# ACP-135 Annunciator Control Panel

## 1. Intent & Scope

This document describes the installation procedure for the ACP-135 Annunciator Control Panel.

## 2. Description

The ACP-135 is a panel mount, large size display version of the Annunciator Control Panel. It provides alarm, point monitoring, and call signaling device notification for locations where audio communications is not required. Control panel functions permit the ACP to acknowledge, cancel, and reset incoming alarms and to monitor, activate and deactivate executable control points.

## 3. Installation

### Mounting the ACP-135

The front view of the ACP-135 Annunciator Control Panel is shown below.


**ACP-135 Annunciator Control Panel**

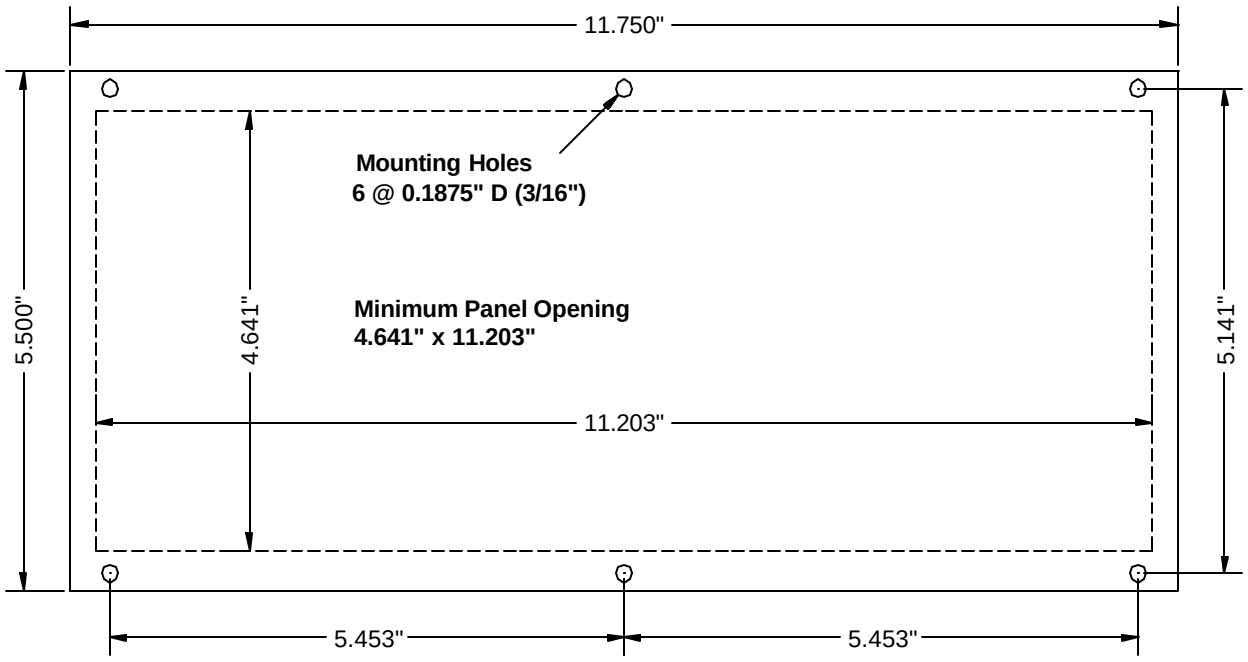
The front plate of the annunciator control panel mounts through a rectangular hole in the panel. The dimensions of this hole and the associated mounting screw hole locations are shown below.

The annunciator display panel is designed to mount on a 0.125-inch thick panel. If thinner panel material is used, shims or washers must be added behind the panel to make a total thickness of at least 0.125 inches. When it is shipped from the factory #10 nuts are placed between the front panel and the main body to act as spacers. These must be removed and discarded when the ACP is installed.

To install the ACP display module, you must separate the front plate from the main body by removing the supplied mounting screws. Then place the main body in position behind the panel. Finally place the front plate in position on the front of the panel and install the mounting screws. The ACP module is shipped with standard #6-

32 screws in the 6 mounting holes. If special tamper resistant mounting hardware is being used, these screws should be replaced with #6-32 x 1/2" screws with the required tamper resistant heads.

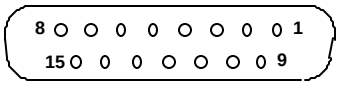
When handling the display module you should be careful not to touch the display or the backside of the display window because this may leave fingerprints. Any fingerprints should be cleaned off the inside of the glass before the face is installed.



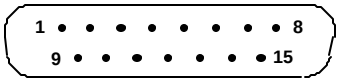

**Mounting Hole Detail of Panel Mounted ACP**

## 3.2 Electrical Connections to the ACP

All the electrical connections to the ACP-135 are through a DB-15 connector. The ACP has a male connector and the mating cable requires a female DB-15 connector.




**Female DB-15 Connector**




**Male DB-15 Connector**

The backview of an ACP-135 shows the location of the male DB-15 I/O connector.


**Back of ACP-100 (Identical to ACP-135)**

The following table gives the pin numbers and the input signals for the DB-15 connector.

| Pin | Signal | Pin | Signal |
|---|---|---|---|
| 1 | Main V+ | 9 | Main V- (Gnd) |
| 2 | Network A+ | 10 | Network A- |
| 3 | Relay 1 NC | 11 | Relay 1 COM |
| 4 | Relay 1 NO | 12 | Relay 2 NC |
| 5 | Relay 2 COM | 13 | Relay 2 NO |
| 6 | Earth Ground | 14 | Network B- |
| 7 | Network B+ | 15 | Backup V- (Gnd) |
| 8 | Backup V+ | | |

**DB-15 Pin Signals**

The ACP-135 can be ordered for either 12 Vdc or 24 Vdc operation. For a 24 Vdc unit, the main power should be connected to a 24 Vdc power supply that must provide 14.5–26.4 Vdc at the ACP power terminals under load. For a 12 Vdc unit, the main power should be connected to a 12 Vdc power supply that must provide 8.0-18.0 Vdc at the ACP power terminals under load. Full load current, with the back lighting at maximum brightness, is 0.5 A. For a 24 Vdc ±10% power supply, and a single 22 gauge wire feed, the power supply should be located within 480 feet (145 meters) of the master station. For a 12±10% Vdc power supply, and a single 22-gauge wire feed, the power supply should be located within 175 feet (53 meters) of the master station. Ensure that the power switch on the ACP is turned off whenever the DB-15 connector is connected or disconnected.

The pins labeled Backup V+ and Backup V- (Gnd) can be used to connect a redundant power supply. This supply acts as a standby power source if the main supply fails. The backup supply must have the same voltage as the main supply.

The Echelon LonWorks connection is made to the pins labeled Network A+ and Network A-. The LonWorks network cable is connected to one of the free topology ports at the SAC computer. A second redundant LonWorks connection can be made to the pins labeled Network B+ and Network B-. If the Network A connection cannot be made the ACP-135 will attempt to make connections on Network B.

The two relay outputs are controlled by setting parameters in the ACP-135 software configuration. They can be programmed to close if the internal buzzer is activated. These contacts can be used to turn on an external buzzer (This buzzer must be externally powered).