



# Wireless Vehicle Detection Systems

**"The e-LOOP replaces traditional wired inductive loops, saving time & increasing reliability"**



# AES

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**For low-traffic single residential/domestic settings.**

### Available Models:

**PRESENCE MODE WITH ADDED RADAR PROTECTION** (Holds gate open when a vehicle is over loop).

**OR**

**EXIT MODE**

### FEATURES



- Quick and easy installation.
- Small compact design (120mm x 120mm x 30mm high) (4.7" x 4.7" x 1.1").
- Static load capacity 2.5 Tonnes (2.7 US Tons).
- High-security 128-bit encryption.
- Range up to 50 meters (50 yards).

**Uses standard 1.5V AA Lithium batteries (included), 3-4 years of battery life depending on mode.**

#### Radio Specifications

Frequency	433.39 MHz
Modulation	FSK
Bitrate	9.6 kbps
Bandwidth	250 kHz
Antenna Type	PCB
Nominal Output Power	10 dBm
Receive Sensitivity	-126.2 dBm
Security	128-Bit AES Encryption
Spurious Emissions	<ul style="list-style-type: none"> <li>• 30 - 1000 MHz: &lt; -56 dBm</li> <li>• 1 - 12.75 GHz: &lt; -44 dBm</li> <li>• 1.8 - 1.9 GHz: &lt; -56 dBm</li> <li>• 5.15 - 5.3 GHz: &lt; -51 dBm</li> </ul>

#### Power, Physical and Environment

Power	4 * 3.6 V 2700ma
Dimensions	120*120*30mm (4.7"x 4.7" x 1.1")
Weight	500g (1.1 lbs)
Environment	<ul style="list-style-type: none"> <li>• designed for above ground mounting.</li> <li>• IP68 ingress Protection.</li> </ul>
Operating Temp	-40° to 80° C (-40°F to 176°F)
Standby Power	14µA
Activation Power	50mA

#### Compliance

Safety	Tested to CE Approval
EMC	<p>FSK Tested to: EN 301 489-1 V2.2. "ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for Electro Magnetic Compatibility" Including.</p> <p>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."</p> <p>c)_Immunity Tests to EN 301 489-1</p>

# e-Loop Mini Presence Mode

## EL00M-RAD

The Domestic/Light industrial Wireless Vehicle Detection System uses magnetometer sensors to detect the presence and movement of vehicles. These detections are transmitted to a nearby transceiver for gate activation.

The sensors are installed on the surface of entry or exit passages using concrete fasteners, contain two replaceable Lithium batteries, and can withstand passenger and light commercial vehicles. The gate or door controller must have a dedicated open input and auto close function enabled.

### Functions / Features

#### Lower power consumption

- Ultra-low power consumption

#### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration

#### Fast and simple installation

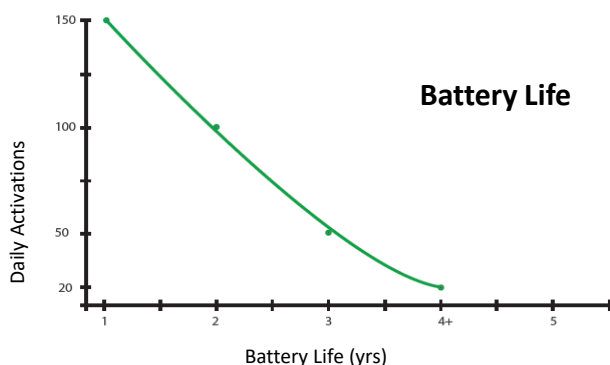
- Quick non-permanent installation

#### Up to 4 year battery life

- Compact design
- Compatible with various gates

#### Reliable radio communications with transceiver

- Reliable radio communication
- High security 128-Bit AES Encryption



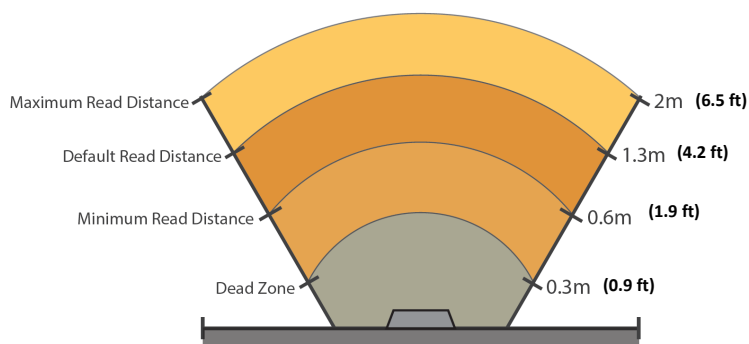
### Magnetometer Detection Areas

Varying the magnetic field detection zones. The grey area depicts a 0.6m (1.9 ft) high-sensitivity detection area surrounding the e-loop, suitable for most vehicles. The dark colour area depicts a 1m (3.2 ft) medium sensitivity detection area surrounding the e-loop, suitable for most vehicles. The light colour area depicts a 1.5m (4.9ft) low sensitivity detection area surrounding the e-loop, which is only suitable for some vehicles.

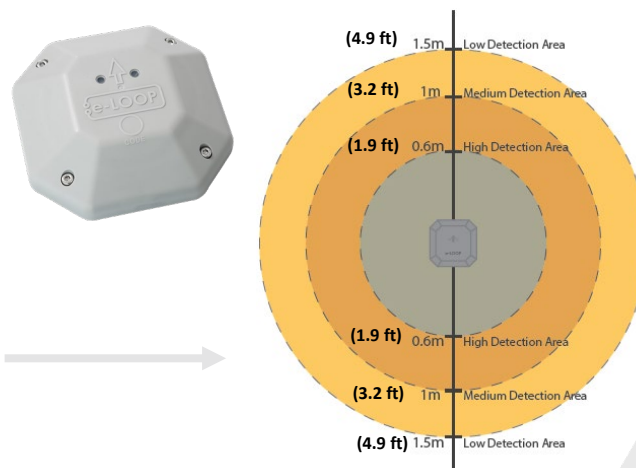
The sensors can detect vehicles that are stopped above the e-loop. The added radar utilises two-way radio communication protocol for reliable operation. Once the magnetometer sensor detects an oncoming vehicle, the transceiver relay will be latched, and confirmation will be sent back to the e-loop. If the magnetic field drops below the set threshold, the radar will check if a vehicle is present. If no vehicle is detected, an unlatch command is sent to the relay, and the transceiver will send a confirmation to the e-loop. If the confirmation is missed, multiple attempts will be made to ensure safe operation. Radar settings can be adjusted using the e-diagnostics remote. Settings that can be changed include; Dead zone, sensor distance, sensitivity, magnetic field release level, confirmation mode.

**DISCLAIMER: UNITS WITH THE PRESENCE FEATURE ARE NOT TO BE USED AS A SOLE SAFETY DEVICE & SHOULD BE USED IN CONJUNCTION WITH STANDARD GATE SAFETY PRACTICES.**

### Radar Read Distances



Radar detection range. Spanning from a 60° FOV from the e-loop, these are the range zones. The grey area depicts the dead zone, in which objects cannot be detected. The Minimum read distance is 0.6m (1.9 ft). The default read distance is 1.3m (4.2 ft), and the Maximum read distance spans up to 2m (6.5 ft).



# e-loop Mini EXIT Mode

## ELOOM

Domestic Wireless Vehicle Detection System uses magnetometer sensors to detect the presence and movement of vehicles. These detections are transmitted to a nearby transceiver for gate activation. The sensors are installed on the surface of entry or exit passages using concrete fixing bolts, contain two replaceable AA batteries, and can withstand almost any vehicle.

**Note:** Gate or door controller must have a dedicated open input and auto close function enabled.

### Functions / Features

#### Lower power consumption

#### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

#### Fast and simple installation

- Quick non-permanent installation

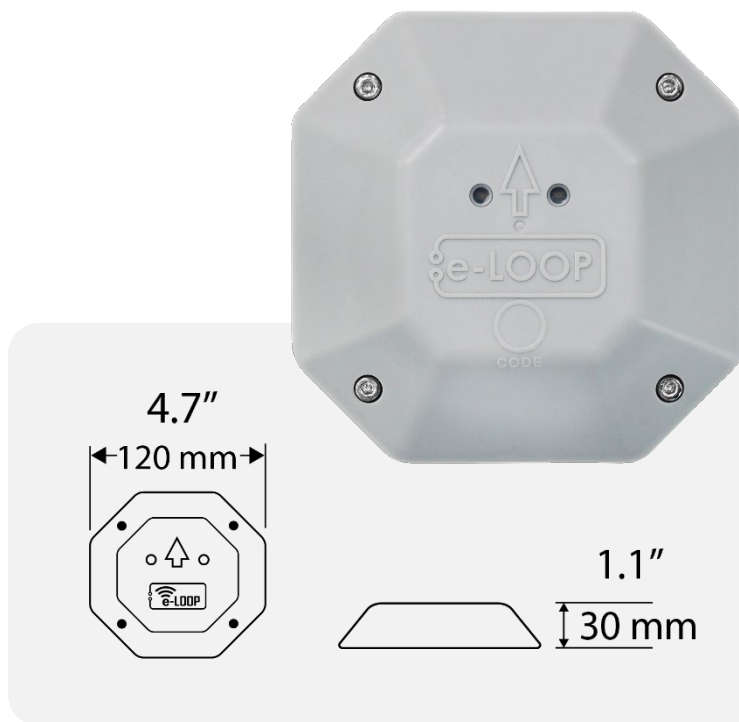
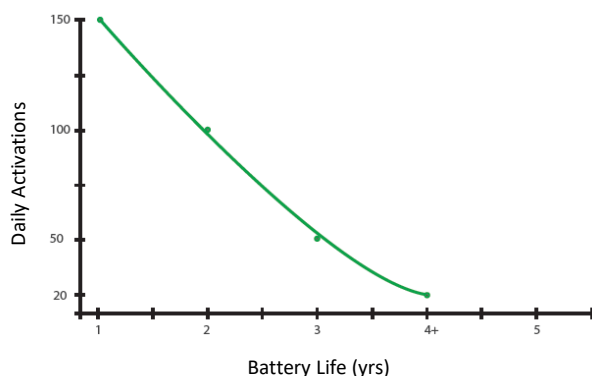
#### Up to 4 year battery life

- Compact design
- Compatible with various gates

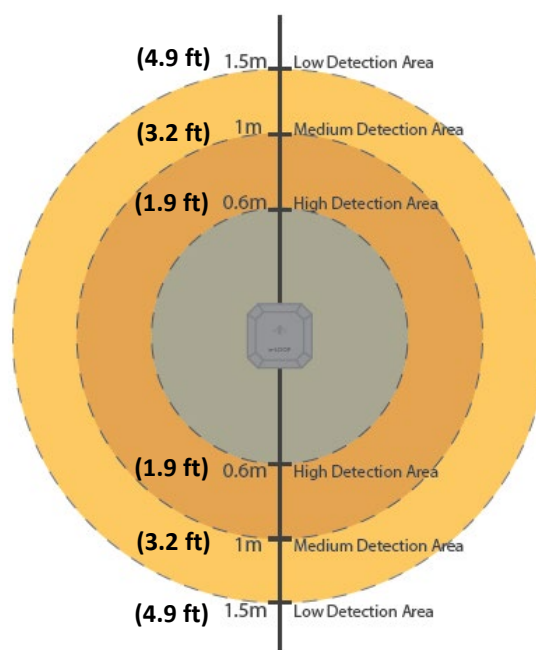
#### Reliable radio communications with transceiver

- Reliable radio communication
- High security 128-Bit AES Encryption

### Battery Life



### Magnetometer Detection Areas



1.6 yards = Low Detection Area.  
1 yard = Medium Detection Area.  
0.6 yard = High Detection Area.

### Battery Life vs Daily Activations

**Note:** Battery life is dependent on many factors, including daily activations, time used per activation, radar range and external conditions.

# e-Loop Mini Domestic kits

## PRESENCE MODE WITH ADDED RADAR PROTECTION.

Dual sensor technology: Magnetic field and Radar detection.

E-loop mini-Domestic **loop ONLY** PRESENCE MODE.

1 x e-Loop Mini Presence mode.

### EL00M-RAD



## EXIT MODE.

Magnetic field detection.

E-loop mini-Domestic **loop ONLY** EXIT MODE.

1 x e-Loop Mini Exit mode.

### EL00M



## Kits with Trans 50:

E-loop mini-Domestic **loop kit** PRESENCE MODE.

- 1 x e-Loop Mini Presence mode.
- 1 x E-Trans 50.
- 2 x Concrete fixing bolts.

### EL00M-RAD-K



E-loop mini-Domestic **loop kit** EXIT MODE.

- 1 x e-Loop Mini Exit mode.
- 1 x E-Trans 50.
- 2 x Concrete fixing bolts.

### EL00M-K



## Kits with Trans 100:

E-loop mini-Domestic **loop kit** PRESENCE MODE.

- 1 x 1 x e-Loop Mini Presence mode.
- 1 x E-Trans 100.
- 2 x Concrete fixing bolts.

### EL00M-RAD-KT



E-loop mini-Domestic **loop kit** EXIT MODE.

- 1 x e-Loop Mini Exit mode.
- 1 x E-Trans 100.
- 2 x Concrete fixing bolts.

### EL00M-KT



## Kits with Trans 200:

E-loop mini-Domestic **loop kit** PRESENCE MODE.

- 1 x e-Loop Mini Presence mode.
- 1 x E-Trans 200.
- 2 x Concrete fixing bolts.

### EL00M-RAD-KLT



E-loop mini-Domestic **loop kit** EXIT MODE.

- 1 x e-Loop Mini Exit mode.
- 1 x E-Trans 200.
- 2 x Concrete fixing bolts.

### EL00M-KLT







## Commercial Surface mount

### Available Models:

**PRESENCE MODE WITH ADDED RADAR PROTECTION** (Holds gate open when a vehicle is over loop).

**OR EXIT MODE**

#### Installation in 3 simple steps

1. Code in the e-Loop
2. Secure the e-Loop to the driveway
3. Calibrate the e-Loop... and you're ready to operate in less than 15 minutes.

Save many hours of installation time compared to wired loop systems.

### FEATURES

- Quick and easy installation.
- Compact profile – only 28mm high x 220mm diameter (1.1" x 8.6").
- High-security 128-bit encryption.
- Range 50 metres/yards.
- Static load capacity 10 Tonnes (11 US Tons).

**10600 mA battery (included) giving up to 6-10 years of battery life (depending on mode).**



#### Radio Specifications

Frequency	433.39 MHz
Modulation	FSK
Bitrate	9.6 kbps
Bandwidth	250 kHz
Antenna Type	PCB
Nominal Output Power	10 dBm
Receive Sensitivity	-126.2 dBm
Security	128-Bit AES Encryption
Spurious Emissions	<ul style="list-style-type: none"> <li>• 30 - 1000 MHz: &lt; -56 dBm</li> <li>• 1 - 12.75 GHz: &lt; -44 dBm</li> <li>• 1.8 - 1.9 GHz: &lt; -56 dBm</li> <li>• 5.15 - 5.3 GHz: &lt; -51 dBm</li> </ul>

#### Power, Physical and Environment

Power	4 * 3.6 V 2700ma
Dimensions	220*220*26mm (8.6" x 8.6" x 1.1").
Weight	1000g (2.2 lb)
Environment	<ul style="list-style-type: none"> <li>• designed for above ground mounting</li> <li>• IP68 ingress protection</li> </ul>
Operating Temp	-40° to 80° C (-40°F to 176°F)
Standby Power	14µA
Activation Power	50mA

#### Compliance

Safety	Tested to CE Approval
EMC	<p>FSK Tested to: EN 301 489-1 V2.2. "ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for Electro Magnetic Compatibility" Including.</p> <p>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."</p> <p>c) Immunity Tests to EN 301 489-1</p>

# Commercial e-loop Presence Mode

## EL00C-RAD

The Commercial Wireless Vehicle Detection System uses magnetometer sensors to detect the presence of oncoming vehicles. These detections are transmitted to a nearby transceiver for gate activation. After the vehicle is detected, the e-loop will switch to radar mode. The sensors are installed on the surface of entry or exit passages using concrete fixing bolts, contain four replaceable Lithium batteries, and can withstand almost any vehicle.

Note: Gate or door controller must have a dedicated open input and auto close function enabled.

### Functions / Features

#### Lower power consumption

#### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

#### Fast and simple installation

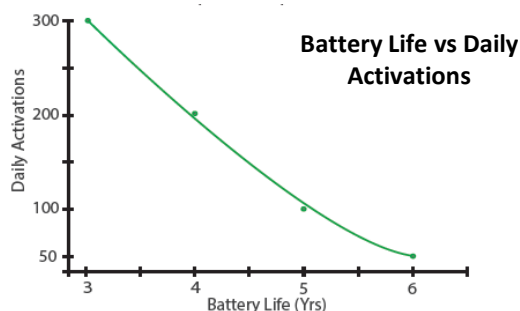
- Quick non-permanent installation

#### Up to 6 year battery life

- Compact design
- Compatible with various gates

#### Reliable radio communications with transceiver

- Reliable radio communication
- High security 128-Bit AES Encryption



Note: Battery life is dependent on many factors, including daily activations, time used per activation, radar range and external conditions.

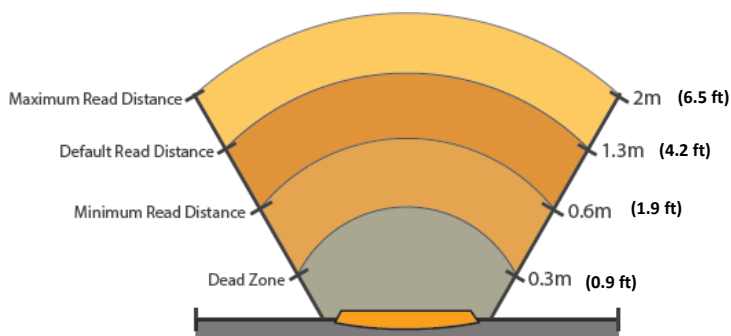
### Magnetometer Detection Areas

Varying the magnetic field detection zones. The grey area depicts a 0.6m (1.9 ft) high-sensitivity detection area surrounding the e-loop, suitable for most vehicles. The dark colour area depicts a 1m (3.2 ft) medium sensitivity detection area surrounding the e-loop, suitable for most vehicles. The light colour area depicts a 1.5m (4.9ft) low sensitivity detection area surrounding the e-loop, which is only suitable for some vehicles.

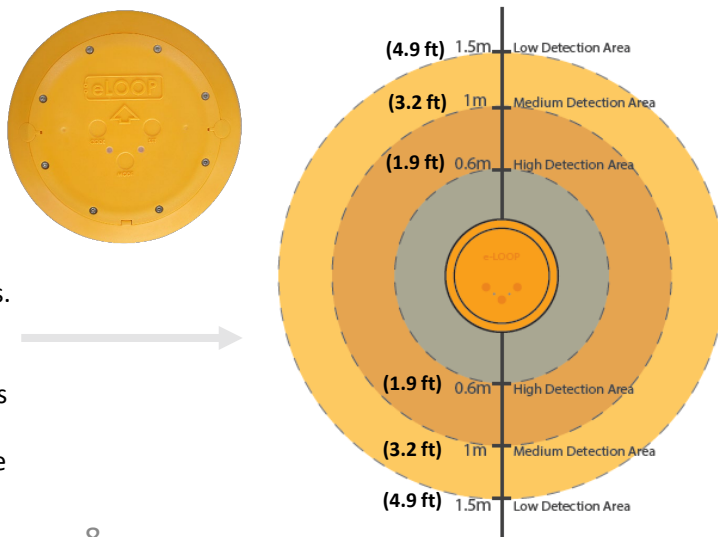
The Radar sensors can detect vehicles that are stopped above the e-loop. The added radar utilises a two-way radio communication protocol for reliable operation. Once the magnetometer sensor detects an oncoming vehicle, the transceiver relay will be latched and confirmation will be sent back to the e-loop. If the magnetic field drops below the set threshold, the radar will check if a vehicle is present. If no vehicle is detected, an unlatch command is sent to the relay, and the transceiver will send a confirmation to the e-loop. If the confirmation is missed, multiple attempts will be made to ensure A safe operation. Radar settings can be adjusted using the e-diagnostics remote. Settings that can be changed include; Dead zone, sensor distance, sensitivity, magnetic field release level, and confirmation mode.

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### Radar Read Distances



Radar detection range. Spanning from a 60° FOV from the e-loop, these are the range zones. The grey area depicts the dead zone, in which objects cannot be detected. The Minimum read distance is 0.6m (1.9 ft). The default read distance is 1.3m (4.2 ft), and the Maximum read distance spans up to 2m (6.5 ft).

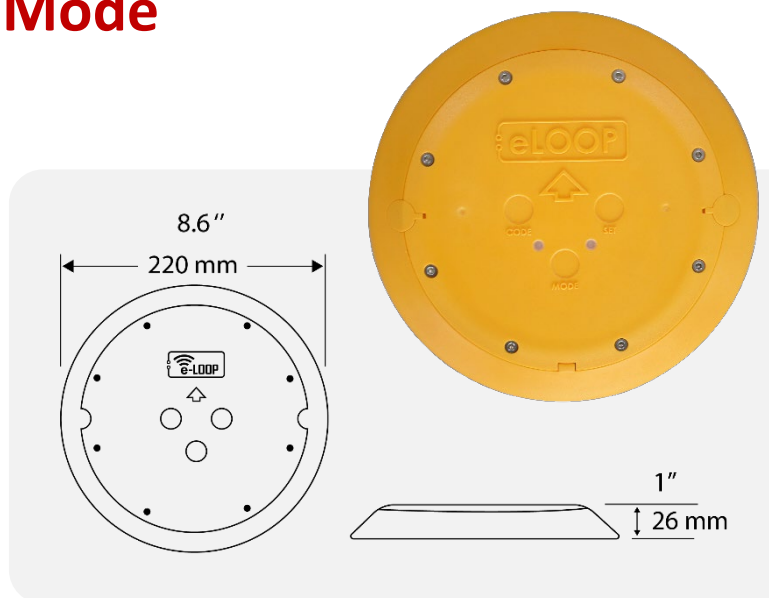




# Commercial e-loop EXIT Mode

## EL00C

The Commercial Wireless Vehicle Detection System uses magnetometer sensors to detect the presence of oncoming vehicles. These detections are transmitted to a nearby transceiver for gate activation. After the vehicle is detected, the e-loop will switch to radar mode. The sensors are installed on the surface of entry or exit passages using concrete fixing bolts, contain four replaceable Lithium batteries, and can withstand almost any vehicle.



Note: Gate or door controller must have a dedicated open input and auto close function enabled.

### Functions / Features

#### Lower power consumption

#### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

#### Fast and simple installation

- Quick non-permanent installation

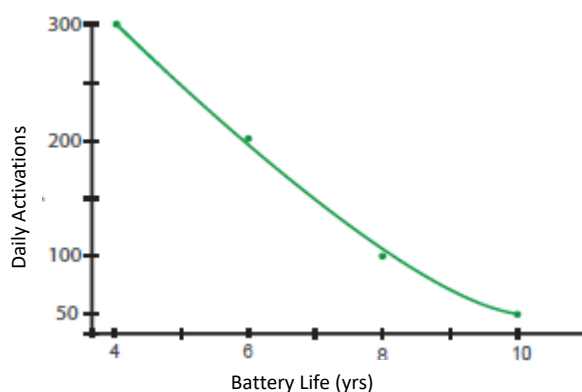
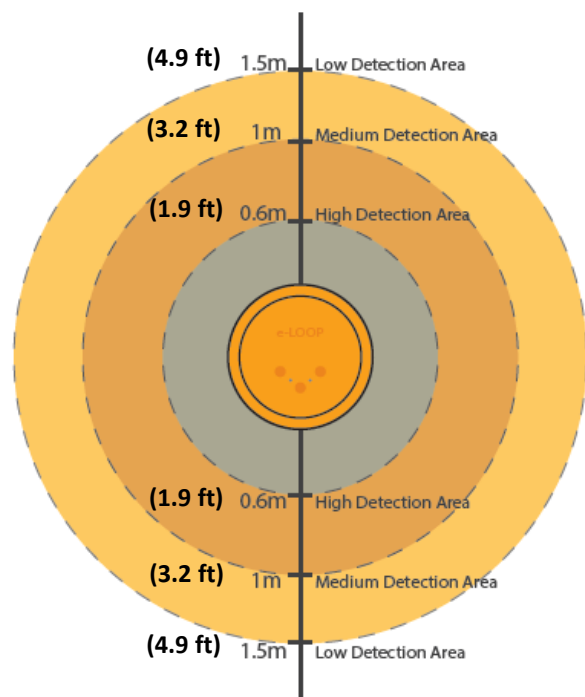
#### Up to 10 year battery life

- Compact design
- Compatible with various gates

#### Reliable radio communications with transceiver

- Reliable radio communication
- High security 128-Bit AES Encryption

### Magnetometer Detection Areas



### Battery Life vs Daily Activations

Note: Battery life is dependent on many factors, including daily activations, time used per activation, radar range and external conditions.

# e-LOOP Commercial surface kits

## **PRESENCE MODE WITH ADDED RADAR PROTECTION.**

Dual sensor technology. Magnetic field and Radar detection.

e-Loop Commercial Radar Loop **PRESENCE MODE.** (Loop only)

1 x e-Loop Commercial Presence mode.



**EL00C-RAD**

## **EXIT MODE.**

Magnetic field detection.

E-loop Commercial **EXIT MODE.** (Loop only)

1 x e-Loop Commercial mode Exit mode.



**EL00C**

## Kits with Trans 50:

e-Loop Commercial Radar Loop kit **PRESENCE MODE.**

1 x e-Loop Presence mode.

1 x e-Trans 50.

2 x Concrete fixing bolts.

1x Magnet.



**EL00C-RAD-K**

e-Loop Commercial Radar Loop kit **EXIT MODE.**

1 x e-Loop Exit mode.

1 x e-Trans 50.

2 x Concrete fixing bolts.

1x Magnet.



**EL00C-K**

## Kits with Trans 100:

e-Loop Commercial loop kit **PRESENCE MODE** with a 2-channel Transceiver.

1 x e-Loop Presence mode.

1 x e-Trans 100.

2 x Concrete fixing bolts.

1x Magnet.



**EL00C-RAD-KT**

e-Loop Commercial loop kit **EXIT MODE** with a 2-channel Transceiver.

1 x e-Loop exit mode.

1 x e-Trans 100.

2 x Concrete fixing bolts.

1x Magnet.



**EL00C-KT**

## Kits with Trans 200:

e-Loop Commercial loop kit **PRESENCE MODE** with an LCD Transceiver.

1 x e-Loop Presence mode.

1 x e-Trans 200.

2 x Concrete fixing bolts.

1x Magnet.



**EL00C-RAD-KLT**

e-Loop Commercial loop kit **EXIT MODE** with an LCD Transceiver.

1 x e-Loop exit mode.

1 x e-Trans 200.

2 x Concrete fixing bolts.

1x Magnet.



**EL00C-KLT**



## Commercial Inground

### Available Models:

**PRESENCE MODE WITH ADDED RADAR PROTECTION** (Holds gate open when a vehicle is over loop).

**OR EXIT MODE**

### Installation in 3 simple steps

1. Code in the e-Loop.
2. Core bore 89mm hole 70mm deep and secure using flexible mastic (3.5" hole 2.5" – 2.7" deep).
3. Calibrate the e-Loop... and you're ready to operate in less than 30 minutes.

**Save many hours of installation time compared to wired loop systems.**

### FEATURES

- Quick and easy installation.
- Recesses into the driveway - 55mm inground height x 89mm diameter (2.1" x 3.5").
- Not affected by ground movement.
- High-security 128-bit encryption.
- Up to 50 metres/yards range.
- Top access for changing the battery.

**14500 mA battery (included) giving up to 6-10 years of battery life (depending on mode).**

### Radio Specifications

Frequency	433.39 MHz
Modulation	FSK
Bitrate	9.6 kbps
Bandwidth	250 kHz
Antenna Type	PCB
Nominal Output Power	10 dBm
Receive Sensitivity	-126.2 dBm
Security	128-Bit AES Encryption
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### Power, Physical and Environment

Power	1 * 3.6 V 14500ma
Dimensions	89*55mm (2.1" x 3.5")
Weight	300g
Environment	<ul style="list-style-type: none"> <li>• designed for inground (flush) mounting</li> <li>• IP68 ingress Protection</li> </ul>
Operating Temp	-40° to 80° C (-40°F to 176°F)
Standby Power	14µA
Activation Power	50mA

### Compliance

Safety	Tested to CE Approval
EMC	<p>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 Electro Magnetic Compatibility" Including.</p> <p>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."</p> <p>c)_Immunity Tests to EN 301 489-1</p>



# Inground e-loop Presence Mode

## EL00IG-RAD

The Inground Wireless Vehicle Detection System uses magnetometer sensors to detect the presence and movement of vehicles. These detections are transmitted to a nearby transceiver for gate activation. The sensors are installed in the ground of entry or exit passages using sikaflex, contain a replaceable Lithium battery, and can withstand almost any vehicle. Gate or door controller must have a dedicated open input and autoclose function enabled.

### Functions / Features

#### Lower power consumption

#### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

#### Fast and simple installation

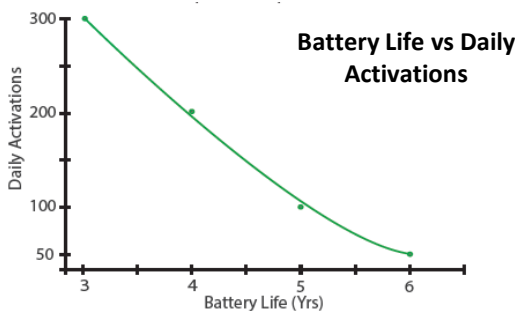
- Quick non-permanent installation

#### Up to 6 year battery life

- Compact design
- Compatible with various gates

#### Reliable radio communications with transceiver

- Reliable radio communication
- High security 128-Bit AES Encryption



**Note:** Battery life is dependent on many factors, including daily activations, time used per activation, radar range and external conditions.

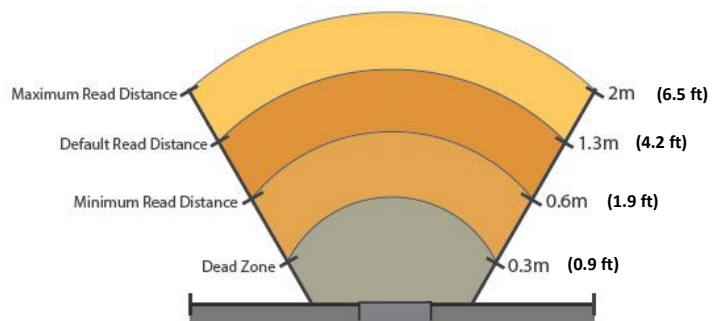
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Varying the magnetic field detection zones. The grey area depicts a 0.6m (1.9 ft) high-sensitivity detection area surrounding the e-loop, suitable for most vehicles. The dark colour area depicts a 1m (3.2 ft) medium sensitivity detection area surrounding the e-loop, suitable for most vehicles. The light colour area depicts a 1.5m (4.9ft) low sensitivity detection area surrounding the e-loop, which is only suitable for some vehicles.

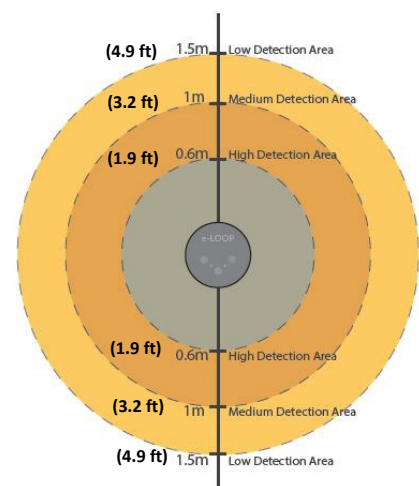
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**DISCLAIMER: UNITS WITH THE PRESENCE FEATURE IS NOT TO BE USED AS A SOLE SAFETY DEVICE & SHOULD BE USED IN CONJUNCTION WITH STANDARD GATE SAFETY PRACTICES.**

### Radar Read Distances



Radar detection range. Spanning from a 60° FOV from the e-loop, these are the range zones. The grey area depicts the dead zone, in which objects cannot be detected. The Minimum read distance is 0.6m (1.9 ft). The default read distance is 1.3m (4.2 ft), and the Maximum read distance spans up to 2m (6.5 ft).

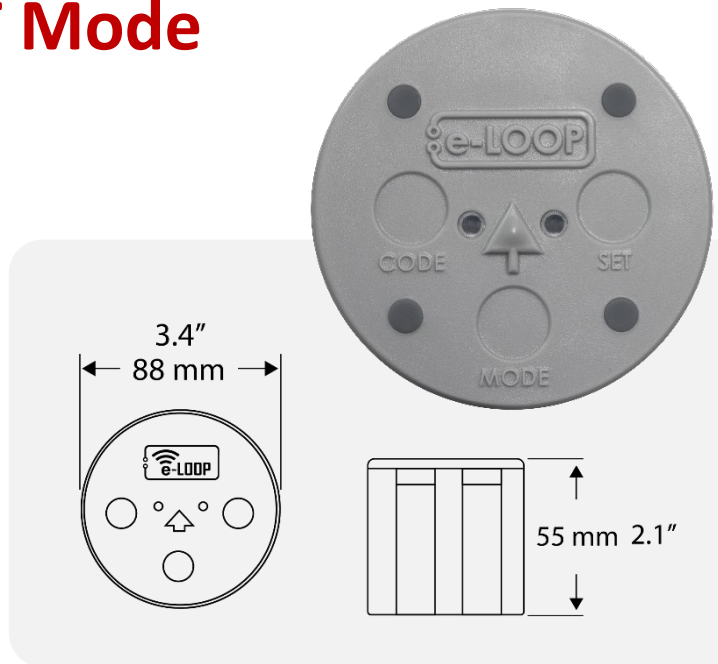


# Inground e-loop **EXIT Mode**

## **EL00IG**

The Inground Wireless Vehicle Detection System uses magnetometer sensors to detect the presence and movement of vehicles. These detections are transmitted to a nearby transceiver for gate activation. The sensors are installed in the ground of entry or exit passages using sikaflex, contain a replaceable Lithium battery, and can withstand almost any vehicle. Gate or door controller must have a dedicated open input and auto close function enabled.

Note: Gate or door controller must have a dedicated open input and auto close function enabled.



### Functions / Features

#### Lower power consumption

#### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

#### Fast and simple installation

- Quick non-permanent installation

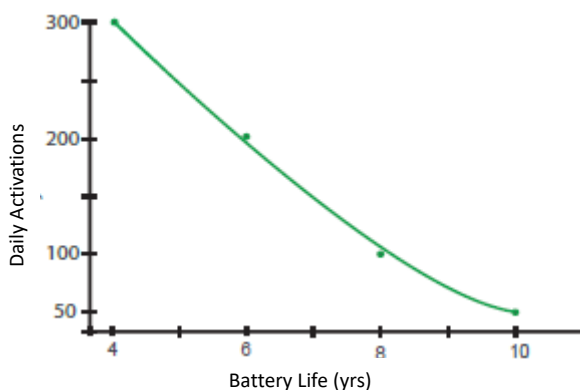
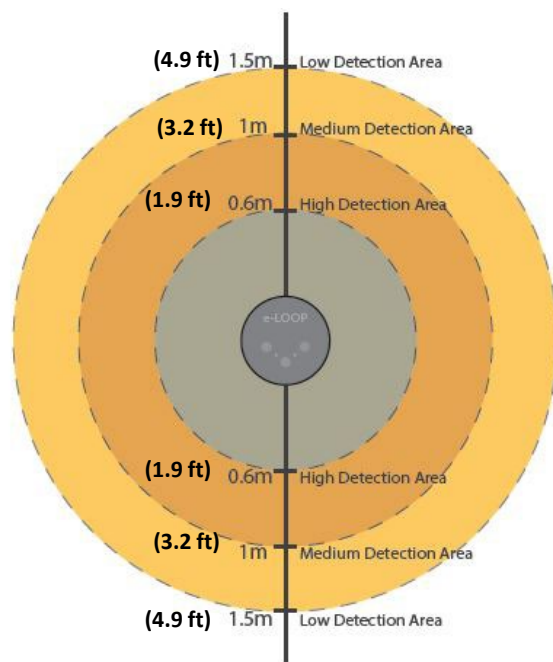
#### Up to 10 year battery life

- Compact design
- Compatible with various gates

#### Reliable radio communications with transceiver

- Reliable radio communication
- High security 128-Bit AES Encryption

### Magnetometer Detection Areas



### Battery Life vs Daily Activations

Note: Battery life is dependent on many factors, including daily activations, time used per activation, radar range and external conditions.

# e-LOOP Inground kits

## **PRESENCE MODE WITH ADDED RADAR PROTECTION.**

Dual sensor technology - magnetic field and Radar detection.

e-Loop Inground Radar Loop **PRESENCE MODE.** (Loop only)

1 x e-Loop Inground Presence mode.

**EL00IG-RAD**



## **EXIT MODE.**

Magnetic field detection.

E-loop Inground **EXIT MODE.** (Loop only)

1 x e-Loop Inground Exit mode.

**EL00IG**



## Kits with Trans 50:

e-Loop Commercial Radar Loop kit **PRESENCE MODE.**

1 x e-Loop Inground Presence mode.

1 x e-Trans 50.

1x Magnet.

**EL00IG-RAD-K**



e-Loop Inground Radar Loop kit **EXIT MODE.**

1 x e-Loop Inground Exit mode.

1 x e-Trans 50.

1x Magnet.

**EL00IG-K**



## Kits with Trans 100:

e-Loop Commercial Radar Loop kit **PRESENCE MODE** with a 2-channel Transceiver.

1 x e-Loop Inground Presence mode.

1 x e-Trans 100.

1x Magnet.

**EL00IG-RAD-KT**



e-Loop Inground Radar Loop kit **EXIT MODE** with a 2-channel Transceiver.

1 x e-Loop Inground Exit mode.

1 x e-Trans 100.

1x Magnet.

**EL00IG-KT**



## Kits with Trans 200:

e-Loop Inground Radar Loop kit **PRESENCE MODE** with LCD Transceiver.

1 x e-Loop Inground Presence mode.

1 x e-Trans 200.

1x Magnet.

**EL00IG-RAD-KLT**



e-Loop Inground loop kit **EXIT MODE** with LCD Transceiver.

1 x e-Loop Inground exit mode.

1 x e-Trans 200.

1x Magnet.

**EL00IG-KLT**







## Introducing the e-LOOP Wired system that has been designed for high operational sites.

The quick and easy solution to fitting wired induction loops. Just one simple line trace to cut or cover the wire with a cable cover for a complete surface mount option, without the need for any site work.

### Available Models:

**PRESENCE MODE WITH ADDED RADAR PROTECTION** (Holds gate open when a vehicle is over loop).  
**OR EXIT MODE.**



**Wires into gate board.**



### FEATURES

- Fully potted for 100% water protection.
- Wireless connection is still available for connection of diagnostic tools as per all the e-Loop range.
- High-security 128-bit encryption.
- Designed for above-ground and in-ground mounting.
- IP69.

### Radio Specifications

Frequency	433.39 MHz
Modulation	FSK
Bitrate	9.6 kbps
Bandwidth	250 kHz
Antenna Type	PCB
Nominal Output Power	10 dBm
Receive Sensitivity	-126.2 dBm
Security	128-Bit AES Encryption
Spurious Emissions	<ul style="list-style-type: none"> <li>• 30 - 1000 MHz: &lt; -56 dBm</li> <li>• 1 - 12.75 GHz: &lt; -44 dBm</li> <li>• 1.8 - 1.9 GHz: &lt; -56 dBm</li> <li>• 5.15 - 5.3 GHz: &lt; -51 dBm</li> </ul>

### Power, Physical and Environment

Power	12-24VDC Input
Dimensions	120*120*20mm (4.7" x 1.1" x 0.7" )
Weight	500g (1.1 lbs)
Environment	<ul style="list-style-type: none"> <li>• Designed for above-ground and in-ground mounting.</li> <li>• IP69 ingress Protection.</li> </ul>
Operating Temp	-40° to 80° C (-40°F to 176°F)
Standby Power	15mA
Activation Power	30mA

### Compliance

Safety	Tested to CE Approval
EMC	<p>FSK Tested to: EN 301 489-1 V2.2. "ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard for Electro Magnetic Compatibility" Including:</p> <p>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."</p> <p>c) Immunity Tests to EN 301 489-1</p>

# Wired e-loop Presence Mode

## EL00W-RAD

This wired Vehicle Detection System uses magnetometer sensors to detect the presence of oncoming vehicles. These detections are sent via a relay to the gate or other device that requires activation. The sensors are installed on the surface of entry or exit passages using concrete fixing bolts can be core bored into concrete or asphalt.

### Functions / Features

#### Lower power consumption

#### 3-axis magnetometer for vehicle detection

- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

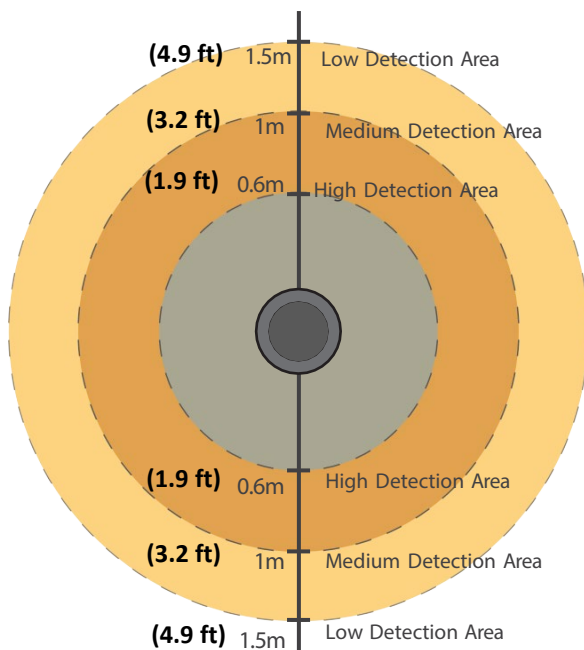
#### Fast and simple installation

- Quick non-permanent installation

#### Relay Outputs

- COM, N/O & N/C
- Supply voltage 12-24VDC

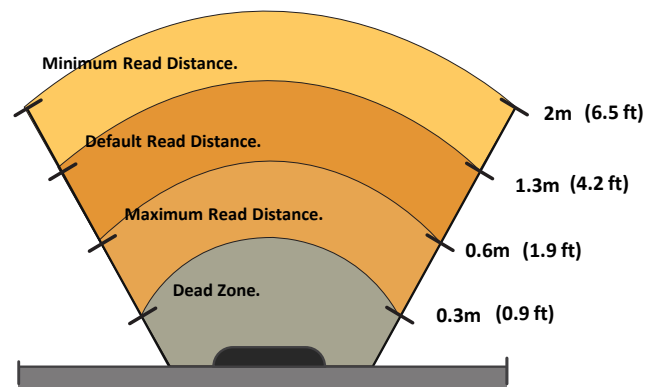
#### Magnetometer Detection Areas



Varying the magnetic field detection zones. The grey area depicts a 0.6m (1.9 ft) high-sensitivity detection area surrounding the e-loop, suitable for most vehicles. The dark colour area depicts a 1m (3.2 ft) medium sensitivity detection area surrounding the e-loop, suitable for most vehicles. The light colour area depicts a 1.5m (4.9ft) low sensitivity detection area surrounding the e-loop, which is only suitable for some vehicles.

The Radar sensors can detect vehicles that are stopped above the e-loop. The added radar utilises two-way radio communication protocol for reliable operation. Once the magnetometer sensor detects an oncoming vehicle, the transceiver relay will be latched and confirmation will be sent back to the e-loop. If the magnetic field drops below the set threshold, the radar will check if a vehicle is present. If no vehicle is detected, an unlatch command is sent to the relay, and the transceiver will send a confirmation to the e-loop. If the confirmation is missed, multiple attempts will be made to ensure a safe operation. Radar settings can be adjusted using the e-diagnostics remote. Settings that can be changed include; Dead zone, sensor distance, sensitivity, magnetic field release level, confirmation mode.

**DISCLAIMER: UNITS WITH THE PRESENCE FEATURE IS NOT TO BE USED AS A SOLE SAFETY DEVICE & SHOULD BE USED IN CONJUNCTION WITH STANDARD GATE SAFETY PRACTICES.**



Radar detection range. Spanning from a 60° FOV from the e-loop, these are the range zones. The grey area depicts the dead zone, in which objects cannot be detected. The Minimum read distance is 0.6m (1.9 ft). The default read distance is 1.3m (4.2 ft), and the Maximum read distance spans up to 2m (6.5 ft).



**Surface Mount**



**Flush Mount**

# Wired e-loop **EXIT Mode**

## **ELOWW**

This wired Vehicle Detection System uses magnetometer sensors to detect the presence of oncoming vehicles. These detections are sent via a relay to the gate or other device that requires activation. The sensors are installed on the surface of entry or exit passages using concrete fixing bolts can be core bored into concrete or asphalt.

### Functions / Features

#### Lower power consumption

#### 3-axis magnetometer for vehicle detection

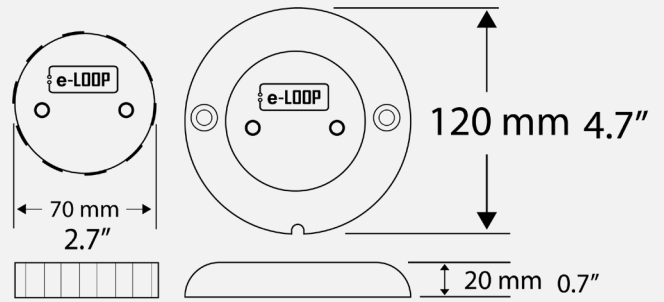
- 8 Hz sampling rate
- Auto-calibration
- Exit/Entry detection mode

#### Fast and simple installation

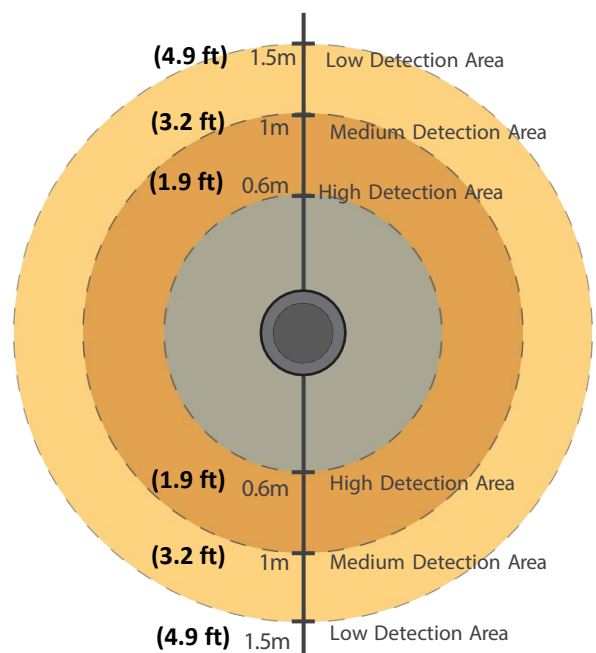
- Quick non-permanent installation

#### Relay Outputs

- COM, N/O & N/C
- Supply voltage 12-24VDC



### Magnetometer Detection Areas



Varying magnetic field detection zones. The grey area depicts a 0.6m (1.9ft) high sensitivity detection area surrounding the e-loop, suitable for the majority of vehicles. The dark colour area depicts a 1m (3.2 ft) medium sensitivity detection area surrounding the e-loop, suitable for most vehicles. The light colour depicts a 1.5m (4.9 ft) low sensitivity detection area surrounding the e-loop, which is only suitable for some vehicles.



**Surface Mount**



**Flush Mount**



**Concealed (exit mode only)**



# e-LOOP Wired Loops

Wires directly into the gate board.



## Wired e-Loop **EXIT MODE**

1 x Wired e-Loop Exit mode.  
1 x Concrete fixing bolts.

**Part Number:** EL00W



## Wired e-Loop **PRESENCE MODE.**

1 x Wired e-Loop Presence mode.  
1 x Concrete fixing bolts.

**Part Number:** EL00W-RAD



# e-DIAGNOSTIC

Introducing the e-Diagnostic bidirectional remote – the ideal tool for the e-Loop range (works with e-loop commercial range & mini).

## Easy to use

With easy-to-navigate menu functions you can:

1. Alter the trip level.
2. Adjust the sensitivity of each Axis.
3. Calibrate the e-Loop.
4. Change operational mode.
5. Monitor operation in real time.
6. Check for background radio interference.



## EDR00

- **Graphic LCD display.**
- **Strong and durable IP67 rated casing.**
- **Powered by 2 x AAA batteries.**



## E-REMOTE

# e-REMOTE

## Two-way remote control



- Bidirectional remote control.
- 3 channels plus lock and unlock button.
- Allows you to latch and unlatch relays on the e-Trans 200 using the lock and unlock keys.
- Confirmation of command sent back to remote with lock and unlock LED indication.
- Functions on all e-Gate controllers allowing you to lock out entry or exit devices such as e-Keypad, e-Loop, e-Entry and the auto-close function.
- IP66 robust housing with silicone rubber surround.
- Powered by a single 3V CR2032 coin cell button battery.
- Frequency: 433MHz.





## SIMPLE AND SECURE



### FEATURES

- 433.39 MHz Transceiver.
- Waterproof housing.
- Operates from a single coin cell 2450 lithium battery.
- Can be unlocked and used as an Entry button.
- Simple 4 to 8 pin code operation.
- Compatible with any Transceiver or gate controller.

### E-KEYPAD

**NOTE:** e-keypad will come in unlocked mode and it must be in this mode to code into Transceiver.

The keypad can be used as a simple entry button or by locking the system the code is required to access the gate.

*New look coming soon.*



## WIRELESS ACCESS KEY FOB REMOTE CONTROL

### FEATURES

- Compatible with all (e-loop) transceiver products.
- Powered by a 3V CR2032 coin cell button battery.
- Secure 128-bit AES Encryption.
- 4 Programmable Buttons.
- 433Mhz Frequency.
- IP64 Robust housing.

### E-TX





# e-TRANS-50



## SINGLE CHANNEL TRANSCEIVER

Featuring a compact design with an exceptional range, the e-Trans-50 is designed to manage access control for home and commercial systems.

- Compact design with exceptional range.
- SMA connector for standard for optional long-range antenna connection.
- Wide Voltage Range: 10-36V DC.
- Exceptionally low Current draw: standby 4.5 m/a, active 30 m/a.
- Frequency: 433.39 MHz.
- Remote storage: 50 remotes, 4 x e-Loops, 4 x Keypads, 4 x Entry Buttons.
- Relay: 1-amp contact rating, COM and N/O connections x 1 relay.
- Multiple Modes: Pulse, Latch and Hold.

### ETRANS50



With a unique lock-out function, this high-end accessory is designed to manage access control for commercial multi-unit complexes with up to 200 units, with functions also suitable for home systems.

# e-TRANS-200

- Simple to use menu functions with LCD display.
- High sensitivity 433 MHz -126 dBm receiver with 20 dBm Transmission output.
- External SMA connector to allow for the connection of different antennas.
- Wide input voltage range from 10V to 36V ACDC.
- 2 relay outputs with the ability to set to Pulse, Hold or Latch mode.
- Selectable ultra-low standby power consumption of only 4.5 m/a making it ideal for solar applications.
- 200 code storage with remote ID selection making it ideal for unit applications.
- Ability to delete individual remote devices.
- Unique lock-out feature allowing you to lock out entry buttons, e-Loops and keypads using the lock and unlock function on the e-Remote.
- Ability to connect to the e-Loop to access menus and change settings.
- Test mode which allows you to test relay outputs, radio signal strength and radio interference.



### ETRANS200



# e-TRANS-100

## TWO CHANNEL TRANSCEIVER

- 2 channel transceiver.
- Long range with SMA connector for external antenna options.
- Stores 2 x e-Loops and 50 x remotes in each channel.
- 10-28VAC or 10-36VDC power input.
- Low current draw 12mA in standby, can be set to LDC mode.
- 4.5mA for solar applications.
- 433.39 MHz frequency.
- 250 Hz bandwidth.
- 128bit AES encryption for total security.
- 2 x 1A relay contacts.
- NC/NO/COM outputs.
- Can be set to pulse latch or hold mode.
- Suspension inputs for each relay.



**ETRANS100**

# e-TRIGGER



## E-TRIGGER-KIT

The e-TRIGGER kit with the e-TRANS-50.

The e-trigger is an ideal solution to eliminate wiring to gate motors and doors and will save many hours digging trenches across driveways.

For example, you no longer need to wire an intercom (or another 3rd party device) directly into a gate motor. This unit connects to a wireless transceiver housed and connected to the gate motor.

When the gates have been triggered, the e-Trigger device creates a wireless bridge to the transceiver on the gate motor, activating the relay and opening the gates/door.

- Range up to 100 meters.
- Frequency: 433.39 MHz.



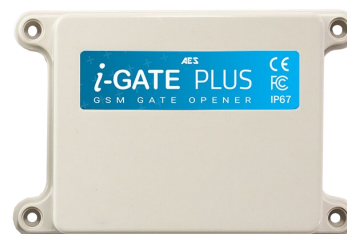
# e-Trans-Plus kits

Get more out of the e-Loop by connecting the e-Trans plus plug-in. This device plugs into our latest I-gate unit the I-Gate-Plus, which gives the user extra features.

- Set auto relay times.
- Set do not disturb times.
- SMS low battery notification.
- Set e-Loop lock-out times.
- Program mode.



E-TRANS-PLUS



I-GATE-PLUS

## Domestic Kit:

### EL00M-KPT

- 1 x e-Loop Mini Exit mode.
- 1 x e-Trans-Plus (Plug in).
- 1 x I-Gate-Plus.
- 2 x Concrete fixing bolts.



Programmable with the AES LITE APP \*.



\*Full app functionality will be released at a later date.  
Direct SMS commands can be used.

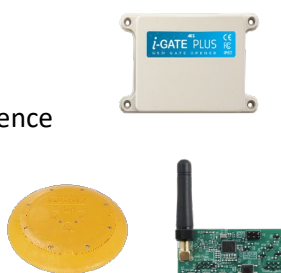
## Commercial Kits:

### PRESENCE MODE WITH ADDED RADAR PROTECTION.

Dual sensor technology. Magnetic field and Radar detection.

### EL00C-RAD-KPT

- 1 x e-Loop commercial Presence mode.
- 1 x e-Trans-Plus (Plug in).
- 1 x I-Gate-Plus.
- 2 x Concrete fixing bolts.

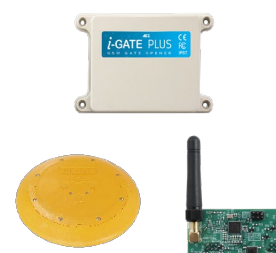


### EXIT MODE.

Magnetic field detection.

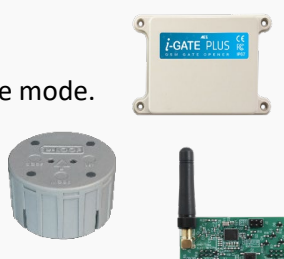
### EL00C-KPT

- 1 x e-Loop commercial Exit mode.
- 1 x e-Trans-Plus (Plug in).
- 1 x I-Gate-Plus.
- 2 x Concrete fixing bolts.



### EL00IG-RAD-KPT

- 1 x e-Loop inground Presence mode.
- 1 x e-Trans-Plus (Plug in).
- 1 x I-Gate-Plus.
- 1x Magnet.



### EL00IG-KPT

- 1 x e-Loop inground Exit mode.
- 1 x e-Trans-Plus (Plug in).
- 1 x I-Gate-Plus.
- 1x Magnet.





# Long Range Gate Opening Kits

## KITS WITH 350 METRES (380 YARDS) ANTENNA KITS



### ETTRANS50-TX-KIT

4 x E-TX - Fobs.  
1 x ANT-12 - 12 dBI Antenna\*.  
1 X ETRANS50 - Transceiver.



### ETTRANS100-TX-KIT

4 x E-TX - Fobs.  
1 x ANT-12 - 12 dBI Antenna\*.  
1 X ETRANS100 - 2-channel transceiver.



### ETTRANS200-TX-KIT

4 x E-TX - Fobs.  
1 x ANT-12 - 12 dBI Antenna\*.  
1 X ETRANS200 - LCD Transceiver.

*\*Up to 350 metres (380 Yards) range, line of sight.*

## KITS WITH 450/500 METRES (490/545 YARDS) ANTENNA KITS



### ETTRANS50-TX-LR-KIT

4 x E-TX - Fobs.  
1 x ANT-30 - 30 dBI Antenna\*.  
1 X ETRANS50 - Transceiver.



### ETTRANS100-TX-LR-KIT

4 x E-TX - Fobs.  
1 x ANT-30 - 30 dBI Antenna\*.  
1 X ETRANS100 - 2-channel transceiver.



### ETTRANS200-TX-LR-KIT

4 x E-TX - Fobs.  
1 x ANT-30 - 30 dBI Antenna\*.  
1 X ETRANS200 - LCD Transceiver.

*\*Up to 450/500 metres (490/545 yards) range, line of sight.*



### E-TX

Add up to 50 additional E-TX fobs to 1 ETRANS50/200.



# Swing gate e-loop set up.

2X PRESENCE MODE E-LOOPS  
1X SHADOW LOOP  
1X EXIT MODE E-LOOP

*Transceiver options:*

1X E-TRANS 300

or

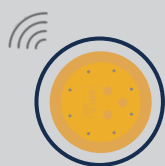
2X E-TRANS 100/200

or

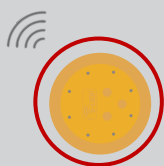
1X E-TRANS 100/200 and 1X E-TRANS 50



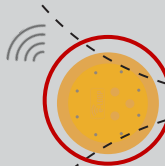
The **e-LOOP Commercial** is a versatile replacement for traditional in-ground induction loops. The features don't simply stop at basic detection; with exit mode & presence mode available for the e-LOOP Radar models. When combined with the e-TRANS these can be used for PE or Sequential Auto-Close.



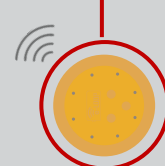
**Exit Mode**  
Optional



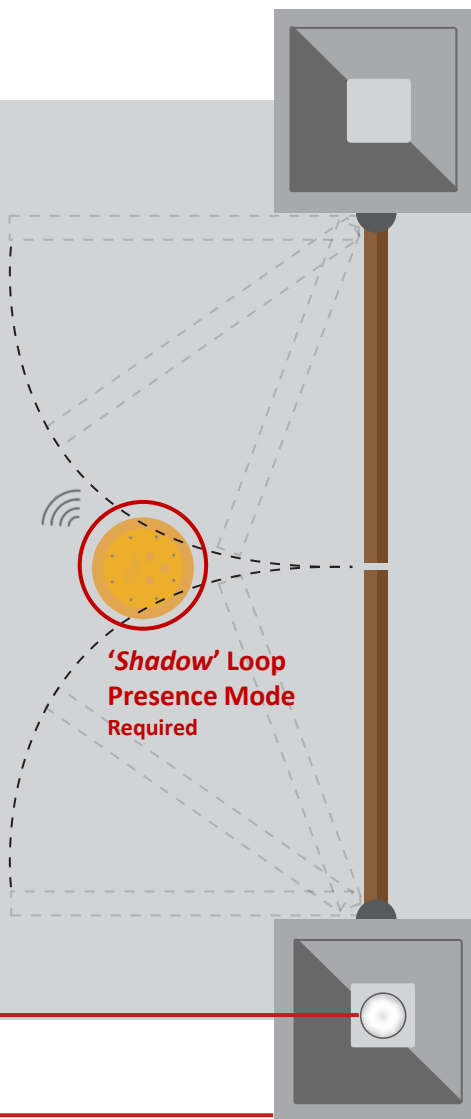
**Presence Mode**  
Required



**'Shadow' Loop**  
Presence Mode  
Required



**Presence Mode**  
Required



The **e-Light (coming soon)** is an intuitive solution to the set-and-forget nature of the e-LOOP ecosystem. Providing alerts for opening & closing with clear illumination, plus showing how users low battery alerts.



The **e-TRANS-300 (coming soon)** is the most advanced of all the e-TRANS products range. With capacity for 300 e-TX, 6 e-LOOPS, 4 e-TRIGGERS. Change settings easily, using the LCD display, including loop settings, lockouts, PE, sequential auto close, with Open, Close & safety Relay outputs.

Other transceivers options:

1x E-TRANS-50

1x E-TRANS-200/100



The **e-TRIGGER** allows seamless installation of aftermarket accessories to be integrated within the e-LOOP ecosystem. The e-TRIGGER is used as a wireless bridging system, between additional devices & the e-Trans ecosystem.



With the extensive aftermarket support that the e-trans-300 provides, additional accessories can be seamlessly nitrated into the system. **E.g. cameras, mics, intercoms & keypads.**



# Sliding gate e-loop set up.

2X PRESENCE MODE E-LOOPS.  
1X EXIT MODE E-LOOP.

Transceiver options:

1 E-TRANS 300

or

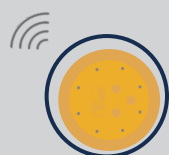
1 E-TRANS 200/100

or

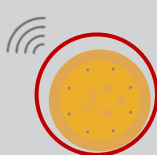
2 E-TRANS 50



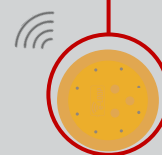
The **e-LOOP Commercial** is a versatile replacement for traditional in-ground induction loops. The features don't simply stop at basic detection; with exit mode & presence mode available for the e-LOOP Radar models. When combined with the e-TRANS these can be used for PE or Sequential Auto-Close.



**Exit Mode**  
Optional



**Presence Mode**  
Required



**Presence Mode**  
Required

The **e-Light (coming soon)** is an intuitive solution to the set-and-forget nature of the e-LOOP ecosystem. Providing alerts for opening & closing with clear illumination, plus showing how users low battery alerts.



The transceivers options:

1x E-TRANS-50

1x E-TRANS-200/100



The **e-TRIGGER** allows seamless installation of aftermarket accessories to be integrated within the e-LOOP ecosystem. The e-TRIGGER is used as a wireless bridging system, between additional devices & the e-Trans ecosystem.



With the extensive aftermarket support that the e-trans-300 provides, additional accessories can be seamlessly nitrated into the system. E.g. **cameras, mics, intercoms & keypads.**











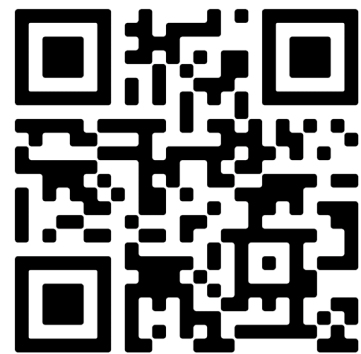
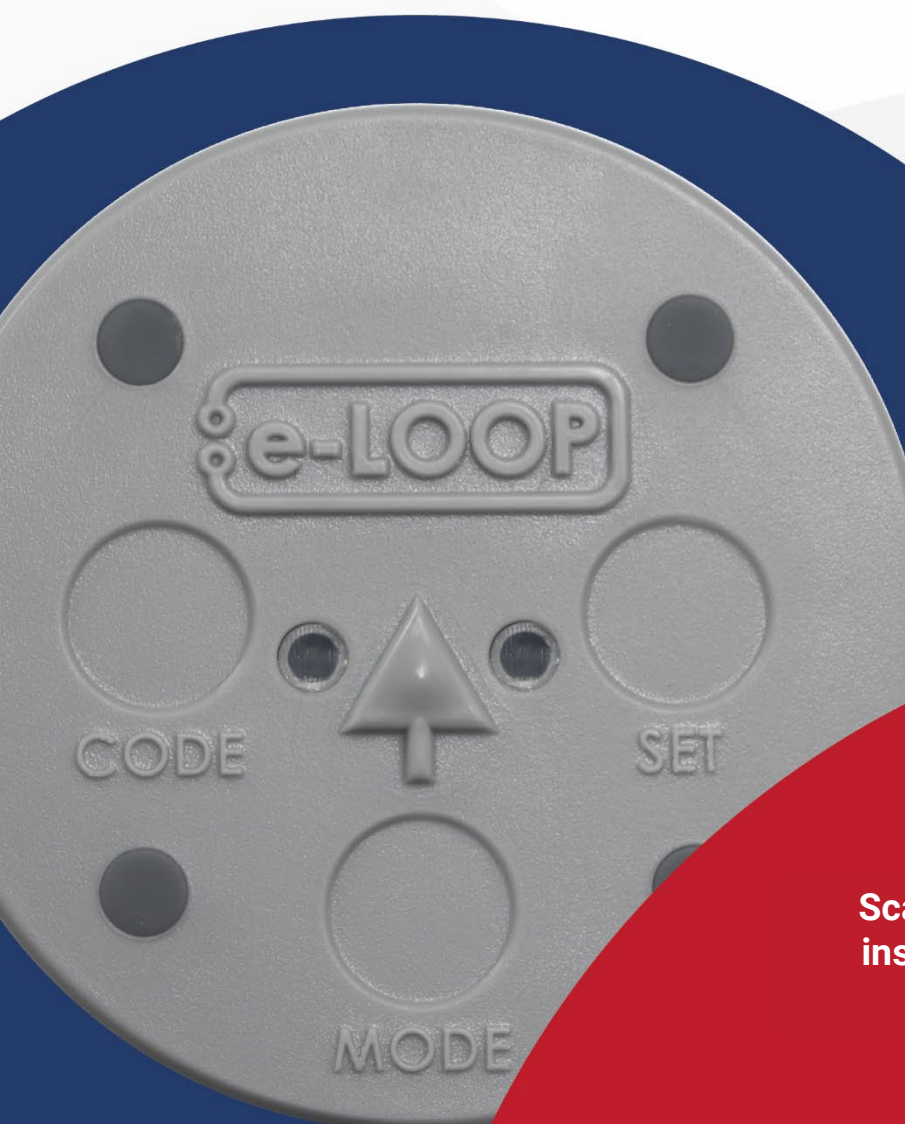
# Wireless Vehicle Detection Systems

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E-LOOP

Scan QR code for e-LOOP fitting instructions, datasheets & other resources.

**AES**