# **DRIVEGUARD**<sup>™</sup> SOUNDERS



### CT-A1 Indoor Sounder

The CT-A1 Sounder is an indoor sounder that installs in a single-gang electric box. Works with DriveGuard and DriveGuard Ultra systems (which use CT-2B and CF-2C control units respectively, see pages 8 & 9).

Three buttons on plate interact with lights and sensor when used with the DriveGuard Ultra (CF-2C):

**ON** Turns lights on, putting them on timer

**RESET** Turns lights off if they have not timed out

**EXIT** Turns sensor probe off so car can pass by and not trip the system

Note: these three buttons are non-functional when used with the DriveGuard system

- Full function with added features
- Mounts in single-gang elec. box
- Triple zone allows multiple monitoring
- Decorative cover hides screws
- Steady, fast-pulse, slow-pulse tones
- Screw terminal hook up
- Volume control with muting
- Includes set of screws



### CT-11 Outdoor Sounder

This is a weather-proof sounder with a piezo-type Mallory Sonalert® for mounting in an outdoor single gang electric box. It is excellent for areas such as pools, greenhouses, barns, etc. Length of tone can be adjusted; manual volume control.

- Weather-proof for outdoors
- 90 dB with manual volume control
- Mounts in single-gang elec. box
- Screw terminal hook up

- Pulsating tone Includes gasket seal and screws
- Manual volume control
- Be alerted anywhere on the property



### AA-1 Alarm Alert

This is a universal sounder that has a piezo-type Mallory Sonalert® audible signal device. It is suitable for any security alarm panel, home automation panel, etc. Requires just two wires: power positive and power negative. It has volume control; may be muted.

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|               | CT-A1         | CT-11         | AA-1          |
|---------------|---------------|---------------|---------------|
| Req. Power    | 10 - 20 VDC   | 10 - 20 VDC   | 10 - 20 VDC   |
| Alarm Current | 20 mA max.    | 25 mA max.    | 20 mA max     |
| Temp. Range   | 0° F 140° F.  | 0° F 140° F.  | 0° F 140° F.  |
| Dimensions    | 4½" x 3" x 1" | 4½" x 3" x 1" | 4½" x 3" x 1" |
| Weight        | 1 lb.         | 1 lb.         | 1 lb.         |
| Max. Volume   | 70 dB         | 90 dB         | 70 dB         |

### Introduction

Both of the Cartell control units can operate up to twelve sounders. All our sounders mount in a single-gang electrical box for flush mounting. All connections are made to a screw terminal on the back of the sounder's circuit board. We suggest you use CAT-5 wire. Solder-tin the ends of the wires before connecting to the sounder and control unit to avoid corrosion. After you have run cable from the control unit to the sounder, always connect the wire to the sounder first and then to the control unit.

Note: After connecting wires to the sounder, and before connecting the sounder to the control unit, measure the resistance between the colored wire you choose to connect to the sonalert and the colored wire you choose to connect to ground. The resistance should never be less than 75 ohms total. Resistance less than 75 ohms shows damage to the wire between the control unit and sounder (e.g., a staple through the wire) and will damage the power supply.

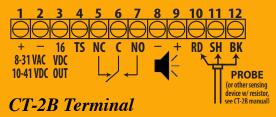
### **CT-A1 Installation Instructions**

Refer to the introduction above. First make the connections at the CT-A1 plate and then to the control unit as follows:

- Connect one colored wire to the terminal marked "G." At the control unit, test the resistance as noted above. Then proceed to connect this wire to terminal 8 (CT-2B) or to terminal 15 (CF-2C).
- Connect another colored wire to the terminal marked "S" (for steady tone) or "P1" (for pulsating fast tone) or "P2" (for pulsating slow tone). At the control unit, test the resistance as noted above. Then proceed to connect this wire to terminal 9 (CT-2B) or to terminal 14 (CF-2C).
- Connect a third colored wire to the terminal marked "V." At the control unit, this wire should be connected to terminal 3 (CT-2B) or to terminal 5 (CF-2C).

If you are using a CF-2C control unit, three more connections should be made:

- Connect a colored wire to the terminal marked "E" on the CT-A1 to terminal 9 on the CF-2C.
- Connect a colored wire to the terminal marked "R" on the CT-A1 to terminal 10 on the CF-2C.
- Connect a colored wire to the terminal marked "M" on the CT-A1 to terminal 8 on the CF-2C.



### **CT-11 Installation Instructions**

Refer to the introduction. First make the connections at the CT-11 plate and then to the control unit as follows:

- Connect one colored wire to the terminal marked "–". At the control unit, test the resistance as noted above. Then proceed to connect this wire to terminal 8 (CT-2B) or to terminal 15 (CF-2C).
- Connect another colored wire to the terminal marked "+". At the control unit, test the resistance as noted above. Then proceed to connect this wire to terminal 9 (CT-2B) or to terminal 14 (CF-2C).

#### **AA-1 Installation Instructions**

The AA-1 works with any security or home automation panel and with Cartell's two control units (CT-2B and CF-2C).

Refer to the introduction. First make the connections at the AA-1 plate and then to the security (or other) panel. The AA-1 requires two wires, one for power positive, the other for power negative. Connect power positive from security panel to the terminal marked SON on the AA-1. Connect power negative from the security panel to the terminal marked GND on the AA-1. Test resistance positive to negative as described in the introduction and finish by connecting wires to the security panel per the installation instructions provided with said system.

When used with the Cartell control units, first make the connections at the AA-1 plate and then to Cartell's control units as follows:

- Connect one colored wire to the terminal marked "GND" on the AA-1. At the control unit, test the resistance as noted in the introduction. Then proceed to connect this wire to terminal 8 (CT-2B) or to terminal 15 (CF-2C).
- Connect another colored wire to the terminal marked "SON" on the AA-1. At the control unit, test the resistance as noted in the introduction. Then proceed to connect this wire to terminal 9 (CT-2B) or to terminal 14 (CF-2C).

