SURE ACTION PLUS LLC

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LP2X

Battery-Operated Vehicle Detection System

with

INOVONICS
HIGH PERFORMANCE
WIRELESS

X=

C for LP2C
CLR for LP2CLR
CDE for LP2CDE
CDELR for LP2CDELR

All complete systems are pre-programmed.

The LP2C is a complete vehicle detection system. It utilizes the LP2 2-zone processor which allows for multiple possible configurations. With one sensing probe you can cover one driveway in non-directional mode. With two sensing probes you can cover two driveways in non-directional mode or one driveway in directional mode. By adding a second transmitter when using two probes you can have an individual output per driveway or per direction.

The probe has a standard lead of 25 feet. **Excess wire should be cut or buried. Do not coil excess wire inside of box.* The outdoor enclosure housing the transmitter(s), processor and batteries is mounted within 25 feet of the probe. Lithium batteries are recommended for duration and temperature. A receiver, sounding system, and power supply are supplied for inside the building. The sounder plugs into your standard electrical outlet and has non-volatile memory. It has 50 melodies and 5 volume levels (including mute). **The components are preprogrammed.** *If reprogramming becomes necessary, consult the paperwork supplied for the specific device or call technical support.*

Depending on the system and addtional components being used, you can cover up to four (4) driveways in non-directional mode or two (2) driveways in directional mode.

Simple 3 Step Installation:

1. Outdoor Components 2. Indoor Components 3. Test the system

System Components

LP2C =
(Single Entrance)
(Short Range)

(1) Outdoor Enclosure
Containing:
(1) LP2 Processor (conformal coated)
(1) Transmitter (conformal coated)
Range: Approx. 2,000 Feet
(1) Driveway Probe with 25' Lead
(1) Receiver
(1) RXTX612 (Wireless Chime Package)
(1) 12 VDC 1A Power Supply

LP2CLR =
(Single Entrance)
(Long Range)

LP2C with (1) Transmitter (conformal coated)
Range: Approx. 10,000 Feet

LP2CDE =
(Dual Entrance)
(Short Range)

LP2C with (2) Outdoor Enclosures
(2) Driveway Probes with 25' Leads

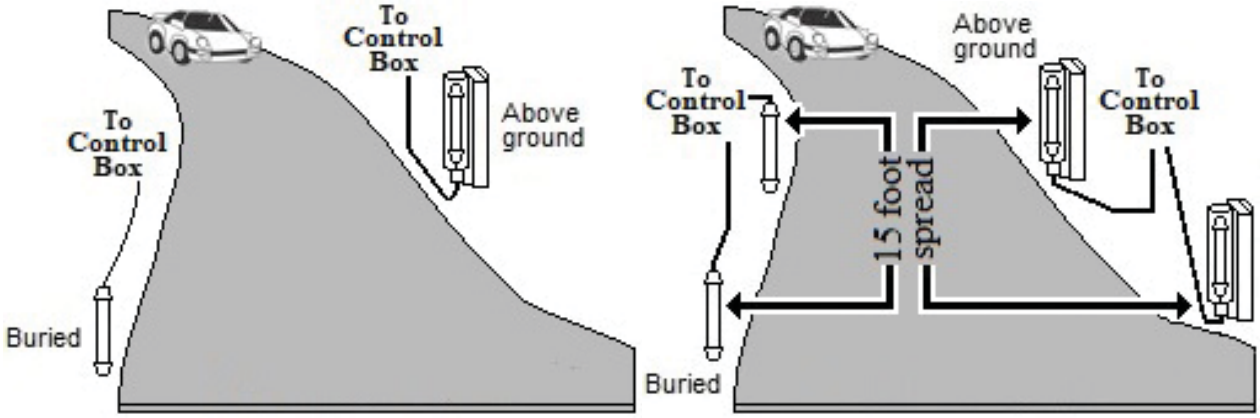
LP2CDELR=
(Dual Entrance)
(Long Range)

LP2CLR with (2) Outdoor Enclosures
(2) Driveway Probes with 25' Leads

Probe Placement - Beside Driveway

Bury the probe at the edge of the driveway deep enough to cover it and keep it stationary (usually 6”- 8”). If the probe is buried, placing it parallel to traffic will give the widest window of capture for a driveway 10 -12 feet wide.

The probe does not have to be buried, it can be mounted above ground. It is recommended that precautions be taken to protect the probe and the wire.

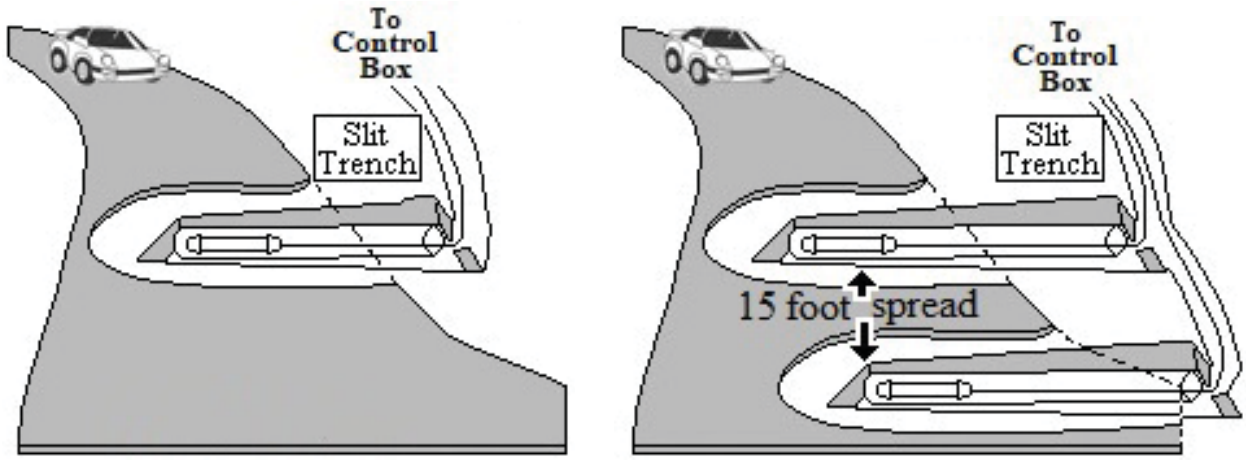


*** The two probes for directional systems should be placed 15 feet apart**

If dealing with ferrous metal gates, surface tests should be performed before the probe is buried. This is to make sure there is no interference by gate movement.

Probe Placement - In Driveway

Place the probe in the center of the driveway. This allows for the lowest possible sensitivity setting and also for vehicle detection on a driveway up to 24 feet wide. If the driveway is not paved, the probe should be placed in conduit. This allows for access should the driveway be paved at a later date. The conduit should have a slight pitch for water drainage.



*** The two probes for directional systems should be placed 15 feet apart**

Do not bury probe(s) within:

* 14 ft. of high-powered radio towers
* 24 ft. of residential traffic.
* 36 ft. of highway traffic.
* 100 ft. of moving trains.

Installation - Outdoor Components

<u>Step 1</u>:

A). Place Probe at the location it will be buried (see "Probe Placement") and mount the control box. (The box should be four feet above the ground.) Bring the probe lead(s) into the box and connect to the processor.
Any unused zone should be jumped with a 1K ohm resistor.

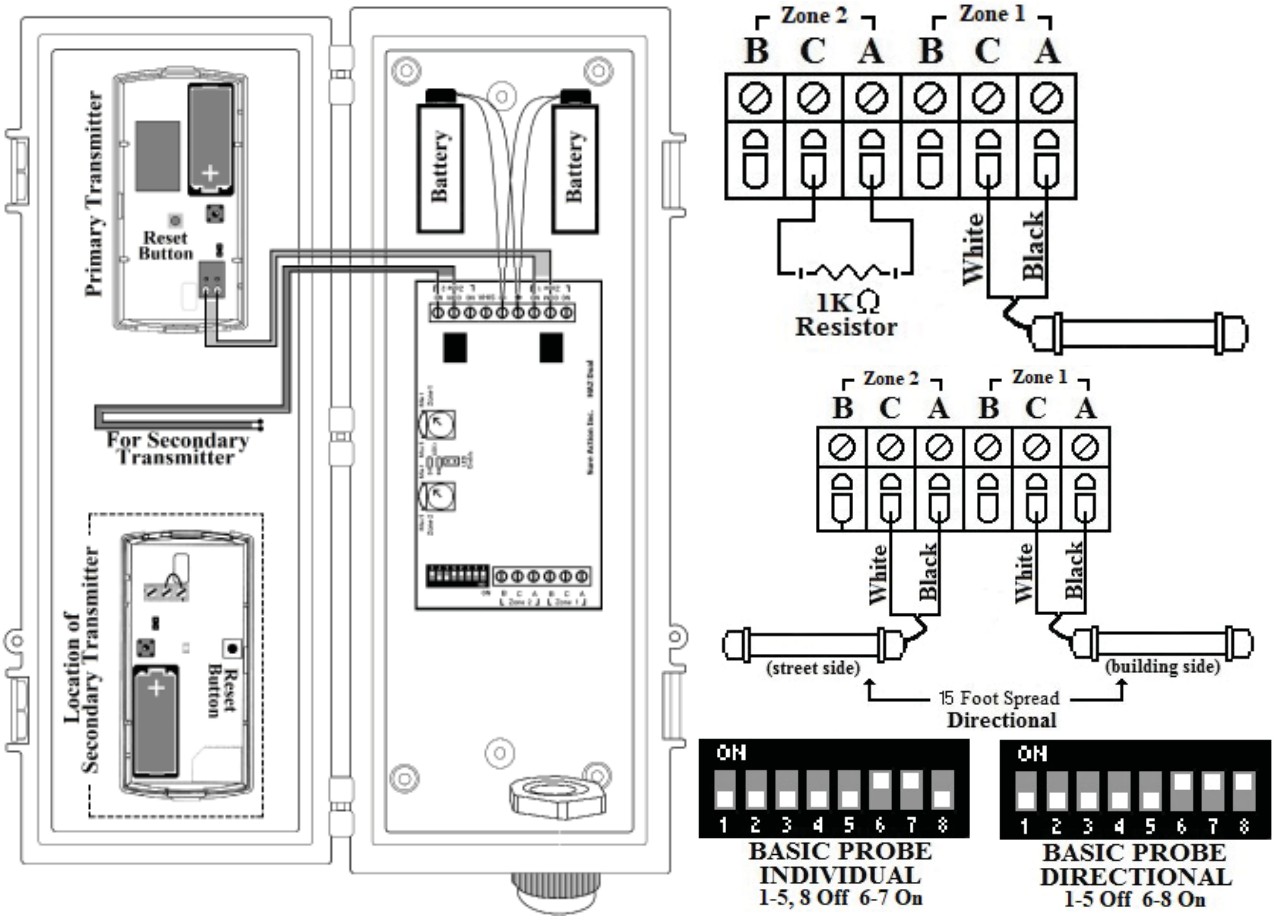
* Excess wire should be cut or buried. Do not coil excess wire in the box.
* Important**:** The box should be mounted to a non-metallic structure.

B). Install the 9-volt batteries and wait 1 minute for the processor to complete the "burn-in" period.

* If the "LE" jumper is enabled, the l.e.d's will blink during this period. They will also light during alarm condition. This feature is for visual determination of processor status and for troubleshooting. During normal operation, the l.e.d's should be disabled for battery conservation.

C). Install the 3-volt battery in the transmitter, press the reset button and replace the cover.

Installation - Outdoor Components



Installation - Indoor Components

Step 2:

A). Mount receiver and TX612 in chosen location.
(The receiver should be four feet above the ground.)

The TX612 (12 volt transmitter) is a 4-conductor device.

Black Wire = Constant Ground
Red Wire = Constant + 12VDC
Green Wire = Green wire (Normally open circuit)
White Wire = White wire (Normally open circuit)

The RX6 (chime receiver) plugs into your standard 110-130V wall outlet.

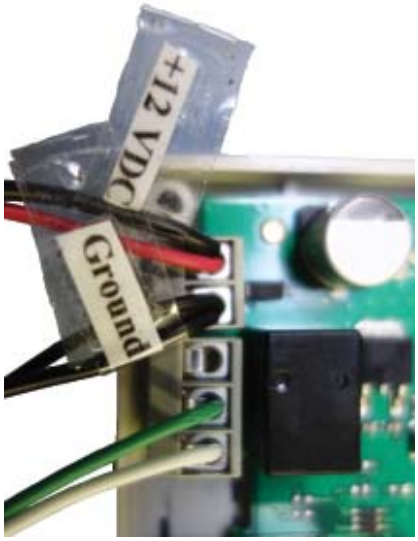
B). The wire from the power supply labeled +12VDC **AND** the Red wire from the TX612 are connected to the terminal in the receiver labeled Vs.

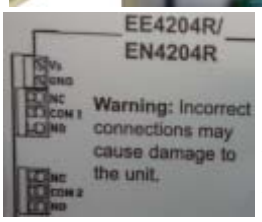
The wire from the power supply labeled GROUND **AND** the black wire from the TX612 are connected to the terminal in the receiver labeled GND.

The Green wire from the TX612 is connected to the terminal in the receiever labeled COM 1.

The White wire from the TX612 is connected to the terminal in the receiver designated NO.

Installation - Indoor Components





Label is located inside the cover of the receiver

If a secondary transmitter is used, it will be wired to COM 2 and NO of the receiver

The label showing terminal designation is located on the inside cover of the receiver.

Testing and Troubleshooting

Step 3:

Test the system. If everything is working correctly make everything permanent.

Troubleshooting

(2) 1K Ohm resistors are required for troubleshooting procedures.
(These resistors are supplied on the door of the box)

Processor:

1). Check batteries. If batteries are low, replace them.
2). Remove probe(s) from processor and place a 1K Ohm resistor between terminals A & C on each zone.

Set dipswitches for Basic Probe individual and cycle power to processor. The l.e.d.s will flash for one minute. Turn sensitivity adjustment to 3 (50%). Wet your finger and short across a resistor. The l.e.d for that zone should light for 4 seconds.

After five minutes check Term. A and Term. C each for 2.48 VDC in relation to (-) of power supply. Both readings should be the same.

Troubleshooting

Probe:

1). Sensitivity is adjusted at the processor. If the system does not detect, turn wheel counterclockwise to increase sensitivity. If the system falses, turn wheel clockwise to decrease sensitivity.

2). Check resistance reading between the White and Black wires. The resistance reading should be close to the reference number written in Red on the body of the Probe (Average: 600 Ohms).

3). Move magnet directly over Probe and observe a meter variation of 2 - 10 Ohms.