



## CC2-AN-4-\*T

(\* = Color Option)

### ***Annunciator - 4-LIGHT with Tone***

The Tech Works **CC2-AN-4-\*T** is a 4 light Intelligent Annunciator panel available in a variety of color options. Standard Color Options are "B" for Bright Colors, Red Yellow, Green, and White, or "P" for Pastel Colors Pink, Ice Blue, White, and Purple, or "N" for No Colors (All White). The 4 windows are back lit by white LEDS and can easily be labeled to correspond to staff or locations such as restrooms or functions such as "Patient Waiting". A built in tone unit sounds to let staff know that there have been a change in the light status of the annunciator.

Intelligent Data Network Communication allows the status of these lights/buttons to be sent to other Intelligent Stations with the same address. Two sets of four-position dipswitches program the Substation address. The first set specifies which Master to display the light status while the second set specifies the column of lights on the Master which correspond to this Substation. All Substations with the same address shall be totally interactive. Pushing a button on the Substation lights either a *steady* or *flashing* corresponding light depending on the dipswitch software selection. The annunciator simply displays the light as communicated by the push button station.

#### **BENEFITS**

- Easy to Install
- Easy to Program
- Easy to Operate
- Durable Construction
- Two Twisted Pair Cable

#### **Associated Equipment**

<b>CC2-AN-16</b>	16-Position Annunciator
<b>CC2-AN-84</b>	8-Column, 4-Color Annunciator
<b>CC2-DL-44</b>	Smart Dome Light

#### **Design Information**

<b>Power</b>	11-25V DC @ 44 mA Min./60 mA Max
<b>Color</b>	White
<b>Mounting</b>	1-Gang Back Box
<b>Dimensions</b>	2.75" W x 4.5" H x 1" D
<b>Weight</b>	0.25 lb.

#### **Architects' and Engineers' Specifications**

The Light Signaling System Annunciator shall be a standard one gang electrical box mounting device constructed of ABS plastic with a water resistant Lexan faceplate. A minimum of four lights shall be provided to indicate up to eight statuses, and color-coded to easily identify functions or staff. The Annunciator shall be an intelligent electronic device, addressable by the installer, requiring no more than 60 mA at 12 Volts DC for full operation. The system shall operate on two twisted pair parallel wiring. Any system that requires more than two twisted pair wire and is not installer programmable will not be considered under this specification.

The Light Signaling System Annunciator shall be Tech Works Model CC2-AN-4-\*T (*Note to specifier – add suffix to indicate desired color options*)



## **Tech Works®**

*"Making Specialized Communication Easy"*

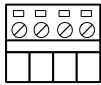


## Quick Start Installation Instructions

W B B  
H L R L  
I A E A  
T C D C  
E K K

Wiring is four screw terminals to interface to the Tech Works Network. The Network is 2 twisted pair wires. One Pair of wires is Network Communication data and the other pair is power.

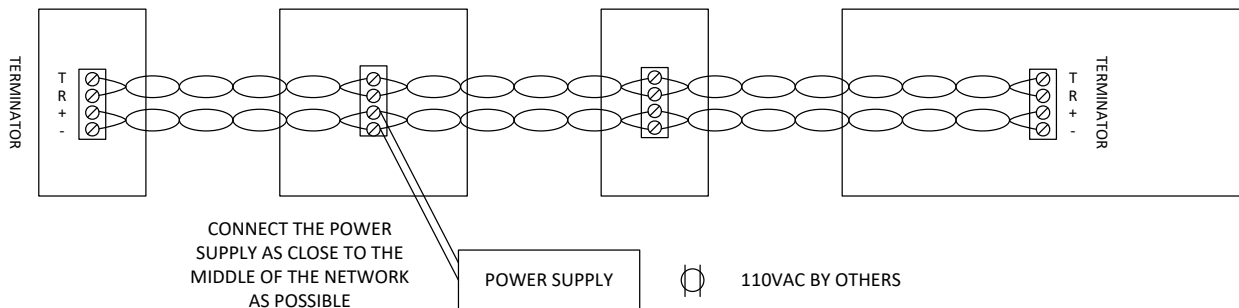
T R + -



Be sure to tighten the screw on the wire tightly. U.L. Torque Spec: 3.5 lb. / in.

The first pair is RS485 terminated bus topology, operating at 39K baud in a parallel connection plan. Because this is a distributed processor system, each intelligent device contains a micro controller, so there is "NO Central Processor". Each device is totally self-contained and can be used as a stand alone or in combination with any other intelligent device. The second pair is 11-25 VDC power in a parallel connection plan.

The system is designed to operate on unshielded twisted pair cable from 24 to 18 AWG. The twist of the cable is critical to the proper communication of data on the network to avoid noise interference. Any standard voice grade twist should provide adequate noise cancellation under normal operating conditions. All wiring is NEC Class 2.

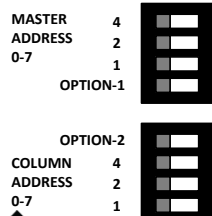


**Due to the implementation of innovative data noise canceling circuits in all Tech Works RS485 microprocessor products, the data and power can now be run in any direction up to a total wire length of 3000 feet.**

**The last station on each end of all wire runs must employ a terminating resistor to make the network operate correctly. The terminator is built into each station and selected by turning "ON" the "T" dipswitch. If a terminator is placed in the middle, data will not flow to all devices in the system causing irregular operation.**

As with any RS485 communication system grounding is critical to the proper operation and life expectancy of the system. All **Tech Works** power supplies employ a floating ground designed to isolate the data communication from interference and destructive electro static discharges. The use of multiple power supplies on the same network will cause different floating ground references (ground loops) which may cause noise and destruction of the intelligent devices. If multiple power supplies are required, be sure to connect all "-" or common wires together between power supplies for a "common" reference.

**Connect the power supply as near the middle of the network loop as possible to assure the best possible power distribution.**



Each Substation is equipped with dipswitches for installer programming of the system. The first set of switches selects the Master or group of Masters on which this Substation will be displayed. The second set of dipswitches selects the column of lights on the Master to represent this Substation. Any two Substations with the same address will be totally interactive. This means the push of a button on one sub will light its light, as well as the light on the other sub with the same address.

