

508D DoubleGuard® Field Disturbance Sensor

The 508D uses an ultra-high frequency field to detect objects of sufficient mass which move within a defined area. The 508D triggers the first stage output if an object is detected in the outer zone of coverage, while the second stage output is triggered if the inner zone is violated.

The first stage output provides a 500mS (-) pulse that can be used three ways: to trigger an optional voice module (516T or 516P programmable voice), to trigger the Warn Away® signal built into many DEI® security systems, or to trigger a relay that would turn on the siren briefly, thus providing a short chirp.

If using the 508D with either a 516T-series voice module or a siren-chirping relay, it must be turned off while the system is not armed. To do this, connect the black (-) ground lead to the (-) ground-when-armed output of a security system. If the security system does not have a (-) ground-when-armed output, a 611T latching relay may be used to provide one.

If you are using the 508D with a DEI® security system that has a multiplex input, you can connect both the BLUE and the GREEN wires to the multiplex input.

Mounting the 508D: should be placed as close as possible to the center line of the vehicle. The mounting tabs should be to the front and the rear of the vehicle, but the orientation of the wire-socket end is not a factor (as with the 508T). Also, the 508D is not sensitive to being placed directly onto metal.

In this drawing, a would-be thief who approaches the vehicle too closely would trigger the Warn Away® signal (whether voice or chirp (s)). If the inner zone is triggered, the system would go from the Warn Away® to full alarm mode. Notice that in order to trigger full alarm, the thief must actually enter the area within the vehicle!

Wiring the 508D:

- Red** (+)12V constant
- Black** (-) ground, either chassis ground or switched ground-when-armed (see above)
- Green** First stage (-) 200mA output (500mS)
- Blue** Second stage (-) 200mA output (1 S)

Adjusting the 508D:

The 508D will not trigger during the first 4 seconds of being turned on. This prevents the user from triggering the voice immediately after arming the system, and avoids several possible installation difficulties.

NOTE: When adjusting the 508D, always set the warn adjustment first. This will expand or contract both zones. After this adjustment has appropriately defined the outer zone, then use the trigger adjustment to set the inner zone.

When the sensor sends a (-) trigger on the green Warn wire, the green LED will turn on. When the sensor sends a (-) trigger on the blue trigger wire, the red LED will light.

