

Model T8000-CM

Conventional Zone Module

for FireSpy® Tracker Control Panels

SAFETY MESSAGE TO INSTALLERS

People's lives depend on your safe installation of our products. It is important to read, understand and follow all instructions shipped with this product. Listed below are some other important safety instructions and precautions you should follow.

- This unit must be installed and maintained by a qualified electrician in accordance with NFPA 72 and National and local Electrical and fire codes, under the direction of the authority having jurisdiction.
- Do not connect this unit to system wiring when circuits are energized.
- After installation and completion of initial system test, provide a copy of this instruction sheet to all personnel responsible for operation, periodic testing and maintenance of this equipment.
- Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you and others.

GENERAL

The T8000-CM conventional zone module (CM) connects to a FireSpy Tracker control panel's RS485 connection. Up to 6 zone modules may be connected to a panel. Each CM provides 5 Class A zones or 10 Class B zones for conventional devices.

Up to 5 T8000-RC relay modules may be connected to a CM.

Zone modules may be mounted in the main enclosure or in UL864 listed remote enclosures.

INSTALLATION

Refer to the Tracker 8000 installation manual for battery calculations and other additional requirements for installing the assembly in the fire panel system.

Mounting

The CM mounts in a UL864 Listed enclosure. The installation location should be reasonably free of dust, vibration, and moisture. To avoid degradation of the operating circuitry, it is recommended that the circuit boards be removed during cabinet mounting, wire installation, and any other procedures that may introduce dust, metal shavings, grease or any other foreign matter into the area of the electronic circuitry.

1. To mount a single module, secure the module to four standoffs in the cabinet with screws.
2. To mount above a T8000-LCU, add four standoffs at the offset mounting positions through the bottom module and secure the upper module to these standoffs with screws. See Figure 1.
3. Secure the ground wire to the backbox grounding stud with a nut.

Wiring

WARNING

To reduce the risk of electrical shock, make sure that all power has been turned off or disconnected prior to attempting to install wiring or connect power.

1. Connect module power supply wiring to the 24VDC supply circuit. Connect RS485 communication wiring to the panel's communication circuit. See Figure 5.
2. Set SW1 to set the module's address (Figure 3). If the CM is the last module on the panel's communication wiring, set SW2 to the end-of-line settings (Figure 2).
3. Connect zone wiring (Figure 5). Set SW2 according to the wiring style used (Figure 2).

Specification	Rating
Listed	ETL, Standard UL864
Use / Environment	Commercial / Indoor, dry
Temperature range	32 to 120°F
Maximum relative humidity	95%
Input voltage	Regulated 24 DC
Max impedance, power wiring, total (3V drop each wire)	6V divided by total alarm current
Max impedance, RS-485 wiring*	100 ohms

Class B (Style B) Zone Specifications	Rating
Input current draw	
Standby (no detectors)	110mA
Alarm, base module current	110mA
Alarm, each additional zone in alarm*	21mA
End of Line resistor	4.7k ohms
Zone output voltage (normal standby)	26.5VDC
Zone output current	
Supervision	5mA
Short circuit / max alarm	40mA
Zone impedance (total per loop), max	100 ohms

* For total alarm current, add 110mA plus 21mA for each additional zone used

Class A (Style D) Zone Specifications	Rating
Input current draw	
Standby (no detectors)	75mA
Alarm, base module current	75mA
Alarm, each additional zone in alarm*	36mA
End of Line resistor	(2) 4.7k ohms**
Zone output voltage (normal standby)	27.5VDC
Zone output current	
Supervision	4mA
Short circuit / max alarm	85mA
Zone impedance (total per loop), max	50 ohms

* For total alarm current, add 75mA plus 36mA for each additional zone used

** Connect 2 EOL resistors in parallel at the last detector

† The maximum number of detectors on a zone is given by $N = 4mA / I_d$, where I_d is the load current of one detector in mA.

Table 1: Specifications

4. Connect cable for T8000-RC modules, if used (Figure 5).

OPERATION

Refer to the control panel documentation for operation and programming details.

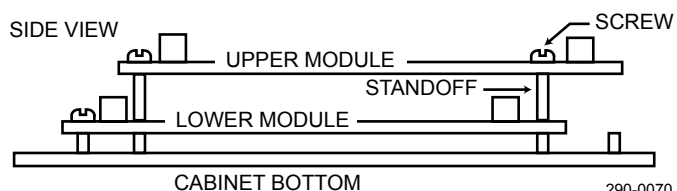


Figure 1: Mounting in stacked configuration

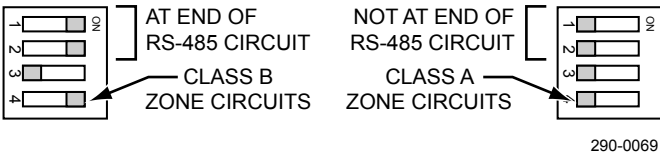


Figure 2: SW2 settings

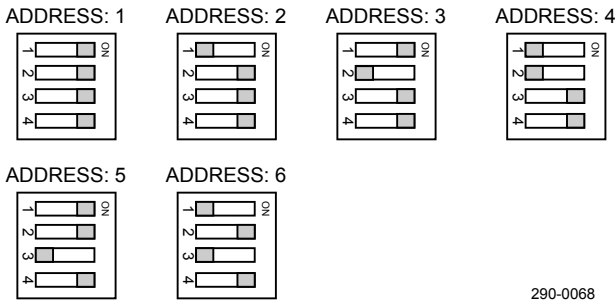


Figure 3: Address (SW1) settings

ORDERING INFORMATION

Model	Stock No.
T8000-CM Conventional zone module	T-CM
T8000-EXP remote enclosure	T-EXP
T8000-EXPL remote enclosure, small	T-EXPL
T8000-EXP5 remote enclosure, large	T-EXP5
Mounting hardware kit	T-KIT
Cable for connecting to T8000-RCs (14 inches)	TG-CBL-RC
Cable for connecting to T8000-RCs (36 inches)	TG-CBL-RC36

SERVICE

To get help with problems or questions not covered in these instructions, contact:

Technical Service Department
Harrington Signal Inc.
2519 - 4th Avenue
Moline, IL 61265
(800) 577-5758

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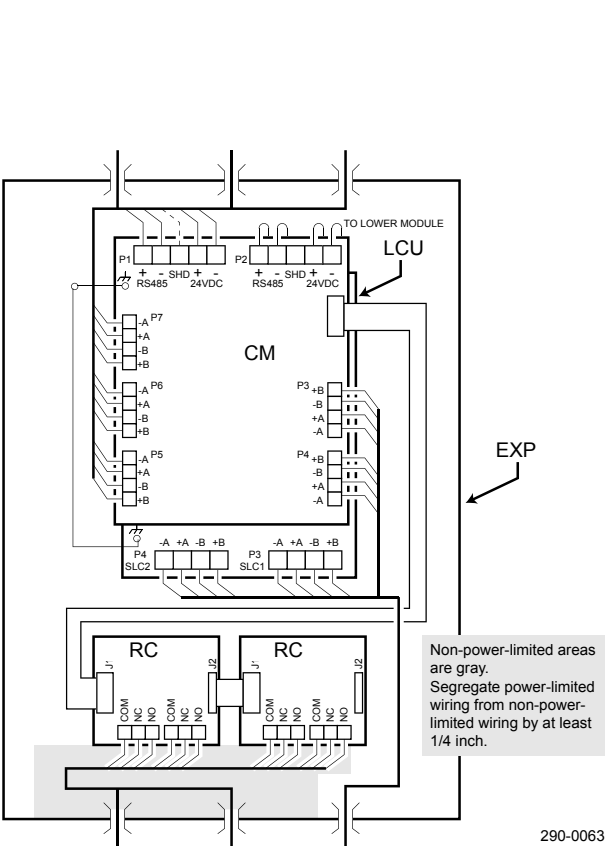


Figure 4: Wire routing in remote cabinet

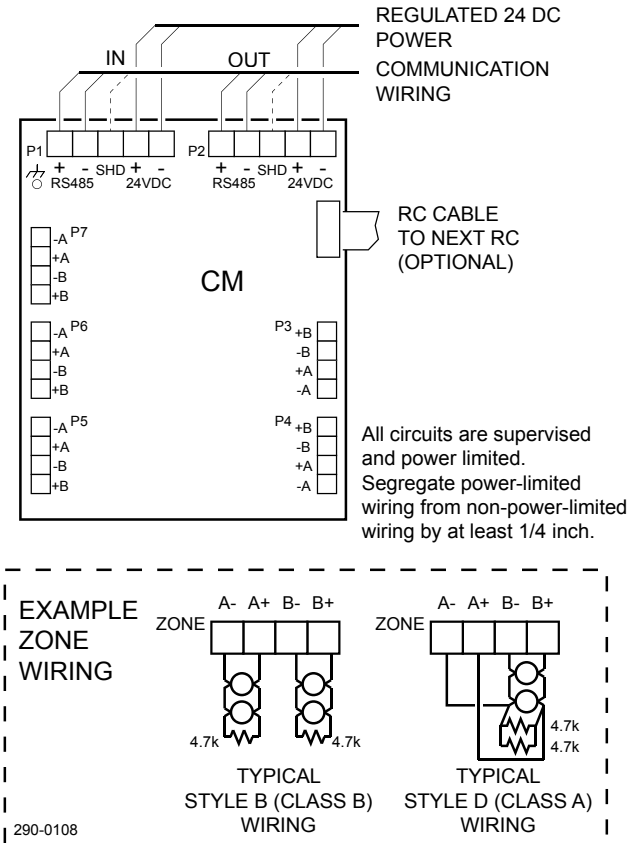


Figure 5: Wiring