



## WIDE AREA DURESS REPORTING SYSTEM (WAD)

(RADIO CONNECTED)



- Each duress alarm station is self-contained and requires no trenching, conduit and wiring to the central control point.
- A duress alarm station can be portable and can be easily moved to a new location whenever necessary.
- Each duress alarm station contains a powerful radio transmitter, assuring that the alarm signal will reach the central control point in all weather conditions.
- Additional duress alarm stations can be easily added to the system whenever necessary by simply installing another unit.

The *Wide Area Duress (WAD) Reporting System* was developed to provide reliable duress reporting capabilities in a large, open area, such as a parking lot, for the lowest effective cost, including installation and maintenance. The WAD uses CDT's EMPACT Series Radio-Alarm-Link (RAL) hardware and software. It is designed and packaged as a complete integrated system, allowing for a simple installation, as with our other RAL products.

The duress alarm system consists of 28 (or more) self-contained duress alarm stations connected to the central security control point using a dedicated radio frequency data transmission system. The duress alarm signals are received by a radio receiver/decoder system and graphic display. The graphic display annunciates the location and type of alarm.

Each duress alarm station is powered by its own battery. A small solar cell (optional) mounted on the pole above the duress station maintains the battery at full charge. There are two heavy-duty alarm buttons recessed in the station faceplate: Emergency and Medical. The use of two buttons is important because the response to a medical emergency often requires taking additional equipment (i.e., oxygen bottle).

Each duress alarm station is pole-mounted (or wall-

mounted) on a heavy-duty 4-inch metal pipe post (not included). The antenna and solar panel are mounted above the alarm station. The antenna normally mounts on the top of the post. A high-intensity strobe light (optional) can be mounted to the post above the station. The strobe lamp flashes when the station is activated, allowing more rapid response by security personnel.

The duress alarm station enclosure is a high-strength environmental enclosure designed to take considerable abuse. The enclosure and internal circuitry are designed to withstand continuous temperatures from -20°F to +130°F.

The central alarm receiving equipment consists of a roof-mounted antenna, self-mounted receiver/decoder, and surface wall- or rack-mounted graphic display. Alarm signals are graphically displayed using colored solid state light-emitting diodes (LEDs) and an audible alarm. Emergencies are displayed as flashing red; medical emergencies as flashing green. Each type of alarm has a unique audible alarm indication.

When an alarm is received at the graphic display, the audible alarm can be silenced; the alarm indication will be reset when the alarm is reset at the duress alarm station using a special key. The alarm from any duress alarm station will continue to be sent approximately

every three minutes (selectable) until the alarm is reset at the station.

Proper operation of each duress alarm station is ensured by an alarm supervision system consisting of a "test" alarm transmission every 5-10 minutes (selectable). If the supervision signal is not received at the central control point at the proper time, a flashing yellow LED and audible alarm is indicated for that station on the graphic display. A low-battery condition is reported in a similar fashion.

The receiver/decoder can be provided with optional relay contacts for activating a camera or other equipment whenever an alarm occurs. Each displayed station can have an independent relay contact. The contact will close when the alarm is received and will not reset until the remote duress alarm station is reset.

The central control alarm receiver/decoder has the capability of connection to the **CDT RANS-Voice** system. RANS-Voice provides the capability of sending voice alarm messages to roving security personnel.

## SPECIFICATIONS

### General System:

**Operating Frequency:** 903-928 MHz  
**Transmission Method:** Spread spectrum (direct sequence)  
**Data Rate:** 9600 Baud

### Duress Alarm Station:

**Enclosure:** Heavy duty, NEMA 12 rated  
**Size:** 12" W x 12" H x 4" D  
**Alarm Switches:** Heavy-duty, sealed oil-tight  
 Emergency—Red  
 Medical—Green  
**Alarm Reset Switch:** Pressing alarm switches in sequence resets alarm.  
**Transmitter Output:** 1 watt, 50 ohm  
**Power Required:** 12VDC from internal battery, 8 Amp. Hour (external power optional)  
**Antenna:** Fiberglass, Omni-directional, Directional (separately mounted)  
**Solar Panel:** 8" W x 6" H x 1" D with mounting bracket (separately mounted) (optional)  
**Strobe Light:** 5-1/4" diameter by 4-3/4" high with mounting bracket for pole mounting. Requires large internal batteries. Lens colors: red, blue, or amber. (optional)

### Central Control Receiver/Decoder:

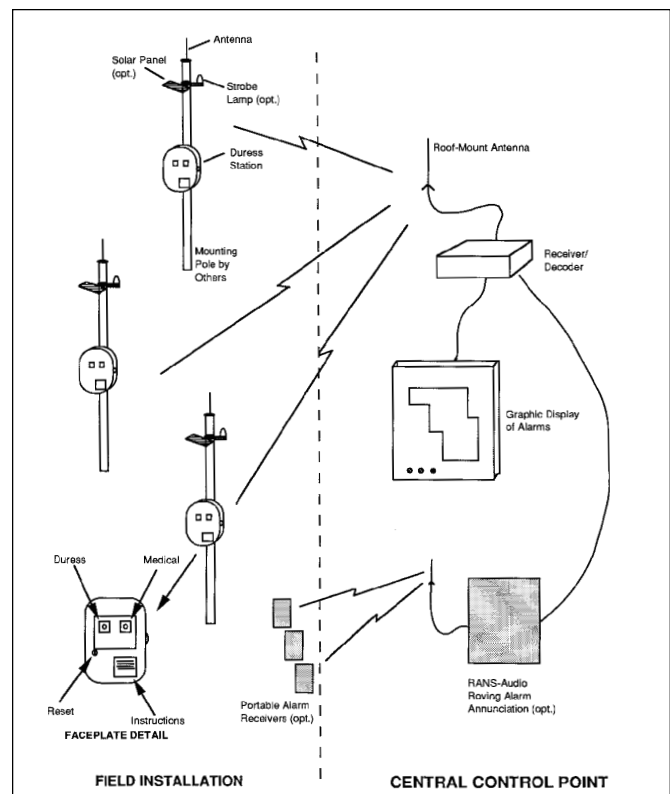
**Enclosure:** Cabinet mount (rack mount optional)  
**Size:** 19" W x 5.25" H x 13" D  
**Power Required:** 120VAC (from wall-mounted UL-approved transformer)  
**Antenna:** Fiberglass, High Gain Omni-directional (separately mounted) (Antenna must be provided by installation contractor)  
**Antenna Cable:** Low Loss RG-8U cable assembly with Type N connectors  
**Relay Outputs:** 1-Form C contact 24VDC/1 Amp. for each remote station (optional)

### RANS-Voice Annunciation for Roving Personnel (optional)

See the *RANS-Voice* brochure.

### Graphic Display Annunciator Panel:

**Enclosure:** Surface Wall-Mounted Cabinet (rack mount optional)  
**Size:** Cabinet: 20" W x 21" H x 4" D  
 Display: 10" W x 19" H  
**Alarm Lamps:** Solid State Light-Emitting Diodes (LED)  
**Lamp Colors:** Emergency—Red  
 Medical—Green  
 Trouble—Yellow  
**Control Switches:** Alarm Acknowledge, pushbutton  
 Alarm Reset, pushbutton  
 Lamp test, pushbutton  
**Audible Alarm:** Solid state sounding device



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