User Manual

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Introduction

Laelaps® was designed to function easily on your smart phone or tablet with the tap of a few buttons. We encourage you to spend a few moments getting familiar with the Laelaps® components, downloading the LaelApp application and reading this User Guide. In no time, you will be tracking your dog *anywhere with ease.* No complicated handheld devices or searching for functions. Swipe. Tap. Easy… Laelaps® is *All About the Dog*!

Personal Device System Requirements

- Bluetooth 4.0 or higher
- Android 4.4 or higher
- iOS 6 or higher

⚠ WARNING!

Review the Safety and Product Information found in the Laelaps® box for important product warnings and other safety information.

Your Laelaps® System includes:

(1) Transceiver
(1) Transceiver
(2) Charging pins
(2) Mini-USB wires

Charging Your Laelaps ® Transceiver and Collar

Prior to using Laelaps, we recommend a four hour charge for each Transceiver and Collar.

For best performance and longer component life, clean and dry the Charging Pin contacts and USB port before each use.

FIDO (Function, Input & Device Output) Panel:

Located on the side of the Transceiver and Collar housings, the FIDO Panel charges and powers the devices On/Off. LED lights indicate important communication interactions and charging status. The FIDO Panel functions the same for the Transceiver and Collar.

1. Attach the standard USB connection of the mini USB cable to a power source (1A current or higher recommended)
2. Attach the mini USB connection into the back of the Charging Pin
3. Align Charging Pin magnets with the FIDO Panel pins, allowing the magnets to connect the devices.
4. A solid Green LED on the FIDO Panel indicates successful connection.

A full charge is advised before each trip or day spent in the field. Laelaps Batteries are designed to last up to 30 hours. Starting a trip with fully charged batteries extends system life and reduces the possibility of losing your dog(s). Keep the phone or tablet running the LaelAPP fully charged as practical. Minimal use of other phone or tablet functions is encouraged to prolong battery life.

IT'S ALL ABOUT THE DOG...

Laelaps® Hardware Operations:

⚠WARNING

Laelaps® Transceivers and Collars utilize flexible NiTi antennas for durability & optimal reception. Users should exercise caution when operating these devices to prevent injury to the User or others in the vicinity or to the dog. Keep Laelaps® away from small children.

Collar

IMPORTANT - Turn on Collar(s) before the Transceiver to acquire GPS signal, preferably outside. GPS acquisition will take longer & use more power indoors.

Power on and Advertise:

1. Press the button on the Collar FIDO Panel once to Power On.

2. Left LED light on Collar will indicate 3 slow green LED flashes and then proceed to rapid flashing green LED.
3. Rapid flashing green LED indicates the Collar is advertising and ready to connect to a Transceiver.
4. Repeat steps 1-3 for each Collar that will be tracked during your activity (Laelaps® tracks up to 10 Collars).

Collar(s) can be re-advertised by pressing the button again to start rapid green LED flashes

Power Off:

1. Hold down the button on the FIDO Panel for 5 seconds until the Collar flashes 3 red LED flashes and release. This turns the Collar off.

Transceiver

Power on and Advertise:

1. Press the button on the Transceiver FIDO Panel once to Power On.

2. Left LED light on Transceiver will indicate 3 slow green LED flashes and then proceed to rapid flashing green LED.
3. Rapid flashing indicates the Transceiver is advertising and can be connected to the LaelApp. The Transceiver will continue advertising until is it connected.

Power Off:

1. Hold down the button on the FIDO Panel for 5 seconds until the Transceiver shows 3 red LED flashes and release. This turns the Transceiver off.

⚠WARNING

Laelaps® Transceivers and Collars contain lithium-ion batteries. Store these devices away from direct sunlight or extreme heat to avoid the possibility of personal injury or device damage. Do Not Attempt to Access the Batteries!

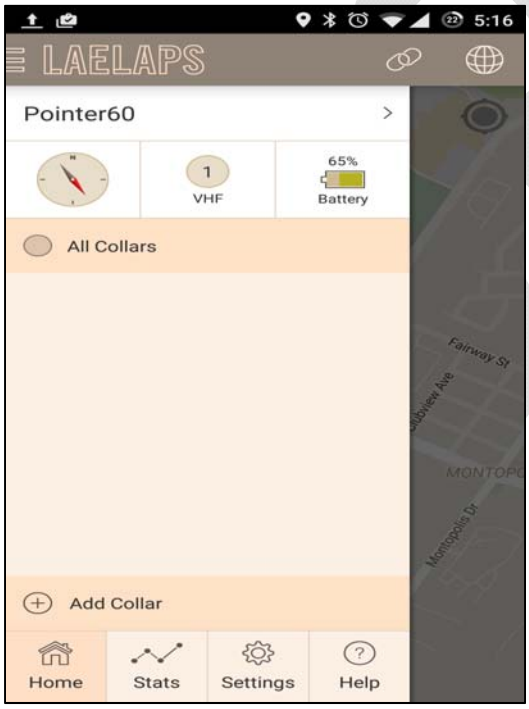
Laelaps® LaelApp Operation

Laelaps® requires the LaelApp to be downloaded to a user Android or iOS device. This can be obtained by scanning the barcode link at the end of this manual or by searching for “Laelaps” in the Play Store for Android or App Store for iOs.

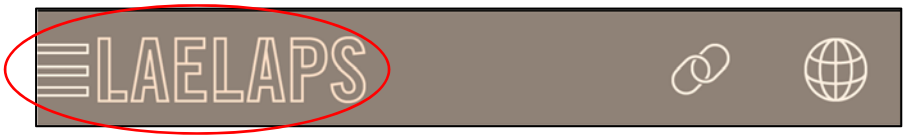
Upon first use, you will be asked to enter your Product ID Number and click on Product Registration. Answer a few quick questions about your dog and the dog’s activities to activate the 1 year limited warranty.

The LaelApp has been designed to be powerful but simple and intuitive to use. It can also run in the background and allow normal use of your phone or table while still tracking your dog. You can use live maps or download maps ahead of time for use without internet connection.

LaelApp Menu



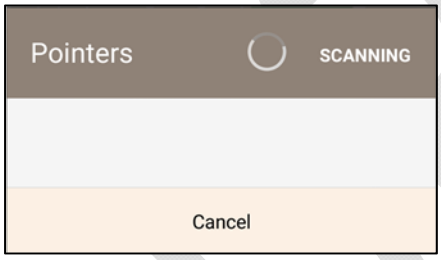
Most interaction with the devices will take place in the LaelApp Menu pictured above. This is easily accessed at any time by swiping from the left side of your screen to the right or tapping the 3 lines and Laelaps name in the LaelApp Menu bar



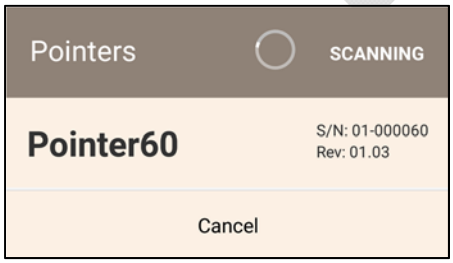
Connecting to the Transceiver

1. Make sure Transceiver is advertising (rapid green LED flashes— see "Transceiver - Power on and Advertise" page 5)
2. Tap chain icon  in the top right corner of LaelApp menu bar.

3. This opens the Transceiver connection window.



4. Tap Transceiver name when it appears in pop up box. NOTE: Transceiver names can be changed after connecting (see "Changing Transceiver Name" page 10)

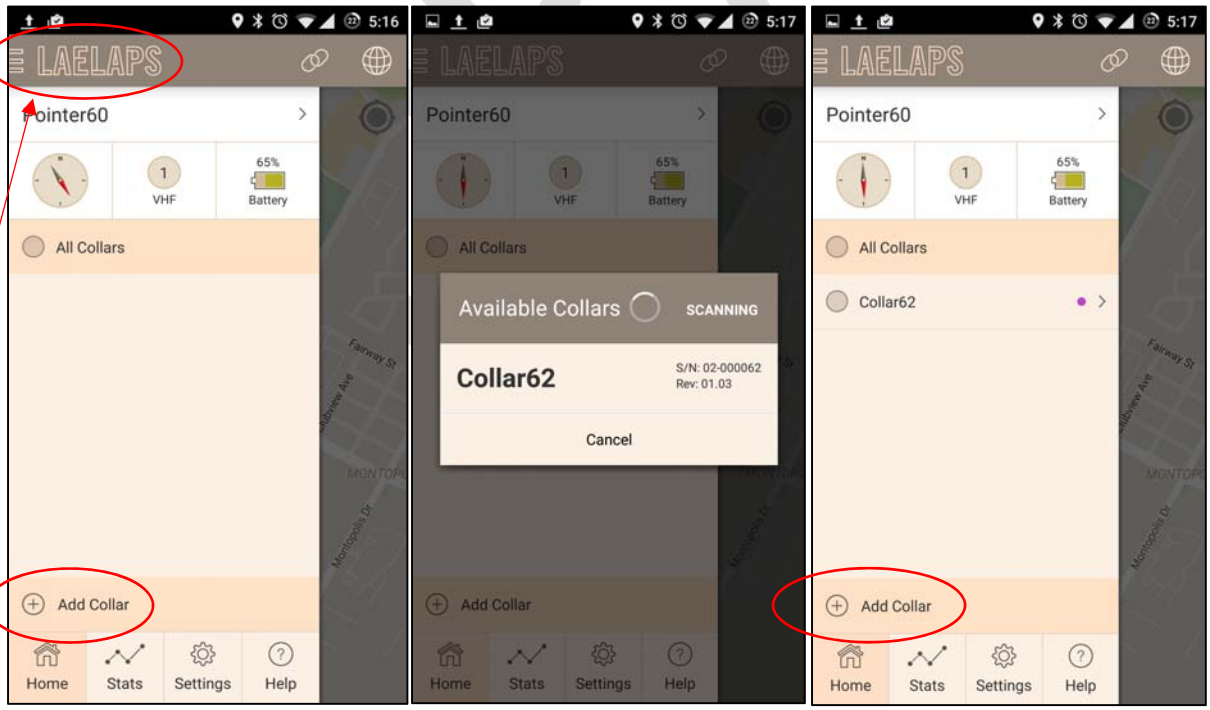


5. Successful connection changes the chain icon to  in the menu bar.

Adding and connecting to a Collar

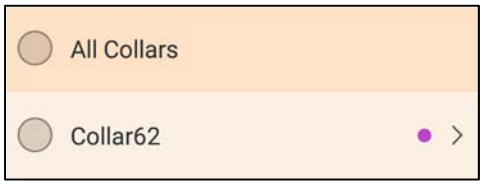
1. Make sure Collar is advertising (rapid green LED flashes – see "Collar – Power on and Advertise, page 5).
2. After the Transceiver has located a Collar, swipe from left side of the screen to the right or tap the Menu icon  in the upper left corner xz to bring up the LaelApp Menu.
3. Tap **<Add Collar>** at the bottom of the Collar Menu
4. Tap the Collar name in the pop up box that appears. NOTE: Collar names can be changed after connecting (see "Changing Collar Name" page 10)
5. Collar will appear in the Collar Menu.
6. Repeat for any additional Collars
7. For reference, the sequence is illustrated below:

Steps 2-3 **Step 4** **Step 5**



Creating a Radio Connection

1. After connecting Collar(s) to the Transceiver (see "Adding and connecting to a Collar" page 8), open LaelApp Menu (Page 7)
2. In Collar Menu either tap the **<All Collars>** bubble at the top to activate all connected Collars or tap the bubble on the far left for an individual Collar.

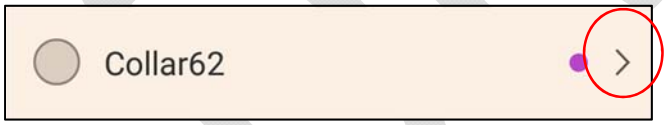


3. Bubbles will turn green when radio is connected.

4. Red LED lights will flash on Collar(s) and Transceiver FIDO Panel indicating successful connection.
5. The Collar GPS icon  will appear on map when position is acquired.

Deleting a Collar from a Transceiver

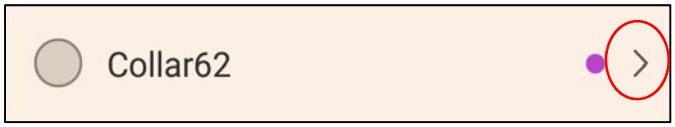
1. Access the LaelApp Menu. (Page 7)
2. Tap the arrow **>** to the right of the individual Collar name in the Collar Menu.



3. Tap **<Delete This Collar>**.

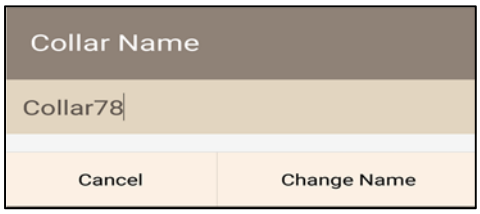
Changing a Collar Name

1. Access the LaelApp Menu. (Page 7)
2. Tap the arrow **>** to the right of the individual Collar name in the Collar Menu.



3. Tap **<Edit Name>** in upper right corner of LaelApps bar on next menu page.

4. Type in your choice of name in the popup box that appears.



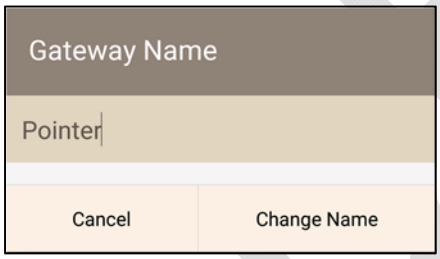
5. Tap <Change Name> to complete

Changing a Transceiver Name

1. With the Transceiver connected to LaelApp (see Connecting to the Transceiver on page 8), access the LaelApp Menu. (Page 7)
2. Tap the arrow **>** to the right of the Transceiver Name in the LaelApp Menu.

3. Tap **<Edit Name>** in upper right corner of LaelApp app bar on next menu page.

4. Type in your choice of name in the popup box that appears.



5. Tap **<Change Name>**.

Using Laelaps® Maps

⚠WARNING

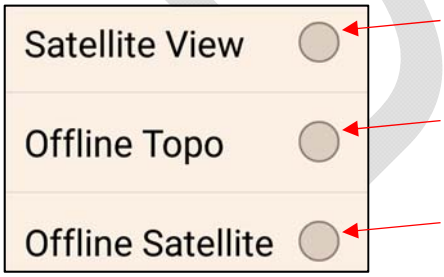
Laelaps® maps and mapping functions are intended for recreational use only. The User bears full responsibility for awareness of their actual location and familiarity with the area. In case of emergency, the User should be aware of current location and notify local authorities.

NOTE:

1. Place your finger on the device screen and move it around to move the map location.
2. Spread 2 fingers on the map to zoom in and pinch 2 fingers to zoom out.
3. Tap the screen 2 times to zoom 2x.
4. Center the map over the Transceiver by tapping this symbol in the top right of the screen. 

Changing Map View

1. Tap globe icon  at the top right corner of the LaelApp menu bar.
2. From the dropdown menu choose from Satellite or Offline options if previously downloaded and tap the circle on the right to select (see “Capturing Maps for Offline Use page 11).



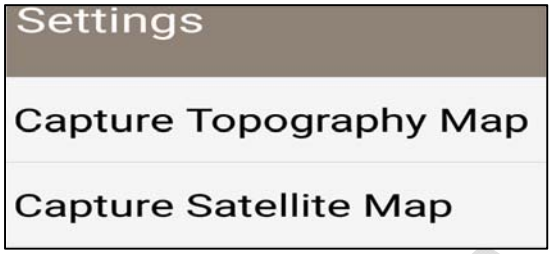
3. Selected map will appear

Capturing Maps for Offline Use

Maps must be downloaded ahead of time to be used offline. We recommend a stable high speed internet connection for quickest download

1. Locate the area you want to have available for offline mapping on LaelApp map screen.
2. Access the LaelApp Menu (Page 7).
3. In LaelApp Menu tap **<Settings>** 

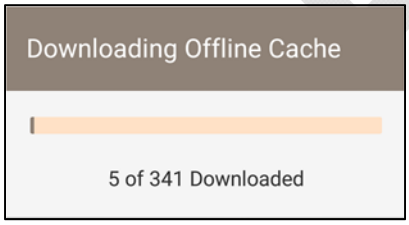
icon at the bottom.
4. Choose either **<Capture Topography Map>** or **<Capture Satellite Map>.**



5. Once you have chosen the map type and the area tap “Capture Topo” or “Capture Satellite” in the top right corner of the screen in the Laelaps app menu bar pictured below 

6. This brings up the Map Set name dialog box pictured below; Tap **<Type New Map Set name>** to assign a name to the downloaded map area.

7. This brings up a status bar that show download progress picture below



8. When map is downloaded you will get a LaelApp notification  in you device’s Notification drawer and an Offline Cache Download Complete notification if you swipe down

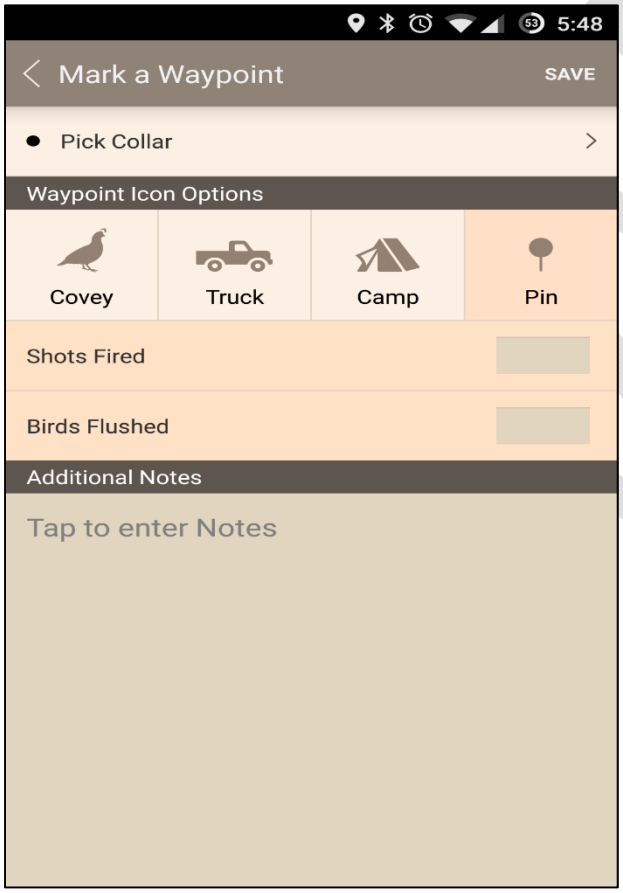
9. The downloaded map will also appear on the screen.

Waypoints

Keep track of the events and places you encounter with your dog with Laelaps® easy-to-use waypoint (pin drop) system.

Adding a Waypoint

1. Tap the map where you would like to set a waypoint.
2. This menu will appear:



3. Tap **<Pick Collar>** if you want to associate the waypoint with a specific Collar (not required).
4. Tap one of the pre-programmed waypoint options **<Covey>, <Truck>, <Camp>** or **<Pin>** to drop these waypoints on the map

5. You can also track Shots Fired or Birds Flushed or input personal notes in **<Additional Notes>** by tapping these areas and inputting numbers or notes
6. Tap **<Save>** at the top right of the screen and your waypoint will appear on the map.

Tapping a waypoint on the map brings up the information recorded for that particular mark.

Deleting a Waypoint

1. Tap an existing waypoint on the map
2. Tap **<Delete>** in the top right corner of the waypoint data screen.

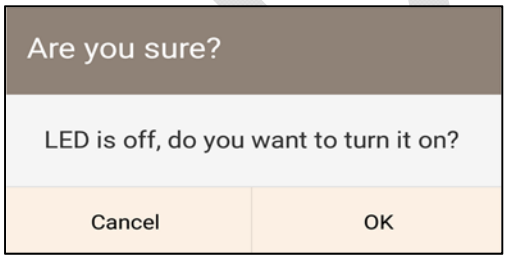
Turning the LED Light On and Off

Laelaps® bright LED light located on the GPS housing on the Collar assists in finding your dog in poor light conditions.

1. Access the LaelApp Menu (Page 7).
2. Tap the arrow **>** at the right of the individual Collar name in the Collar Menu.

3. Tap the bubble next to **<LED Beacon>**.

4. Answer **<OK>** to the following question.



5. The LED light on Collar's GPS housing will begin flashing.

   You can turn the LED off using the same steps.

Path Replays

Laelaps® allows the User to replay the path each collar has traveled for a specific period of time.

1. Access the LaelApp Menu. (Page 7)
2. Tap **<Stats>** icon 

at the bottom of the Collar Menu.
3. Tap **<Review Stats>** to specify times on a calendar or Stat Log to pull up most recent activity. 

4. **<Review Stats>**: choose a Start and End time on the **<Calendar>**; **<Stat Log>** choose the event you want to replay.
5. Choose how fast the replay goes (X2, X10, X100) at the bottom of the screen.
6. 

7. Tap Play  to start
8. Individual Collar paths can be viewed or hidden by tapping their individual bubble at the top of the playback window.

How Laelaps® Works

Laelaps® utilizes VHF radio on the unlicensed MURS frequencies to communicate the GPS position from the dog Collar to the Transceiver. The Transceiver then uses Bluetooth Low Energy to communicate the Collar's GPS position to the User's smart phone or tablet.

How to get the best range and GPS signal

VHF radio range

Laelaps® has the highest VHF output allowed by MURS law which will yield over 10 miles in ideal conditions. It should be noted that hills and major elevation changes, trees, power lines, and other electronic nuisances can impede VHF signal and diminish results.

Here are some tips to maximize the range of the Laelaps system

- **Use outdoors for best results:**
- **Position antennas as vertically as possible:** this maximizes the antenna efficiency and allows for the widest spectrum of radio reception.
- **Elevate the Transceiver when practical:** the higher you raise the Transceiver the better (within BLE range).

GPS signal

GPS signal is influenced by overhead obstructions. Laelaps® acquires its coordinates from the many GPS satellites orbiting in Earth's atmosphere and optimal results are achieved outside with a clear sky. In most situations, Laelaps® will acquire a position but it may take up to 1 minute in less than ideal conditions. Once a signal is acquired it is much easier to maintain a GPS position.

APPENDIX A

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

This device complies with Part 15 of the FCC rules and operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.

— Increase the separation between the equipment and receiver.

— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

— Consult the dealer or an experienced radio/TV technician for help

Your device is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. The FCC has established criteria for the amount of radio frequency energy various products may produce depending on their intended usage. This product has been evaluated and found to comply with the FCC's exposure criteria.

Body worn operation of the Laelaps Pointer met the FCC RF exposure guidelines. Use of metallic accessories may not ensure compliance with FCC RF exposure guidelines and should be avoided.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

This device must not be co-located with other transmitters.

IMPORTANT NOTE:

The antennas used for the collar transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be located or operating in conjunction with any other antenna or transmitter.

Les antennes utilisées pour l'émetteur du collier doit être installé en considérant une distance de séparation de toute personnes d'au moins 20 cm et ne doivent pas être localisé ou utilisé en conflit avec tout autre antenne ou transmetteur.

IMPORTANT WARRANTY INFO—SIGN UP THROUGH LAELAPS APP OR **WWW.LAELAPSCOLLARS/WARRANTY** TO ACTIVATE 1 YEAR LIMITED WARRANTY*