MODEL ID:
E L 0 0 I G

VERSION 4

e-LOOP

IN-GROUND

INSTRUCTION MANUAL



VISIT OUR WEBSITE AT HTTPS://ELOO.PS FOR VIDEOS, TROUBLESHOOTING & MORE DOCUMENTATION

DOWNLOAD THE E-CONNECT APP
FOR ACCESS TO ADVANCED SETTINGS & DIAGNOSTICS. AVAILABLE ON **ANDROID & IPHONE**

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Radio Specifications

Frequency	433.39MHz
Modulation	FSK
Bit Rate	100kbps
Bandwidth	50kHz
Antenna Type	PCB
Nominal Output Power	14dBm
Receive Sensitivity	-126.2dBm
Security	128-Bit AES Encryption
Spurious Emissions	30 - 1000MHz: < -56dBm 1 - 12.75GHz: < -44dBm 1.8 - 1.9GHz: < -58dBm 5.15 - 5.3GHz: < -51dBm

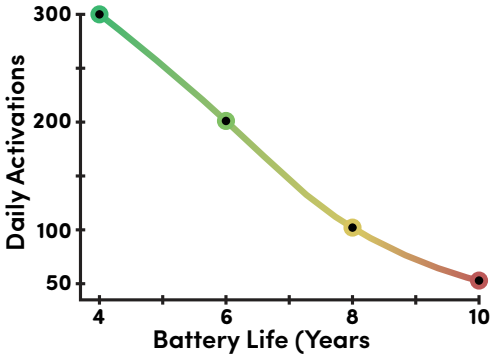
Power, Physical & Environment

Power	1 x 3.6V 14500mAh
Dimensions	224 x 224 x 36mm
Weight	300g
Environment	• Designed for in ground mounting • **IP68** Ingress Protection
Operating Temp	-40°C - 80°C
Standby Power	14µA
Activation Power	40µA

Compliance

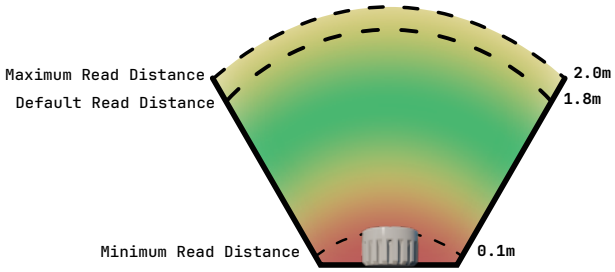
Safety	Tested to CE RoHS
EMC	Tested to: EN 301 489-1 V2.2.3 "ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for ElectroMagnetic Compatibility" Including a)_Emissions to EN 55032 "Electromagnetic compatibility of multimedia equipment". b)_Transmitter and receiver test to EN 300 220-1 V3.1.1 'Short Range Devices (SRD) operating in the frequency range 25MHz to 1000MHz; Part 1: Technical Characteristics and methods of measurement". c)_Immunity Tests to EN 301 489-1

Battery Life vs. Daily Activations



NOTE: Battery Life is dependent on many factors, including daily activations, time used per activation, radar range & external conditions.

Radar Read Distance

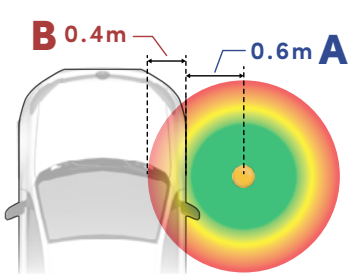


Radar detection range defaults to 0.1m - 1.6m, with a 60° FOV. Radar maximum range can be increased to a maximum of 3m. Any vehicles outside of the radar FOV can latch the e-LOOP for a default of 5 minutes.

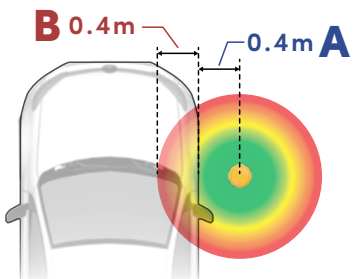
Sensitivity Settings

e-LOOPs are capable of multiple sensitivity levels. High, Medium & Low. This dictates the level of side-on-detection available. It is always recommended to mount an e-LOOP sensor centrally to the typical driving path & encourage drivers to only drive directly over the sensor.

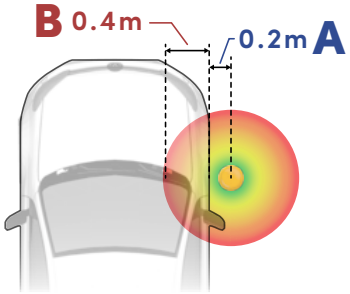
High



Medium



Low

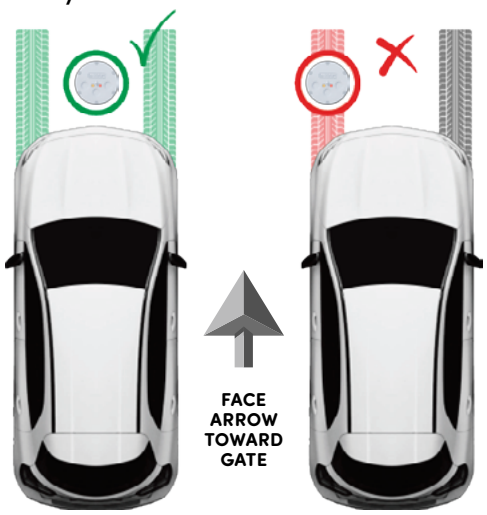


A: Detection Range
B: Unreliable Detection

e-LOOP Fitment/Setup Notes

1. Mounting Location

Ensure e-LOOP Sensor is fitted centrally to the most frequently driven path. This avoids unnecessary drive-overs.



2. Electrical Interference Warning

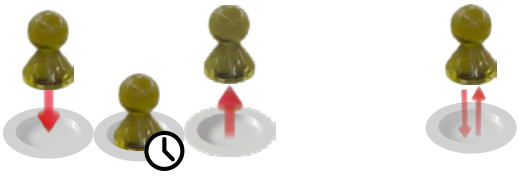
Do not mount e-LOOP sensor in close proximity to high voltage cables. E.g powerlines. Electromagnetic interference may affect e-LOOP functionality.



3. Interacting with the e-LOOP Using the Included Magnet

When interacting with e-LOOP magnetic buttons, note the difference between "Hold" & "Tap"

"HOLD" **"TAP"**



4. Unit Fitment



Fig. 1 Do Not Mount in a flood area. Unit cannot detect whilst submerged.

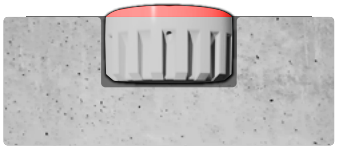


Fig. 2 Ensure you mount flush with surface to avoid unwanted damage.

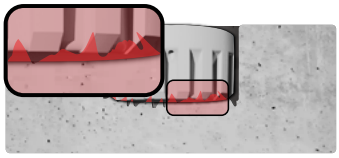
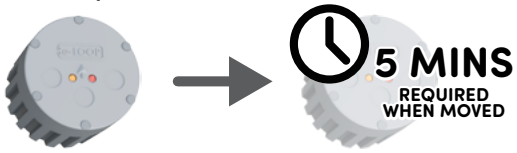


Fig. 3 Do not mount on uneven, jagged surfaces.

5. Moving Calibrated e-LOOP

Once Calibrated, the e-LOOP will require re-calibration when moved. Otherwise a 5-minute wait time is required for the sensor to automatically calibrate.



6. Operation Mode Definitions

The e-LOOP is capable of 3 operation modes

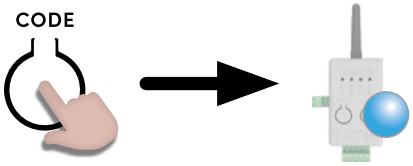
- **EXIT MODE**: Sends a single pulse trigger to receiver upon detection.
- **PRESENCE MODE**: Latches receiver relay while loop is active.
- **PARKING MODE**: Same behaviour as Presence mode, slower response & lower power use.

NOTE: Do not use presence mode as a personal safety function, it is designed for operation only for use with vehicles not pedestrians.

Step 1 - Coding to e-TRANS

Option 1 | Short Range Coding

1. Press the CODE button on the e-TRANS, the Blue Light will illuminate.

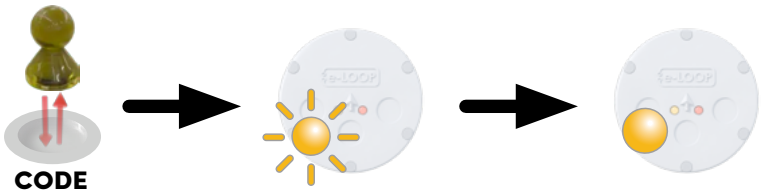


2. Tap the magnet in the CODE recess. e-LOOP Yellow Light will flash & e-TRANS Blue Light will flash 3 times. Indicating a successful pairing.

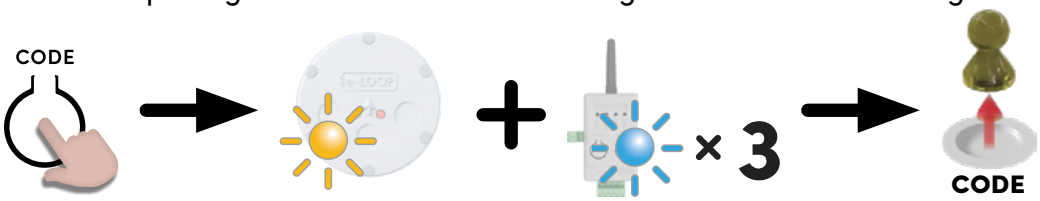


Option 2 | Long Range Coding

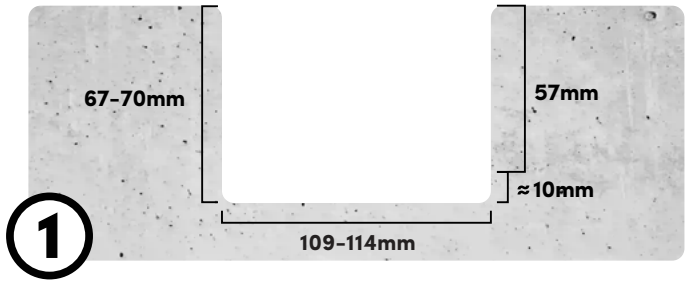
1. Tap the magnet in the CODE recess of the e-LOOP. The Yellow Light will flash once, then illuminate solid.



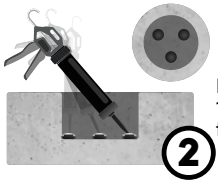
2. Go to the e-TRANS, press the CODE Button. The e-TRANS Blue Light will illuminate. Remove finger from CODE Button, e-TRANS Blue Light will flash 3 times. The e-LOOP Yellow Light will flash. Indicating a successful pairing. Both e-TRANS & e-LOOP Lights will turn off returning to normal operations.



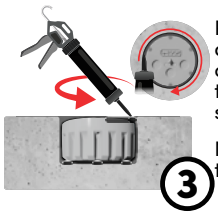
Step 2 - Mounting



Core Bore a 110mm hole, 67-70mm deep. Clean the lower surface of any debris or rough edges, ensure surface is level.



Deposit 3 drops of silicon adhesive approx. 10mm diameter in a triangular pattern at the base of the hole.



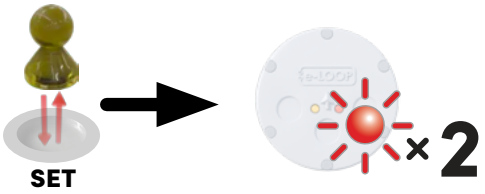
Place e-LOOP unit into the hole, press firmly down until the e-LOOP is flush with the top of the hole. Run a bead of adhesive between the unit & the edge of the hole. Ensuring it seals completely.

NOTE: Do not over-fill the cavity, seal only the top to allow for movement.

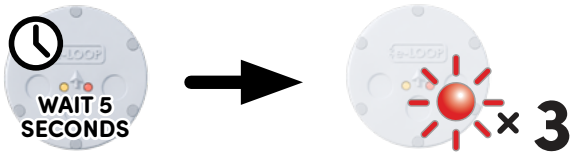
ALWAYS FIT IN ACCORDANCE WITH FITMENT NOTES. FAILURE TO DO SO MAY VOID WARRANTY

Step 3 - Calibration

1. Remove any metallic objects from near the e-LOOP sensor.
2. Tap the magnet in the SET recess. The Red Light will flash 2 times.



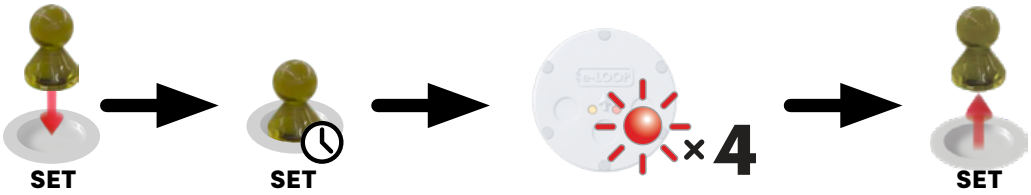
3. The e-LOOP will take about 5 seconds to calibrate, once complete the Red Light will flash 3 times.



NOTE: After calibration you may get an error indication.
ERROR 1: Low Radio Range: Yellow Light flashes 3 Times.
ERROR 2: No Radio Connection: Yellow & Red Lights flash 3 Times

Un-Calibration

Hold magnet in set recess on e-LOOP, until Red Light flashes 4 times. e-LOOP is now un-calibrated.



Connecting with e-CONNECT App

The e-CONNECT Mobile Application is available for both Android & iPhones. Download to access advanced settings & diagnostics.

Download on the Google Play

Download on the App Store

Step 1.

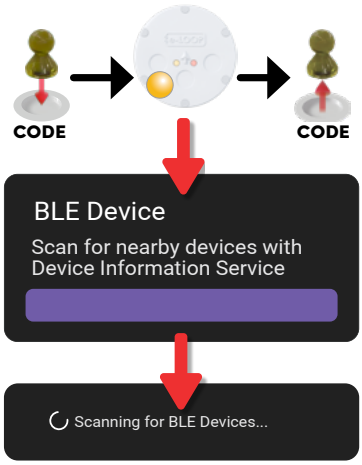
Open the e-CONNECT mobile application

Allow all requested device permissions (bluetooth, wifi, etc)

Tap the magnet on the CODE recess of your e-LOOP. Yellow Light will illuminate solid.

Press “Scan for Devices”

Allow the application a moment to scan for devices

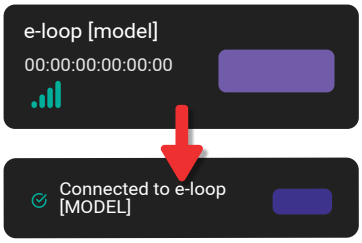


Step 2.

Once e-LOOP appears in the app, tap connect to complete the connection

Once a successful connection has been established you will be shown a summary of the unit.

You are now ready to make your desired changes.



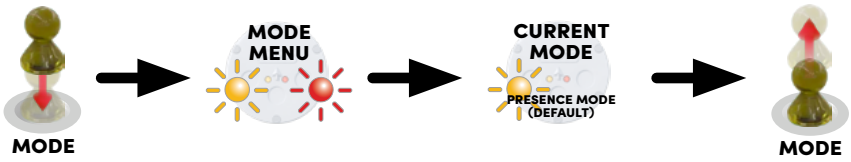
Changing Mode

The e-LOOP has 3 modes. Exit, Presence & Parking. These modes can be changed physically or via the e-CONNECT App.

⚠ **NOTE: DO NOT USE PRESENCE MODE AS A PERSONAL SAFETY FUNCTION, IT IS DESIGNED FOR OPERATION ONLY FOR USE WITH VEHICLES NOT PEDESTRIANS.**

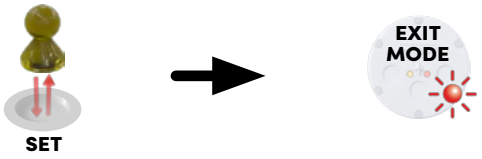
Entering Menu

Place magnet in e-LOOP MODE recess. Both Lights will flash once. Leave magnet on MODE recess until current mode is displayed.



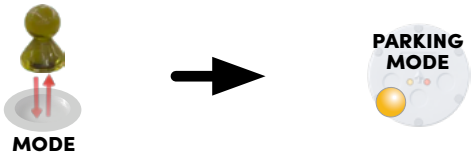
Exit Mode

Tap magnet in e-LOOP SET recess. Red Light will start flashing to indicate EXIT MODE.



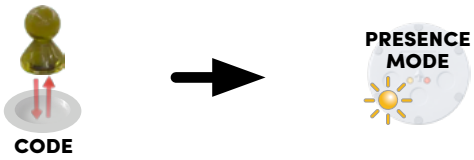
Parking Mode

Tap magnet in e-LOOP MODE recess. Yellow Light will illuminate solid to indicate PARKING MODE.



Presence Mode

Tap magnet in e-LOOP CODE recess. Yellow Light will start flashing to indicate PRESENCE MODE.



Confirmation Mode

To enter the Confirmation Menu, select the desired operation mode and wait 5 seconds for all LEDs to flash to confirm the selection.
NOTE: Vehicle must driver over sensor for this function. It is not capable of side-on detection.

1. Once in the Confirmation Menu, the Red Light will illuminate solid, indicating that Confirmation Mode is NOT enabled.



2. To enable Confirmation Mode, tap magnet into the e-LOOP CODE recess. all lights will illuminate solid, indicating Confirmation Mode is enabled



Once desired setting is selected, wait 5 seconds for the Confirmation menu to be exited automatically. All Lights will flash 3 times to indicate settings saved and menu exited.

Resetting e-LOOP to Factory Defaults

To reset the e-LOOP to factory defaults, hold the Magnet on the CODE recess for 10 seconds until the Yellow Light flashes 3 times.

