

## Just the basic FAQs

### *Drive-Alert Frequently Asked Questions*

#### **What should I do if I encounter false alarms (with no vehicle passing the sensor)?**

This can occur suddenly, late at night or after a rainstorm. It is most often a result of moisture making contact with exposed wires through an accidental nick in the cable jacket. The control panel may also have a problem.

First—remove the 3 sensor leads, (red, black and silver shield wire). Wait approximately 1 minute, if no more alarms occur after 1 minute, usually it is a problem with the sensor cable. An ohmmeter test should be run in this case. Typically this results from a cut/break in the cable outer jacket and insulation of one or both inner conductors. Next, run a test of the control panel itself (see below).

To run an Ohmmeter test, first disconnect the cable from the control panel terminals. Ohmmeter tests of the cable's red and black leads should show 800 ohms plus or minus 50 ohms. Then connect the ohmmeter to the red lead and the silver shield lead-this should read open circuit (very high resistance). Use the highest ohm range the meter has. Note-some meters have a high reading of just 2 million ohms-this may be too low if the problem is just beginning or is initially 3-5 million ohms. Typically the meter should have a 20 million ohms or higher range to catch initial problems. Note-the problem can be aggravated by changing resistance caused by moisture conductivity changes with temperature.

For the control panel test, disconnect the sensor for more than one minute. If the alarm sounds continuously or intermittent alarms occur without touching the circuit board, the control panel is defective and needs repair. Momentary alarms can be induced by touching BK and S terminals with moistened fingers. This test may cause alarms that last 5 to 25 seconds. The control panel should remain quiet thereafter. Do not touch the circuit board after initiating an alarm. If no alarm occurs, check the blanker LED at the back of the circuit board (note- blanker LED may flash momentarily during the finger test). If ON continuously, turn the blanker pot counterclockwise to turn off. If there is no change and the LED remains on, the unit needs repair. The blanker LED is usually ON for one minute when AC power is initially applied to the control panel, and then is out at all other times. If the power LED and/or blanker LED are out at all times when the AC power is first applied, the unit needs repair. Also, see next question for additional information.

#### **What do R, BK and S stand for on the terminals?**

R= Red sensor wire  
BK= Black sensor wire  
S= Shield wire

#### **What should I do if there are no alarms, but I can hear the internal Drive-Alert relay clicking?**

Check the rear whistle switch; it should be ON for the Drive-Alert internal alarm to sound. Also the internal 1 ampere glass fuse should be checked (red LED adjacent to terminal strip is out if fuse is open). The blown fuse problem occurs most often with external alarm sounders connected to the NO and NEG terminals. Replace the internal 1 ampere glass cartridge fuse if open. DO NOT EXCEED FUSE RATING. Before replacing fuse, remove AC power and external alarm connections. Place whistle switch in ON position. Insert new fuse. Apply power and create alarm by touching the BK and S terminals. The internal whistle should sound and the red power LED alongside terminal strip should be on. Reconnect the external alarms. If the fuse blows again, check external alarm components and proper connection of the wires to the external sounder.

Note-if whistle switch is normally off and external sounders do not operate but relay clicks, check external alarms. With rear switch off external connections are between C and NO (the C and NO terminals are closed each time the relay clicks).

#### **What do I do if the vehicle alarm length is too short?**

The alarm duration is controlled by the Timer Adjust Pot. Turn the timer pot adjustment counterclockwise to lengthen time. See the label on the inside of the top cover for the timer-adjust-pot location. Also check the blanker LED, if it is momentarily flashing at the start of each alarm, adjust its pot slightly

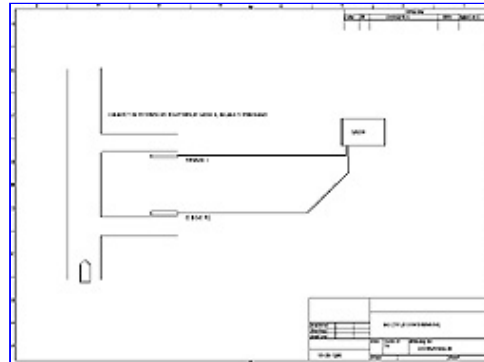
counterclockwise (15-20 degrees).

### What do I do if the vehicles on the street or road are tripping the alarm?

Check the sensor location; it should be 25 to 30 feet from the street. Furthermore, if there is fast traffic (semi tractors) traveling at high rates of speed, the sensor needs to be farther from the road. Otherwise, reduce the sensitivity setting of the Drive-Alert. Then, check if slow moving small vehicles still activate Drive-Alert as it moves past sensor. If distance can not be met, reduce sensitivity and/or move sensor closer to moving vehicle. In some instances this can be addressed by burying the sensor in the middle of the drive. Install a PVC pipe to center of the drive, and slide sensor in pipe to the middle of the drive. Then reduce the sensitivity setting.

### May I use more than one sensor and protect more than one area?

Yes. Whenever additional sensors are required there are two ways to connect the sensors to the control panel – both sensors in series connection or in a parallel connection. For the series connection connect the sensor one red-lead to the R terminal, the sensor one black-lead to the sensor two red-lead and the sensor two black lead to the BK terminal. Tie both shield leads to the S terminal. For the parallel connection tie both red leads to the R terminal and both black leads to the BK terminal. All shield leads connect to the S terminal.



Whenever more than 2 sensors are used, the series arrangement should be used. Connect the sensor one red-lead to the R terminal, the sensor one black lead to the sensor two red lead, and the sensor two black lead to the next sensor red lead, etc. Connect the last sensor black lead to the BK terminal. All shields connect to the S terminal.

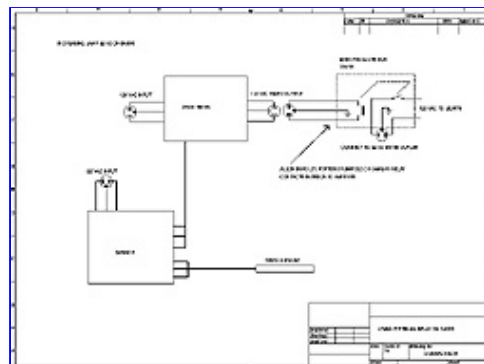
Using more than 3 sensors will work, but with a gradual diminishing pickup. This is the result of the sensor resistance and inductive reactance reducing the signal as it passes through each sensor. In a parallel connection, the sensor resistance of each in parallel will reduce the available signal at the control panel terminals. This effect has been rigorously tested for each hookup and begins to show up when more than 3 sensors are used.

### Why can't I use the sensor without a control panel?

The sensor is a passive device that contains no amplification. The detected vehicle signal is very low in amplitude; thus, it will not provide operation of any relay without a large amount of amplification and signal shaping. The Mier Products' control panel removes extraneous signals as well as detects the various waveforms that occur.

### How do I increase the DA-505 timer power handling capability?

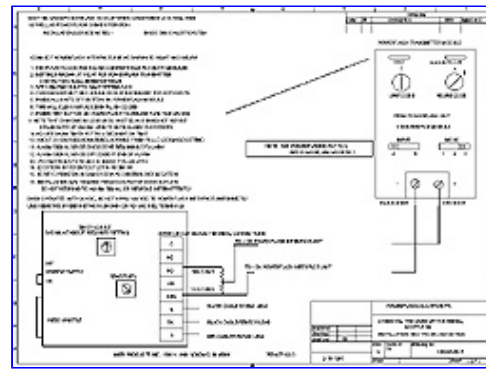
The power handling capability of the DA-505 timer can be increased by using the timer to operate a 25-30 ampere external relay with its high current contacts. The relay coil (120VAC) can be driven by the DA-505 timer and the external relay contacts used to control the high power lights. Be sure to enclose the new relay in a metal enclosure to prevent shock from the AC power.



### What should I do if I have intermittent or non-operating DA-057 Powerflash Interface and DA-058 Chime modules (X-10)?

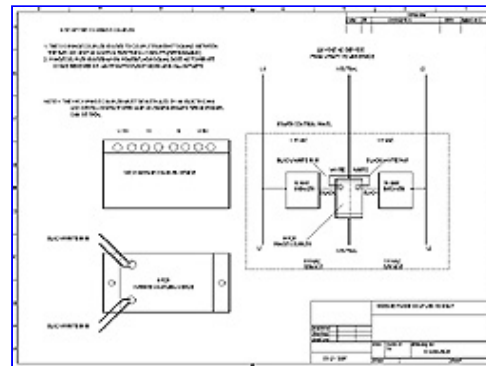
When using the DA-500 and DA-057 Powerflash Interface transmitter and DA-058 Chime module, verify you have a correct hookup (including all DA-057 and DA-058 switch settings). If it's a new hookup, also verify correct wiring is in use, (resistor network to lower control voltage to DA-057 approximately to 12-13VDC and wiring is correct).

If it's an existing hookup that has been working properly, verify the Drive-Alert control panel is functioning correctly. Then press the Powerflash Interface transmitter TEST button (upper left) to activate the remote chime. If there is no response, move the chime to the same location as the DA-057 transmitter and check once more. Verify the house and unit code settings are the same on each module. If there is no response, then either one or the other module is defective and needs replacement. If the modules work at the same location, then try another outlet in the chimes' location. Also see suggestions for using a Passive Phase Coupler under the following FAQ.



**What should be done if, while using the Powerflash Interface modules to operate a chime or lamp module, an intermittent operation occurs, or one of the modules works in one outlet but does not respond in other outlets?**

In this case, the signal strength on the house wiring may be the cause. House wiring has two main 120 VAC circuits. Whenever a Powerflash Interface transmitter is plugged into one AC outlet and the associated chime or lamp module is plugged into an AC outlet on the second circuit an insufficient signal may be present and the module will not respond. At times, changes in operation can be associated with a furnace, well-pump, or washer operation. Move the inoperative module to the same location as the transmitter to verify a weak signal is the problem. If this is the case, the problem should be resolved with the use of a Passive Phase Coupler which connects to both 120 VAC circuits in the house service entrance panel. Follow the installation instructions to place a Passive Phase Coupler in a service entrance panel.

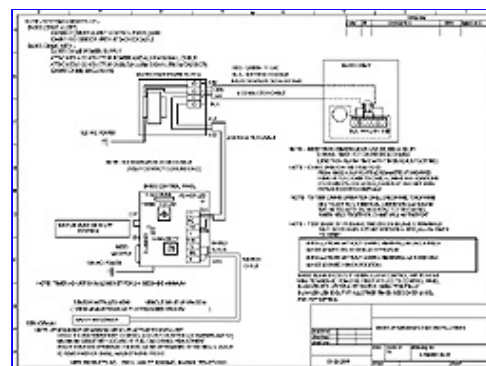


**How do I test the DA-500 Control Panel for continuous and no alarms?**

Disconnect the sensor cable first and then run the ohmmeter test described for false alarms. If the alarms stop the sensor cable is the problem. If the alarms continue without touching the terminal strip or circuit board for more than 1 minute, the control panel needs repair. If no alarms occur and the control panel appears to not function, then repair is required.

**How do I use the DA-055 Chime System? What would cause the Chime to be muffled?**

The DA-055 Chime System is an electronic chime that uses a relay contact to activate the chime. The chime is a solenoid system that uses a plunger to strike two chime bars. Check the mounting of each bar. Muffled chime notes could be the result of chime bars that have fallen off the grommet bar supports or the chime is not upright. System operation can be checked by disconnecting one wire from the DA-500 (C or NO terminals) then touching the disconnected wire to the other wire. Two notes should sound. If there is no chime note, then verify the chime power supply is connected and 11 VAC is present internally on the two top transformer wires. If the power is ok, then the chime may need to be replaced. (NOTE: DO NOT operate the DA-500 control panel with the whistle switch in ON position without first disconnecting the two DA-055 wires). Place switch in OFF position before connecting the two DA-055 wires back on the terminal strip. Note-if a continuous alarm exists the chime will not sound more than 2 notes. It will then remain silent.



**What do I do if I am using the Drive-Alert for a Drive-up Window, and I'm experiencing problems?**

Intermittent operation can result if a sensor is located too far from the vehicle. This can occur if the sensor is installed in an overhead canopy that is 10 or more feet high. Also the sensor must be located more than

a vehicle length from the drive up window. Small and/or low iron content vehicles moving slowly may not produce sufficient signal change in the sensor to activate the chime. Also the sensitivity setting should be checked. Turn sensitivity pot setting clockwise to increase Drive-Alert sensitivity. Placing a speed bump across the vehicle lane in line with the sensor may help increase the vehicle signal. If vehicles outside of the drive-up lane trigger the Drive-Alert, reduce the sensitivity setting slightly.

### How can I use a Home Alarm in conjunction with the Drive-Alert to announce a vehicle's presence?

The Mier Products control panel can be connected to a home alarm system requiring no voltage on the internal relay contacts (dry contacts). The C, NC and NO terminals of the Drive-Alert control panel can be used with home alarm systems by placing the whistle switch on the back of the control panel in the OFF position. This removes the internal voltage from the SPDT relay contacts and also turns off the internal piezo whistle. **DO NOT CONNECT THE DRIVE-ALERT DRIVEWAY ALARM SYSTEMS TO OTHER ALARM SYSTEMS WHICH ARE TIED TO THE POLICE OR OTHER SERVICES WITH FALSE ALARM POLICIES.**

### How do I turn the Drive-Alert audible alarm off at selected times?

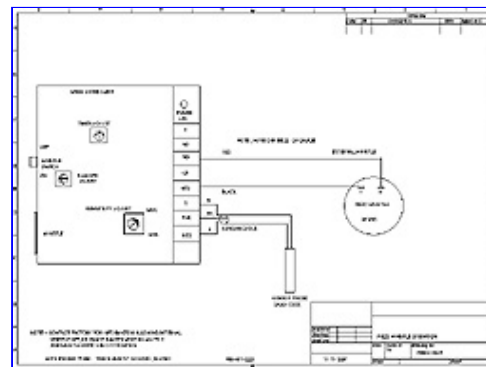
The internal and external piezo whistles on the Drive-Alert can be selectively turned off by placing the rear whistle switch in the OFF position. A separate switch can be used by placing the whistle switch in the off position and connecting an ON/OFF switch between the C and plus 24 terminals. This will control the application of Drive-Alert voltage on the C terminal. The latter method will not allow the internal piezo whistle to operate.

### Can I use a remote whistle with the base model DA-500 Drive-Alert?

Yes, the Mier Products DA-052 wall mount whistle can be used with the DA-500 control panel to sound an alarm in any room (see the next FAQ). However, it may be more cost efficient for you to use the DA-503 or DA-504 models, which bring you more features (such as remote chimes that can be placed in any receptacle in the house and turning on lights) without the work and cost of hard-wiring. Check out the DA-503 and DA-504 information on this website for more details.

### How can I connect an external piezo whistle to the Drive-Alert?

An external piezo whistle rated 3-28 VDC can be connected to the Drive-Alert. Two conductors with 22-24 gauge wire size is adequate for this service. If it is desired to operate the Drive-Alert without the internal piezo whistle, the rear whistle switch should be placed in the OFF position and a jumper wire connected from the front terminal strip +24 VDC position to the C terminal.



### Can I splice the sensor cable?

**The splicing of the sensor cable must be done with considerable care.** Moisture in a break in the cable jacket will result in false alarms. The outer jacket of the cable is polyethylene material that resists adherence of some sealants. Use of an ordinary plastic tape will not produce a moisture proof splice. A silicone based sealer may not be sufficient either. Mier Products offers a tested and approved spliced kit, or we have tested and approved cable lengths up to 2000 feet.

### What if problems with the Drive-Alert persist?

If all the tests above do not identify the problem, or control panel repair is felt necessary, contact Mier Products for additional assistance or send the control panel to the factory for testing and repair.