



GAI-TRONICS®
A HUBBELL COMPANY

Fiber Module Modification Kit for LE200 Series

MODELS 12549-001 AND 12549-002

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General Information

The Model 12549-001 and 12549-002 Fiber Module Modification Kits are designed to allow an LE200 Series Line Extender to use the LE300 Series Line Extender Module in an existing cabinet.

These kits are intended for the following applications:

Kit	For use with:
Model 12549-001	Model LE200-FLR Line Extender with Long-Range Fiber Optic Modem (T1)
	Model LE200-FLR-E1 Line Extender with Long-Range Fiber Optic Modem (E1)
Model 12549-002	Model LE200-FSR Line Extender with Short-Range Optic Modem (T1)
	Model LE200-FSR-E1 Line Extender with Short-Range Fiber Optic Modem (E1)

The Model 12549-001 and -002 Modification Kits contains the following components:

Qty.	Description
1	Line Extender adapter plate
1	Wall-mount bracket media chassis
4	Flat head screws, #6-32 × 3/8-inch long
1	SM Fiber Optic Module (Model 12549-001 Kit only) or MM Fiber Optic Module (Model 12549-002 Kit only)

Qty.	Description
1	Fiber optic chassis
2	Nuts, #8-32
1	Wire, green/yellow, 18 inches long
1	No. 14 AWG ring lug
1	Spade terminal, #6, No. 14–16 AWG
2	Spade terminals, #6, No. 22–16 AWG
1	Ferrule, Twin 2 × No. 18/20 AWG, red
1	CAT5 cable with ferrules
1	Nylon tie cable, 1.25 inches long

Installation

1. Ensure the power is OFF.
2. Disconnect the power wiring that runs from the Fiber Optic Transceiver and 12 V dc power supply, and save for later use. Disconnect the data cable that runs from the Fiber Optic Transceiver to P19 on the Line Extender Main PCBA and discard. Remove the ground wire that runs from the Fiber Optic Transceiver to the grounding bar and discard. Refer to Figure 1.

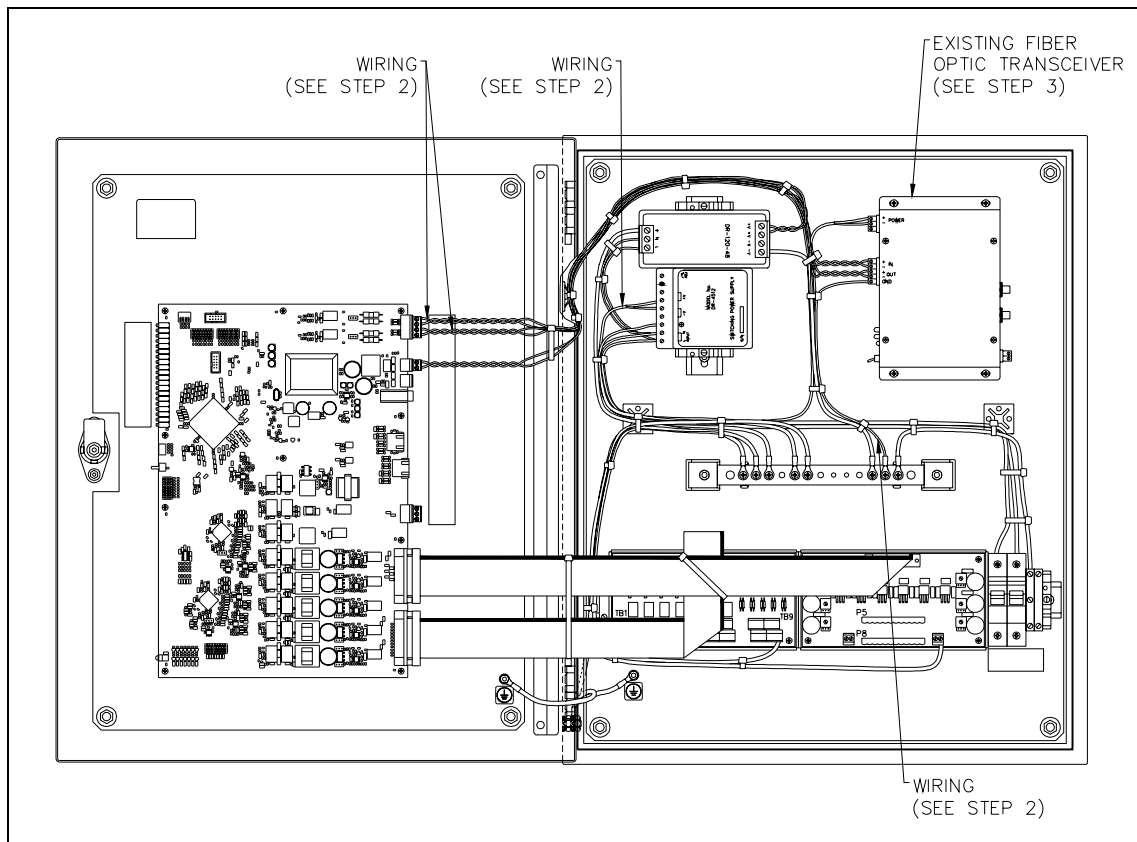


Figure 1.

3. Remove the four screws holding the Fiber Optic Transceiver to the rear mounting panel. Remove the Fiber Optic Transceiver from the enclosure and discard. See Figure 1.
4. Using the #6-32 × 3/8-inch long flat head screws, mount the Line Extender adapter plate to the enclosure.
5. Slide the Fiber Optic Module into the media chassis via the card guides until the module is seated securely in the connector. Secure the module to the chassis by tightening the captive screws.
6. Mount the wall-mount brackets to the media chassis using the supplied screws.
7. Using the supplied green/yellow wire, connect the ring lug to one end and connect a #6 14–16 AWG spade terminal to the opposite end. Connect the spade terminal of the green/yellow wire to ground on the new Fiber Optic Transceiver before installation into the enclosure. See Figure 2.
8. Using the red and black twisted pair wires previously saved, on one end replace the ferrule on each of the wires with a #6 22–16 AWG spade terminal. Using the side with the spade terminals, connect the red wire to the “+” terminal and the black wire to the “-” terminal at the new Fiber Optic Transceiver before installation into the enclosure. See Figure 2.
9. Mount the new Fiber Optic Transceiver to the Line Extender adapter plate using two #8-32 nuts.
10. Connect the green/yellow wire coming from the new Fiber Optic Module to the grounding bar.
11. At the 48 V dc power supply, disconnect the black wire at the V– termination. Remove the existing ferrule. Combine this black wire with the black wire coming from the new Fiber Optic Transceiver and attach the supplied twin 2 × 18–20 AWG ferrule. Connect this ferrule back to the V– termination at the 48 V dc power supply. Connect the red wire coming from the new Fiber Optic Transceiver to the V+ termination at the 48 V dc power supply. See Figure 2.
12. Install the CAT5 cable with ferrules to the connector P19 on the Line Extender Main PCBA as described below. Plug the RJ45 connector into the Fiber Optic Transceiver. Refer to Figure 2.
 - White/orange wire to position 1 (TX-Ring)
 - Orange wire to position 2 (TX-Tip)
 - Blue wire to position 3 (RX – Ring)
 - White/blue wire to position 4 (RX – Tip)Connect the other end to the T1/E1 connection at the new Fiber Optic Transceiver.
13. Use tie cables wherever is necessary. Refer to Figure 2.

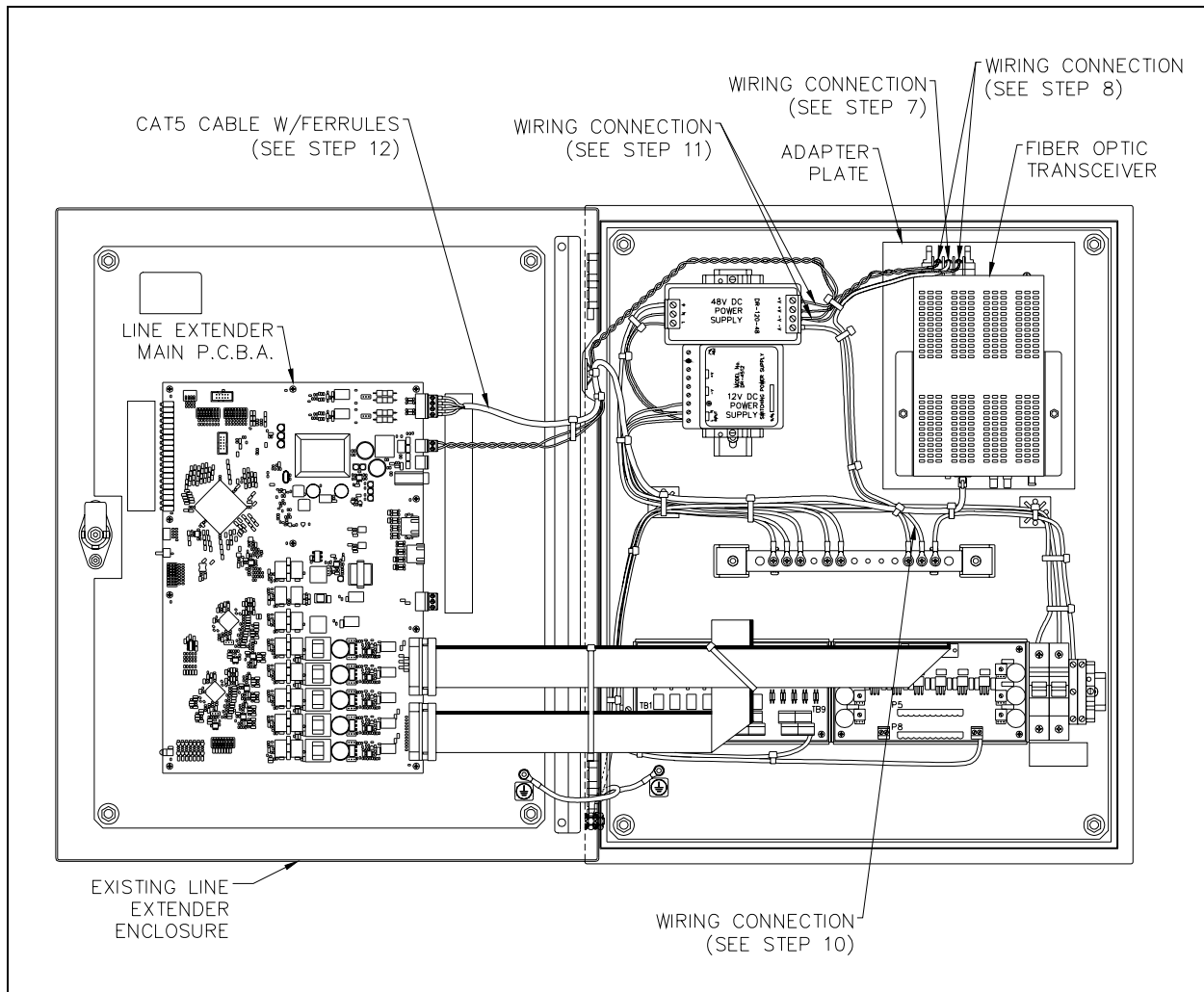


Figure 2.

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.