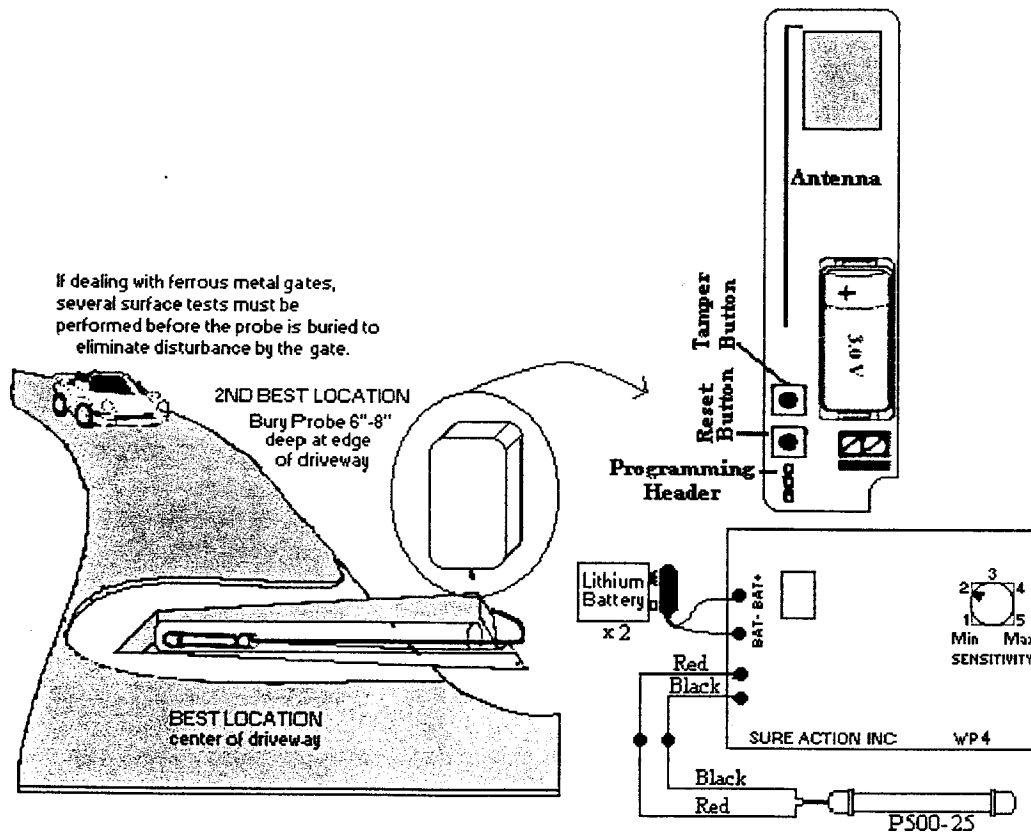


The SU-WP4CLR is a vehicle detection system designed to be operated by two (2) 9-volt Lithium batteries. It is ideal for locations where running wire between a building and the location of the probe is difficult. A gray NEMA III enclosure houses the transmitter and processor (conformal coated), and batteries. The box is then mounted near the location of the probe. The probe will come with a standard 25-foot lead. Excess wire may be cut. Probes are also available with longer wire lengths. The maximum length is 1000 feet.

The SU-WP4 replaces the WP2000 processor. The WP4 features enhanced RF suppression and a lower current draw during alarm condition. The WP4 has been tested against interference with all major brands of transmitters. Average battery life should be approximately 12 months depending on how often the system is fired. The lower current draw during alarm condition allows the processor to fire twice as often as the WP2000 within the same overall battery life span.

The "Low Battery" light on the receiver will come on when the battery in the transmitter gets low. The "Inactive" light will come on if the transmitter ceases to function. The system may begin to oscillate when the 9-volt batteries get low. If the system ceases to function and the low battery and/or inactive lights are not lit on the receiver, the 9-volt batteries must be changed.



Possible Ways to Bury Probe

- 1) Center of Driveway - 1st Choice
 - a) Sensitivity can be lowered for greater stability
 - b) Range can be extended for a wide driveway
 - c) Bury probe under driveway by encasing probe in 2" or 3" PVC pipe that has been sealed at one end.
 - i) Pipe should be pitched for drainage.
 - ii) Allows retrieval of probe at later date.
- 2) Alongside Driveway - 2nd Choice
- 3) Bury probe 6"-8" in soft earth close to driveway.
- 4) Place probe parallel to traffic motion.

Range and Sensitivity Don'ts

1. The range of the probe will cover a driveway up to 14 ft.
2. **Do not** bury probe within 5 ft. of power cables or transformers.
3. **Do not** bury probe within 14 ft. of high-powered radio towers.
4. **Do not** bury probe within 24 ft. of residential traffic.
5. **Do not** bury probe within 36 ft. of highway traffic.
6. **Do not** bury probe within 100 ft. of moving trains.

Installation

Step 1: Place Probe at the location it will be buried and mount the control box. *The box should be four feet above ground.*
Bring the probe lead into the box and connect the wires color for color.
Install the 9-volt batteries and wait 1-2 minutes for the processor to complete the "burn-in" period.
Install the 3-volt battery in the transmitter, press the reset button and replace the cover.

The Transmitter and Receiver have been pre-programmed. There should be no need to reprogram them. **When initially installing the battery in the transmitter you must press the reset button on the transmitter.**

Because the cover will be off of the transmitter when you install the 3-volt battery, the "TAMPERED" light may activate on the receiver. Momentary pressing the reset (tall) button on the receiver will return the system to normal. A "Tampered" light will not effect system operation. It will only tell you that the cover has been or is removed from the transmitter. The "Tampered" light will remain lit until reset from the receiver.

Step 2: Mount receiver and chime in chosen locations. *The receiver should be four feet above ground.* The Chimeplate is mounted so that the switch is on the bottom.

Chime (Requires a 3-conductor wire run)

Black wire = Constant Ground Red wire = Constant +12VDC Blue wire = Blue wire inside receiver

Sound Pressure: 80dB at 12VDC

Current Consumption: 5.0mA at 12VDC Standby
 125mA at 12VDC Alarm

Note: The power supply supplied with the system is to operate the receiver and a maximum of two (2) chimes. If using more than two sounders you must replace the power supply with an appropriate power source.

Step 3: Test the system. If everything is working bury the probe and make all connections permanent.

Troubleshooting

One (1) 1K Ω is required for troubleshooting procedures.

Processor:

- 1) Check battery. Cut probe free from processor.
- 2) Wire a 1K Ω resistor between the Black lead and the Red lead.
- 3) Digital voltage readings are positive in relation to negative of the battery.
 - i. Black to Neg. = 1.9 – 2.2 VDC
 - ii. Red to Neg. = 1.9 – 2.2 VDC

Both readings will be the same.

Probe:

- 1) Cut Probe free from processor.
- 2) Take a resistance reading between the Black lead and the White lead. The reading should be very close to the reference number written in red on the body of the probe.
- 3) Wave magnet over the probe. Observe resistance variation of +/- 2 to 10 Ohms. The 2K Ohm setting of the meter would be the most accurate.