



Graphic Display Annunciation has proven very useful in control rooms and monitoring locations where a large area must be monitored. Typical installations include power plants, refineries, military bases, and correctional facilities. Properly designed graphic annunciation systems show all important buildings, partitions, doorways, and gates, as well as the precise locations of alarm devices and zones.

CDT manufactures custom graphic display annunciators suitable for wall, console or rack mounting. Annunciators for console or equipment rack mounting are normally designed to fit and mount within standard 19-inch EIA mounting rails. When provided for wall mounting, each annunciator is provided with a surface-mount enclosure. Annunciators can also be provided in custom enclosures designed to integrate with the other control room equipment.

CDT's EMPACT Series annunciator systems normally consist of a custom-designed graphic faceplate and enclosure. The annunciator faceplate consists of a .1875-inch 6061-T1 aluminum substrate with a .020-inch polycarbonate graphic display bonded to the aluminum surface. All lamps and other annunciator equipment are mounted to the aluminum substrate. The graphic representation is photographically produced on the reverse (back) side of the polycarbonate sheet. The outside (front) surface of the polycarbonate sheet is a

GRAPHIC DISPLAY ANNUNCIATOR SYSTEMS

WM SERIES

- High-Accuracy CAD-Produced Graphics
- Polycarbonate Non-Glare Graphic Surfaces
- Choice of Lamps: Solid State or Incandescent
- Wide Selection of Colors
- Custom Enclosures Available

nonglare, velvet-textured surface. The graphic presentation can be provided in one or more of 11 distinct colors. For example, a typical display will show the fence line and buildings in bright blue, alarm areas and zones in white, and zone nomenclature and wording in red. Accents and special features will be provided in yellow, orange, and green.

All *EMPACT Series* faceplate and substrate graphics are accurately produced from a single Computer-Aided-Design drawing, assuring that the graphic surface accurately registers with the aluminum substrate containing the lamps. The polycarbonate sheet is bonded to the aluminum substrate using a non-hardening pressure-sensitive adhesive. Annunciator lamps are multi-element ultrabrite light-emitting diodes, or long-life incandescent lamps. Incandescent lamps are always operated at less than 80% of the rating to achieve maximum life. The front surface of each lamp is in direct contact with the polycarbonate graphic panel, providing a minimum 160-degree viewing angle. Surface-mounted lamps allowing a 180-degree viewing angle can also be provided. Each lamp is replaceable from the rear of the panel. Front panel replaceable

lamps are optional. Normal lamp colors are red for alarm, green for secure, and yellow for access. Alarm zones are displayed with two red alarm lamps, one at each end of the zone extents. Secure and access lamps are mounted in the center of the zone.

Each **CDT** graphic panel contains an illuminated legend. The legend consists of one each of the lamps used in the display. All connections to the graphic panel are via screw-type terminals. Each terminal is labeled. A drawing of the wiring connections is shipped with the panel. The back of the aluminum substrate is drilled and tapped to accept a variety of manufacturers' custom lamp driver modules, as well as *EMPACT*

Series display drivers and Graphic Interface Units (GIU). The annunciator lamp wiring is terminated directly to the display driver modules, leaving only simplified connections for the installer.

All **CDT's** *EMPACT Series* graphic annunciator enclosures are constructed from 16-gauge CRS and finished in light beige epoxy enamel (other colors available on request). Each enclosure is furnished with a full-length stainless steel hinge on one edge with a tumbler key lock on the opposite edge. Each graphic display annunciator is completely factory tested before shipment.

