

TR-ISO-6 Six Fault Isolator Module

SPECIFICATIONS

Normal Operating Voltage:	15-32 VDC
Stand-By Current:	450 microA per circuit, 2.7 mA all circuits
Maximum Current Draw:	17 mA per circuit in isolation, 102 mA with all circuits in isolation
Temperature Range:	32°F to 120°F (0°C to 49°C)
Humidity:	10 to 93% Non-condensing
Dimensions:	6.8"H × 5.8"W × 1.0"D (17.3 cm x 14.7 cm x 2.54 cm)
Accessories:	TR-ACB Cabinet; BB-6 Cabinet; CH-6 Chassis
Wire Gauge:	12-18 AWG

BEFORE INSTALLING

This information is included as a quick reference installation guide. If the modules will be installed in an existing operational system, inform the operator and local authority that the system will be temporarily out of service. Disconnect the power to the control panel before installing the modules. This system contains static sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. The housing cabinet should be metallic and suitably grounded.

NOTICE: This manual should be left with the owner/user of this equipment.

GENERAL DESCRIPTION

The TR-ISO-6 Six Fault Isolator Module provides six equivalent circuits that will allow a portion of the communications loop to continue operating when a short circuit occurs on that loop. An amber LED indicator will blink in the normal state for each of the six inputs and will latch on during a short circuit condition. The module will automatically restore the communications loop to normal condition when the short circuit is removed.

CONTENTS INCLUDE:

- (6) 1 x 4 Terminal Blocks
- (2) 1¼" (32mm) Stand offs
- (4) Machine Screws
- (2) Nuts

COMPATIBILITY REQUIREMENTS

To ensure proper operation, this module shall be connected to a compatible control panel only.

NOTE: The number of devices that may be installed between fault isolator modules will vary based on the types of devices on the loop. Contact your Fire Alarm Panel manufacturer or refer to your device manual for the correct isolator load ratings of individual devices. When added together, the sum of all isolator load ratings of the devices between fault isolator modules should not exceed 1.

COMPONENTS

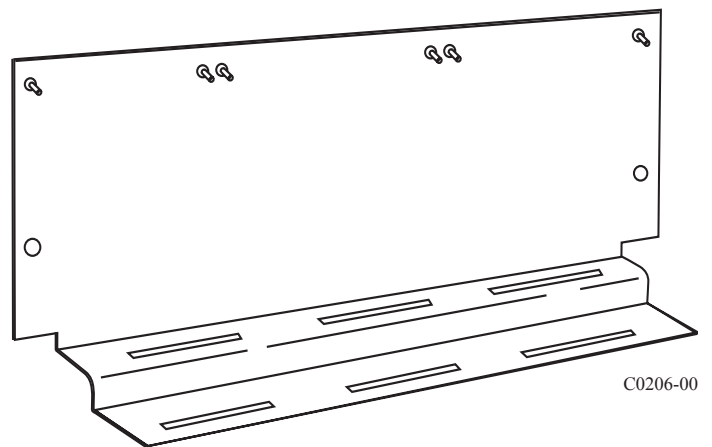
Following are descriptions of the TR-ISO-6 mounting frameworks. There are two mounting options for TR-ISO-6 modules:

- Up to six TR-ISO-6 modules can be installed on a CH-6 in a BB-6 cabinet
- One or two TR-ISO-6 modules can be installed in a TR-ACB cabinet

Chassis

The CH-6 chassis is used to mount TR-ISO-6 modules in a BB-6 cabinet. It accommodates up to six TR-ISO-6 modules in a single cabinet row three modules wide and two modules deep.

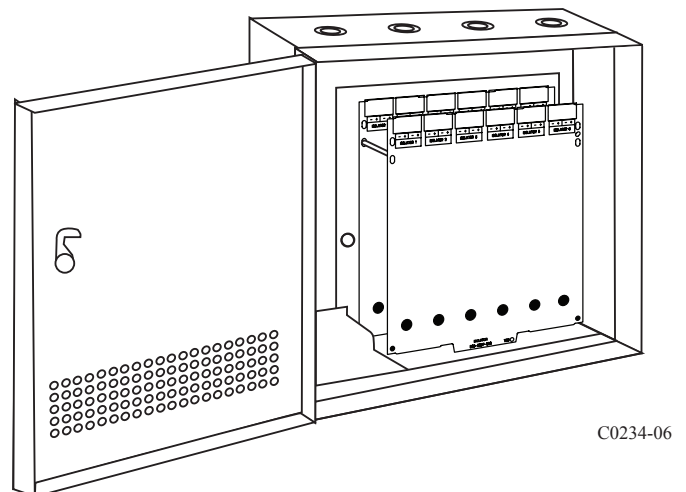
FIGURE 1. CH-6 CHASSIS



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The TR-ACB cabinet has a built-in chassis that will accommodate one or two TR-ISO-6 modules.

FIGURE 2. TR-ACB CABINET



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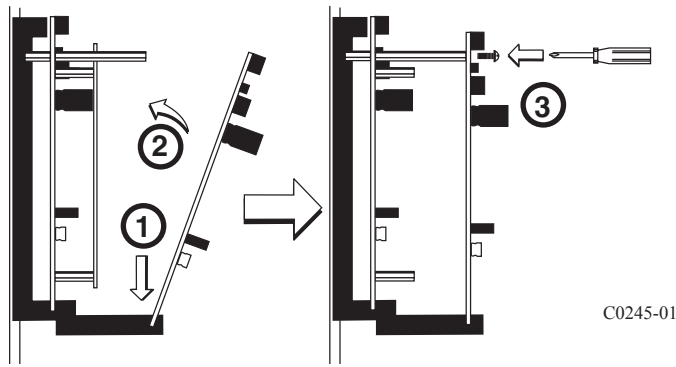
The front TR-ISO-6 module positions of each chassis are offset below the rear TR-ISO-6 module positions so that all of the status indicators are visible.

Cabinets

A BB-6 cabinet will house the CH-6 chassis with up to six TR-ISO-6 modules installed on it.

The TR-ACB cabinet houses one or two TR-ISO-6 modules on the internal chassis that is part of the cabinet. Refer to cabinet installation documents for dimensions.

FIGURE 6B. INSTALLATION OF TR-ISO-6 MODULE IN FRONT CHASSIS POSITION



- Step 1: Insert the bottom edge of the TR-ISO-6 module down into a front slot of the chassis.
- Step 2: Carefully swing the upper edge of the board towards the back of the chassis until it touches the 1/4" (3.18cm) standoffs installed on the rear module.
- Step 3: Align two 4-40 screws with the two standoffs and tighten.
- Step 4: Wire the modules according to the instructions in this manual.

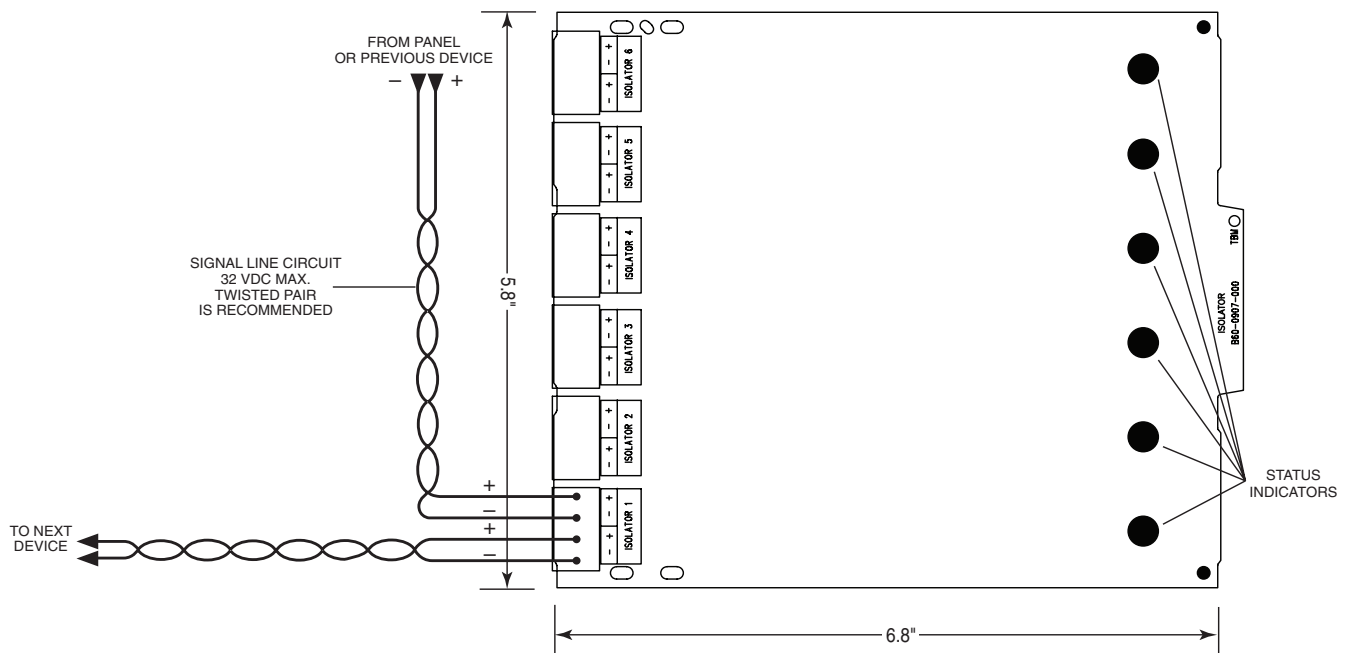
WIRING

NOTE: All wiring must conform to applicable local codes, ordinances, and regulations.

1. Install module wiring in accordance with the job drawings and appropriate wiring diagrams.
2. Make electrical connections by stripping approximately 1/4" (6.35mm) of insulation from the end of the wire sliding the bare end of the wire under the clamping plate, and tightening the clamping plate screw.

NOTE: All references to power limited represent "Power Limited (Class 2)".

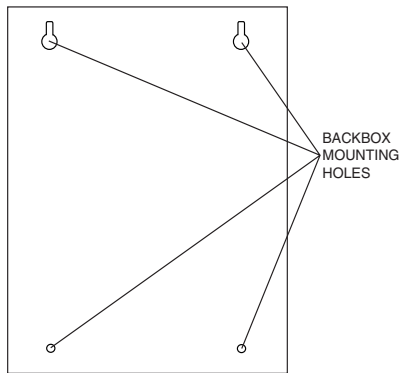
FIGURE 7. WIRING AND PROGRAMMING THE TR-ISO-6 MODULE



INSTALLATION STEPS

1. Cabinet Mounting

FIGURE 3. TYPICAL MOUNTING HOLE LOCATIONS

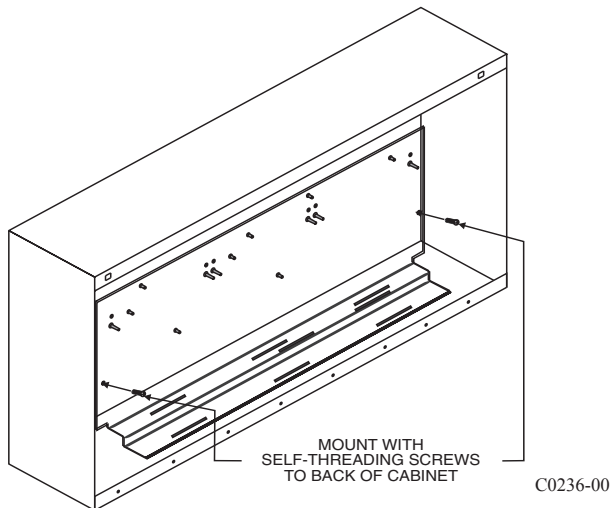


In a clean, dry area, mount the backbox using the four holes provided in the back surface of the cabinet.

2. Chassis Installation

The CH-6 chassis is mounted in the BB-6 cabinet. It is shipped with two self-threading screws, which are used to fasten the chassis to the back wall of the cabinet (see Figure 4).

FIGURE 4. MOUNTING THE CH-6 CHASSIS

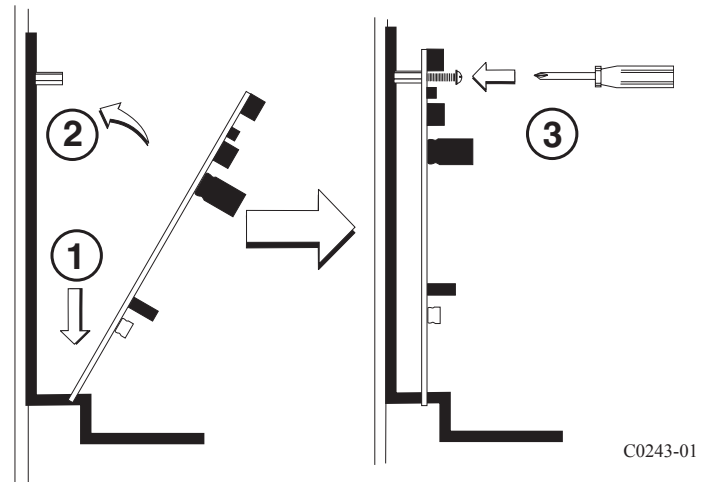


The TR-ACB cabinet comes with the chassis already installed, so no mounting is necessary.

3. Module Installation

There are two methods for installing a module in the rear position of a chassis. Method one is for installation of a rear module only, when no module will be installed in front of it. Refer to Figure 5 for instructions. Method two is for installation of a rear module when another module will be installed in the chassis position in front of it. Refer to Figures 6a and 6b for method two. All necessary screws and standoffs are supplied with the modules.

FIGURE 5. INSTALLATION OF REAR MODULE ONLY, METHOD ONE



Step 1: Insert the bottom of the TR-ISO-6 module down into a rear slot on the chassis.

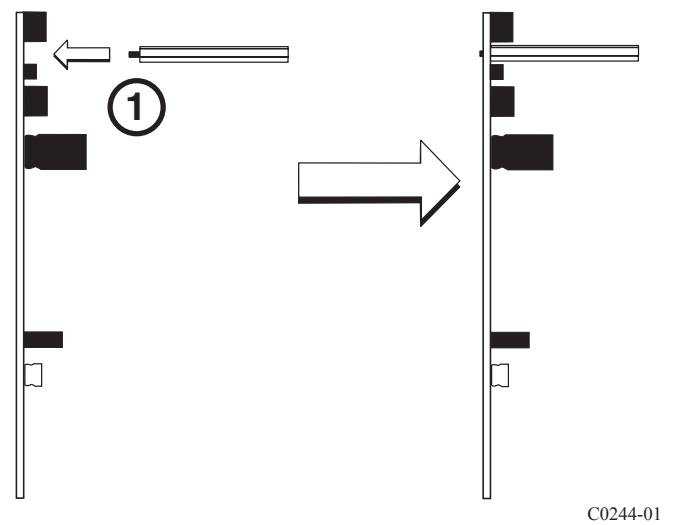
Step 2: Carefully swing the upper edge of the board back towards the back of the chassis until it touches the two standoffs.

Step 3: Align two 4-40 screws with the two standoffs and tighten.

Step 4: Wire the modules according to the instructions in this manual.

The steps in Figures 6a and 6b describe and illustrate module installation when the rear chassis position and the position in front of it will be filled. Front position installation is possible only if the rear position is filled with an input/output module.

FIGURE 6A. INSTALLATION OF TR-ISO-6 MODULE IN A REAR CHASSIS POSITION, METHOD TWO



Step 1: Insert the bottom edge of the TR-ISO-6 module down into a rear slot of the chassis.

Step 2: Carefully swing the upper edge of the board towards the back of the chassis until it touches the short standoff attached to the chassis.

Step 3: Align the long standoff with the short standoff and tighten.

FCC STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.