



GAI-TRONICS®
A HUBBELL COMPANY

Model 703-006 Multi-Party Amplifier Enclosure

Confidentiality Notice



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General Information

The Model 703-006 Multi-Party Amplifier Enclosure is a component of the 700 Series Page/Party® system. This enclosure is configured for multi-party systems and can accommodate conversations on up to five party lines simultaneously.

The Model 703-006 is constructed of fabricated steel and is extremely weatherproof and corrosion-resistant. It is equipped with terminal strips for connecting system cable. The Page/Party® Series amplifiers mate directly with this enclosure.

Installation

 **CAUTION**  **Do not install this equipment in hazardous areas or other than those indicated on the approval listing in the “Specifications” section of this manual. Such installation may cause a safety hazard and consequent injury or property damage.**

 **WARNING**  **Do not disconnect equipment while energized.**
Insure proper grounding to protective earthing.

When installing an add-on station, consult the appropriate system layout diagrams. These figures, when used in conjunction with the station installation information and cable layout guide, should provide all the information necessary to install additional Page/Party® stations.

Enclosure Placement

All GAI-Tronics Page/Party[®] units are wired in parallel. Good system layout design minimizes the cable required for each installation. GAI-Tronics multi-conductor cable, designed especially for this application, is recommended. The number, size, and color-coding of conductors are listed in the system connection diagrams.

System layout and power cable length are very important when installing Page/Party[®] equipment. Although it varies for different systems, the general guideline is that the total power cable length should not exceed one mile (5280 feet) for 120 V ac systems. The total cable length is the most important consideration while cable length between the stations is generally not a factor.

Mounting

The Model 703-006 Enclosure is not supplied with conduit or cable openings. Drill or punch these openings using Figure 1 before mounting the enclosure. Whenever possible, do not enter an enclosure from the top: side or bottom entry helps to prevent moisture from dripping onto the terminals or PCBAs. The entry holes should be placed on the enclosure per Figure 1.

Plain entry holes must maintain the following:

- The plain hole shall be no larger than 0.7 mm above the major diameter of the entry thread.
- The gland or stopping plug is secured internally by a locknut, such that the gland or stopping plug will be not dislodged by a 7 N-m impact.
- The enclosure will be maintained at IP 66 by a suitable sealing washer under the shoulder of the cable gland or conduit hub.

The customer may drill plain entry holes in the enclosure providing they are in accordance with the relevant code of practice and comply with the details shown in Figure 1. When mixed entries are accommodated on a face they must be in the positions shown in this manual for the largest gland entry on that face. For complex mixed entries, contact GAI-Tronics Technical Sales. Entries into the enclosure must be via a suitable approved entry device. All unused entry holes must be fitted with a stopping plug with a certification equal to that of the enclosure's ATEX certification. The stopping plug shall be held in place by a locknut.

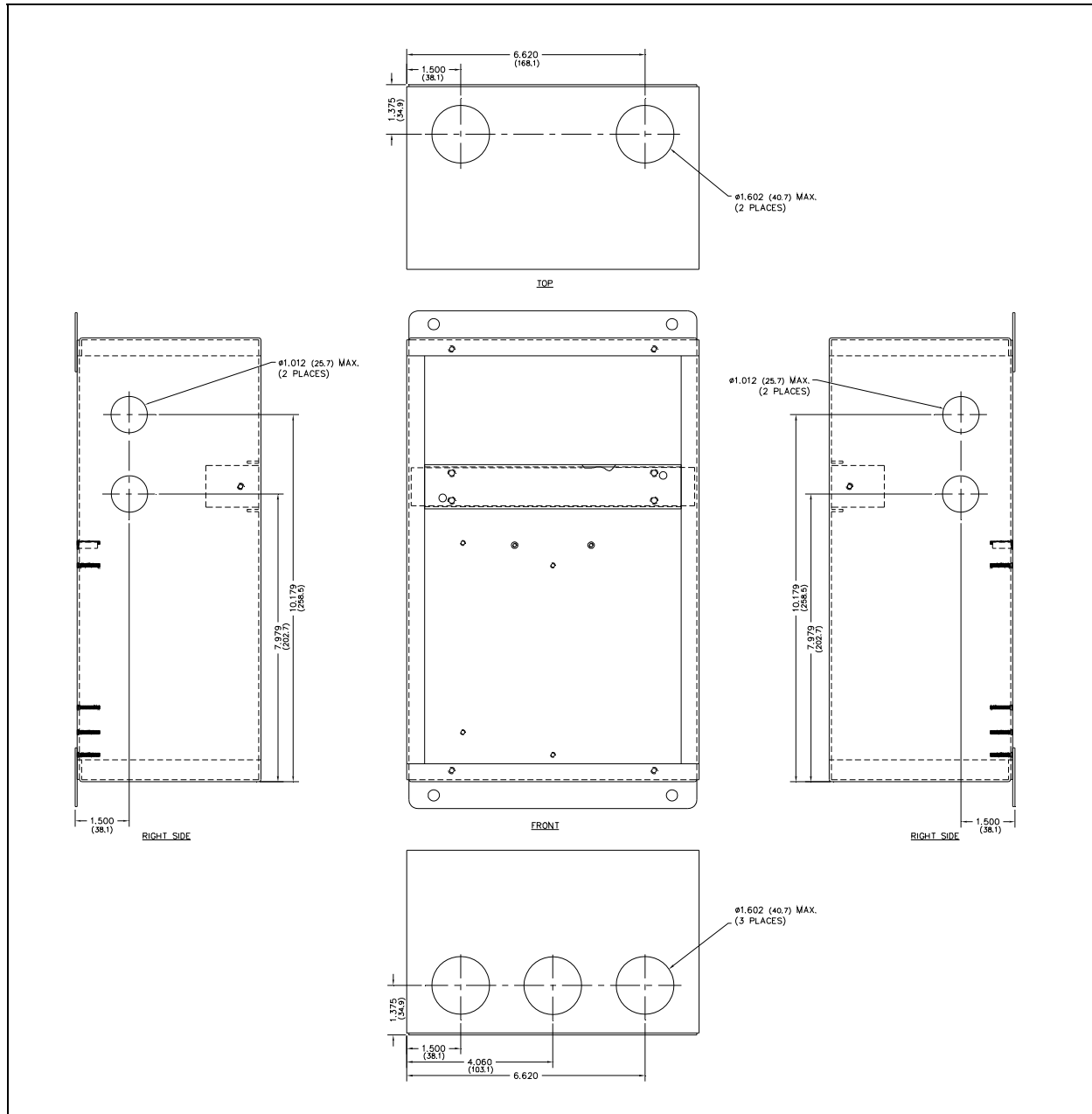


Figure 1. Acceptable Entry Locations

NOTE: It is recommended that no more than two M40 glands be installed on the bottom face of the enclosure.

For specific details including mounting hole dimensions, refer to Figure 2. When mounting the enclosure, use caution to avoid damaging the terminal blocks inside. The suggested mounting height for all station enclosures is 54 inches (137 cm) up to the centerline of the enclosure.

For continued IP 66 protection, torque setting for securing the amplifier to the enclosure should be 10 to 12 in-lbs. or 1.13 to 1.36 N-m.

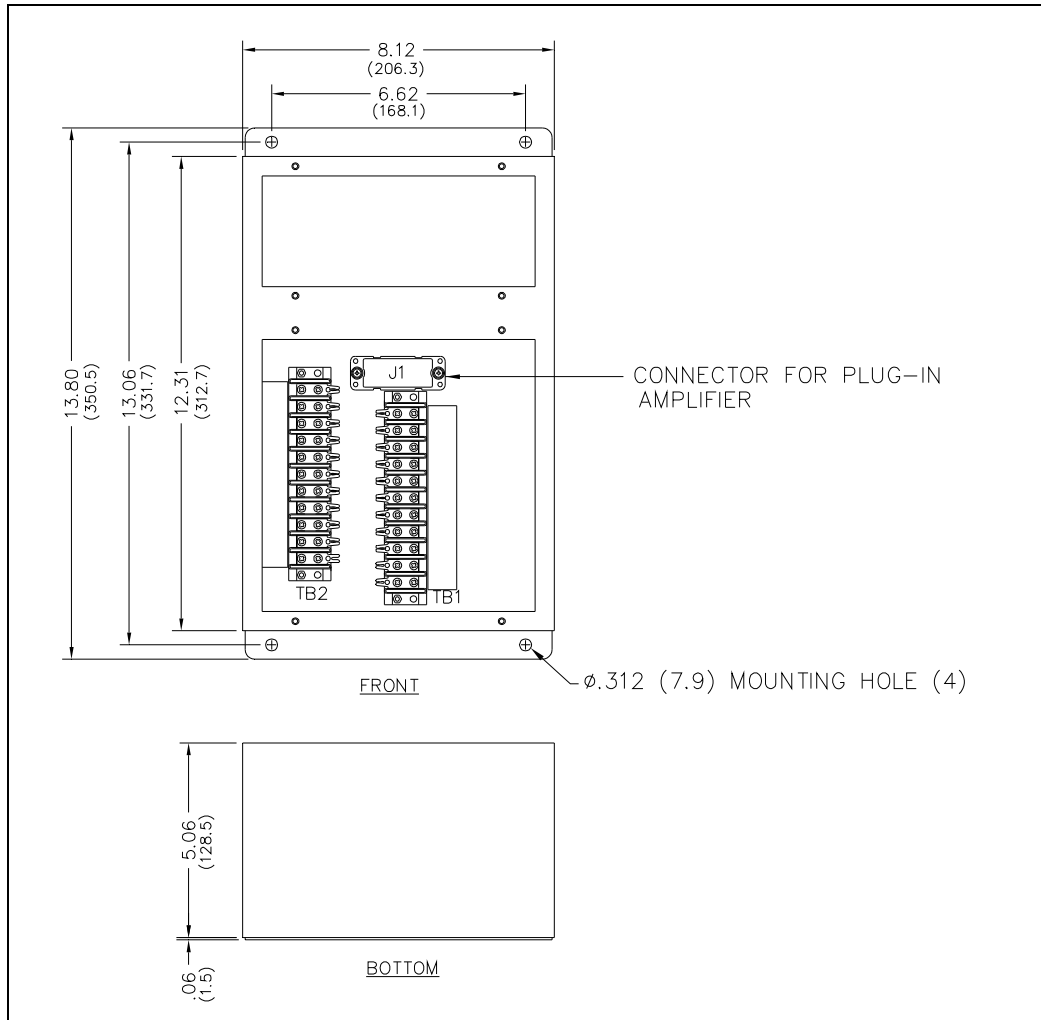


Figure 2. Model 703-006 Enclosure Mounting Details

Wiring

See Figure 3. Follow the wire colors carefully because the colors correspond to GAI-Tronics multi-party cable. The wires must be spade-lugged and connected carefully and completely to the terminal block. An improper termination may result in diminished station performance.



For safe operation, connect terminal 3 of TB1 to system ground.

Local Muting

Figure 3 illustrates local speaker muting when stations are completely assembled and paging operation occurs. Normally, when the station button is pressed, the paging speaker connected to that station is silenced (muted) to prevent acoustic feedback to the handset microphone. However, while the handset is in use for party line conversations, the paging speaker is “live” to enable paging calls from other stations.

To disable the mute feature, follow these instructions:

1. Locate the lugged violet wire attached to terminal point 7 (mute) on the terminal block within the enclosure.
2. Transfer the lugged violet wire to terminal point 8 (Page L1).

After any muting changes are made, unpack the station amplifier and install.

Mutual Muting

In the event that feedback occurs within an area and repositioning of the system speakers does not help, mutual muting may be used to correct this problem.

The following steps mutually mute adjacent amplifiers/handsets within a zone.

1. Ensure that the purple lugged wire is connected to terminal 7 of TB1.
2. Connect terminal TB1-7 of the handset station to TB1-7 of the station within the zone that is causing feedback. This is done by using the spare system wire (orange conductor) from within the system cable that runs between the stations.

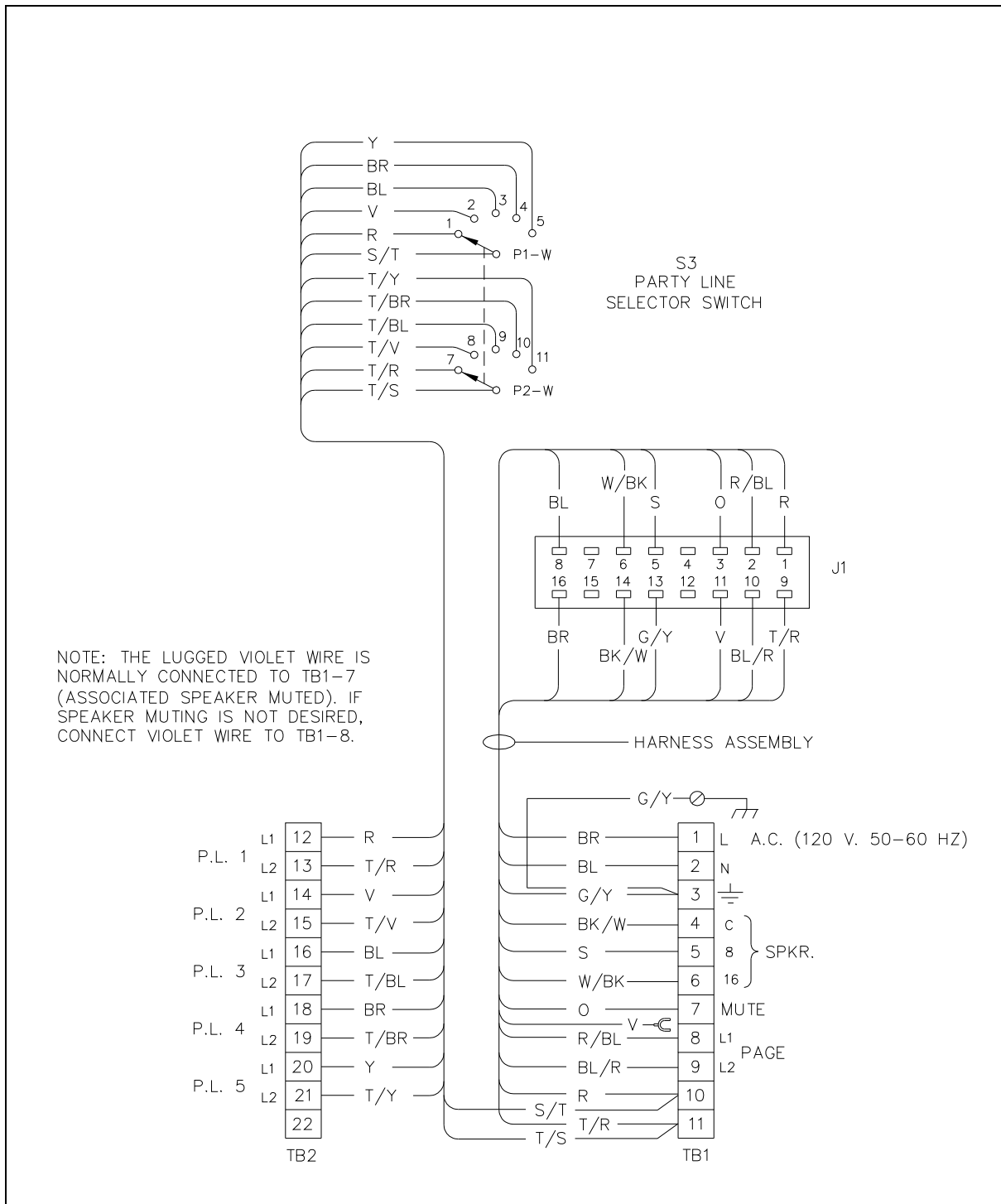


Figure 3. Wiring Diagram

Maintenance

Regular inspection and a good preventive maintenance program will increase the reliability of your GAI-Tronics station. The GAI-Tronics Field Service Department can formulate a service contract suited to your facility's specific need for preventive maintenance.

In addition, the following procedure can be used to keep Page/Party[®] systems operating effectively.

 **WARNING**  **Before performing any of the following preventive maintenance steps, remove all power from the station.**

1. Remove the amplifier from the enclosure.
2. Visually check the interior of the enclosure for signs of contamination such as dust, condensation or process liquid.
3. Using the No. 10440-002 Maintenance Cable, plug the amplifier into the connector in the enclosure. Check, and if necessary, adjust the amplifier to maximize performance.
4. Reinstall the amplifier in the enclosure. Ensure that all gaskets and hardware are in place. Failure to install the gaskets, which also act as spacers, can result in damage to the connectors on the amplifiers and inside the enclosures and can cause system faults.

It may become necessary to re-terminate some or all of the enclosures in a system. If so, strip the wires back to clean copper and connect only one wire to each connector to allow for easier future troubleshooting.

Troubleshooting

The following table lists some hints to aid technicians in troubleshooting.

Problem	Solution
Feedback occurs only during page.	<ol style="list-style-type: none"> 1. If a speaker is close to the station, try using the muting feature in the amplifier enclosure at the terminal blocks. Connect the violet wire at TB1-8 to TB1-7. Refer to the wiring diagram. 2. Ensure that speakers attached to other stations located nearby are not pointed in your direction. If changing the orientation of the other speakers has no effect, mutual muting may be required. Mutual muting silences all the speakers within proximity to the affected stations during a page from any one of the mutually muted stations. Connect the orange wire (spare) to the TB1-7 of all the stations to be mutually muted. NOTE: If too many stations are selected, paging coverage can be adversely affected. 3. Check line terminations at the line balance assembly. Line balance assembly connections are critical.
Crosstalk occurs.	One or more system cable pairs may be improperly terminated. Visually inspect the system cable connections for accidental crossing of the cable pairs or grounds.

Specifications

Construction/Finish..... 16-gauge cold-rolled steel; gray polyurethane
 Mounting..... Wall or column, four 0.31-inch (7.8 mm) mounting holes
 Connections..... Internal screw-type barrier terminal blocks
 External controls..... Rotary selector switch
 Dimensions 13.8 H × 8.1 W × 5.1 D inches (350 × 206 × 129 mm)
 Temperature, operating and storage.....(−22° F to +158° F) −30° C to +70° C
 Shipping weight 7.5 lbs. (3.4 kg)

Approvals

Model 703-006..... II 3G EEx nA IIC T4
 Temp −30° C to 70° C
 Location Zone 2
 IP 66 when installed with a Model 701-305, 751-005, 701-905, or 751-905 Amplifier

NRTL listedSuitable for use in hazardous locations Class I, Div. 2, Groups A, B, C, D;
 Class II, Div. 2, Groups F, G;
 Class III, Div. 2
 when used with listed 701-305, 701-905, 751-005 or 751-905 Amplifier
 Enclosure environmental rating: Type 13

CE Mark

Certificate No. DEMKO 04 ATEX 0424225X
 Notified Body Id No. 0539
 UL International DEMKO A/S
 Lyskear 8
 DK-2730 Herlev
 Denmark

Replacement Parts

Contact GAI-Tronics for replacement part information.

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.

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

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.