SIEMENS

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 05/07/13
Planner: Benjamin Wallace Jr

Installation Instructions
Model HTRI-M

Addressable Interface Module

The **SIEMENS** Model HTRI-M Series Addressable interface module interfaces direct shorting devices to the DLC loop of the FireFInder-XLS System or the FS-DLC loop of the FS-250 System. It is also approved for 1076, Proprietary Burglary.

The HTRI-M can monitor a normally open or closed dry contact and it can report the status of the contact.

Figure 1
HTRI-M Module

PROGRAMMING

Refer to Figure 1 to locate the red and black DLC/FS-DLC loop circuit wires of the HTRI-M.

Connect the Addressable Loop Driver circuit wires of the HTRI-M to the **SIEMENS** Model DPU Programmer/Tester. Use the cable provided with the Programmer/Tester and the 2 alligator clip to banana plug adapters provided.

CAUTION

To Prevent Damage To The DPU:
DO NOT connect a HTRI-M to the DPU until all field wiring is removed from the red and black DLC/FS-DLC loop circuit wires of the HTRI-M.

NOTE

Connection from the DPU to the HTRI-M is not polarity sensitive. Refer to Figure 3 for the proper connections to the control panel.

(Refer to Figure 2.) Follow the instructions in the **DPU Programmer/Tester Manual** (P/N 315-033260) to program the desired address into HTRI-M.

Record the device address on the label located on the HTRI-M. The HTRI-M can now be installed and wired to the system.

NOTES:
1. There can be any number of normally closed or normally open switches.
2. The end of line resistor must be located at the last switch.
3. Do not wire a normally closed switch across the end of line resistor.
4. Only for use with security and status applications.
5. Do not use N.O. switches for security applications.

Figure 2
Wiring Switches

Siemens Building Technologies
Fire Safety

WIRING

(Refer to Figure 3.) Refer to the wiring diagram and wire the addressable interface module accordingly.

NOTE

Recommended wire size: 18 AWG minimum
14 AWG maximum

Figure 3
Installing the HTRI-M Wiring

NOTES:

1. **All supervised switches must be held closed and/or open for at least a quarter of a second to guarantee detection.**
2. End of line device: 3.6K, 1/4W resistor, P/N 140-820185. For Canadian applications, use Model EL-33 with 3.6K, 1/4W resistor.
3. HTRI-M is polarity insensitive. Line 1 and Line 2 can be either line of the loop.
4. The supervised switches have the following ratings:
   Voltage maximum: 27 VDC
   Current maximum: 3.5mA during polling
   Contact resistance maximum: 10 ohms
   Maximum cable length: 200 feet (18 AWG)

   $C_{Line\ to\ line}$: 0.02uF
   Max line size: 14 AWG

   $C_{Line\ to\ shield}$: 0.04uF
   Min line size: 18 AWG

CAUTION

Ground shield ONLY at the specified location on the Control Panel.

5. The green wire must be connected to earth ground.
   a. Use wire nuts to pass the shield wire through the electrical box with **NO** connection to the device green wire.
   b. Use shielded wire to connect the switch wiring.
   c. Tie the switch wiring shield to earth ground.
6. For proprietary burglary application:
   a. Use aTSW-1/2 tamper switch to monitor the main enclosure.
   b. Monitor each HTRI-M related to this application continuously by using a listed motion detector (to prevent tampering).
7. In supervisory: HTRI-M draws 1.5mA
8. All circuits are power limited.

MOUNTING

The SIEMENS Model HTRI-M mounts directly into a single gang switchbox (user supplied)

Connect the appropriate wires using wire nuts. Tuck the HTRI-M module inside the electrical box and dress the wiring as required. (See Figure 4.)

Figure 4
Mounting the HTRI-M