

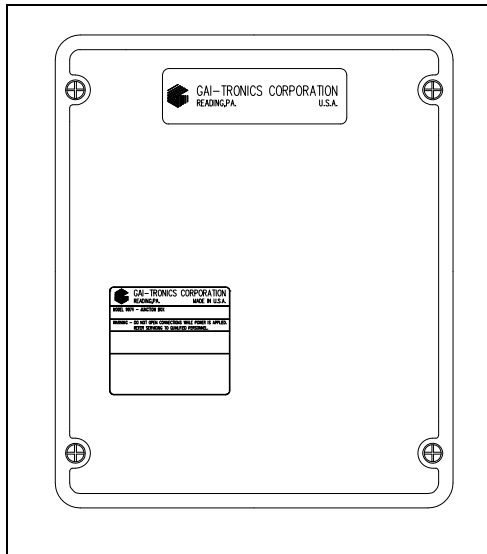


GAI-TRONICS®  
A HUBBELL COMPANY

# Model 9974 Junction Box

## Confidentiality Notice

This manual is provided solely as an operation, installation, 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

GAI-Tronics Page/Party® systems are industrial communication systems designed to be both flexible and durable to survive challenging industrial environments. The 9000 Series consists of a wide array of products and configuration options that enable it to meet diverse applications. The 9000 Series design incorporates technologically-advanced materials to endure harsh environments.

The Model 9974 Junction Box is packaged in glass-reinforced polyester with the housing composed of two modular subassemblies: the front panel and the rear enclosure. This modular design allows the front panel to be detached from the rear enclosure to simplify installation.

## Mounting

1. Remove the front panel by loosening the four captive screws and swinging the panel open to the left. Pull the hinges out of the holes in the rear enclosure to expose all four mounting holes.
2. Determine which of the four available conduit locations is to be used. Drill spots have been provided for use with a chassis punch or hole saw. We recommend using 1.25-inch conduit hub assemblies because this size hub will make the proper contact with the supplied grounding plate. In using any conduit hub assembly other than the recommended size, it is the installer's responsibility to provide the proper earth ground bonding. Hubs must be connected to the conduit before being connected to the enclosure.

### Approved conduit entry hub assemblies:

- GAI-Tronics 14611-004 (1¼-inch)
- Myers ST-4 (1¼-inch)

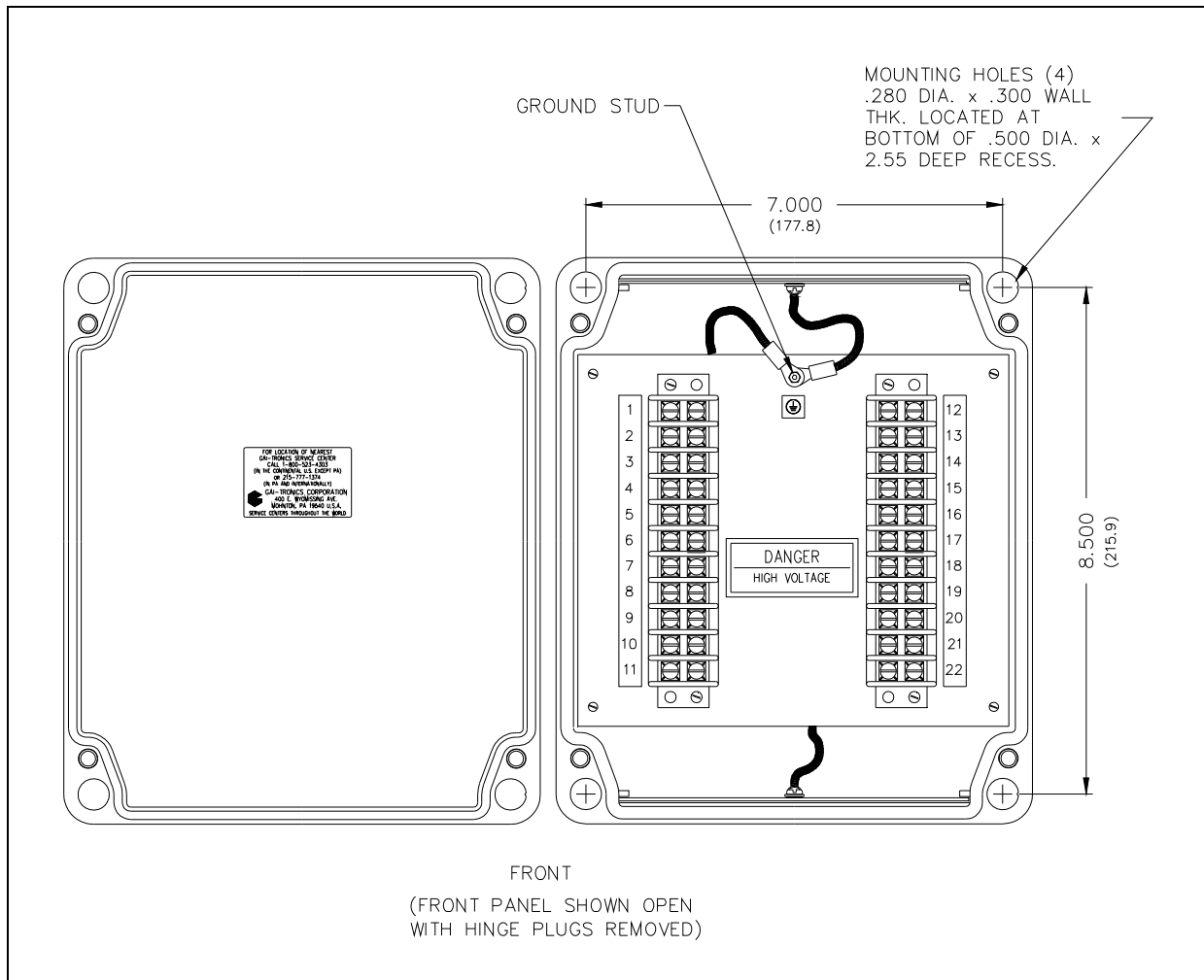


Figure 1. Mounting

3. There are four mounting holes in the rear enclosure. Mount the enclosure to the wall using either four 1/4-20 machine screws with nuts and washers, or #14 wood screws of appropriate length for the mounting surface. See Figure 1. Install the rear enclosure to a wall or an appropriate surface through the supplied mounting holes.
4. Connect the conduit to the hub assembly, and run the system cables to the unit. Follow the cable termination instructions supplied in the “Wiring” section of this manual.

**⚠ WARNING ⚠**

**This unit has NRTL approval for Div. 2 hazardous areas. It shall not be installed, removed, or adjusted while the power is applied in a known hazardous area. Do not install this equipment in hazardous areas other than those on the equipment approval list in the “Specification” section of this manual. Such installation may cause a safety hazard and consequent injury or property damage.**

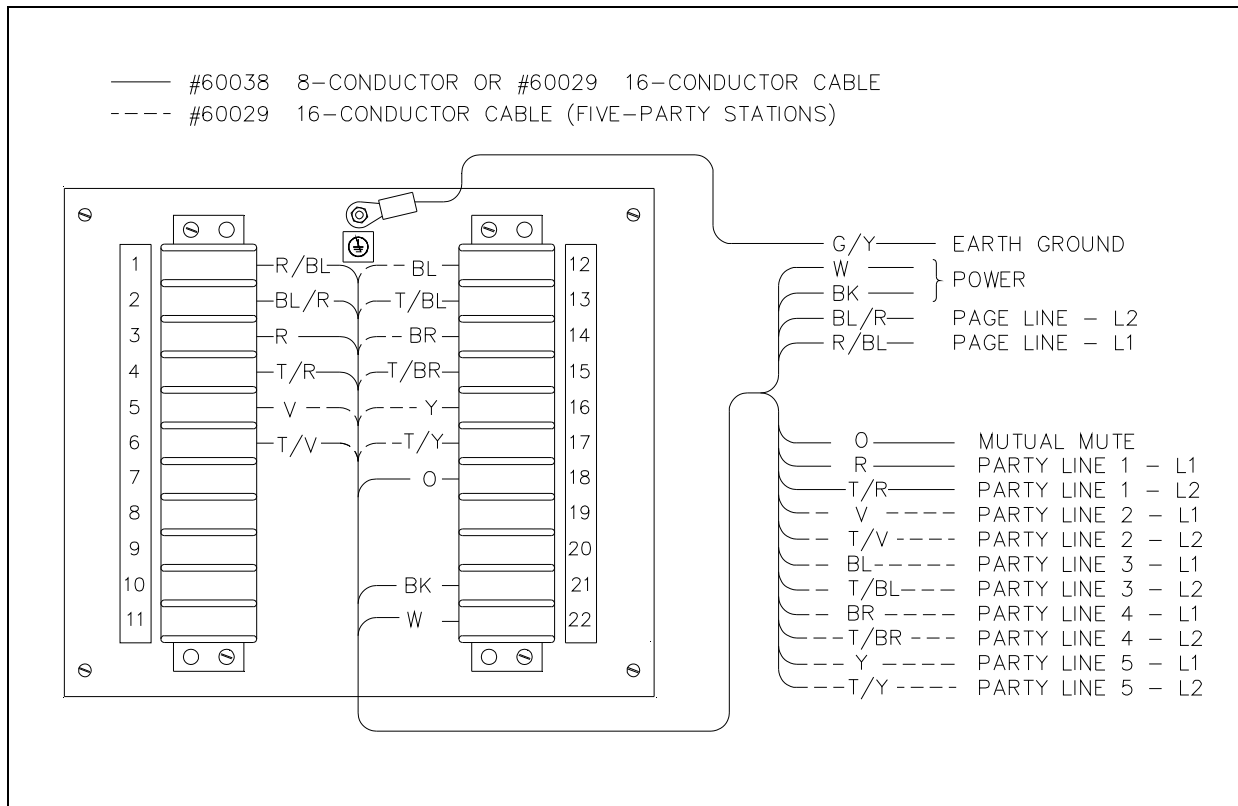


Figure 2. Wiring Diagram (Typical)

## Wiring

Figure 2 is the wiring diagram for Model 9974. The wire color code is based on GAI-Tronics 60038 or 60029 inter-station cable, and 60021 speaker cable. Power connections should be made with No. 14 AWG conductors while signal connections should be made with No. 18 AWG conductors. Use of GAI-Tronics cable, following the correct wire color designations, will ensure that power and signal connections are made with the proper gauge wire.



**NOTE: The installer must crimp a round lug onto the earth ground wire, and bolt it to the ground stud at the top of the enclosure.**



Any single screw terminal is large enough to accept up to two No. 12 AWG conductors.

**⚠ WARNING ⚠** - Explosion hazard - Substitution of components may impair suitability for Class 1, Division 2.

**⚠ AVERTISSEMENT ⚠** - Risque d'explosion - La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Class I, Division 2.

This equipment is suitable for use in Class I, Division 2, Groups A, B, C, and D; Class II, Division 2, Groups F and G; Class III, Div. 2, or non-hazardous locations only.

 **WARNING**  - Explosion hazard - Do not disconnect the equipment unless the power has been switched off or the area is known to be non-hazardous.

 **AVERTISSEMENT**  - Risque d'explosion - Avant de deconnecter l'equipment, couper le courant ou s'assurer que l'emplacement est designe non-dangereux.

## Specifications

### Mechanical

Dimensions ..... 9.5 H × 8.0 W × 3.8 D inches (241.8 × 203 × 98 mm)

Temperature range ..... -40° C to +70° C (-40° F to +158° F)

Material ..... Gray, glass-reinforced polyester

Connections ..... Terminals for up to four inter-station cables;  
Four drill spots for locating conduit fittings

Mounting ..... Wall or column (with optional GTC Model 231-001 Pole Mounting Kit)  
Four 0.280-inch mounting holes

Environmental rating ..... Type 4X

### Approvals

NRTL approved for use in US and Canada ..... Class I, Div. 2, Groups A, B, C, D;  
Class II, Div. 2, Groups F and G;  
Class III, Div. 2

## REPLACEMENT PARTS

| Part Number | Description           |
|-------------|-----------------------|
| 12513-003   | Hinge Replacement Kit |
| 12516-001   | Screw Pack (10)       |

# Warranty

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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.

Services. 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 re-perform 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.

Warranty Periods. 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.

Limitations / Exclusions. 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

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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.