



Media Mapper Mobile

Iteration #10 – updated mockups

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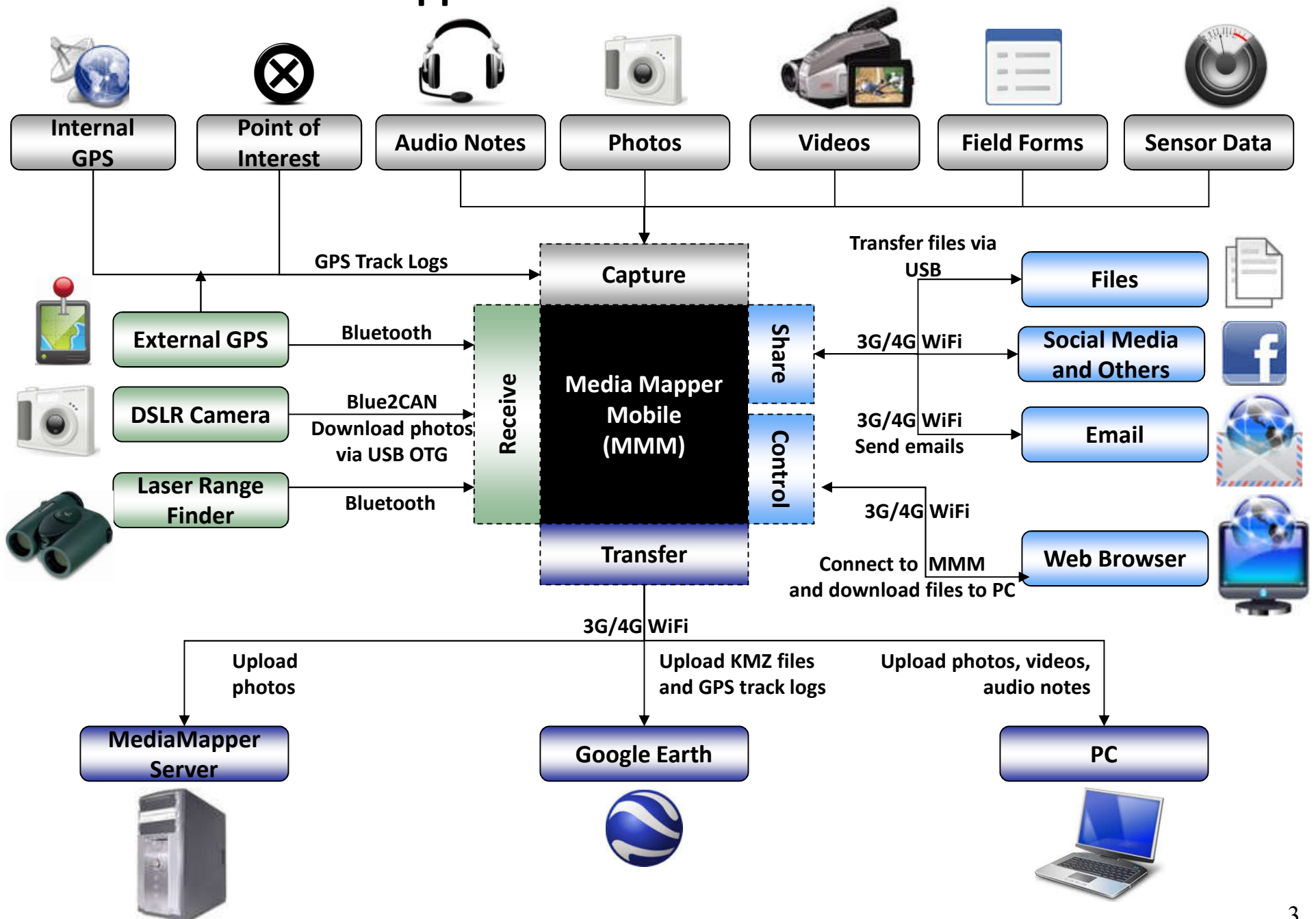
 = new or changed mockups

Quick Overview

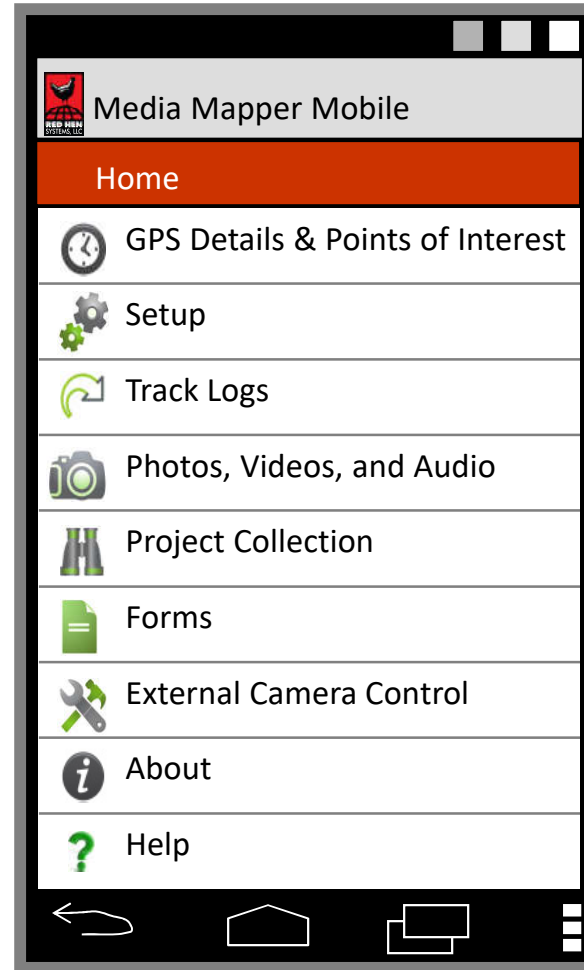
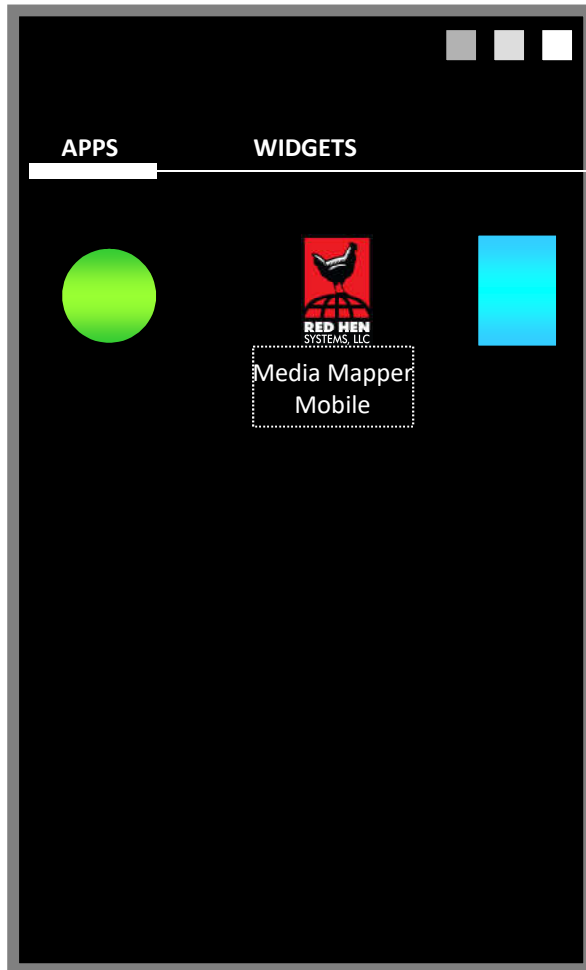
My initial UI evaluation examined the home screen and all screens accessed by the large buttons on that screen (and by large buttons on the Task screen), as well as screens accessed from the expanded menu produced by the ellipses at the bottom of the screen.

1. After viewing the screens, I recommend the following – which I have implemented in the mockups:
 - a. Use a layout different from than large rectangular buttons (“main menu items”) for a fresher, more modern appearance.
 - b. Use icons for main menu items to call attention to them and make them look clickable.
 - c. Develop a color scheme for dialogs that “brands” the application as a Red Hen app – red, gray, black, white.
 - d. Left-align labels, align all text entry fields, and align pull-down menus for a less cluttered look.
 - e. Improve task flow where possible so users can perform their tasks faster.
 - f. Improve menu items names where necessary.
 - g. If possible, group tasks into categories and display as many of those categories as possible on the Home screen to help user grasp the wide range of tasks available to them and access them more quickly.
 - h. Provide pop-up Help screens when there is not room for explanatory text in a readable font.
2. The mockups in this slide set provide sample screens to demonstrate my ideas. As a starting point, they focus only on the:
 - Home screen
 - GPS Details & Point of Interest screen
 - Setup screen with all its various tabs
 - Project collection screens
3. The mockups also give you an idea how we might group tasks associated with photos and videos.

What Does MediaMapper Mobile Do?



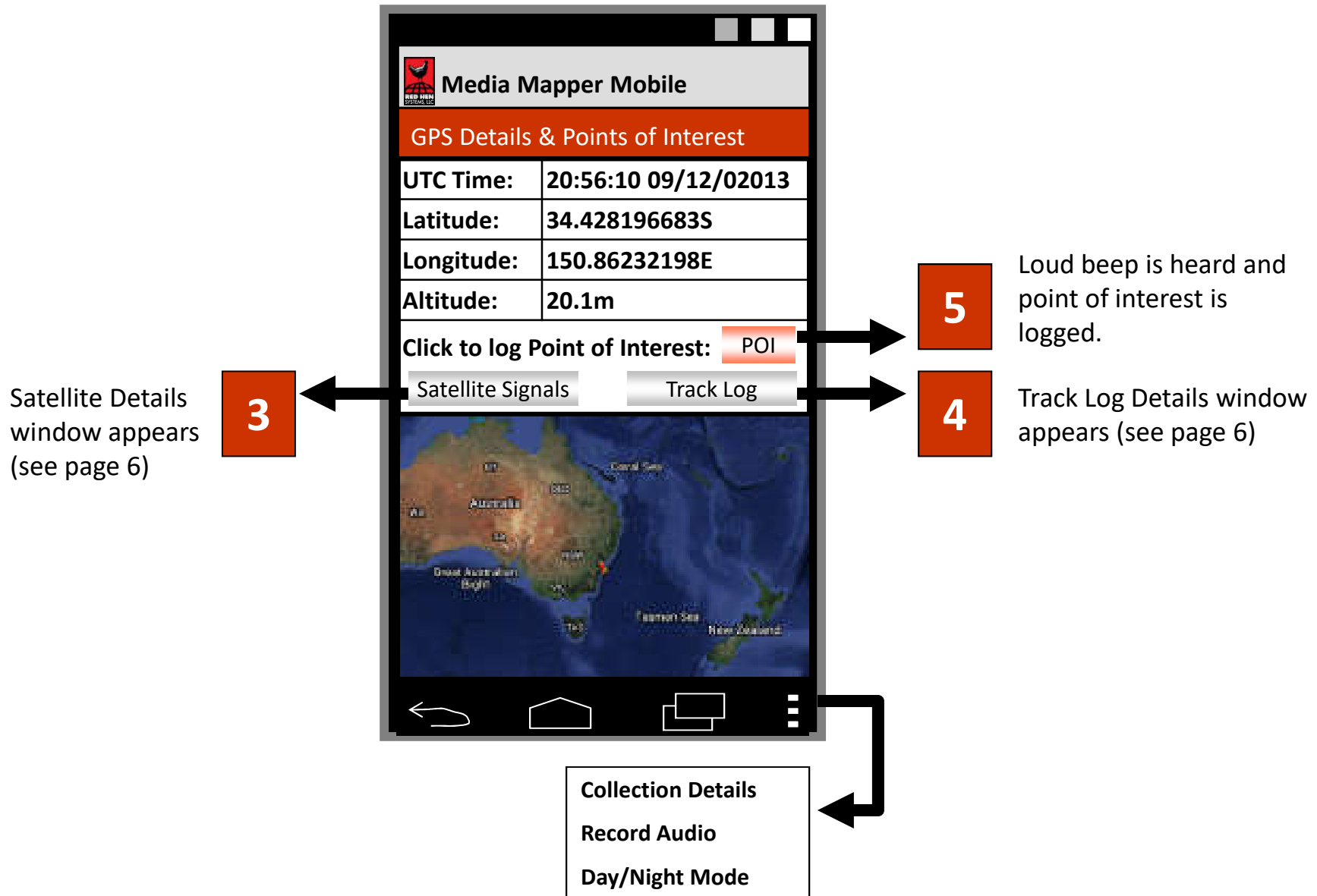
Startup and Home screens



1 Turn on the mobile device and go to the Apps screen; click the Media Mapper Mobile icon.

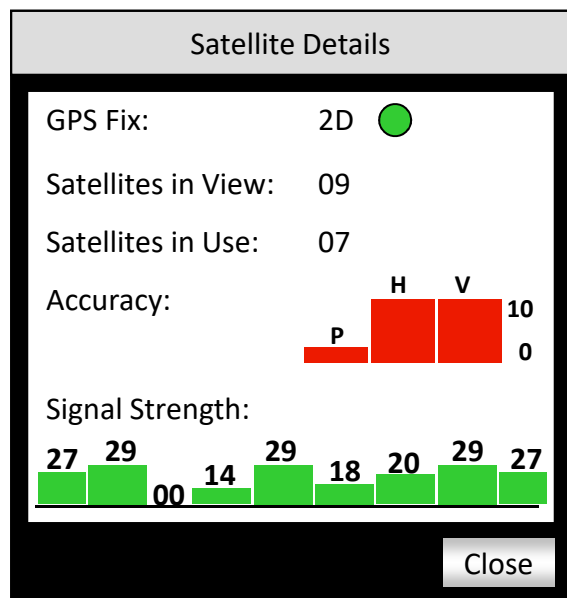
2 The MMM Home page appears.

Home > GPS Details & Points of Interest



Home > GPS Details & Points of Interest > buttons

3



4

Track Log Details

User/Collector:

Initials:

Country Code:

Track Log ID:

File Name:

Folder:

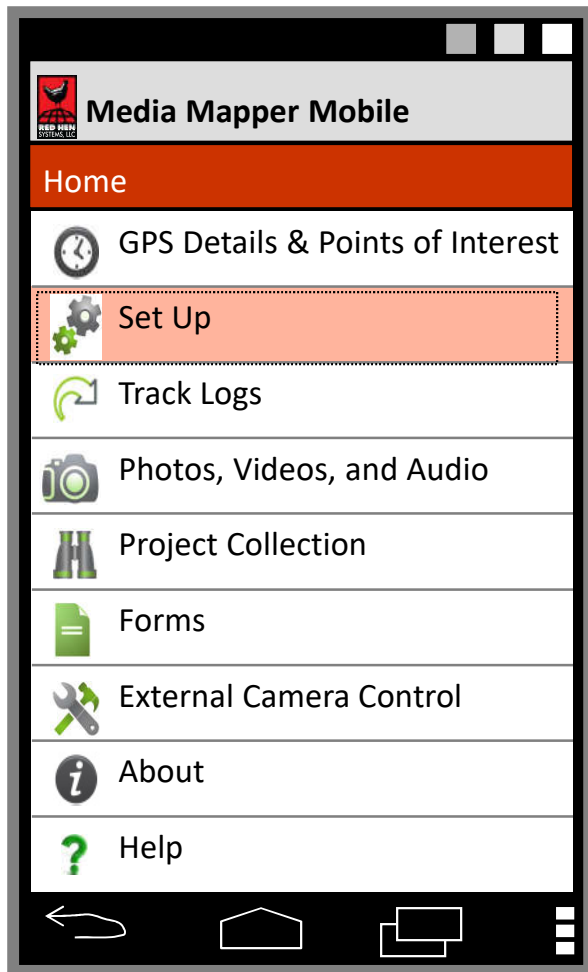
View All Track Logs

OK Cancel

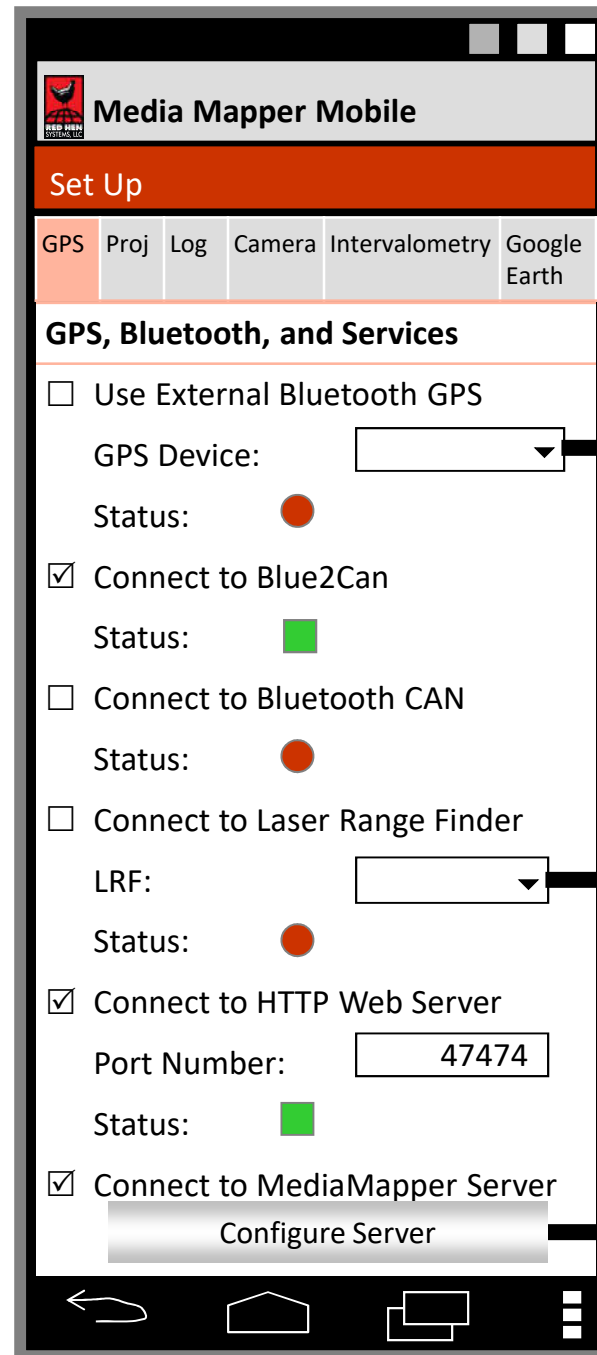
View Track Logs window appears with list of track logs to choose from.

NOTE: The bottom of GPS Details & Points of Interest screen expands to display keyboard.

Home > Setup > GPS



1 Select Setup from Home screen.

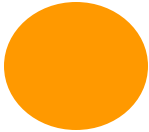


2 Set Up screen appears with GPS tab in the foreground.

3 Select Devices window appears (see next page)

4 Configure MediaMapper Server window appears (see next page)

Home > Setup > connection and configuration pop-up windows



3

Home > Setup > GPS > GPS Device
Home > Setup > GPS > LRF

Select Device

Available Devices

- Device #1
- Device #2
- Device #3

Pair Devices ?

Add Manually ?

OK Cancel

?

Press the Help buttons to get more information. See Windows #5, #6, and #7 on the next page.

5

6

7

4

Home > Setup > GPS > Configure Server

Configure MediaMapper Server

User Name:

Password:

Server:

Port Number:

Work Group:

Allow photos with duplicate GPS

Automatically upload photos to MMS

Prompt before uploading to MMS

Only use WIFI connection

Set image size for upload:

OK Cancel

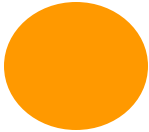
Add Bluetooth Device Manually

Enter 17-digit hexadecimal code for Bluetooth device:

(Separate digits by colons, for example, A1:B2:C3:D4:E5:F6)

OK Cancel

Home > Setup > connection and configuration pop-up windows



3

Home > Setup > GPS > GPS Device
Home > Setup > GPS > LRF

Select Device

Available Devices

- Device #1
- Device #2
- Device #3

Pair Devices ?

Add Manually ?

? OK Cancel

Press the Help buttons to get more information. See Windows #5, #6, and #7 on the next page.

5



6



7

Add Bluetooth Device Manually

Enter 17-digit hexadecimal code for Bluetooth device:

(Separate digits by colons, for example, A1:B2:C3:D4:E5:F6)

OK Cancel

4

Home > Setup > GPS > Configure Server

Configure MediaMapper Server

User Name:

Password:

Server:

Port Number:

Work Group:

Allow photos with duplicate GPS

Automatically upload photos to MMS

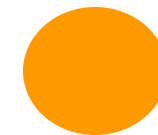
Prompt before uploading to MMS

Only use WIFI connection

Set image size for upload:

OK Cancel

Help screen: Pairing



5a



More About Pairing

If you do not see the device you want to select, it may require pairing. Pairing is the process of identifying an external device to your Android device.

- To determine if pairing is required for use, check the documentation provided by the device manufacturer.
- When pairing is required, you must enter a 4-digit pass-key (or PIN number) provided by the manufacturer (usually specified in the documentation).

You typically have to pair the device only once, and from then on the Android operating system remembers the paired device.

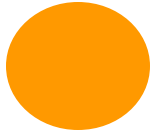
1. From your Android device (phone or tablet), click **Apps**.
2. From the Apps screen, select **Settings**.
 - a. From the Settings screen, look for the **Wireless and Networks category**.
 - b. Beneath that category, make sure that **Bluetooth** is **ON**.
3. Select **Bluetooth** to view the Bluetooth screen.
 - a. Power on the Bluetooth device and make sure it is located within a few meters of the Android device. Also make sure the Bluetooth and Android devices have charged batteries for extended use.
 - b. From the Bluetooth screen, press the Android device name until this message appears beneath it: **Visible to all nearby Bluetooth Devices**.

Close

Help Screen for “Pair” button.

Scroll down to see the rest (see next page)

Help screen Pairing (cont'd)



5b



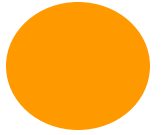
More About Pairing

4. At the top-right corner of the Bluetooth screen, press **Search for Devices**.
 - a. Wait for the name of the Bluetooth device to appear in the list of **Available Devices** and select it..
 - b. When prompted, enter the 4-digit pass key for the Bluetooth device.
 - c. Once the pass key is accepted, the device name will appear in the **Paired Devices** list. The device is now ready to use with MediaMapper Mobile.
5. If you performed the pairing by originally clicking the **Pair** button in the Select Device screen, you will be automatically returned to MediaMapper Mobile. Otherwise, manually exit the Android Settings screen and return to MediaMapper Mobile.
6. Use the MediaMapper Mobile Settings screens to select and use the paired Bluetooth device as needed, such as for an external GPS Receiver or Laser Range Finder.
7. Power off the Bluetooth device when you finish using it. Make sure to stop access to the device by unchecking its option in the MediaMapper Mobile Setup screens. This ensures that MediaMapper Mobile does not continue trying to re-establish communication with the Bluetooth device, causes unnecessary battery depletion.

Note: It is possible to change the default name of Bluetooth devices when using the Android device; however, we recommend you leave the device name as is when using Media Mapper Mobile. In some cases this allows Media Mapper Mobile to recognize the type or model of the Bluetooth device with which it is communicating.

Close

Help screens: Add Manually and More About Devices



6 **? More About Adding Manually**

Some Bluetooth devices do not broadcast their name and address details, in which case you need to add the device address [#Manually](#). This allows you to enter the hexadecimal code for the device.

Close

Help Screen for “Add Manually” button.

This link takes the user to the Add Bluetooth Device Manually screen (*page 8*) where the user can actually enter the hexadecimal code.



7 **? More About Devices**

Selecting a device is only required if you want MediaMapper Mobile to communicate with an external GPS unit, Laser Range Finder, or other Android device.

Note: Do NOT select a device if you want MediaMapper Mobile to communicate with Blue2Can devices or with a Bluetooth sensor, such as SensorTag..

If you do not see the device you want to select, you may need to add it [#Manually](#) or [#Pair](#) it.

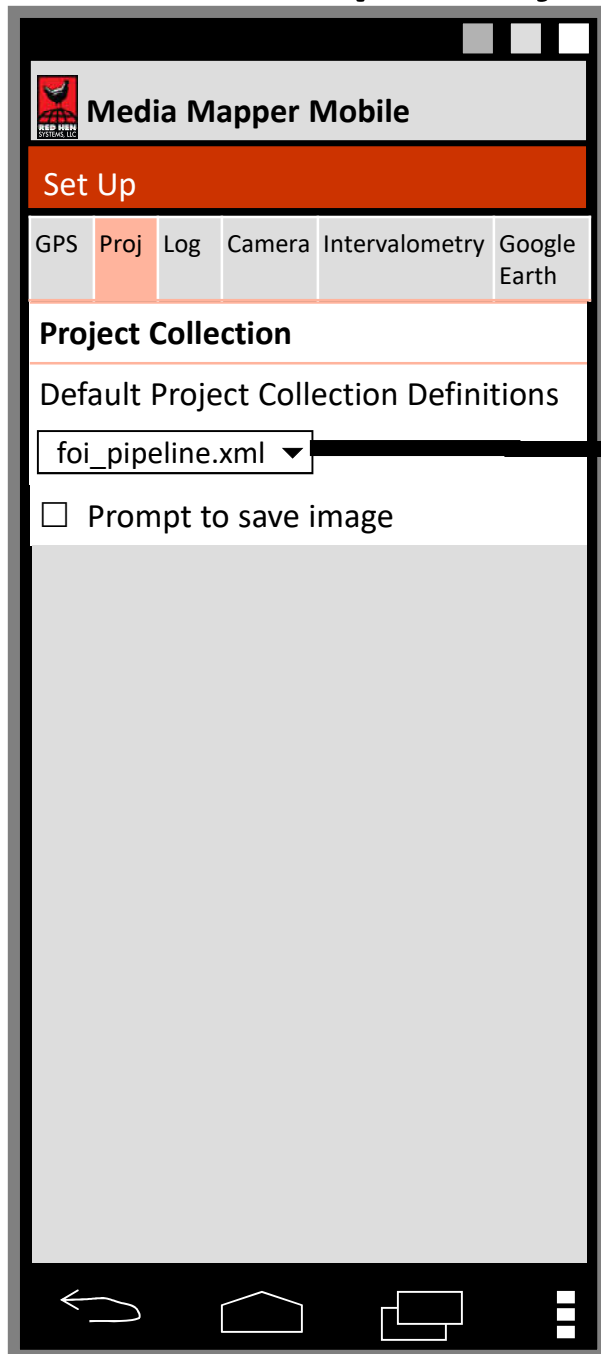
Close

Help Screen for “Add Devices” screen.

These links take the user to the Add Bluetooth Device Manually screen (*this page*) and the Android Bluetooth screens (*pp. 9-10*).



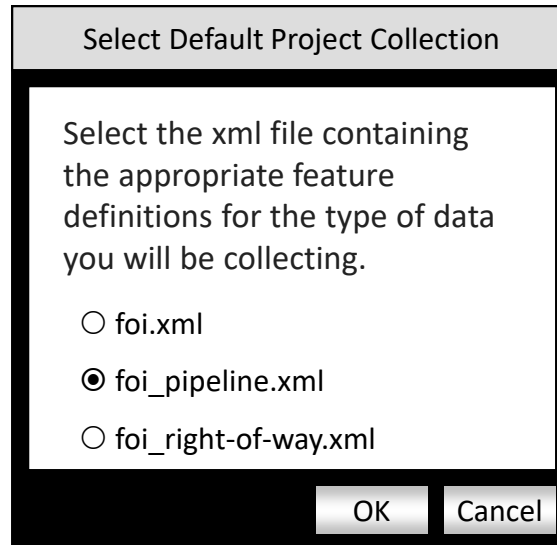
Home > Setup > Proj



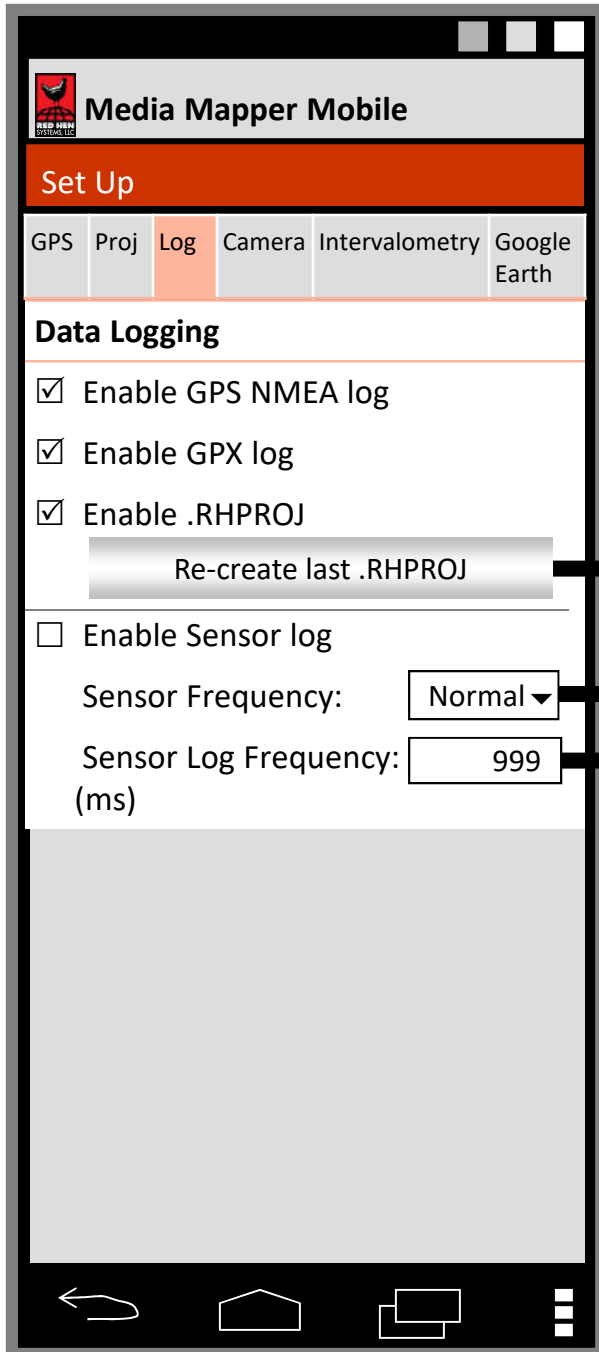
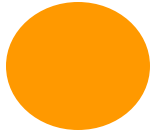
1

Press Setup from Home screen.
Then press Proj tab

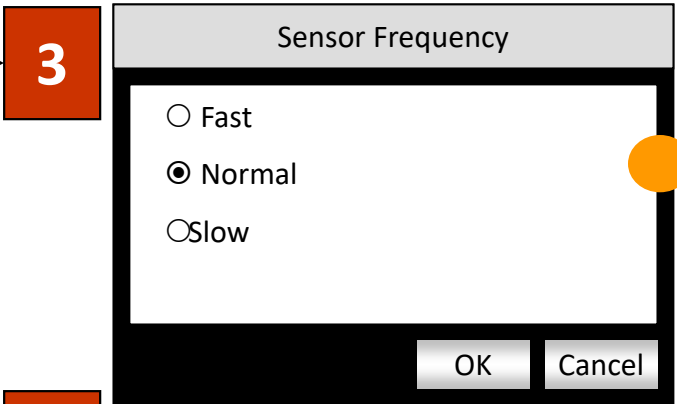
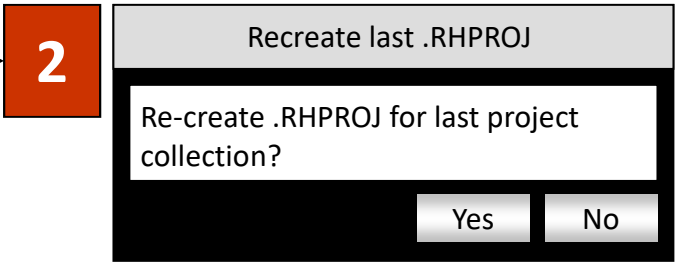
2



Home > Setup > Log

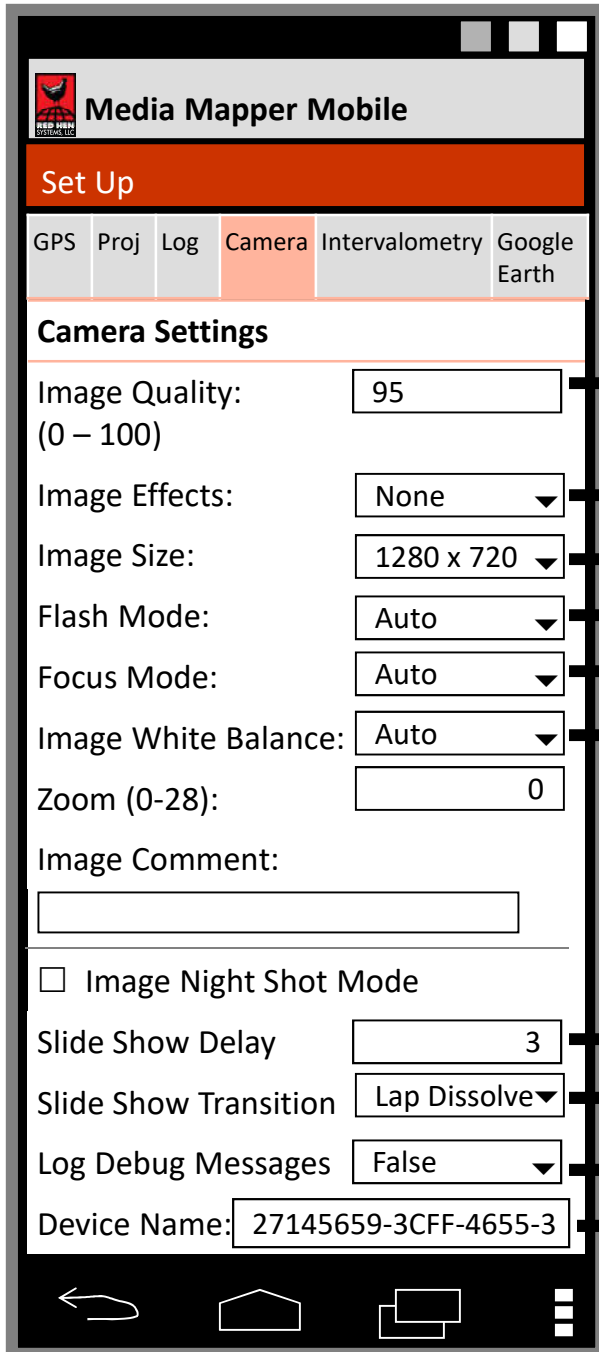


1 Press Setup from Home screen.
Then press Log tab.



4 Keyboard appears at bottom of screen

Home > Setup > Camera



1 Press Setup from Home screen.
Then press Camera tab for Camera Settings screen to appear.

Numbered windows appear on the next page.

Home > Setup > Camera > pop-up windows

2 Keyboard appears at bottom of screen

4

3

Image Effects

- None
- Mono
- Negative
- Aqua
- Blackboard
- Posterize
- Sepia
- Solarize
- Whiteboard

Grouped and alphabetized for ease of reading

OK Cancel

Image Size

- 320 x 240
- 480 x 480
- 640 x 480
- 800 x 600
- 1024 x 768
- 1280 x 720
- 1290 x 960

Grouped for ease of reading

OK Cancel

7

5

Flash Mode

- Auto
- On
- Off

OK Cancel

6

Focus Mode

- Auto
- Infinity

OK Cancel

Image White Balance

- Auto
- Custom
- Daylight
- Incandescent
- Fluorescent
- Cloudy
- Shade
- Twilight

Grouped and alphabetized for ease of reading

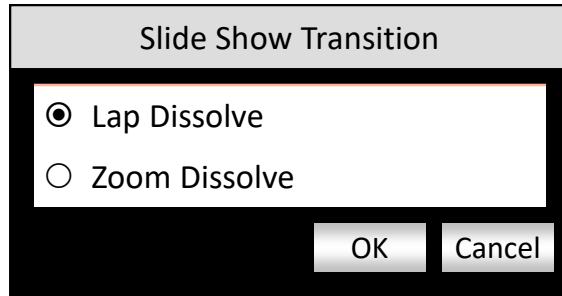
OK Cancel

Home > Setup > Camera > pop-up windows (*continued*)

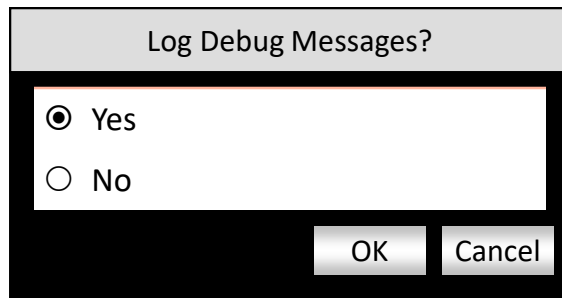
8

Keyboard appears at bottom of screen

9



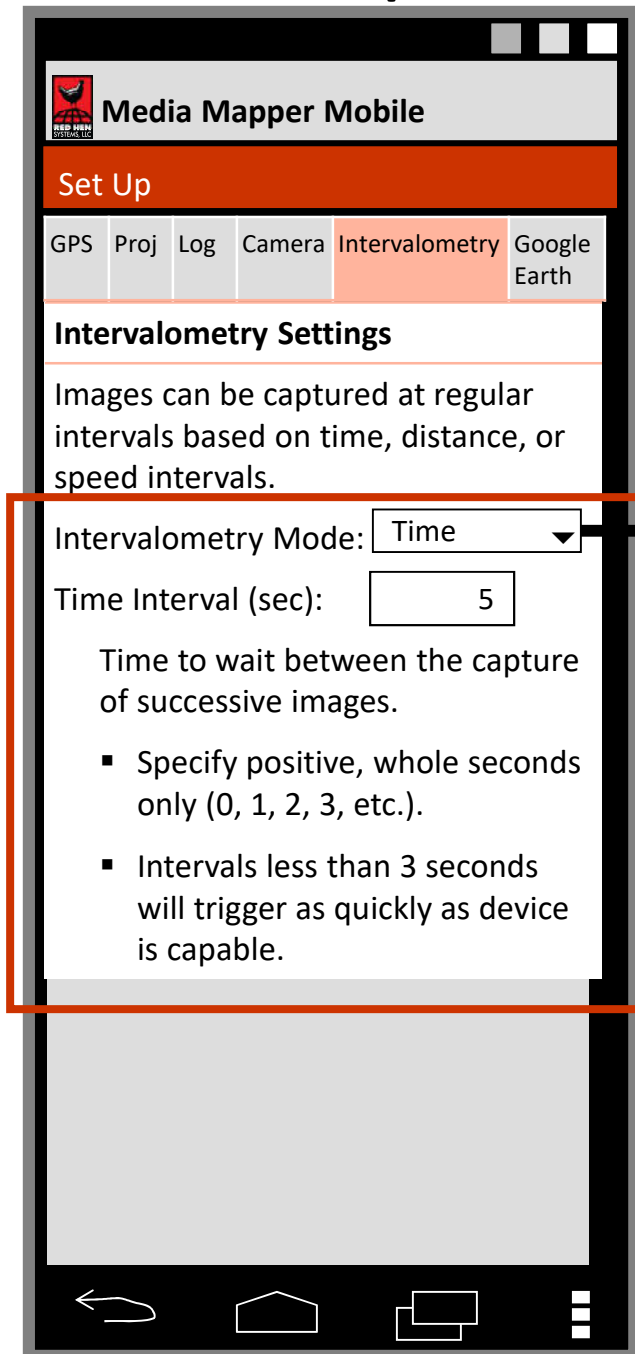
10



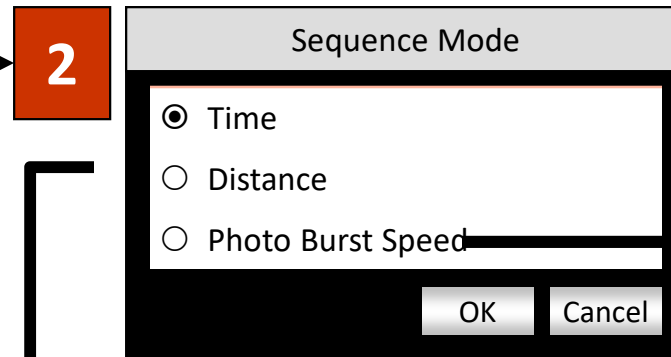
11

Keyboard appears at bottom of screen

Home > Setup > Intervalometry



1 Press Setup from Home screen.
Then press Sequence tab for Image Sequence Settings screen to appear.



Based on the Sequence Mode you select, the rest of the Image Sequence Settings screen changes. (as indicated by RED rectangles)

2

Intervalometry Mode:

Distance Interval (m):

Distance to move (as measured by GPS) between the capture of successive images.

- Specify positive whole meters only (0, 10, 20, 30, etc.).
- If you specify an invalid value, a 100 meter interval will be used by default.
- An interval less than 10 meters may cause the camera to trigger unreliably due to GPS jitter and inaccuracy.

Intervalometry Mode:

Minimum Speed (kph):

Vehicle speed above which images will be captured.

- Specify 0 to capture Photo Burst images regardless of speed.
- Specify a value greater than 0 to record Photo Burst images only when the device is moving faster than the specified speed.

Home > Setup > Google Earth

Media Mapper Mobile

Set Up

GPS Proj Log Camera Intervalometry **Google Earth**

Google Earth Tour Settings

MediaMapper Mobile creates Google Earth Tour kml and kmz files with image sequences, audio, and GPS location details.

Camera Altitude (m): ?

Camera Tilt (deg): ?

Fly To Time (sec): ?

Photo Overlay Altitude: ? (m)

Photo Overlay Tilt (deg): ?

Photo Overlay Roll (deg): ?

Image Direction Method:

#8 window appears on next page.

1 Press Setup from Home screen. Then press Google Earth tab. Press **?** to get to Help windows (#2-#7). This simplifies the screen.

2 ? **Camera Altitude**

Height above the ground (meters) of the tour camera.

Close

5 ? **Photo Overlay Altitude**

Height above the ground (meters) of the image sequence photos

Close

3 ? **Camera Tilt**

Tilt angle (degrees) of the tour camera. 90 is look ahead and 0 is look down.

Close

6 ? **Photo Overlay Tilt**

Tilt angle (degrees) of the image sequence photos. 90 is vertical and 0 is horizontal. Leave blank to use actual tilt angle recorded for each image.

Close

4 ? **Fly To Time**

Time (seconds) to fly between image sequence photos. Enter a negative value (i.e. -10) to use actual recorded elapsed time,

Close

7 ? **Photo Overlay Roll**

Roll angle (degrees) of the image sequence photos. 0 is horizontal. Leave blank to use actual roll angle recorded for each image.

Close

- 2**
- 3**
- 4**
- 5**
- 6**
- 7**
- 8**

Keyboard appears at bottom of screen

Home > Setup > Google Earth > Image Direction Method

8

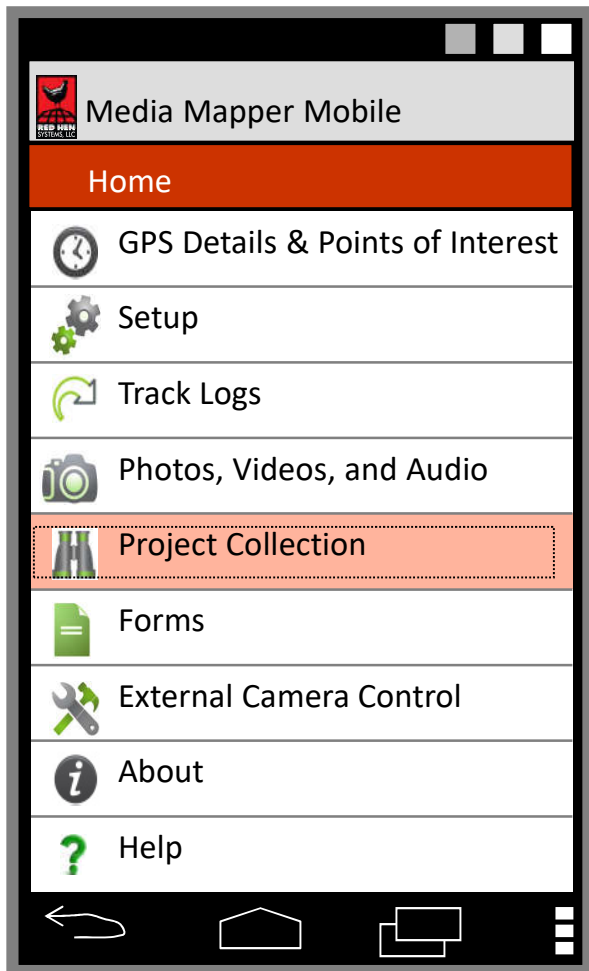
Image Direction Method

You can use the **GPS Bearing** or the device **Compass** to determine the direction the image sequences photos are facing. Compass can be unreliable when affected by magnetic fields.

- Bearing
- Compass

Close

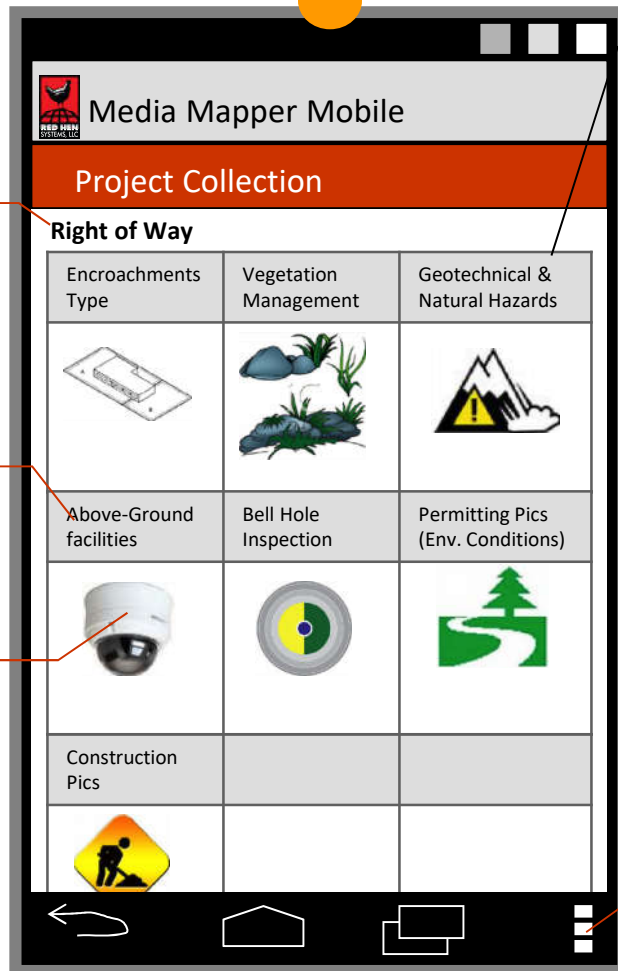
Home > Project Collection screen



Category grouping

Category title

Category icon



I recommend using a table format and white background to get category icons and titled to line up better

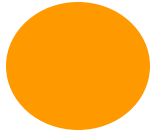
Menu options:

- Collection Details
- Start Collection
- Record Audio
- Re-create Last RHPROJ

1 Select Project Collection.

2 The Project Collection screen appears . Each Category Grouping is identified by bold text followed by a table with a white background. Each Category icon appears in a separate table cell.

Home > Project Collection > Collection Details



Collection Details

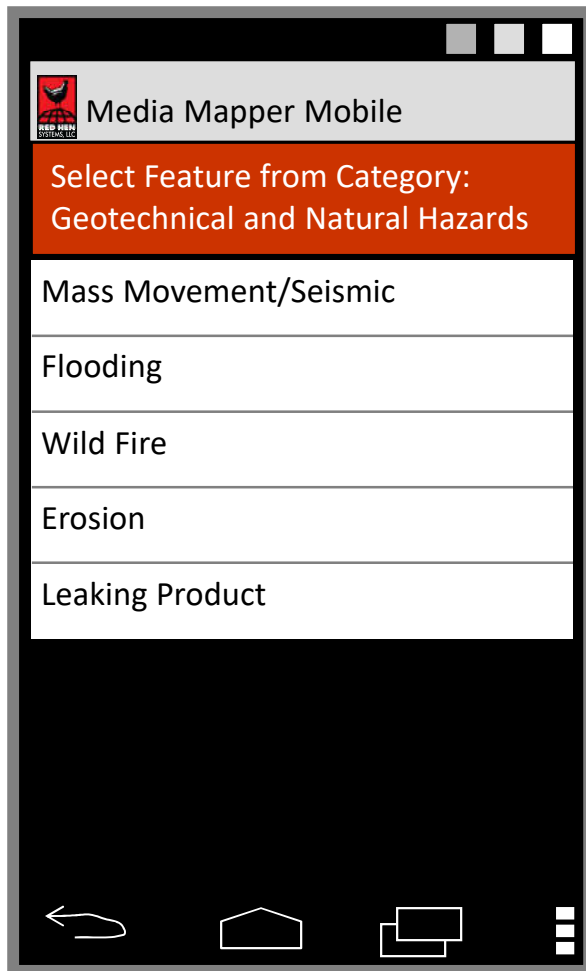
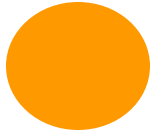
User/Collector Initials:	MER
Country Code:	US
Collection ID:	007
Collection Name:	Hazards
Collections:	???

Prompt to record audio notes.

OK Cancel



Home > Project Collection > Select Category

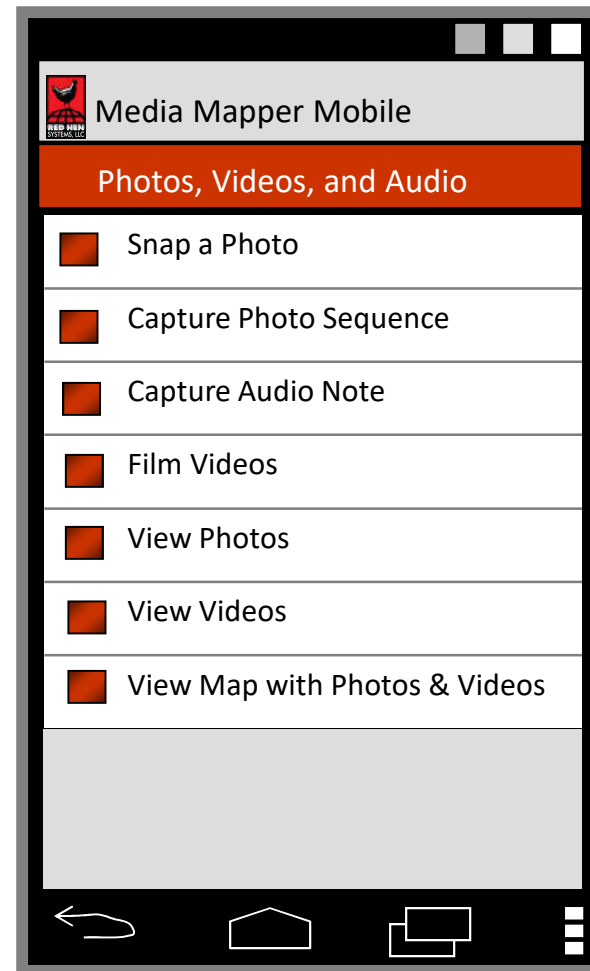
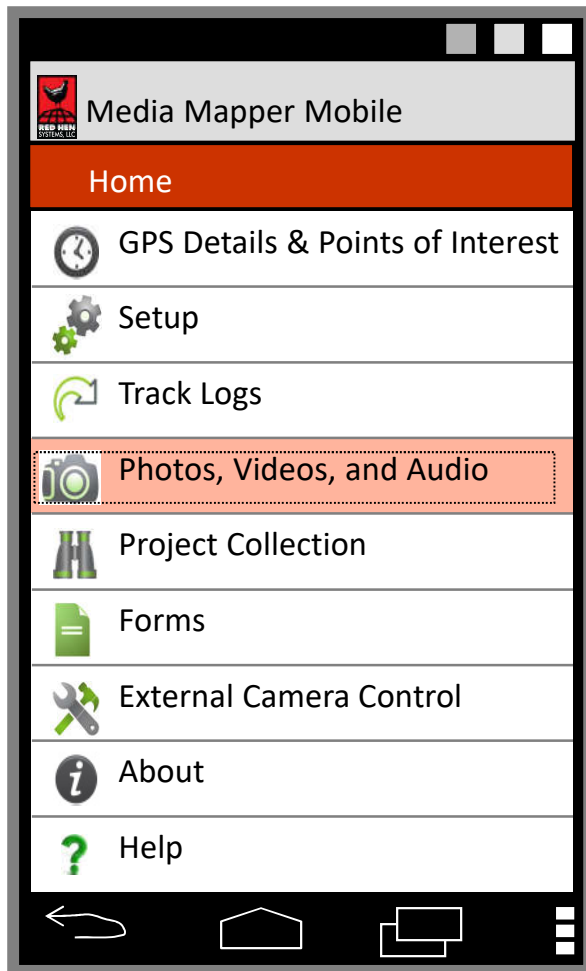


The screen looks like this once you select a category icon – you see all the features associated with the selected category.

You can then press any of the features to take a photo.

If “Prompt to record audio notes” was earlier checked on the Collection Details screen, you will also be prompted to record an audio note.

Home > Photos, Videos, and Audio screen



1

Select Photos, Videos, and Audio.

2

The Photos and Videos screen appears . Each item would have an icon to the left, and when clicked would behave as it does today).