Hazardous Area ICS RTU Upgrade Kit

Model 12820-001

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General Information

The Model 12820-001 Remote Terminal Unit (RTU) PCBA Upgrade Kit adds remotely controlled dry relay contacts to an ICS Page/Party® station equipped with either a VLC PCBA or a SmartSeries PCBA in conjunction with an ADVANCE head end.

The Hazardous Area ICS RTU Upgrade Kit provides the following components:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>ICS RTU Module PCBA</td>
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<tr>
<td>1</td>
<td>RTU Mounting Bracket</td>
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<tr>
<td>1</td>
<td>Harness, 6-conductor</td>
</tr>
<tr>
<td>4</td>
<td>Standoffs, ¼-inch long</td>
</tr>
<tr>
<td>2</td>
<td>Screw, 6-32×5/16-inch PHMS</td>
</tr>
<tr>
<td>4</td>
<td>Screw, 4-40×1/4-inch PHMS</td>
</tr>
<tr>
<td>4</td>
<td>Washer</td>
</tr>
<tr>
<td>1</td>
<td>Label, RTU Identification</td>
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<tr>
<td>1</td>
<td>Resistor, 20k-ohm, 10 W</td>
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Installation

⚠️ WARNING ⚠️ Before performing any of the following settings and adjustments, remove all power from the station.

⚠️ WARNING ⚠️ To reduce the risk of hazardous atmospheres, disconnect the equipment from the supply circuit before making any adjustments to the amplifier’s handset level.
Opening the Station

Remove all cover bolts from the enclosure. Swing the front door open to access the internal PCBAs. See Figure 1.

Installing the RTU PCBA

1. Install the four standoffs (provided) and washers onto the brackets.

2. Align the RTU PCBA with the four standoffs so that TB7 is oriented toward the Termination PCBA. See Figure 1.

3. Secure the RTU PCBA using the four 4-40 screws provided.

4. Attach the RTU bracket to the rear mounting panel using the two 6-32 screws provided.

5. Install the provided 6-conductor harness from P5 of the SmartSeries or VLC PCBA to P5 of the RTU PCBA.

6. Place RTU upgrade identification label on power supply bracket as shown on Figure 1.
Field Wiring

The RTU PCBA provides terminal blocks for field wiring. Attach spade lugs to the wires before attachment to the terminal blocks for the most secure connection.

OUTPUT 1A and OUTPUT 1B are activated by either the VLC or SmartSeries PCBA. OUTPUT 1B is fused on the normally open (N. O.) contact with a T1.6 amp fuse.

Attaching the Front Panel

1. After all connections have been completed, inspect and clean the machined flange joint surfaces of both the cover and the box. Surfaces must be smooth, free of nicks, scratches, dirt or any foreign particle build-up that would prevent a proper seal. Surfaces must seat fully against each other to provide a proper explosion-proof joint. Clean surfaces by wiping with a clean lint-free cloth.

2. Apply a light coat of Killark “LUBG” lubricant to flange surfaces and close the cover. Install and tighten all cover bolts to 30 ft-lbs. Make certain no cover bolts are omitted. Use only those bolts supplied with the enclosure.

3. Reapply power to the station.

Refer to Pub. 42004-723L2 for general 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.

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**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.

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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.