

DA-100 Drive-Alert

now with *new* Zone Control, Alert Tone Selection and Antenna features

Detect vehicles and monitor areas and assets at your...

...Home



...Farm



...Workshop



...Remote Site



...Work Site



...Gate



...Drive-Up



THE BASICS

A sensor detects any vehicles entering a monitored area

It also detects assets moving such as trailers, RVs, tractors, boats, or anything a sensor is attached to.

A control panel receives a signal from the sensor and triggers an internal chime with volume control

DA-100

The DA-100 is a COMPLETE KIT, shown here, which includes:

- One DA-100CP Control Panel receiver with built-in chime, volume control, and three choices of chimes
- One DA-611TO Sensor/Transmitter with 50 feet of cable
- Zoning Control to monitor up to three different areas and provides a different tone for each. (NOTE: additional Sensor/Transmitters are needed for each additional area to monitor)



DA-100CP
Control Panel

DA-611TO
Sensor/Transmitter

MORE OPTIONS

The DA-100 allows you to monitor up to three separate areas with one receiver! You may monitor multiple areas, lanes, driveways by adding additional DA-610TO or DA-611TO sensor/transmitters.

Increase reception range from 1300 feet up to 8/10 mile by adding a DA-660 Long-Range Reception Booster Antenna accessory.

You may also add alert chimes to multiple buildings by installing DA-100CP control panels in those areas.

Use these systems in conjunction with Mier's other wireless Drive-Alert systems such as the DA-700.

DA-100-610

The optional DA-100-610 Kit, shown here, includes:

- One DA-100CP Control Panel receiver with built-in chime, volume control, and three choices of chimes
- One DA-610TO Sensor/Transmitter with the sensor *inside* the transmitter box
- Zoning Control just like the D-100



DA-610TO
Sensor/Transmitter



DA-100CP
Control Panel

DA-100 Installation Manual

All Mier Wireless Vehicle Detection Systems feature:

- * Normal reception up to 1300 feet line-of-sight, with up to a 8/10 of a mile when using a DA-660 Long Range Reception Antenna
- * 100% compatible with and use of an unlimited number of Mier's Wireless Sensor/Transmitters or Mier Control Panel/Receivers
- * Zoning Feature (see page 3, the three separate tones will alert for three (3) different driveways or areas) and Addressing
- * UL Listed switching mode power supply, isolated from ground, with input voltage of 100 to 240 50/60HZ, which provides better lightening rejection. Output regulation of 24VDC +/- 0.5A with output short circuit protection with current limit until fault is cleared.

The DA-100CP Control Panel Includes:

- Wireless receiver board inside a durable metal enclosure
- An Alert Chime Select Switch allows users to choose from three (3) different chime alerts, with on/off and volume control
- Zoning feature allows the control panel to receive signals from up to three (3) different sensors with different alerts for each zone
- The antenna is extendable, directional and can be removed to easily replace with our DA-660 Long-Range Reception Antenna

The DA-611TO Sensor/Transmitter and optional DA-610TO Sensor/Transmitter features:

- The DA-611TO comes with the sensor outside of the transmitter enclosure attached with 50' of cable. Longer lengths of cable are available. Burying the cable and sensor within a PVC pipe is recommended to protect and prolong cable and sensor life.
- The optional DA-610TO includes the sensor inside a larger transmitter enclosure (no cable).
- Mier's sensors detect any disturbance in the magnetic field (moving vehicles) and not people or animals.
- These sensors are even able to detect through walls made of standard building materials.
- A wireless transmitter board is within the NEMA 4X outdoor enclosure, and is powered with two (2) AA Lithium batteries; we recommend Lithium. When the sensor is tripped a signal is sent to the control panel.

NOTE: Lithium battery life at a residential installation is over 3 years, and over 1 year at a drive-up window application.

BENCH TESTING

Before Installation, perform the following BENCH TEST steps:

1. Apply power to the DA-100PLUS Control Panel/Receiver. Turn the volume switch up at least halfway, and check that the GREEN Power LED is on.
2. Remove the cover from the DA-611TO or DA-610TO. **DO NOT** wipe off the silicone grease which adds an additional layer of environmental protection.
3. Install two (2) AA Lithium batteries, observing proper polarity.
4. Turn on the DA-611TO or DA-610TO power switch. The RED Transmit LED should come on and the DA-100CP should chime.
NOTE: Some early models of the DA-611TO may not have a power switch or red LED. These units become active as soon as the batteries are installed.
5. Reinstall the cover **being careful not to over tighten the screws** which could crack the cover.
6. Turn off the DA-100 Control Panel after confirming that it chimed in Step 4.



DA-100CP
Control Panel/
Receiver with
Alert Chimes



DA-611TO
Sensor/Transmitter
with external sensor



DA-611TO
Sensor/Transmitter
with external sensor

Sensor/Transmitter Installation Examples



At the base of a pole
for up to 500 foot range



3-foot high for greater range
of up to 1300 feet
Note: Pole must be steady
and not move in the wind



Under landscaping next
to the drive



Under a DA-ROCK1 fake rock
next to the drive



DA-611TO transmitter box
3-4 foot high in a tree for
a range up to 1300 feet.
Note: **DO NOT** mount a
DA-610TO box on a tree.

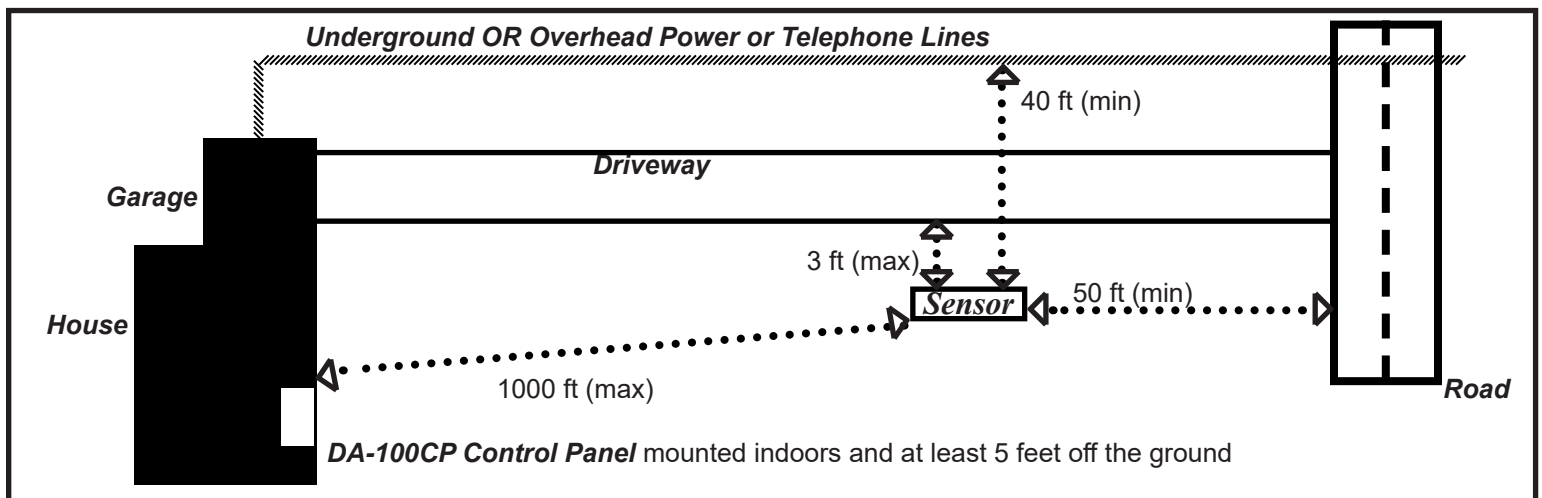
DA-100 Installation Manual

EASY Installation is often completed in under 30 minutes!

1. AFTER BENCH TESTS ARE COMPLETED: **install the DA-611TO Sensor/Transmitter, or the entire DA-610TO**, within 3 feet of the drive or area you wish to monitor, parallel to the traffic for best performance. (see Examples below in Fig 1 and at bottom of previous page)
2. The sensor should be at least 30 feet from power lines and 40-50 feet away from street traffic if possible. Call our free Tech Support if it is a drive-up window or short drive installation. (See Figure 1 below)
3. The sensors detect up to 14' in every direction if sensitivity is set at maximum.
4. The DA-611TO sensor and cable may be buried 2-12 inches underground (AFTER On-Site testing above ground for a few days). Excess cable may be coiled and/or buried. The Transmitter box should be mounted at least 5 feet above ground.
5. If using a DA-610TO, and it is mounted on the ground, expect a 500 foot transmission range. If a DA-610 is mounted 3-5 feet high, then you may expect transmission range up to 1300 feet straight line of site. A DA-610TO MUST be mounted securely, as it will signal an alarm whenever it is moved. For example, mounted on a tree that sways in the wind will cause false alarms.
6. **Set up the DA-100CP Control Panel receiver** 5+ feet above ground inside the home/building, turn on the volume at least half way, and make certain the green LED power light is on. (See Figure 2 below)
7. Test the installation using a vehicle traveling at least 5 MPH. Once satisfactory performance is achieved, then permanently mount all equipment.
8. **Changing Chime Selection:** To select an alert chime sound in the Control Panel manual mode, move the tone-select switch to one of the three available tones. No. 1 position is a "ding-dong", No. 2 position is a "ding-ding-ding" and the No. 3 position is a "dong-ding-dong" alert. (See Figure 2 below)

Zoning and Addressing covered on the next page...

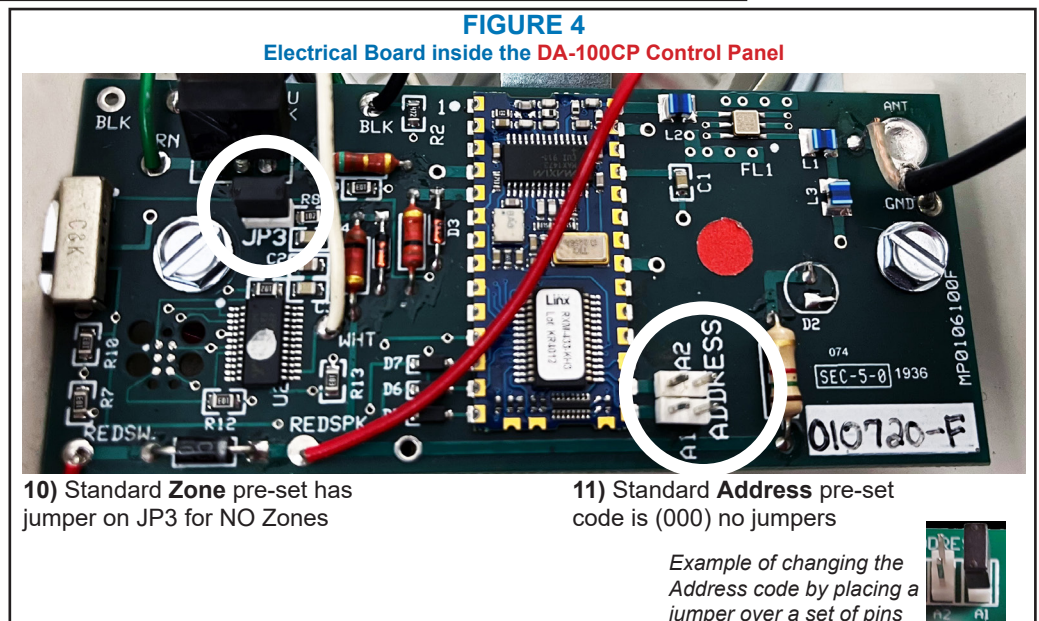
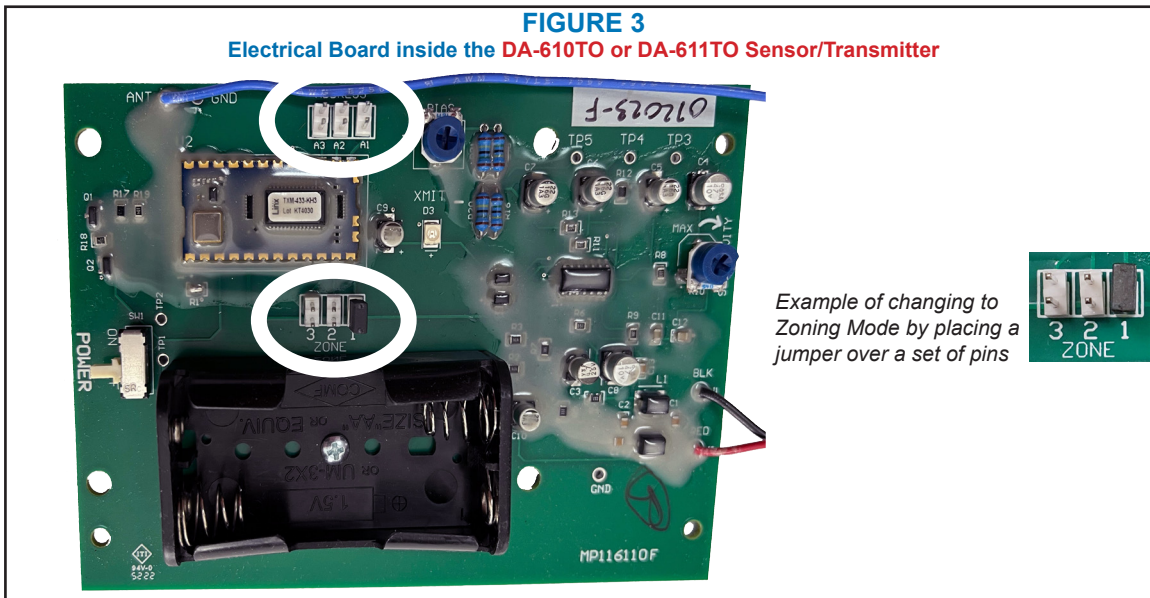
FIGURE 1 - SINGLE ZONE, BASIC SET-UP EXAMPLE



EASY Installation continued...

IF YOU CHANGE ZONES OR/AND ADDRESSING, YOU MUST DO SO IN BOTH THE SENSOR AND THE CONTROL PANEL

9. **Use of Jumpers:** Use the included Jumpers to set Zone and Address if needed (continue to steps 10 and 11). **The DA-610TO/DA-611TO Sensor/Transmitter board in Figure 3 below** is configured for Address 0 and Zone 1.
10. **Zoning Set-Up:** To utilize the Zone features, you will need to configure your sensor/transmitter (DA-610TO or DA-611TO) to its own Zone. **The DA-610TO/DA-611TO Sensor/Transmitter board in Figure 3 below** is configured for Zone 1 because the Jumper is placed over Pin Set 1. Zone 2 would be a jumper over Zone Pin Set 2. The Factory Default is NO Zones configured or NO Jumper on any of the Zone Pin Sets. Additional DA-611TO or DA-610TO Sensor/Transmitters will be needed for each additional zone to be monitored (see Figure 5, next page).
To change Zones in the DA-100CP receiver, locate the JP3 Jumper-Header on the Zoning Pin, and pull the Jumper-Header off (see #10 on Figure 4 below). Then replace the cover on the enclosure. In the Zone Mode the receiver will provide a different tone for up to (3) different transmitters monitoring (3) different driveways. *NOTE: The tone-select switch is disabled in the zone mode and is automatic.*
11. **Equipment Addressing:** The Control Panel **AND** the Sensor/Transmitter are already set for the default address mode 0 from the factory, with NO Jumper-Headers on the address pins A1, A2 or A3. IN THE RARE CASE of a neighbor's system interfering with your system, use the Jumper-Headers to select different address pins for your system by placing a Jumper over pin set A1, A2 or A3, which will give you the following addresses: A1 would be address 1, A2 would be address 2, and A3 would be address 3. Make certain they are the same in **BOTH** your Control Panel **AND** Sensor/Transmitter. You can place a Jumper-Header on one set of pins, or the other, or on both sets of pins depending on how many other system addresses are nearby. (see #11 on Figure 4 below)



DA-100 Installation Manual

FIGURE 5
Example of a farm with Zoning activated

- A)** Three (3) zones monitored with sensor/transmitters. These can be either DA-611TOs or DA-610TOs.
B) Four DA-100CP Control Panel/Receivers with alerts placed in the home, in the work shed, and in two barns.

In this installation, the owners are alerted to vehicles approaching in any of the three driveways by the sensors placed in areas marked "A", with different alert chime tones for each so the owners know exactly *which* drive the vehicle is in, and those alerts are communicated in four different buildings where control panels are mounted marked "B".

Mier Products offers the **FREE** service of using satellite imaging like the photo shown, and talking with the installer to determine which equipment needs to be installed in each location to satisfy the customer's need. Just give us a call!



Changing the standard extendable antenna for a DA-660 Long-Range Reception Booster Antenna Accessory

If you would like to increase range between one of our sensor/transmitters and a DA-100 control panel from 1300 feet up to 8/10, you can easily do so by removing the standard antenna and adding our DA-660 Reception Booster Antenna with RG6 cable and BNC/F Adapter Connector. Our DA-660 Long-Range Reception Booster Antenna is pictures on the right, and the instructions on how to swap the antenna are shown below.



Step 1:
Push Down and Twist to remove the standard extendable antenna



Step 2:
Locate the "BNC" F Connector Adapter for the DA-660 Reception Booster Antenna Cable



Step 3:
Push Down and Twist the "BNC" F Connector in place



Step 4:
Screw RG6 cable on to the F Connector and attach the other end to a DA-660 Reception Booster Antenna



F Connector on the DA-660 Antenna

