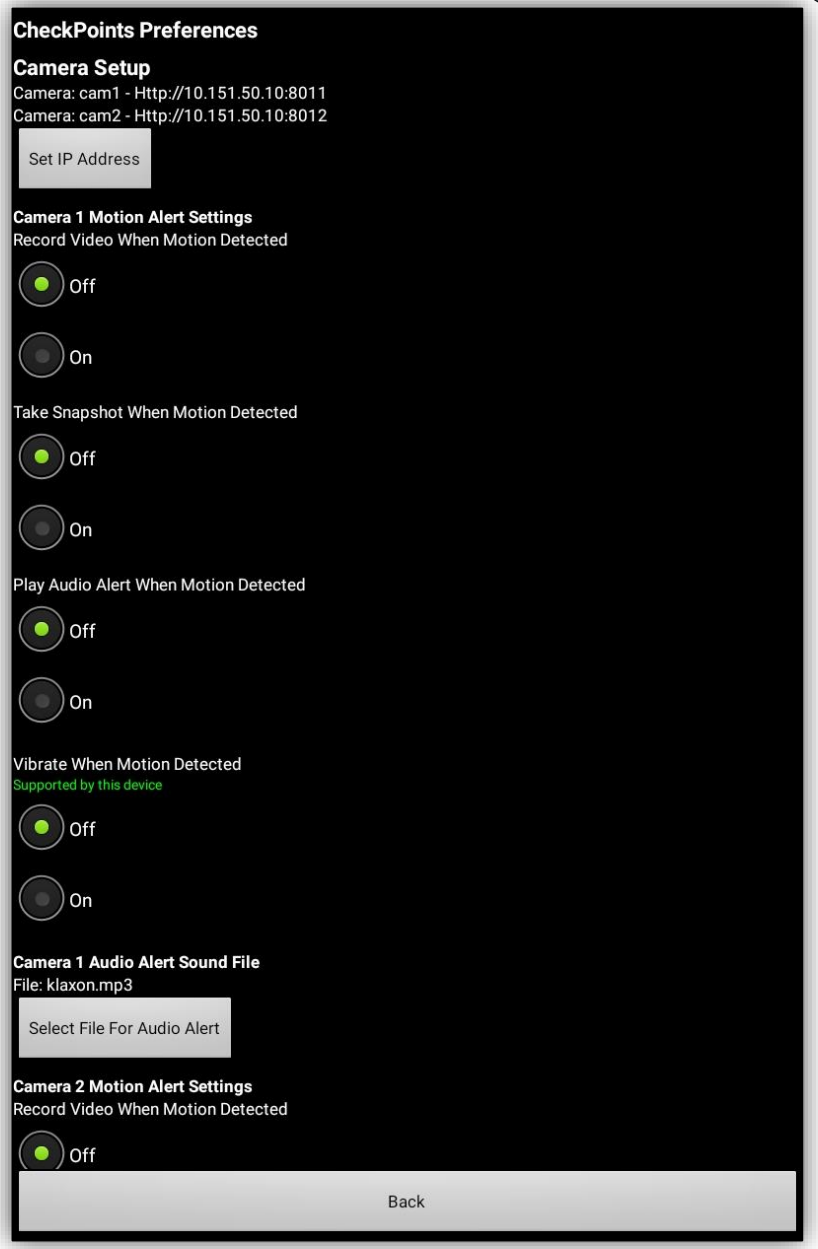
CheckPoints™ Standalone: Settings Overview

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

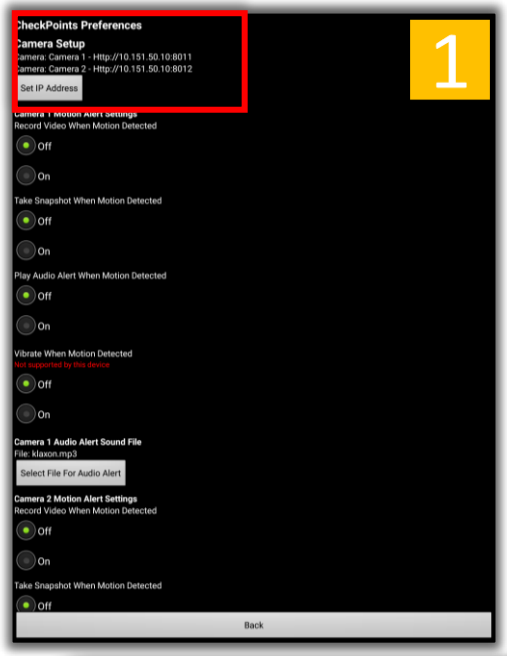
The CheckPoints™ Settings (aka Preferences) allows the user to:

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

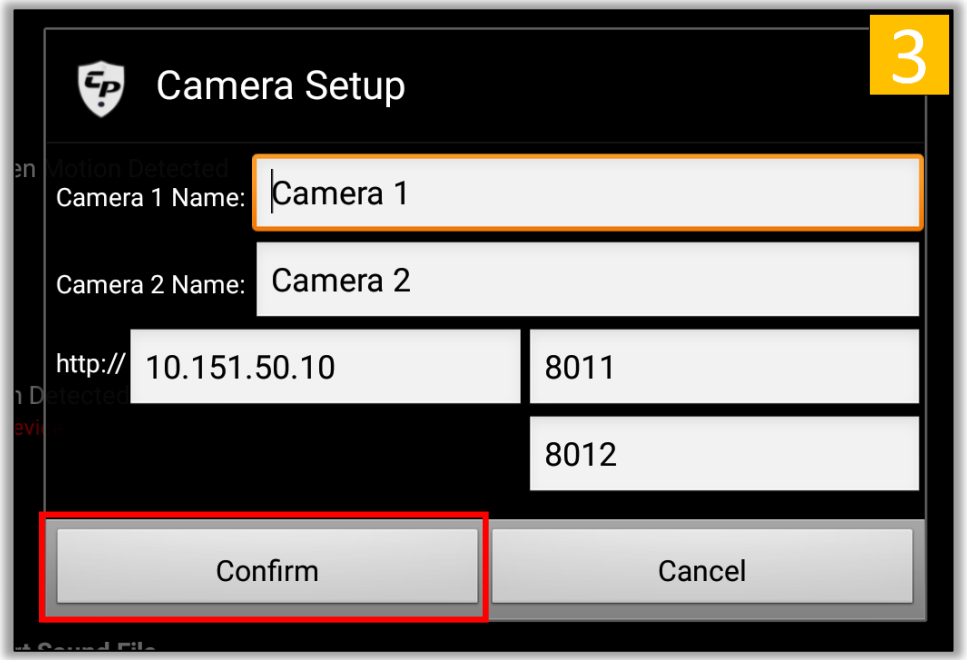
*This should be done with extreme caution!



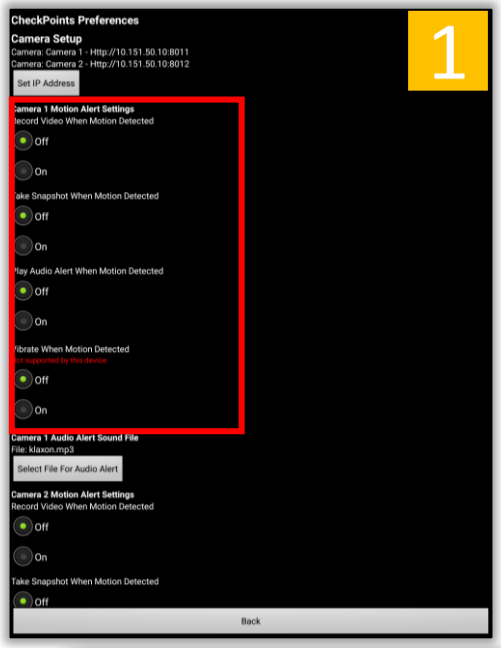
CheckPoints™ Standalone: Settings – Camera Setup



1. Locate Camera Setup in the CheckPoints Preferences.
2. ***Tap*** *Set IP Address*.
3. Change the Camera Setup parameters as needed. ***Tap*** *Confirm* to save the new settings. ***Tap*** *Back* at the bottom of the "CheckPoints Preferences" screen to return to the "CheckPoints Main" screen.



CheckPoints™ Standalone: Settings – Motion Alert Settings

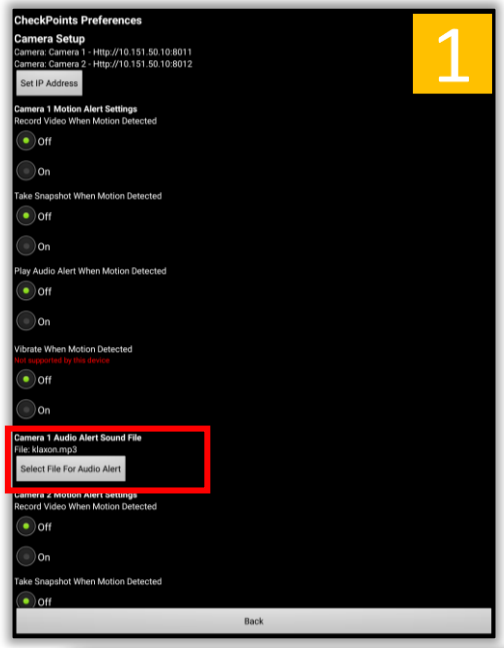


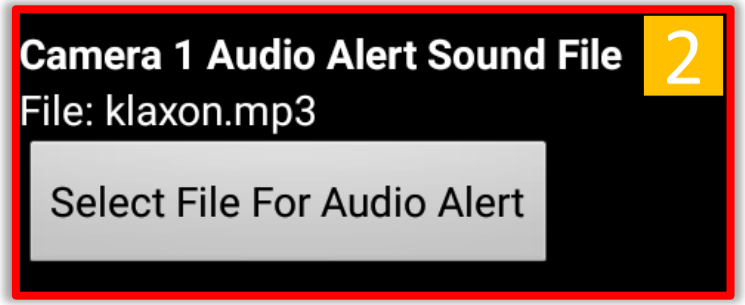
1. Locate the Motion Alert Settings for “Camera 1” or “Camera 2”.

2. ***Toggle*** *Camera Motion Alert Settings* from Off to On as desired. Settings for “Camera 1” and “Camera 2” are independent of each other. Changes must be made for both cameras. ***Tap*** *Back* at the bottom of the “CheckPoints Preferences” screen to return to the CheckPoints Main” screen.

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

CheckPoints™ Standalone: Settings – Audio Alert Sound File

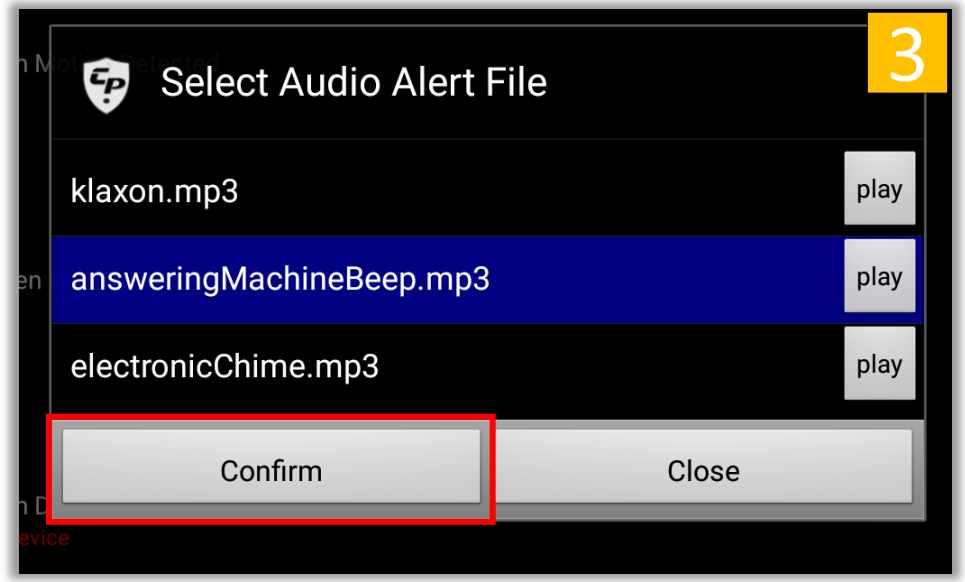




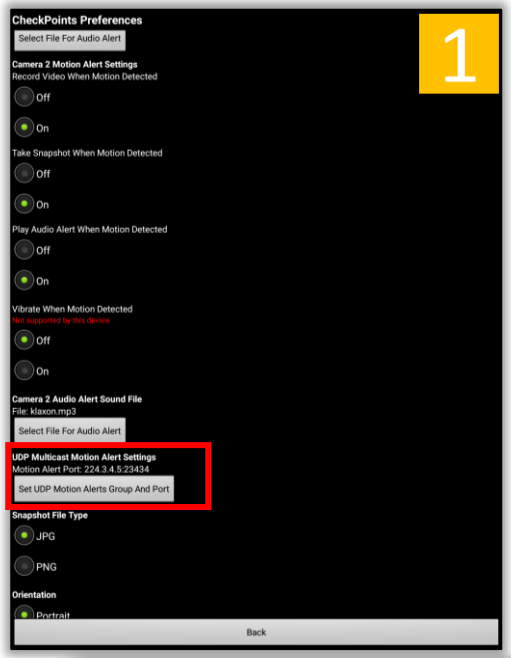
1. Locate the Audio Alert Sound File for “Camera 1” or “Camera 2”.

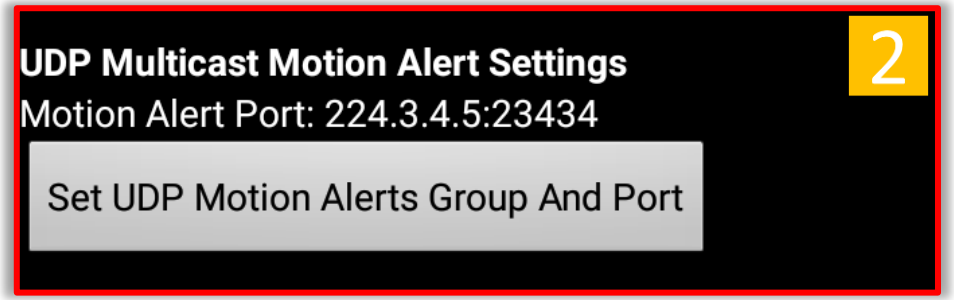
2. ***Tap*** *Select File For Audio Alert.*

3. ***Tap*** the desired *Audio Alert* File then ***tap*** *Confirm*. Settings for “Camera 1” and “Camera 2” are independent of each other. Changes must be made for both cameras. ***Tap*** Back at the bottom of the “CheckPoints Preferences” screen to return to the “CheckPoints Main” screen.



CheckPoints™ Standalone: Settings – UDP Multicast Motion Alert Settings*

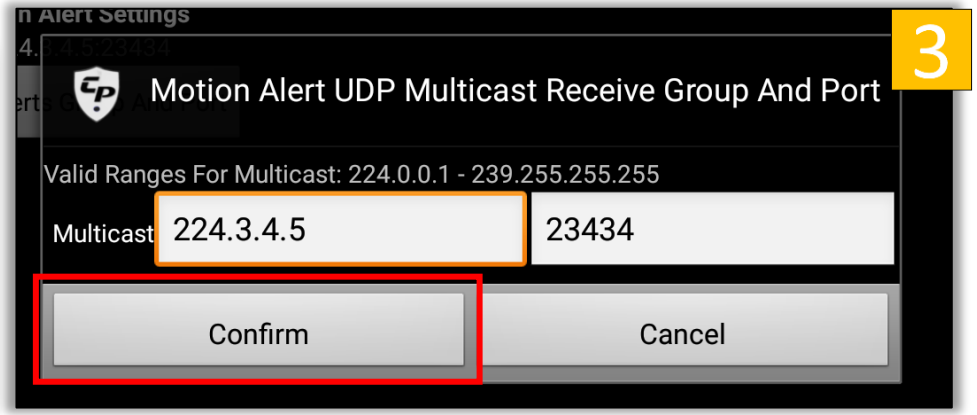




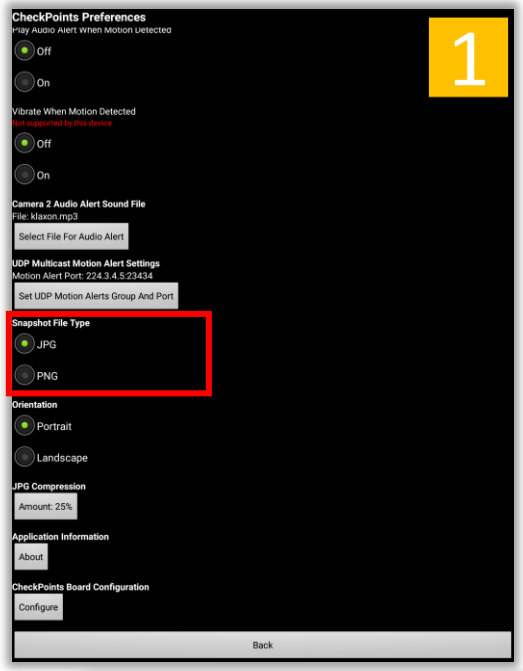
1. Locate *UDP Multicast Motion Alert Settings*.

2. ***Tap*** *Set UDP Motion Alerts Group and Port.*

3. ***Enter*** the desired *Multicast* and *Port* number then ***tap*** *Confirm*. (*In most cases you shouldn't edit this!) ***Tap*** *Back* at the bottom of the "CheckPoints Preferences" screen to return to the "CheckPoints Main" screen.



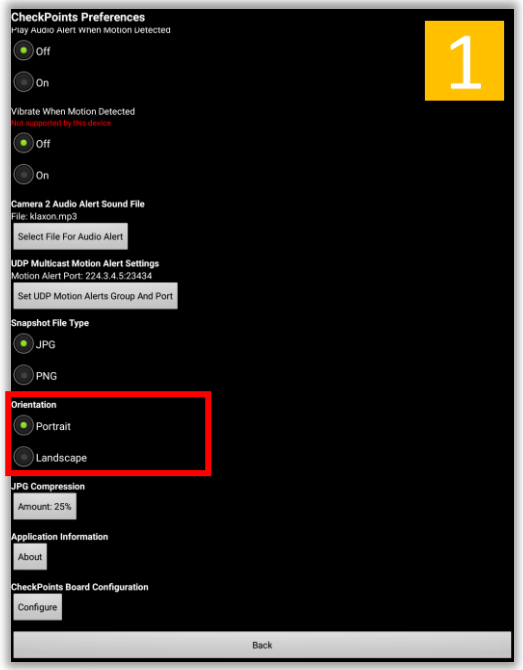
CheckPoints™ Standalone: Settings – Snapshot File Type



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 "CheckPoints Preferences" screen to return to the "CheckPoints Main" screen.

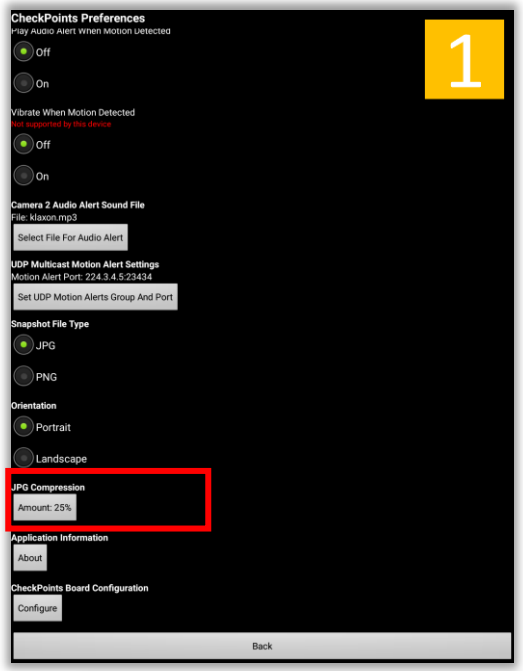
CheckPoints™ Standalone: Settings – Orientation

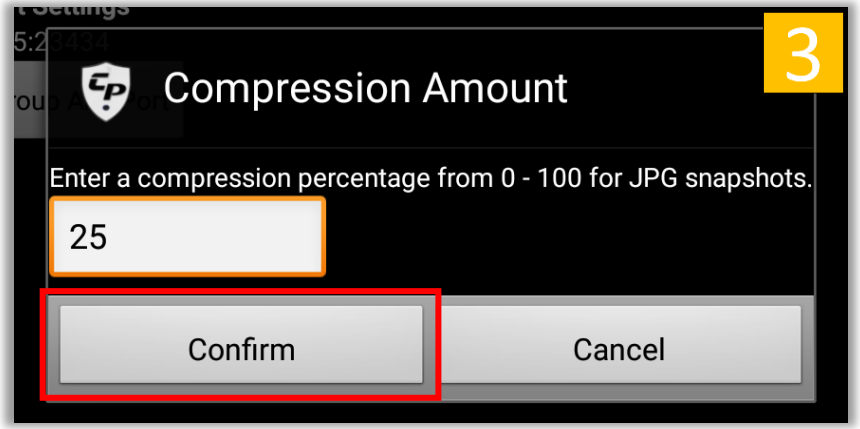


1. Locate *Orientation*.

2. ***Tap*** *Portrait* or *Landscape* to change the orientation of the app. The default value is Portrait. ***Tap*** *Back* at the bottom of the "CheckPoints Preferences" screen to return to the "CheckPoints Main" screen. You will have to restart the app to apply the orientation change.

CheckPoints™ Standalone: Settings – JPG Compression



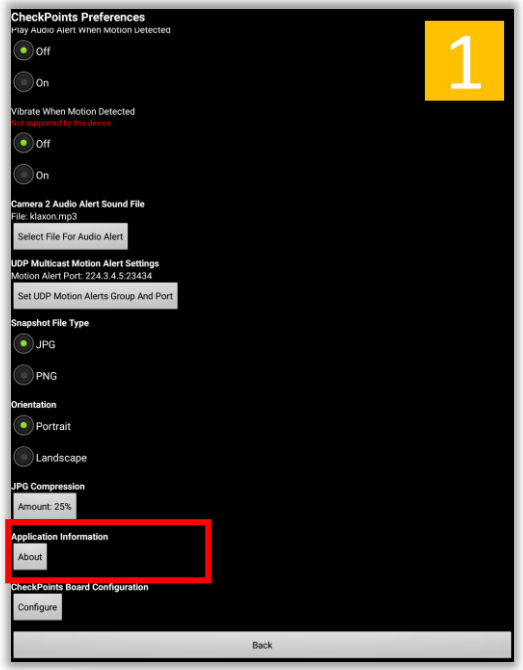


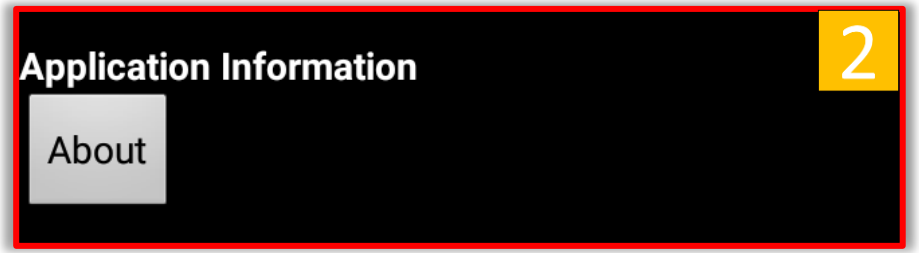
1. Locate *JPG Compression*.

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 "CheckPoints Preferences" screen to return to the "CheckPoints Main" screen.

CheckPoints™ Standalone: Settings – Application Information

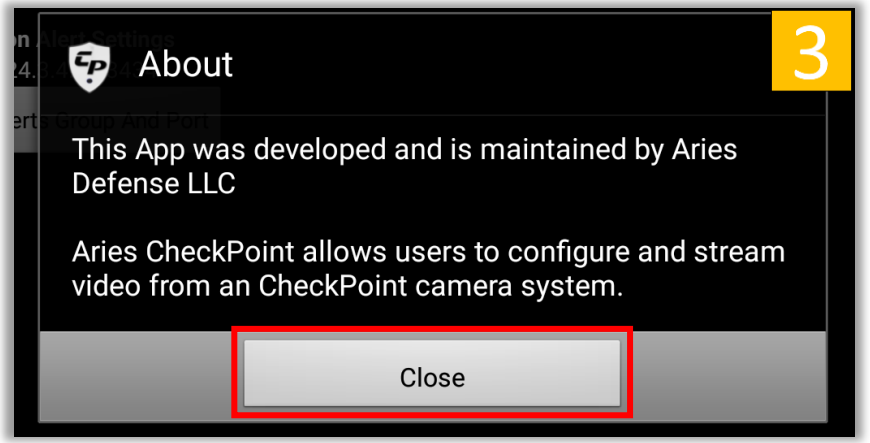




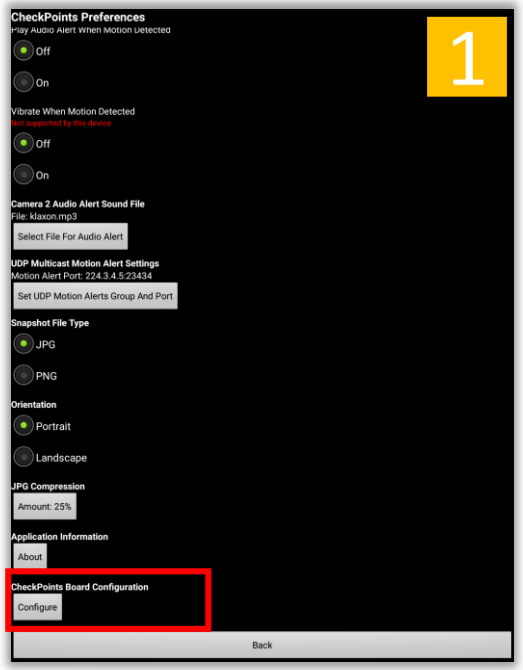
1. Locate *Application Information*.

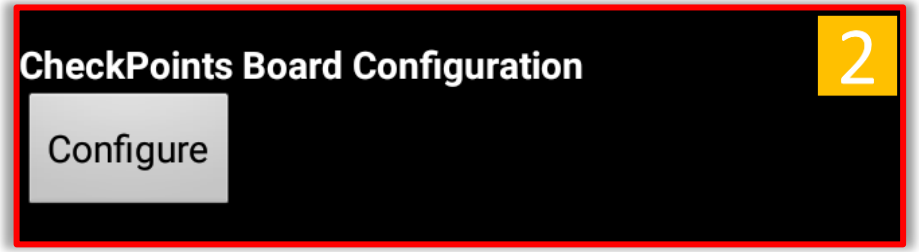
2. ***Tap*** *About* to view the Application Information.

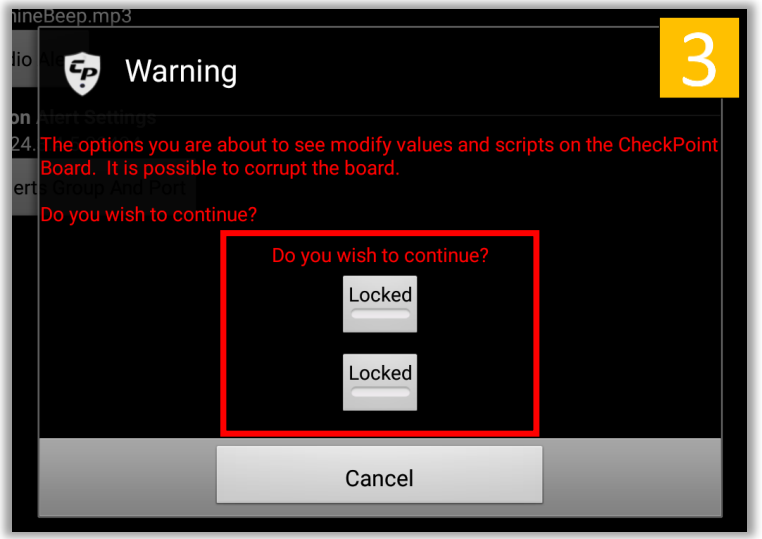
3. ***Tap*** *Close* to exit the About window. ***Tap*** *Back* on the bottom of the "CheckPoints Preferences" screen to return to the "CheckPoints Main" screen.



CheckPoints™ Standalone: Settings – Board Configuration







1. Locate *CheckPoints™ 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.

CheckPoints™ Board Configuration

CheckPoints™ Board Configuration - Overview

Please see “CheckPoints™ Settings – Board Configuration” on Page 20 and follow the steps to access the Board Configuration Menu. Configuring the preferences options in this section assumes the user has done this step.

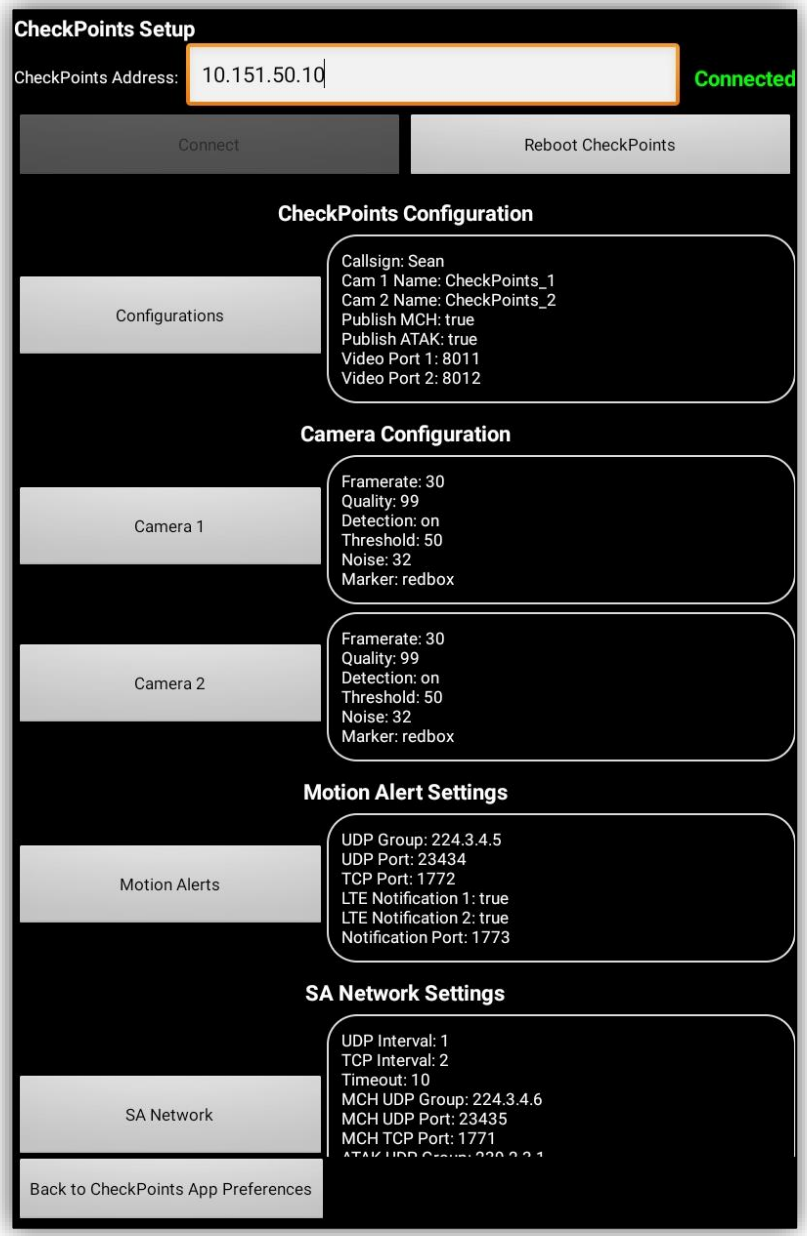
The CheckPoints™ Board Configuration allows the user to:

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

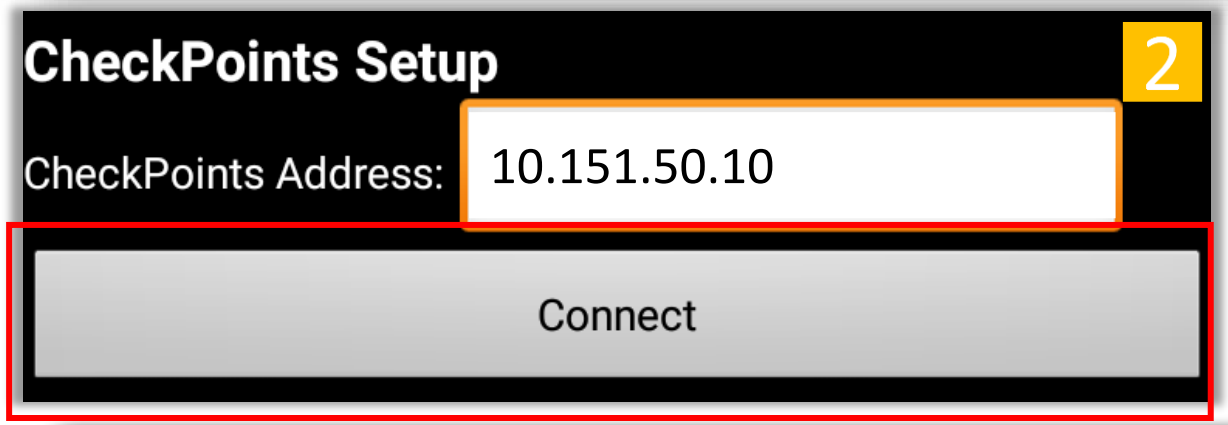
Remember – Cameras configurations are independent of each other. Changes must be done to BOTH cameras

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

Proceed with caution



CheckPoints™ Board Configuration – Connect to Board

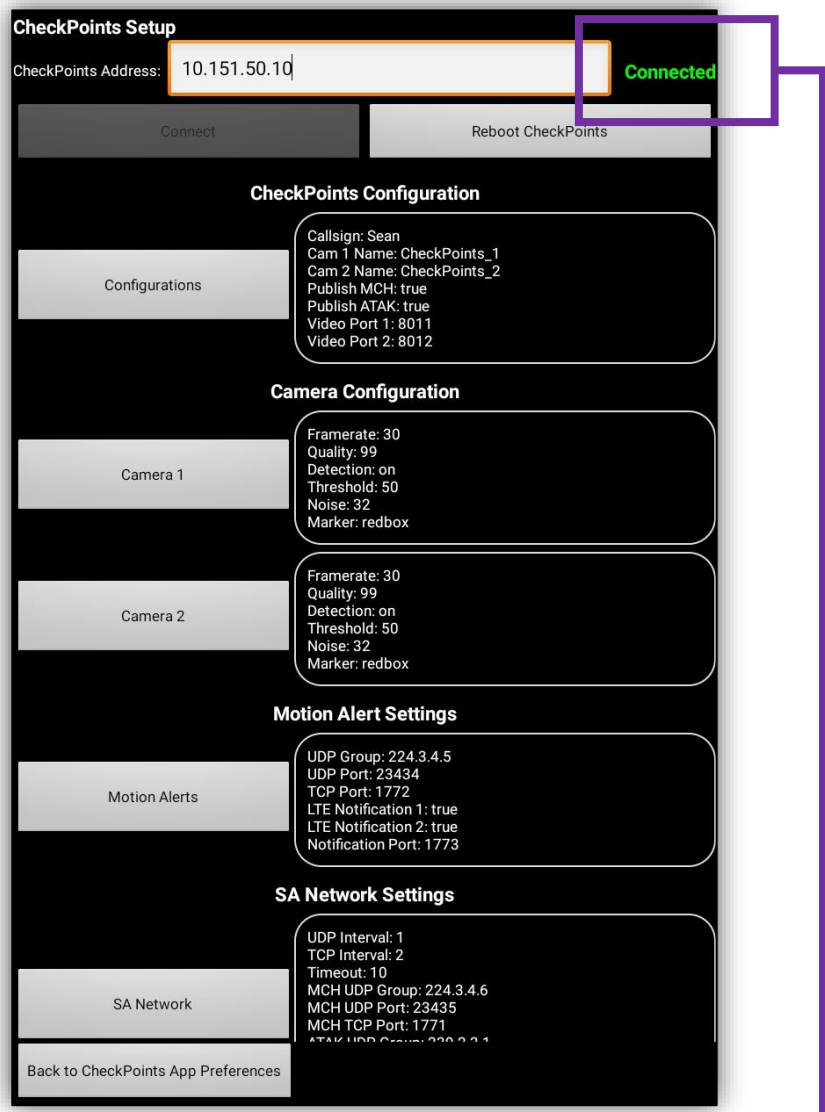


1. Enter the IP Address of the board. The Default IP Address is 10.151.50.10.

2. ***Tap*** *Connect.*

Connection Status:

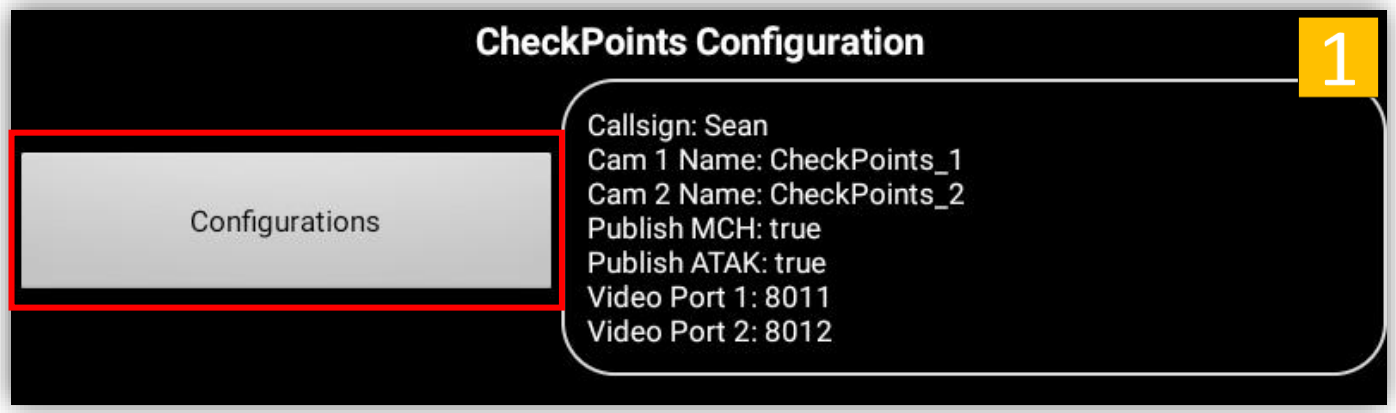
Not Connected – The CheckPoints App is not logged into the Board
Connecting… - The CheckPoints App is trying to establish a logon session
Connected – The CheckPoints App is currently logged into the board.

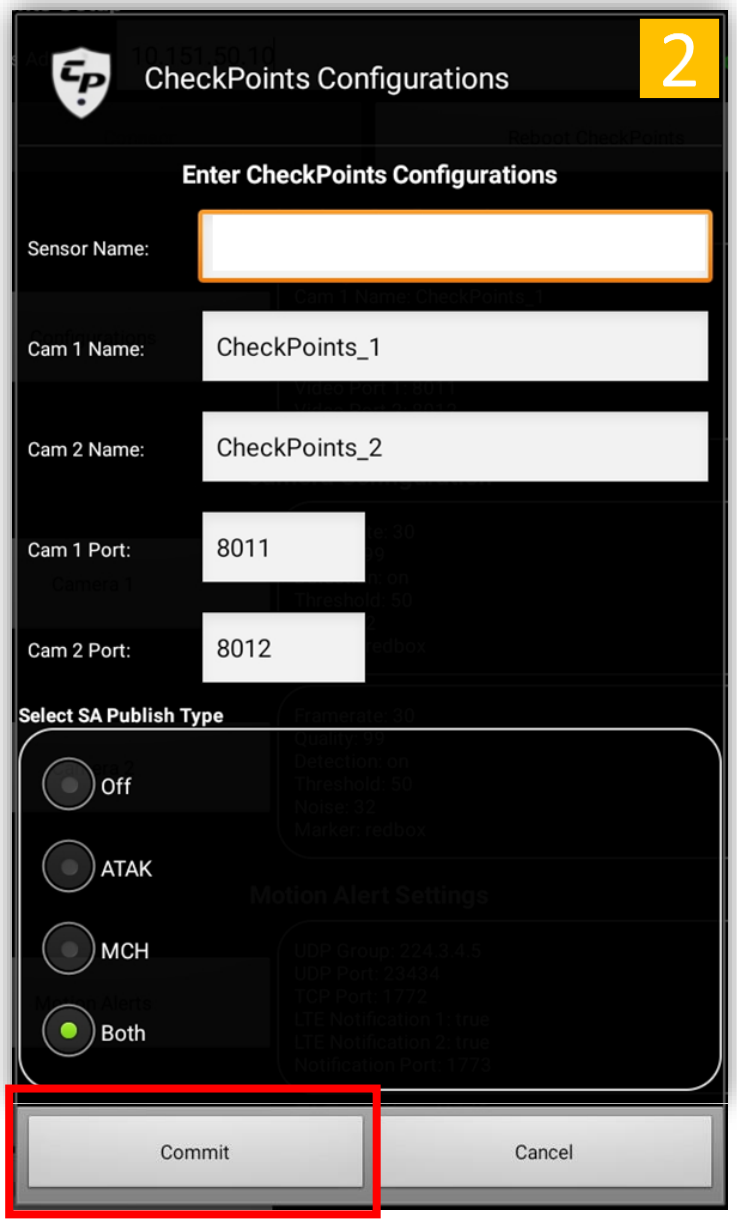


CheckPoints™ Board Configuration

CheckPoints™ Configuration

CheckPoints™ Board Configuration – Camera Label





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

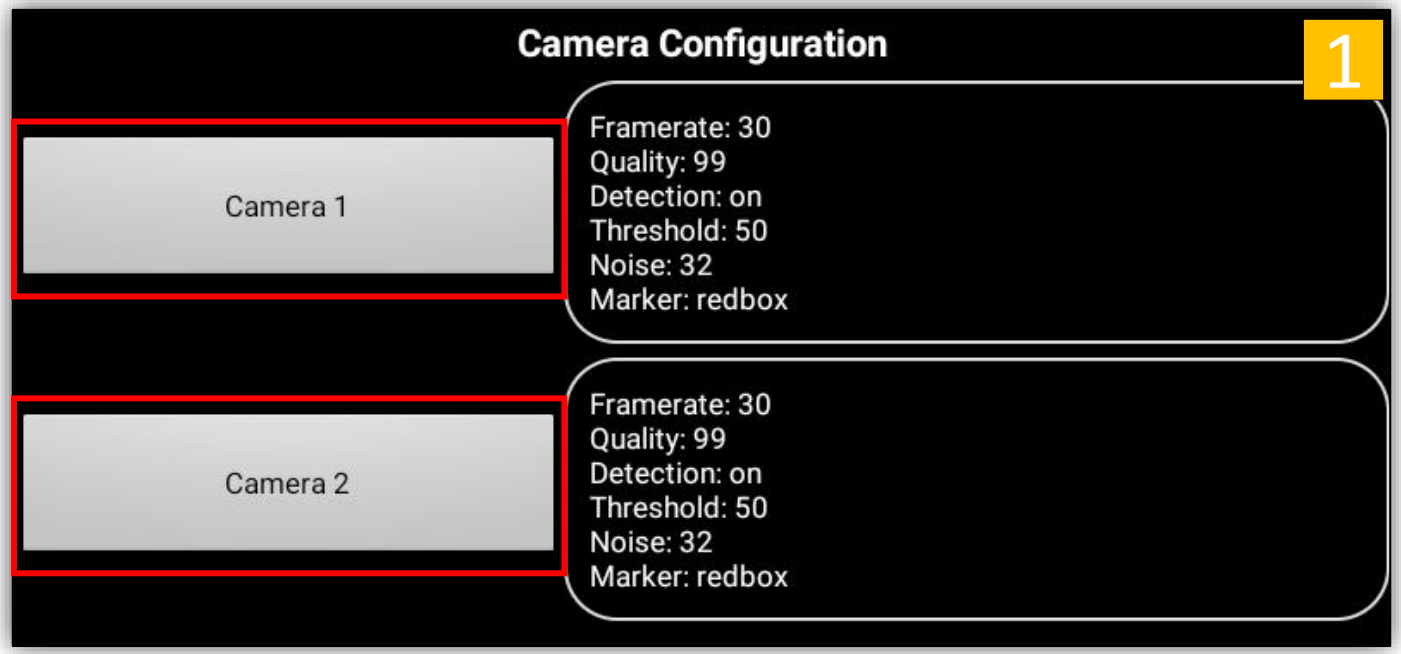
The SA Publish type will send situational awareness ports to either ATAK or MCH but can be set to publish to both (default setting)

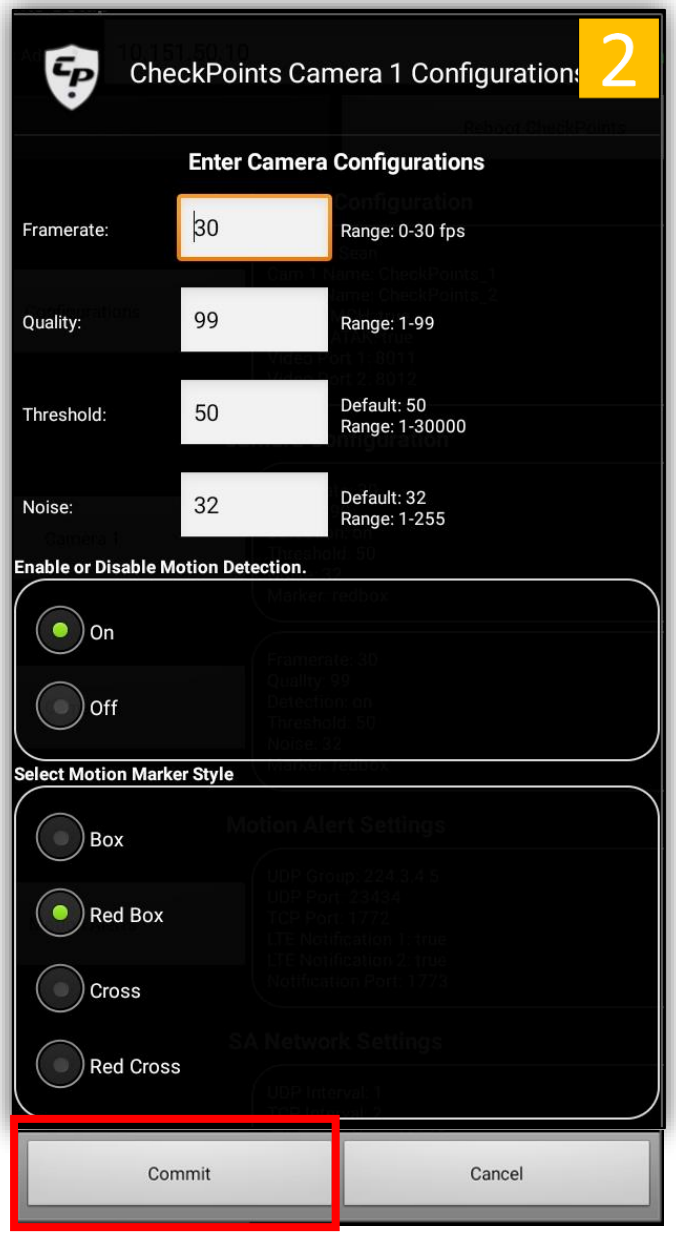
You may continue to make changes to the board. When finished ***Tap*** the *Reboot CheckPoints button*.

CheckPoints™ Board Configuration

Camera Configuration

CheckPoints™ Board Configuration – Camera Configuration





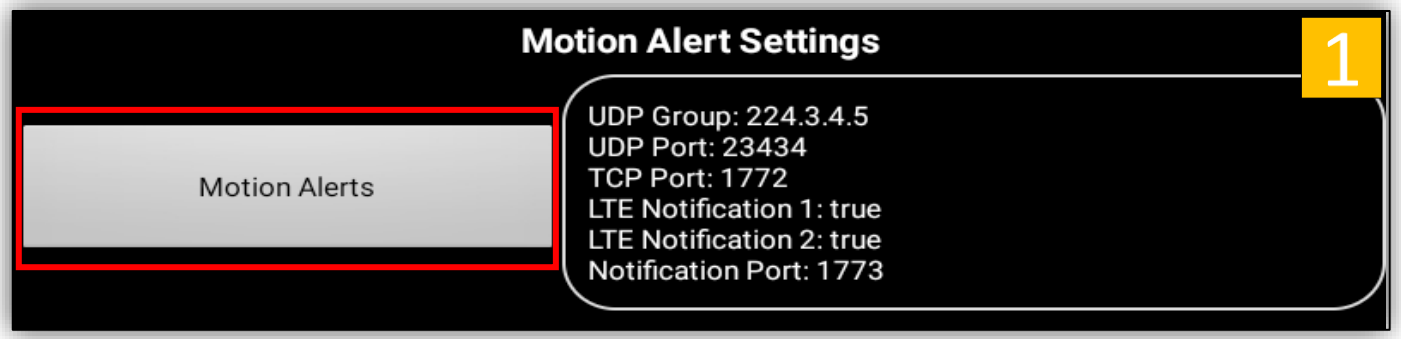
1. **Tap** either the *Camera 1* or *Camera 2* buttons to modify the camera configuration settings
2. Toggle the new Camera Configurations settings then ***tap*** Commit

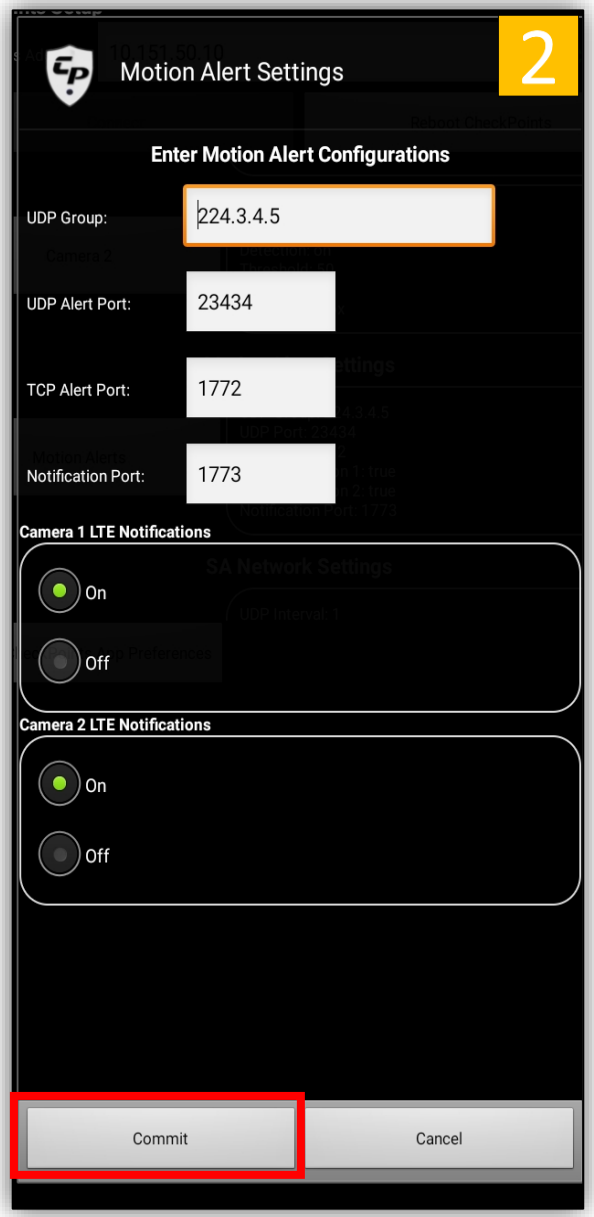
You may continue to make changes to the board. When finished ***Tap*** the *Reboot CheckPoints button*.

CheckPoints™ Board Configuration

CheckPoints™ Motion Alert Settings

CheckPoints™ Board Configuration – Motion Alert Settings





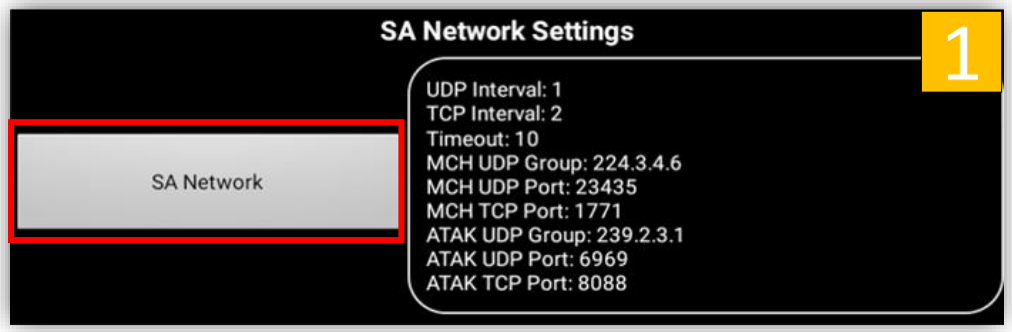
1. Locate and ***tap*** *Motion Alerts Button* under CheckPoints Configuration.
2. Toggle the new Motion Alerts Configurations settings then ***tap*** Commit.

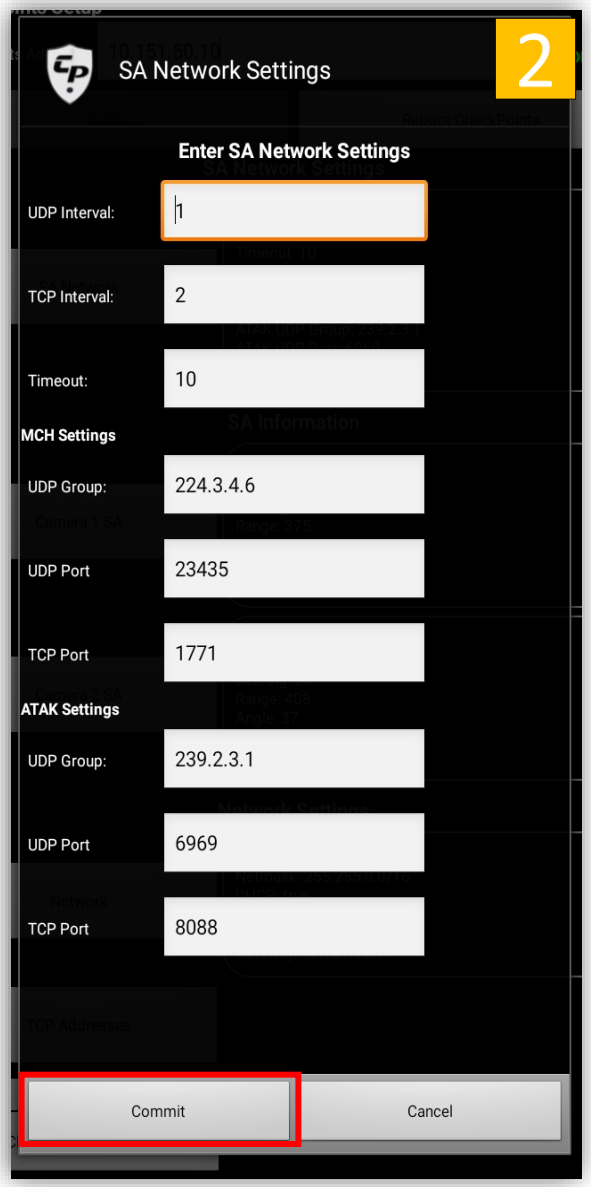
You may continue to make changes to the board. When finished ***Tap*** the *Reboot CheckPoints button*.

CheckPoints™ Board Configuration

CheckPoints™ SA Network Settings

CheckPoints™ Board Configuration – SA Network Settings





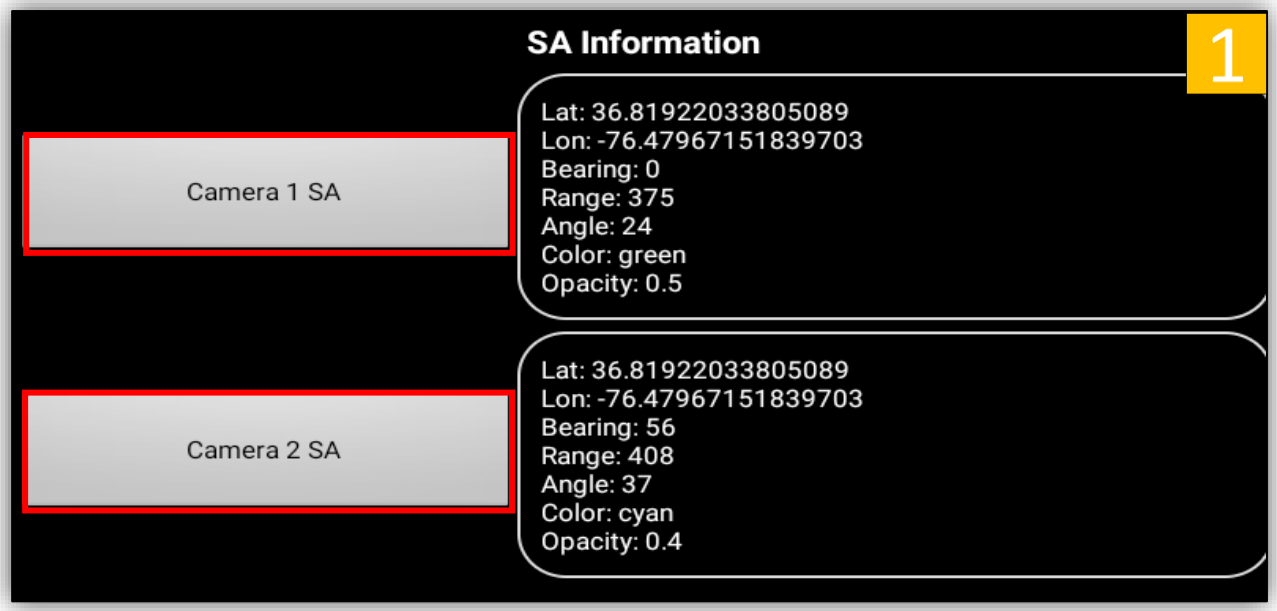
1. Locate and ***tap*** *SA Network Button* under CheckPoints Configuration.
2. Change the new SA Network settings then ***tap*** Commit.

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

CheckPoints™ Board Configuration

CheckPoints™ SA Information

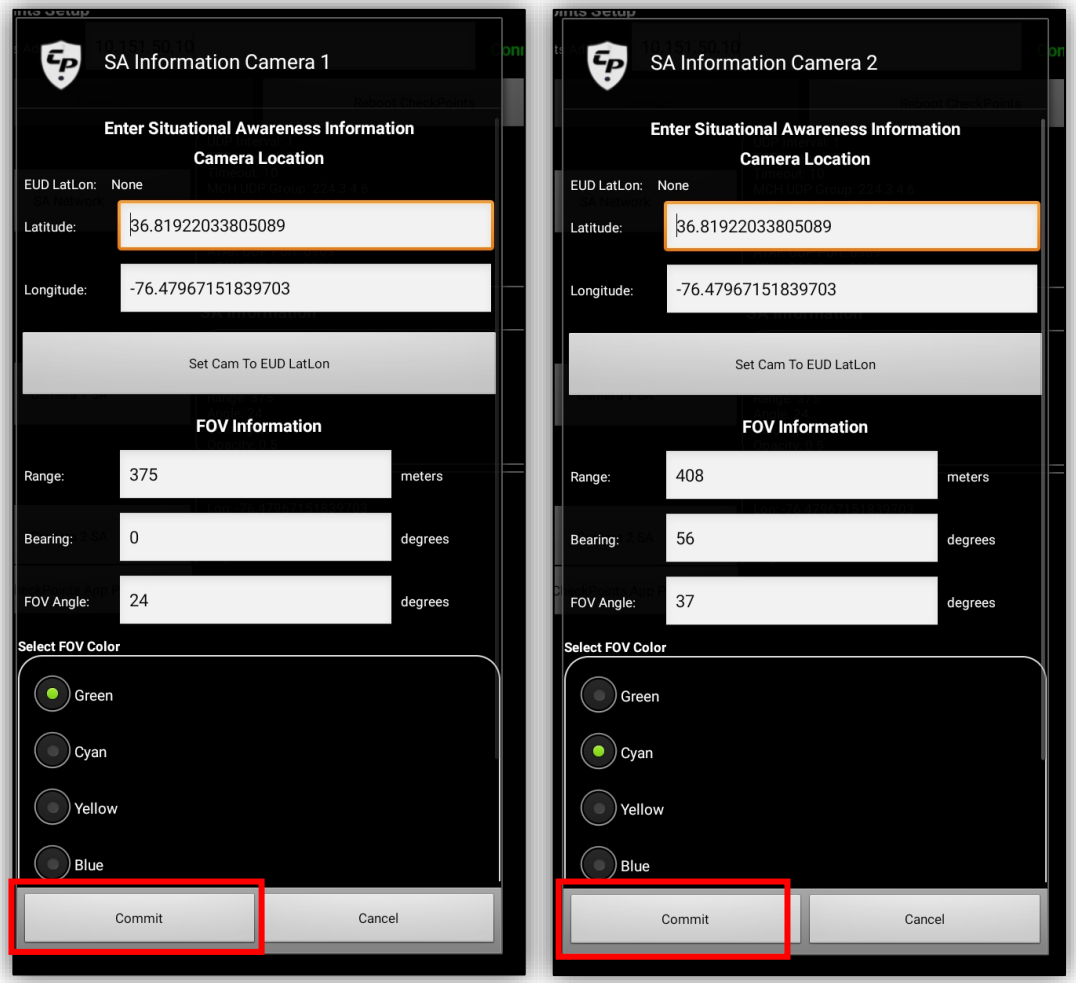
CheckPoints™ Board Configuration – SA Information



1. Locate and ***tap*** *Camera 1* or *Camera 2 SA* Button under CheckPoints 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 CheckPoints button*.

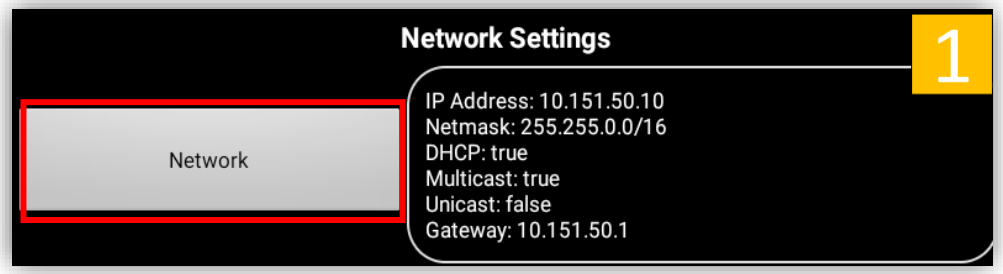
2

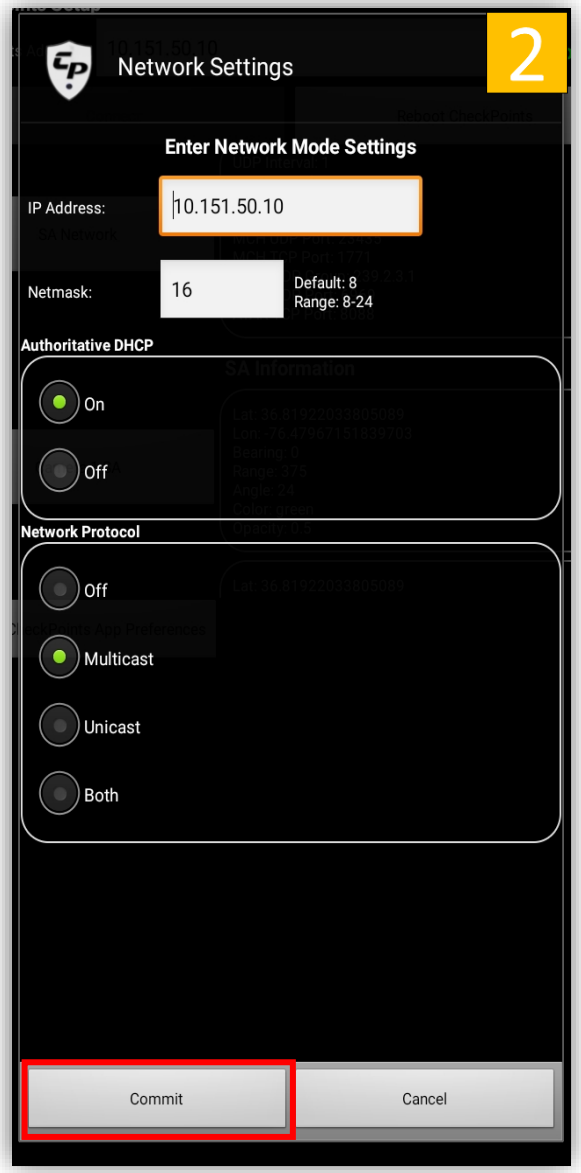


CheckPoints™ Board Configuration

CheckPoints™ Network Settings

CheckPoints™ Board Configuration – Network Settings





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

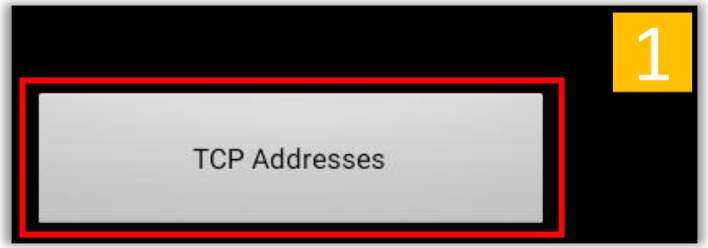
*If your network setup requires a gateway, please **tap** *Unicast* or *Both* under Network Protocol. This will unhide the gateway option.

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

CheckPoints™ Board Configuration

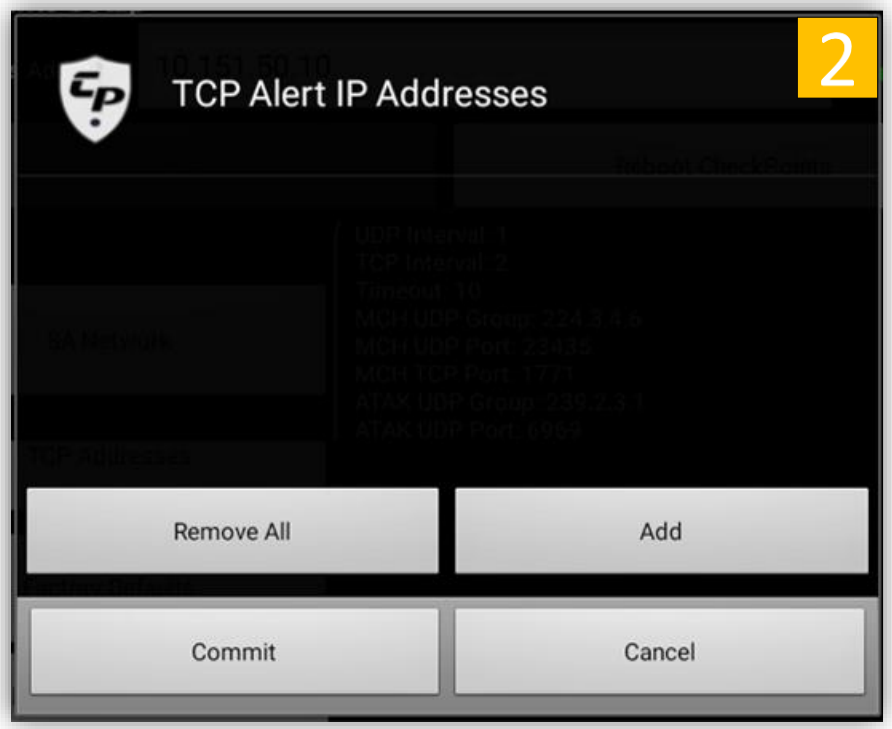
CheckPoints™ Other Settings

CheckPoints™ Board Configuration – TCP Address



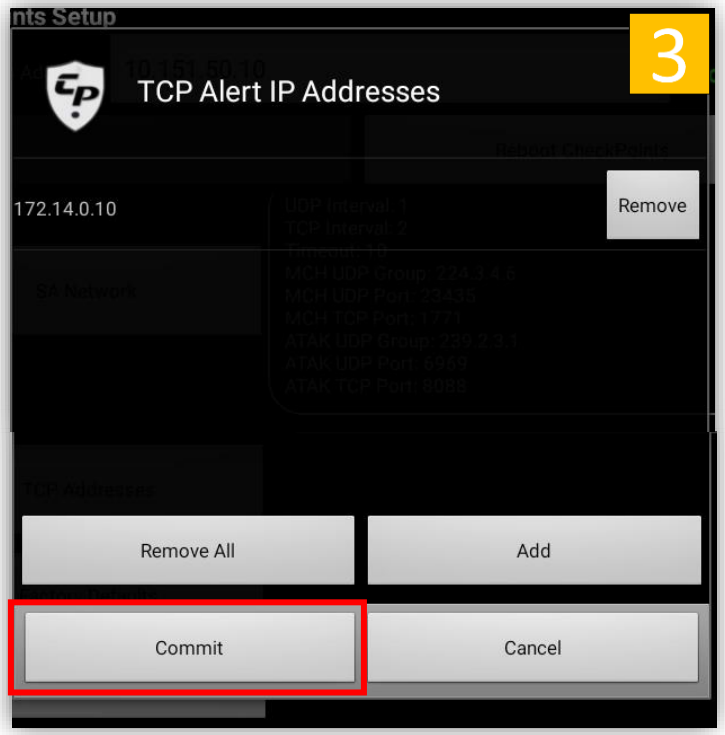
1. Locate and ***tap*** the *TCP Addresses* button under CheckPoints Configuration.
2. This menu will allow the user the ability to Add, Remove, and Commit IP addresses to receive TCP based alerts.

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



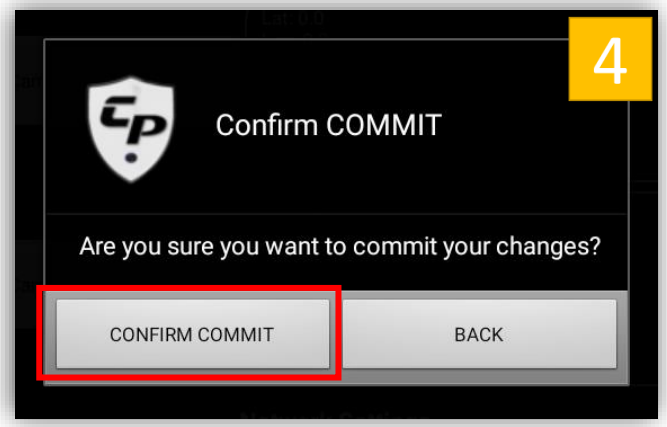
Button	Description
Remove All	Remove All IP Addresses in the list
Add	Add an IP address to receive TCP Alerts
Commit	Commit newly added TCP Addresses
Cancel	Cancel current actions.

CheckPoints™ Board Configuration – Add TCP Address.

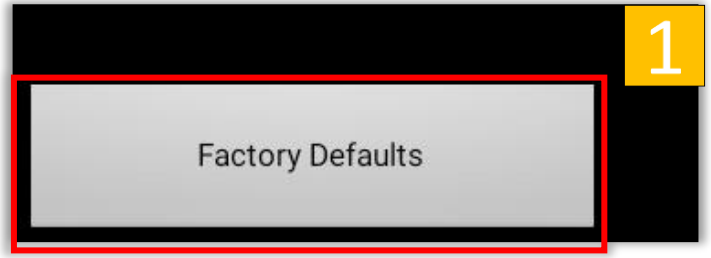


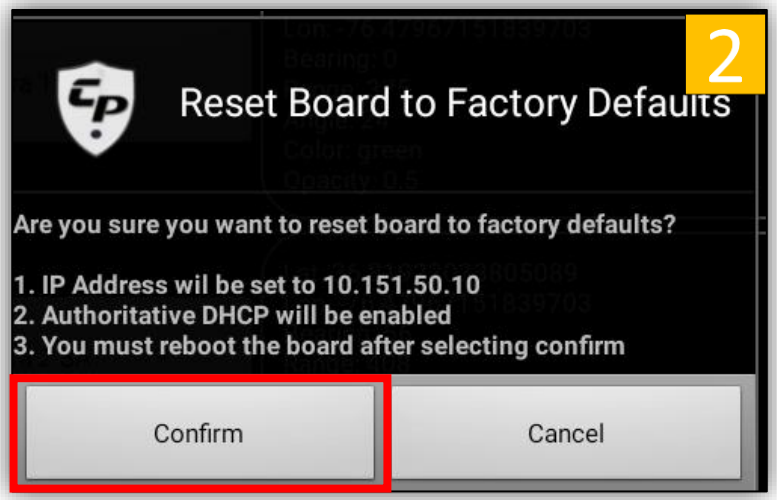
1. Locate and ***tap*** the *Add* button under TCP Alert IP Addresses Menu.
2. ***Enter*** an IP address to receive TCP Alerts then ***tap*** Confirm.
3. ***Tap*** Commit and then confirm commit to add the IP address

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



CheckPoints™ Board Configuration – Factory Reset





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