

Model 379-004 E3 IP Strobe MRM (Monitored Relay Module) Station

Confidentiality Notice

This manual is provided solely as an installation, operation, and maintenance guide and contains sensitive business and technical information that is confidential and proprietary to GAI-Tronics. GAI-Tronics retains all intellectual property and other rights in or to the information contained herein, and such information may only be used in connection with the operation of your GAI-Tronics product or system. This manual may not be disclosed in any form, in whole or in part, directly or indirectly, to any third party.

General Information

The Model 379-004 E3 IP Strobe MRM (Monitored Relay Module) station operates in an *Elemec3* system. The E3 controller software configuration controls its operation.

The MRM includes eight relay output circuits. Each relay contains two type C contacts rated for 5 amps. Relay outputs typically switch power to signaling devices such as beacons or strobes but are applicable to any switching application that does not exceed the relay's current rating. Relay circuits are programmable to activate during:

system alarms
pages
trouble conditions

The E3 IP strobe MRM monitors relay output cabling for open circuit, short circuit, and ground fault conditions and automatically reports fault conditions to the E3 controller. Monitoring occurs while the relay output circuit is inactive. The relay circuit will not activate while a cable fault is present, preventing a possible dangerous condition.

The Model 379-004 E3 IP Strobe MRM station's housing is a NEMA 4X stainless steel enclosure measuring 13.00 W \times 14.30 H \times 6.23 D inches (330.2 \times 363.2 \times 158.2 mm). Internal components include:

- 24 V dc power supply
- No. 12579-005 Monitored Relay Module Assembly

The No. 12579-005 E3 IP Strobe MRM has three components (see Figure 1):

- No. 69639-001 Ethernet CPU PCBA
- No. 69670-001 Strobe Monitored-Input PCBA
- No. 69672-001 Relay E3 Strobe Supervision PCBAs.

The scope of this manual is mounting and wiring the Model 379-004 IP Strobe MRM station. Refer to Pub. 42004-559 for additional information on the No. 12579-005 E3 IP Strobe MRM (see the <u>Reference Documentation</u> section).

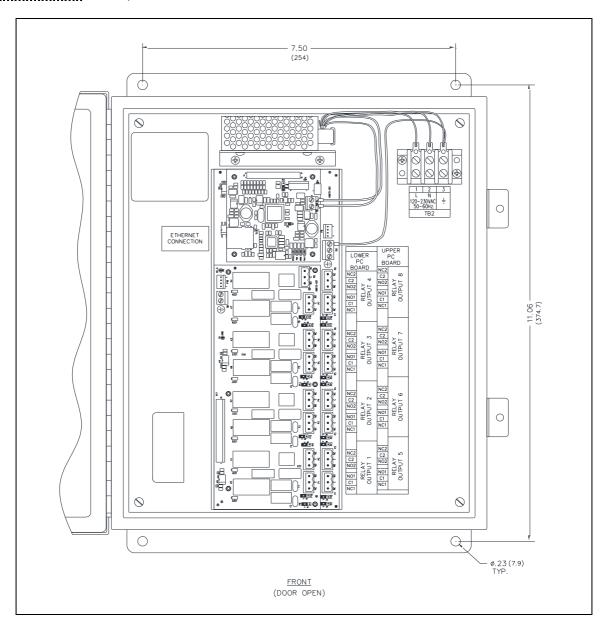


Figure 1. Model 379-004 E3 IP Strobe MRM Station (Interior View)

Installation

CAUTION — Do not install this equipment in hazardous areas. Disconnect power before installing or removing the MRM.

Mounting

The Model 379-004 E3 IP Strobe MRM station enclosure is not supplied with conduit or cable gland holes.

- 1. Drill or punch openings, at the required locations, before mounting the enclosure.
 - Separate cable entries for power, Ethernet, and input wiring are typically required (see the <u>Wiring</u> section).
 - Use caution when drilling or punching the enclosure to avoid damaging internal components.
 - Use bottom cable entries to help prevent moisture from entering the enclosure and dripping onto the terminals or circuit boards.
- 2. Mount the enclosure to a suitable surface using appropriate (customer-supplied) hardware (see <u>Figure</u> 1 for mounting hole dimensions).
- 3. Remove the shipping tie-wrap securing the PCBA to the mounting Snaptrack.

Wiring

The IP strobe MRM station requires 120 to 230 V ac, 50/60 Hz power and an Ethernet connection to an *Elemec3* IP controller. Connect the eight relay outputs and input contact circuits as needed. Refer to Pub. 42004-559 for detailed information on input/output circuits, input/output circuit connections, and input/output configuration.

Power

Connect 120 to 230 V ac power to terminal block TB2, at the top of the panel (see Figure 1).

WARNING —Ensure proper grounding to protective earthing.

Terminal TB2-3 provides earth ground termination.

Table 1.. AC Power Termination

Function	Terminal Block	Wire Color
AC Line (hot)	TB2-1	Black
Neutral	TB2-2	White
Ground	TB2-3	Green/yellow

Ethernet Connection

Plug the Category 5 or better Ethernet cable with RJ45 plug from the E3 network into the RJ45 jack, located on the CPU PCBA (see <u>Figure 1</u>).

Replacement Parts

Table 2. Replacement Parts

Part Number	Description	
69639-001	PCBA, Ethernet CPU	
69670-001	PCBA, Strobe Monitored IN8—120VAC	
69672-001	PCBA, Relay E3 Strobe Supervision	
40404-011	Power Supply, 24 V dc, 25 W	

Reference Documentation

For additional information, please refer to the standard publication listed below. GAI-Tronics' publications are on the GAI-Tronics website at https://www.gai-tronics.com.

E3 IP Strobe MRM (Monitored Relay Modules)......42004-559

Specifications

Electrical

Mechanical

Environmental

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his expense.

Warranty

Equipment. GAI-Tronics warrants for a period of one (1) year from the date of shipment, that any GAI-Tronics equipment supplied hereunder shall be free of defects in material and workmanship, shall comply with the then-current product specifications and product literature, and if applicable, shall be fit for the purpose specified in the agreed upon quotation or proposal document. If (a) Seller's goods prove to be defective in workmanship and/or material under normal and proper usage, or unfit for the purpose specified and agreed upon, and (b) Buyer's claim is made within the warranty period set forth above, Buyer may return such goods to GAI-Tronics nearest depot repair facility, freight prepaid, at which time they will be repaired or replaced, at Seller's option, without charge to Buyer. Repair or replacement shall be Buyer's sole and exclusive remedy. The warranty period on any repaired or replacement equipment shall be the greater of the ninety (90) day repair warranty or one (1) year from the date the original equipment was shipped. In no event shall GAI-Tronics warranty obligations with respect to equipment exceed 100% of the total cost of the equipment supplied hereunder. Buyer may also be entitled to the manufacturer's warranty on any third-party goods supplied by GAI-Tronics hereunder. The applicability of any such third-party warranty will be determined by GAI-Tronics.

<u>Services.</u> Any services GAI-Tronics provides hereunder, whether directly or through subcontractors, shall be performed in accordance with the standard of care with which such services are normally provided in the industry. If the services fail to meet the applicable industry standard, GAI-Tronics will reperform such services at no cost to buyer to correct said deficiency to Company's satisfaction provided any and all issues are identified prior to the demobilization of the Contractor's personnel from the work site. Re-performance of services shall be Buyer's sole and exclusive remedy, and in no event shall GAI-Tronics warranty obligations with respect to services exceed 100% of the total cost of the services provided hereunder.

<u>Warranty Periods.</u> Every claim by Buyer alleging a defect in the goods and/or services provided hereunder shall be deemed waived unless such claim is made in writing within the applicable warranty periods as set forth above. Provided, however, that if the defect complained of is latent and not discoverable within the above warranty periods, every claim arising on account of such latent defect shall be deemed waived unless it is made in writing within a reasonable time after such latent defect is or should have been discovered by Buyer.

<u>Limitations / Exclusions.</u> The warranties herein shall not apply to, and GAI-Tronics shall not be responsible for, any damage to the goods or failure of the services supplied hereunder, to the extent caused by Buyer's neglect, failure to follow operational and maintenance procedures provided with the equipment, or the use of technicians not specifically authorized by GAI-Tronics to maintain or service the equipment. THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES AND REMEDIES, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Return Policy

If the equipment requires service, contact your Regional Service Center for a return authorization number (RA#). Equipment should be shipped prepaid to GAI-Tronics with a return authorization number and a purchase order number. If the equipment is under warranty, repairs or a replacement will be made in accordance with the warranty policy set forth above. Please include a written explanation of all defects to assist our technicians in their troubleshooting efforts.

Call 800-492-1212 (inside the USA) or 610-777-1374 (outside the USA) for help identifying the Regional Service Center closest to you.