



GAI-TRONICS®
A HUBBELL COMPANY

234WM-202 **RED ALERT**® Elite Wall-Mount Communication Station

TABLE OF CONTENTS

Confidentiality Notice 1

General Information 1

Installation 2

 No. 84505-202 Wall-Mount Enclosure Installation 2

 Grounding Requirement 3

 Tempered Glass Installation (Factory Installed) 4

 No. 84503-30x Panel Light Installation 5

 Model 540-001 or 541-001 Strobe Installation 6

 Emergency Telephone Installation 7

 Station Panel Light and Strobe Power Connections 8

Maintenance 9

Repairing Surface Damage to Powder-Coated Stations 9

Specifications 10

Approvals 10



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234WM-202 **RED ALERT**® Elite Wall-Mount Communication 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 234WM-202 RED ALERT Elite communication station is part of a completely integrated emergency communication solution. The station accommodates a GAI-Tronics Model 39x or 27x Series Flush-Mount Telephone and a Model 540-001 or 541-001 Strobe (each sold separately). The communication station is a simple, attractive, yet highly visible unit measuring 40.5 inches (1.03 meters) tall.

GAI-Tronics enhanced emergency telephones are ideal for isolated high-risk areas requiring emergency communication equipment. Emergency telephone users simply press the clearly labeled emergency push button for immediate connection to a pre-programmed central security telephone number.

The strobe creates added visibility to emergency telephone locations with a constant-on lamp that automatically flashes when the emergency button is pressed. The telephone is also highly visible; a light mounted in the station shines over the face of the telephone, illuminating it for nighttime use.

The Model 234WM-202 Wall-Mount Communication Station consists of the No. 84505-202 Wall-Mount Enclosure and the No. 84503-30x Panel Light Assembly (each packaged separately). The strobe and the emergency telephone are purchased and packaged separately.

Installation

No. 84505-202 Wall-Mount Enclosure Installation

1. Remove and save the two tamper-resistant screws at the top of the station (see [Figure 1](#)).
NOTE: A GAI-Tronics Model 233-001 Security Screwdriver (sold separately) is required to remove the tamper-resistant screws.
2. Remove the wall-mounting assembly from the front panel assembly (see [Figure 1](#)).
3. Detach the chain from the wall-mounting assembly (see [Figure 2](#)).
4. Enlarge the conduit entry pilot hole(s) to be used for the station's power cables (see [Figure 3](#)).
5. Fasten the wall-mount enclosure to a wall or flat surface that can support at least 50 pounds, using 3/8-inch bolts (see [Figure 2](#) for mounting hole dimensions and ADA height requirements).

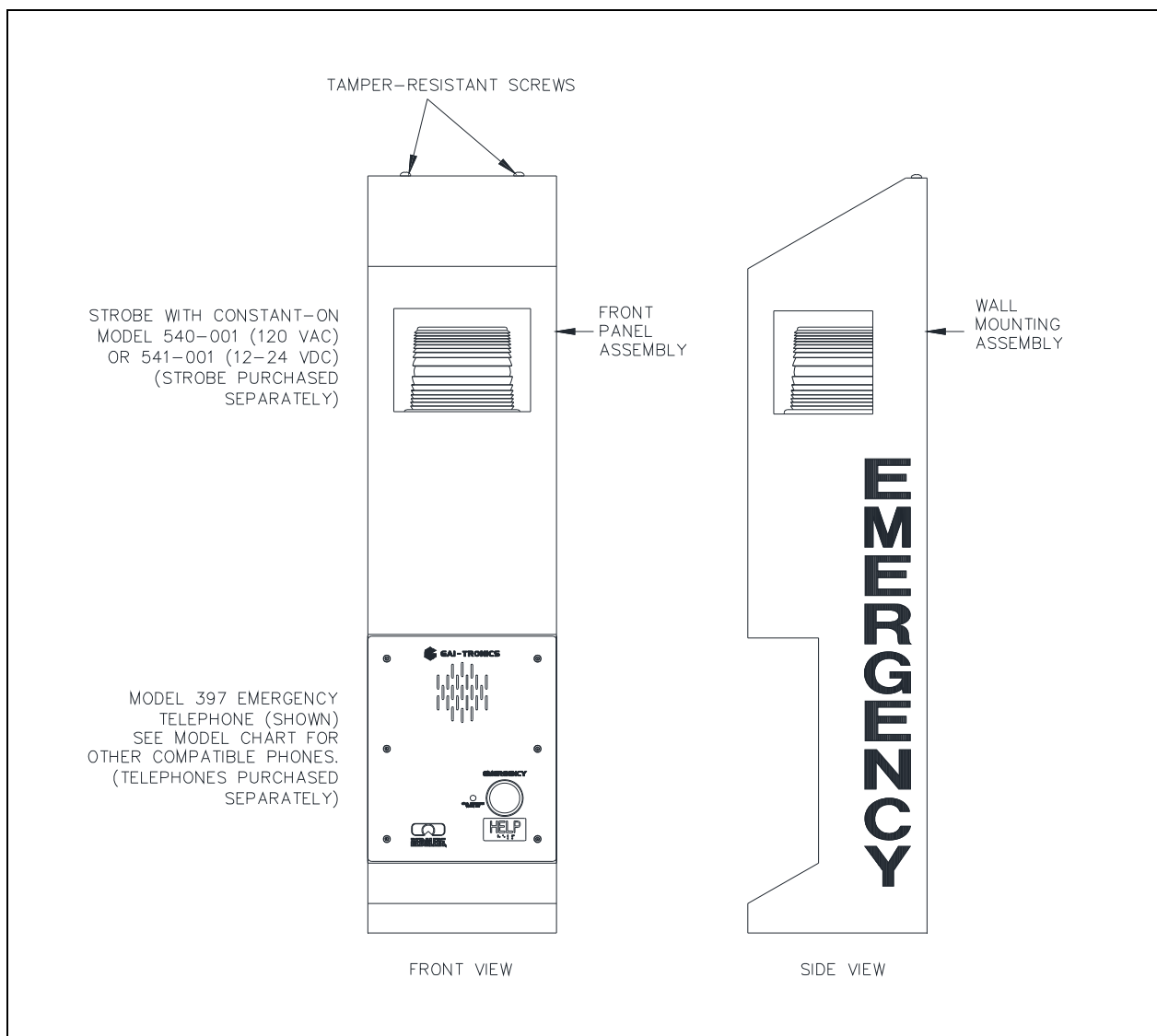


Figure 1. Model 234WM-202 Wall-Mount Station Enclosure

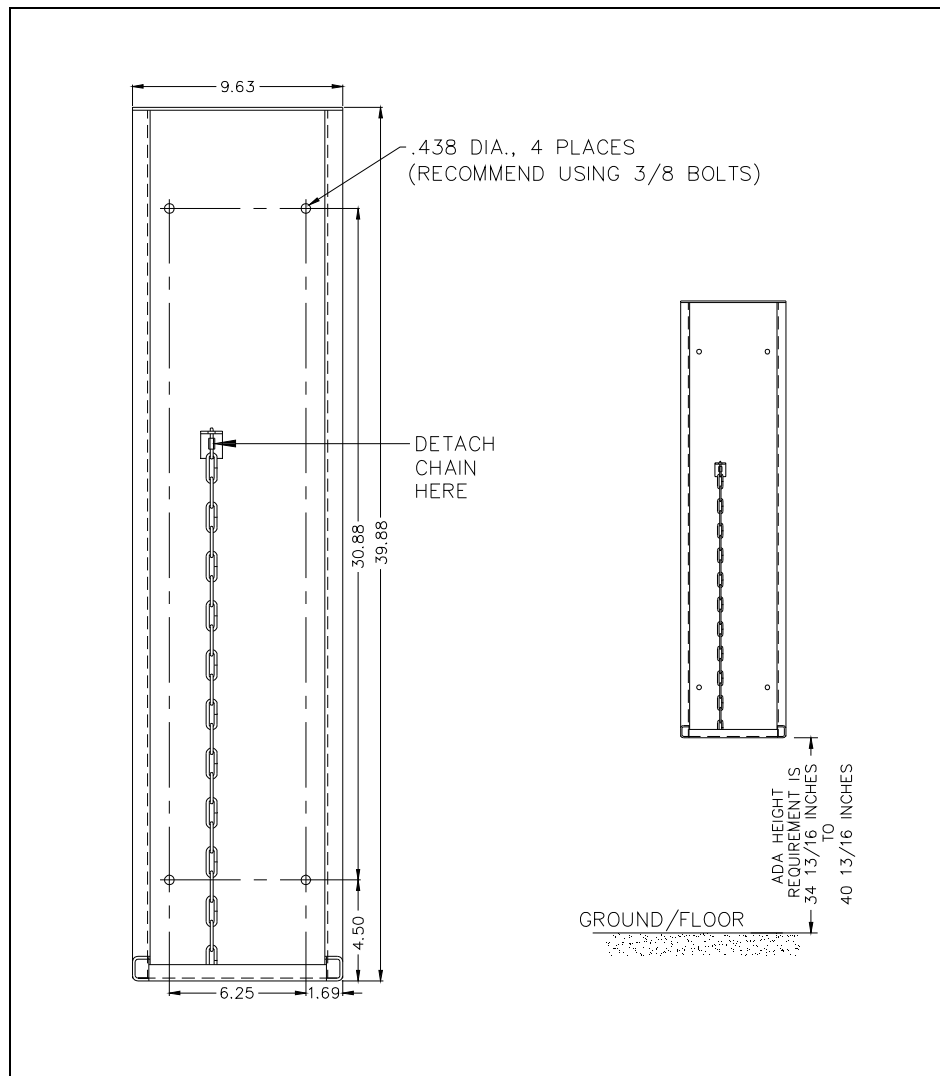


Figure 2. Wall Mounting Details

Grounding Requirement

1. Ground this unit in accordance with the National Electrical Code (NEC) in the United States or the Canadian Electrical Code (CEC) in Canada.

A #10 grounding stud is located at the base of the station for grounding (see [Figure 3](#)).

2. Connect the #10 grounding stud to a grounding electrode.

A grounding electrode rod is typically 8 feet (2.44 m) long per NEC 250, or 9.84 feet (3 m) long per CEC Rule 10.

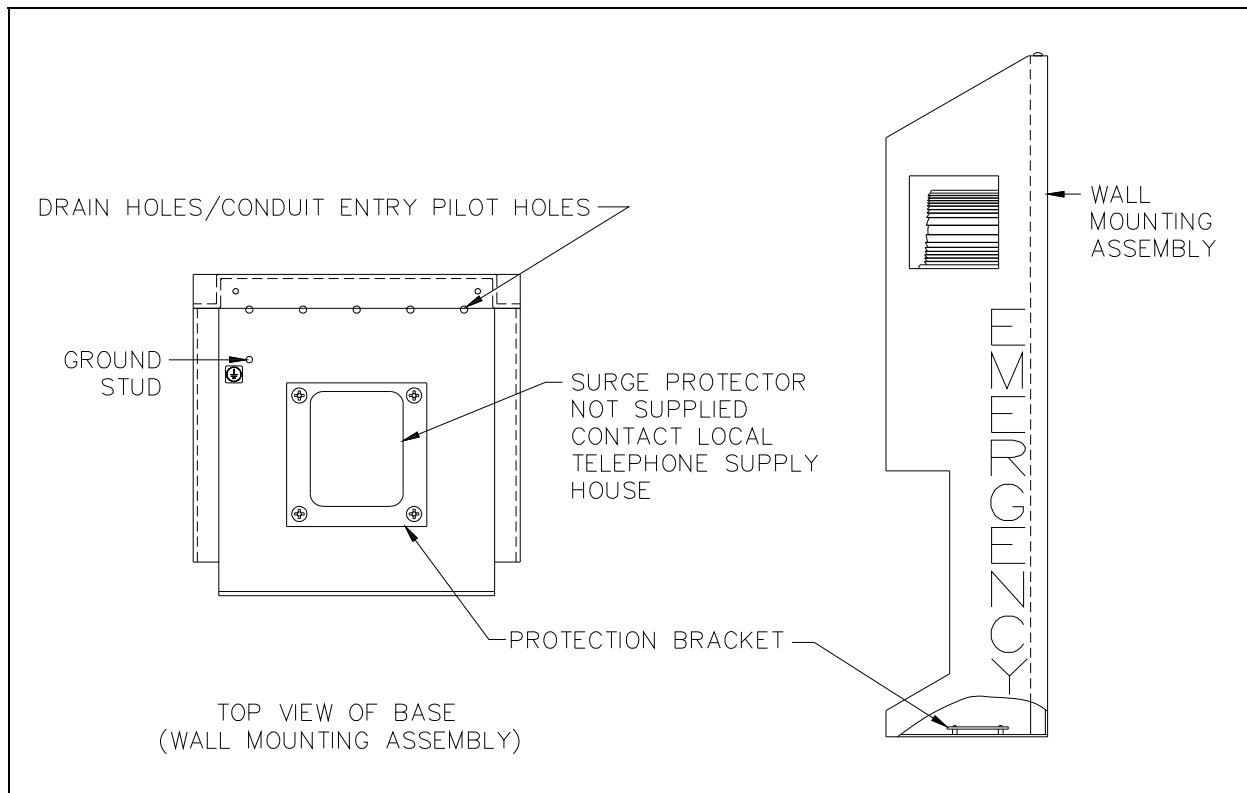


Figure 3. Conduit/Surge Protection Locations

Tempered Glass Installation (Factory Installed)

1. Remove the keps nuts, spacer brackets, and holding brackets.

These parts hold the glass in place.

2. Carefully unpack the glass from the box located in the telephone mounting area of the Model 234WM-202 Wall-Mount Enclosure.
3. Center the front glass left to right and top to bottom around the opening in the front panel assembly.

4. Fasten the glass in place using the spacer brackets, holding brackets, and keps nuts previously removed (see Figure 4).

NOTE: Do not exceed 24 in-lb of torque on the keps nuts.

5. Repeat the above steps for both side glass pieces.

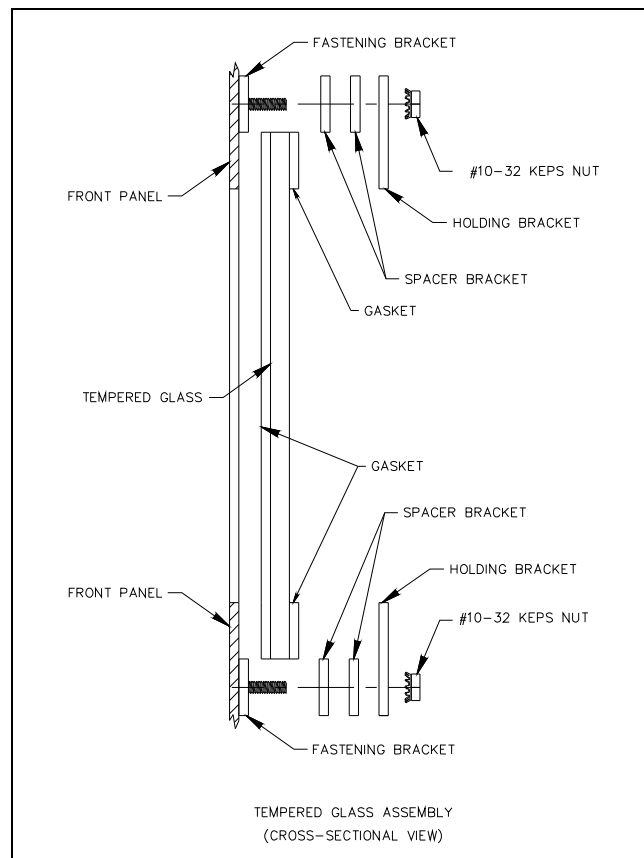


Figure 4. Glass Installation Instructions

No. 84503-30x Panel Light Installation

1. Align the station panel light assembly inside the station (see [Figure 5](#)).
2. **Model 84503-301:** Extend the black (hot), the white (neutral) and the green (ground) wires to the base of the station (these wires will be connected later, along with the strobe wires to the incoming power wires in accordance with applicable electrical codes).

Model 84503-302: Extend the black (–) and the white (+) wires to the base of the station (these wires will be connected later, along with the strobe wires to the incoming power wires in accordance with applicable electrical codes).

3. Apply a small amount of clear RTV silicone sealant or equivalent to the threads of each panel light screw to reduce the possibility of rust forming in the screw threads.
4. Secure the panel light assembly to the station with the two mounting screws.

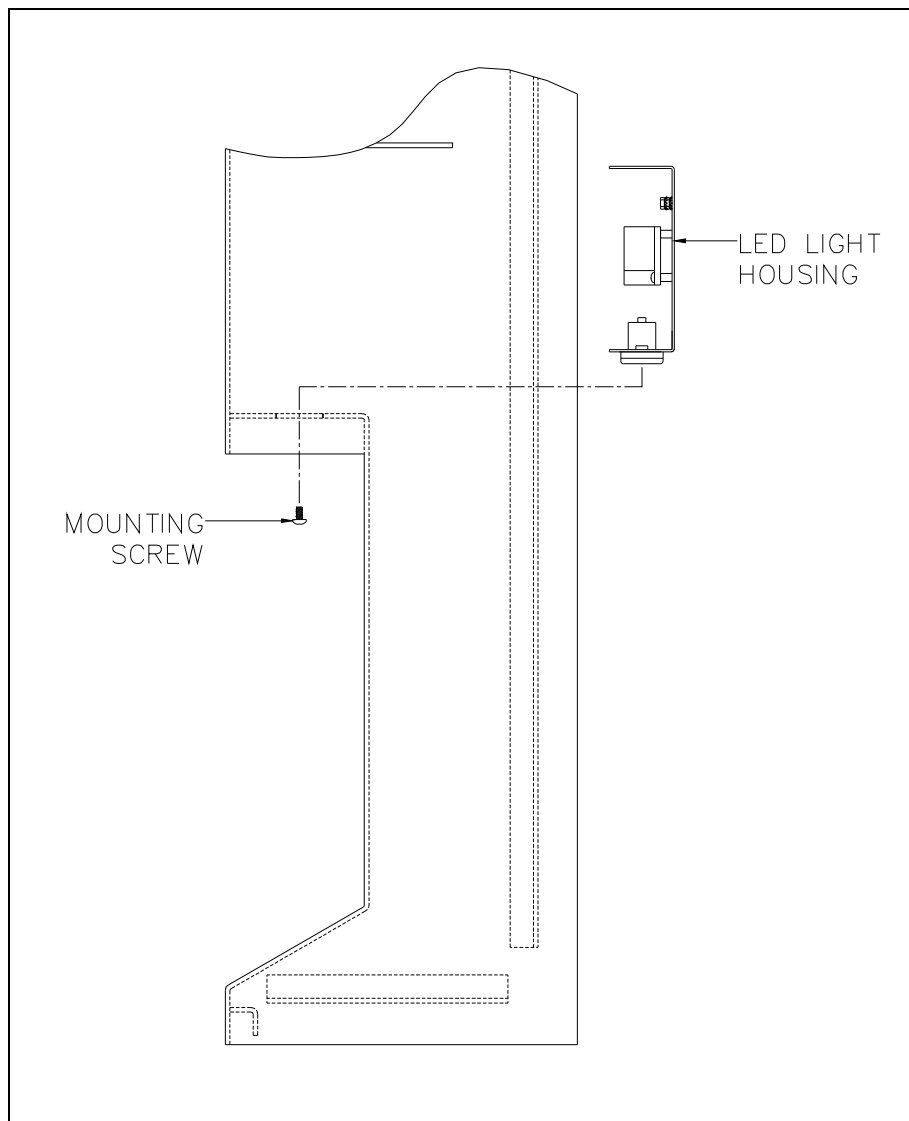


Figure 5. Station Panel Light Assembly

Model 540-001 or 541-001 Strobe Installation

1. Insert the strobe's 15-foot wires through the station's threaded nipple and allow the wires to extend to the bottom of the station (see Figure 6).
2. Screw the strobe onto the threaded nipple.
3. Separate the orange and violet wires necessary for the telephone connection and extend these wires through the station cutout for the telephone.

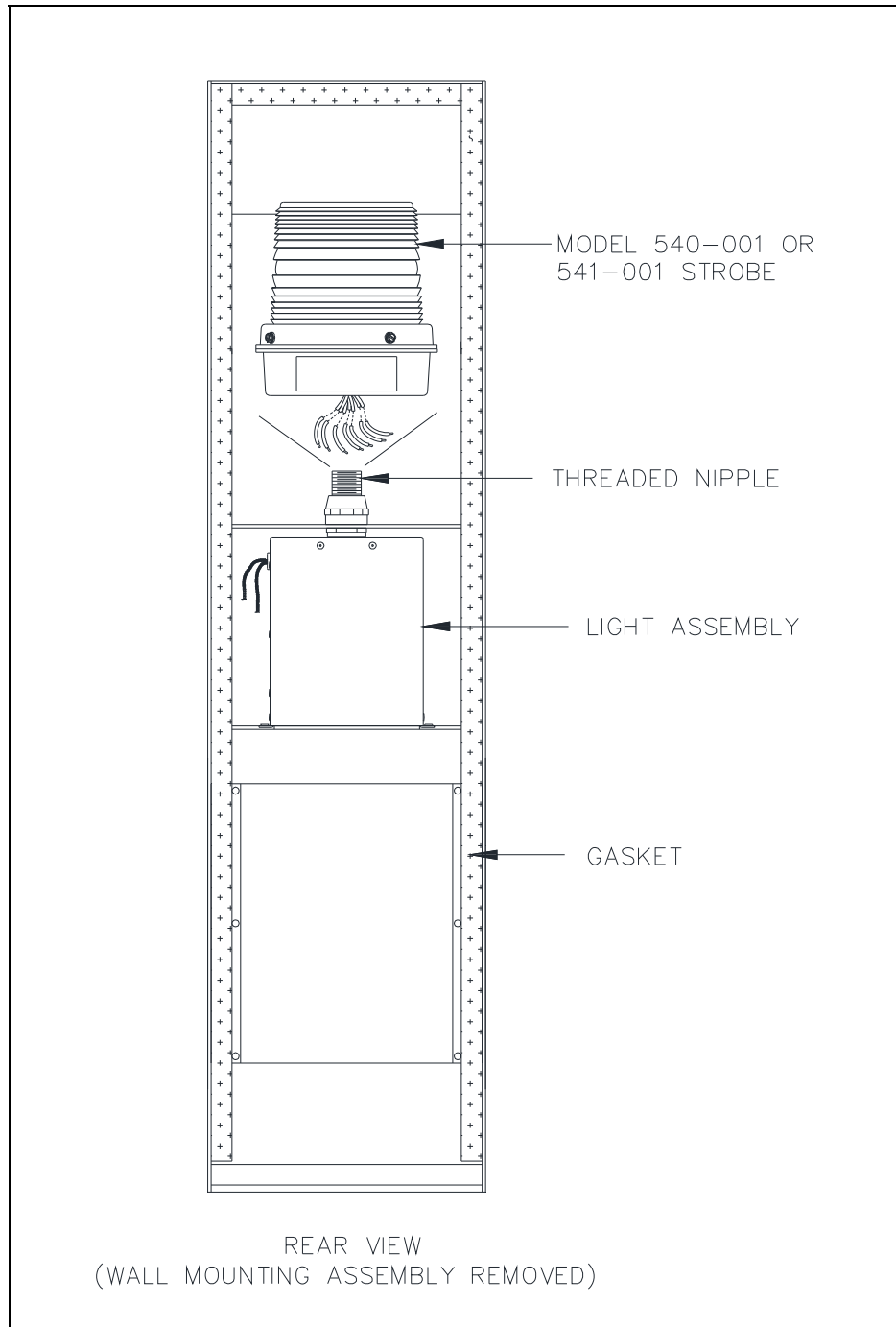


Figure 6. Strobe Assembly

Emergency Telephone Installation

1. Separate the back box from the front panel of the telephone.

The parts envelope inside the back box contains eight #6-32 self-tapping flat head screws, six security screws, six washers, and a hole plug.

2. Place the back box into the telephone opening from the front of the station.
3. Fasten the back box using four #6-32 self-tapping flat head screws (see [Figure 7](#)).

The telephone back box has two openings, one in the top and one in the bottom.

4. Plug the top opening with the hole plug.

NOTE: The bottom of the back box is the recommended entry location for the telephone line and strobe control wires.

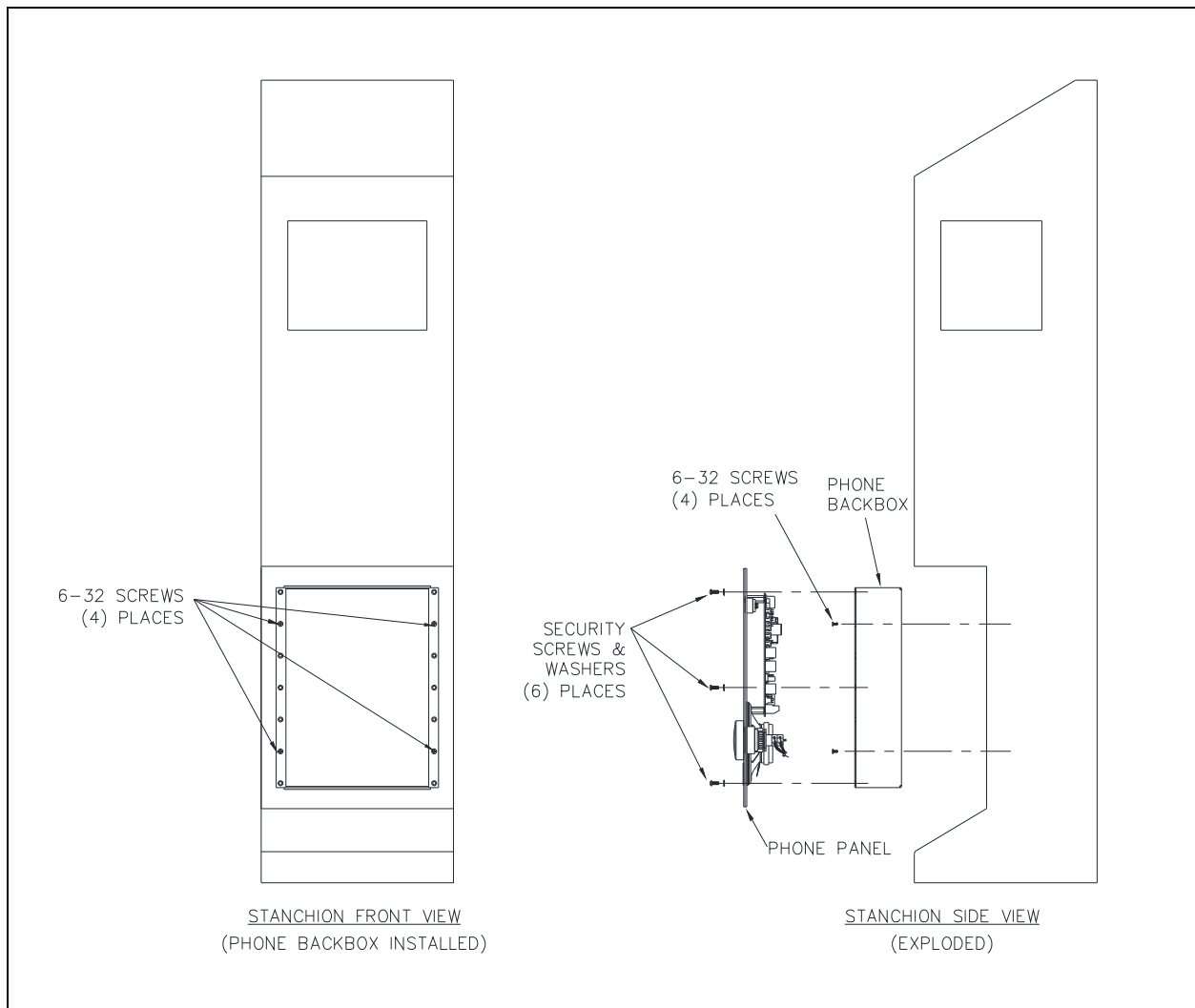


Figure 7. Telephone and Back Box Installation

5. Install a telephone line surge suppressor (sold separately) on the protection bracket in the bottom of the wall-mounted station assembly (see [Figure 3](#)).
6. Install a ground wire between the telephone line surge suppressor (sold separately) and the grounding lug in the bottom of the station (see [Figure 8](#)).
7. Connect the telephone line to the surge protection (see [Figure 8](#)).

8. Connect the telephone cable from the surge protection and feed the cable through the bottom access hole of the telephone back box and allow it to hang free.
9. Bring the orange and violet strobe unit wires through the bottom access hole of the back box and allow them to hang free.
10. The telephone front panel is shipped from the factory with a cable and modular plug attached to terminal block TB1. If desired, an optional modular telephone jack can be mounted to the inside of the back box allowing the use of the cable and modular plug that is attached to TB1. If the telephone line is to be hard-wired to the telephone, this cable can be removed and discarded.
11. Attach the telephone cable from the surge protector to terminal block TB1 on the telephone PCBA (see [Figure 8](#) or [Figure 9](#)).
12. Attach the strobe's violet and orange control wires to terminal block TB2 on the telephone PCBA (see [Figure 8](#) or [Figure 9](#)).
13. Install the telephone's front panel using the six tamper-resistant screws and six washers provided.

NOTE: Excessive tightening will cause the panel to warp. Do not over-tighten.

Station Panel Light and Strobe Power Connections

NOTE: All connections must be made in accordance with the National Electrical Code (NEC) in the United States or the Canadian Electrical Code (CEC) in Canada.

AC installations: Install the power lines per [Figure 8](#) for ac installations or [Figure 9](#) for dc installations.

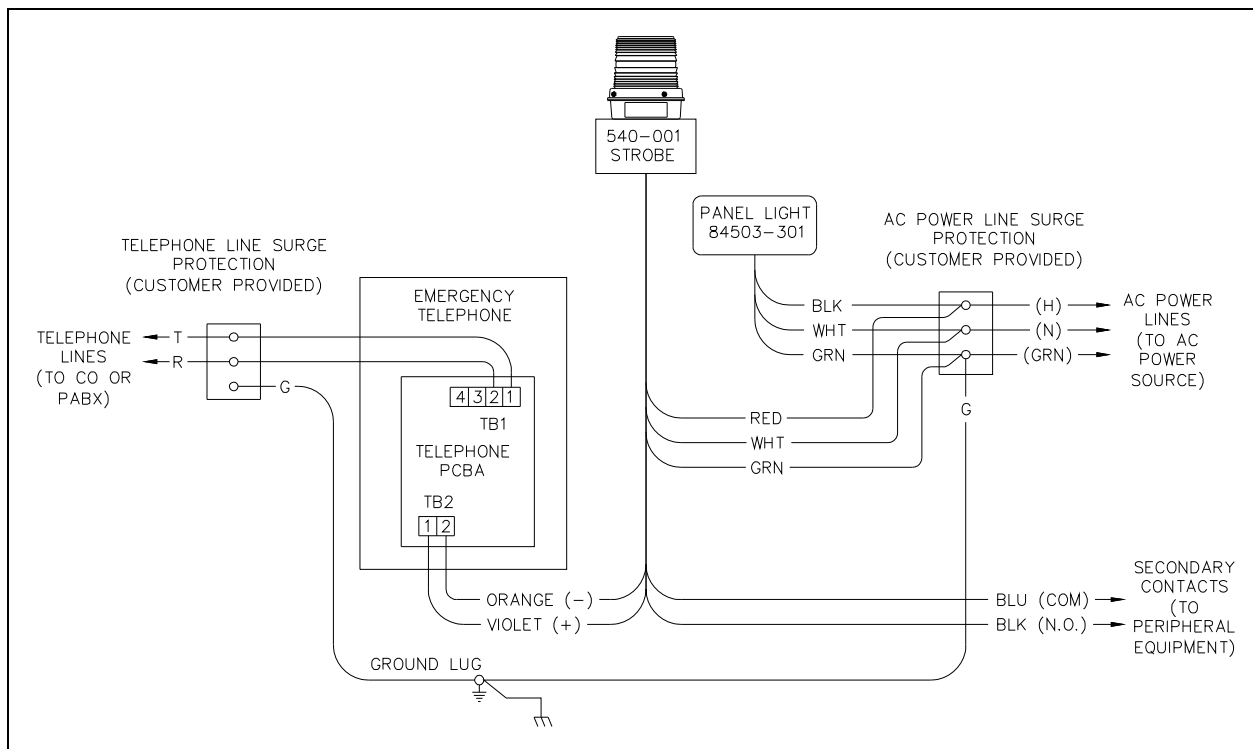


Figure 8. Interconnection Diagram with AC-Powered Strobe

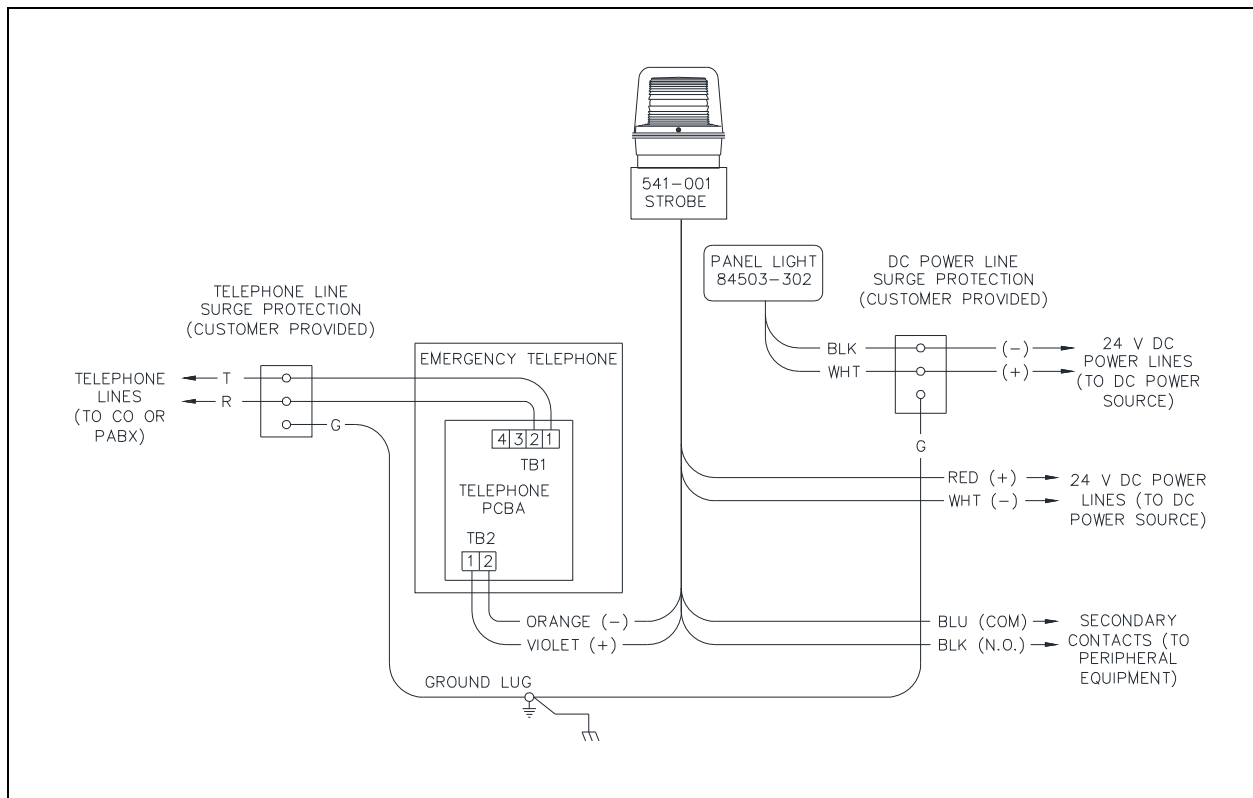


Figure 9. Interconnection Diagram with DC-Powered Strobe

Maintenance

Contact a regional service center for a return authorization number (RA#) if the equipment requires service. Equipment must be shipped prepaid to GAI-Tronics with a return authorization number and a purchase order number. Repairs or a replacement will be made in accordance with GAI-Tronics' warranty policy if the equipment is under warranty. 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.

Repairing Surface Damage to Powder-Coated Stations

1. Carefully sand the damaged area to clean and score the base metal, taking care to minimize any additional damage to the surrounding powder coating.
2. Wipe the sanded area with a cleaning solvent, such as DuPont PrepSol® or equivalent. Allow the area to dry. This type of product is normally available at auto parts stores. Denatured alcohol may also be used.
3. Prepare the bare metal surface for painting by treating it with a phosphoric acid solution intended for this purpose. The phosphoric acid solution is also normally available at auto parts stores. Allow the area to dry.
4. Using a cotton-tipped swab or small brush, paint the prepared surface with an automotive enamel or oil base polyurethane enamel such as Red Devil, Rustoleum, or equivalent. Do NOT use Krylon-type paints. Carefully blend the repair enamel into the powder coat at the edges.

NOTE: Exact color matches may not be attainable.

Specifications

Dimensions 40.5 H × 10.0 W × 9.5 D in (0.25 × 0.24 × 1.03 m)

Wall thickness 0.125 in

Wall material aluminum

Finish textured powder-coat epoxy

Power ratings:

Model 540-001 AC Strobe 0.39 A @ 120 V ac

Model 541-001 DC Strobe 1.1 A @ 12 V dc or 0.5 A @ 24 V dc maximum

Model 84503-301 AC Panel Light Assembly 25 mA @ 120–230 V ac

Model 84503-302 DC Panel Light Assembly 40 mA @ 10–33 V dc

Weight Approximately 40 lb

Approvals

UL/cUL listed telephone station Canadian Electrical Code, Part I (CE Code, Part I),
and the ANSI/NFPA 70 National Electrical Code (NEC)

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.

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