



Installation and Operation Manual RSD-E-BOX

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Form IOM-RSD-E-BOX - Rev 03

IMPORTANT: KEEP THIS DOCUMENT WITH THE PRODUCT UNTIL IT REACHES THE END USER.

1. Contact with or inhalation of Anhydrous Ammonia (NH₃) can cause **SERIOUS INJURY OR DEATH**.
2. Before installation or removal of any valve, the system must be purged of all product.
3. Personal Protective Equipment (PPE), safety gloves, goggles and clothing should be worn.
4. For proper handling and storage of NH₃, refer to ANSI Standard K61.1, CGA 2.1 or Local Authority having jurisdiction.
5. An abundant supply of fresh water should be available to provide immediate first aid treatment for exposure to NH₃.
6. To ensure long term safe operation, the manufacturer recommends that under normal service conditions this product should be inspected at least twice every year and be repaired or replaced as required. Transmitter battery should be checked/tested once daily when in use.

WARNING: This product should be used with Anhydrous Ammonia (NH₃) only.

WARNING: Remote is for emergency use only. Not intended for operational shut-down. Always reset the receiving unit after actuating system with handheld remote.

DESCRIPTION

The RSD-E-BOX is designed to add remote shut-down capabilities to a stationary anhydrous ammonia (NH₃) storage tank. In the event of an unintentional product release, the operator may remotely shut-down the electromagnet or pneumatically actuated valves using a handheld, wireless transmitter.

When the “Emergency Shut-down” button is pressed on the transmitter, the transmitter sends an encoded 32-bit ID number and commands to the receiver. Only the receivers that have that transmitter’s ID in its programmed list of transmitters will respond. One receiver can be easily programmed to respond to up to 15 different transmitters.

ELECTRICAL SPECIFICATIONS

- Operating Voltage: 120 VAC
- Current Output: 15 A at 12 VDC
- Input Cable: 5 ft. long, 14 AWG 3-conductor Cord
- Output Cable: 2 ft. long, 12 AWG 2-conductor SJOOW Cord
- Fuse: 20 Amp Mini-Blade

ENCLOSURE SPECIFICATIONS

- Size: 12” x 12” x 6” (L x W x D)
- Weight: 17-1/2 lbs.
- Enclosure Material: 16 Gauge Steel
- Enclosure Rating: Weather-proof NEMA Type 4

MOUNTING INSTRUCTIONS

The RSD-E-BOX enclosure has a NEMA Type 4 Rating and is required to be mounted in the vertical position (wiring at the bottom). The enclosure includes a mounting flange at the top and bottom with two ¼” holes on each flange accessible for wall mounting. Caution must be taken to ensure mounting screws and wall can support at least 17-1/2 lbs. of weight.

ANTENNA INSTALLATION

After properly mounting the RSD-E-BOX, attach the provided antenna to the BNC connector at the top of the enclosure. The connection is considered secure once the antenna locking nut turns ¼ of a turn.

RSD-E-BOX & TRANSMITTER



While this information is presented in good faith and believed to be accurate, Individuals using this literature must exercise their independent judgment in evaluating product selection and determining product appropriateness for their particular purpose, system requirements and certifications. The manufacturer reserves the right to change product designs and specifications without notice.

ELECTRICAL WIRING



CAUTION
ELECTRIC SHOCK HAZARD

Disconnect the AC power prior to maintenance (except for programming) or installation of any electronic or electrical device. Failure to do so could cause injury or death.



WARNING

Any changes or modifications not expressly approved by the PGI Division of Parker Hannifin Corporation could void the user's authority to operate this device.

The RSD-E-BOX comes internally pre-wired and ready for use. The only external connections necessary are the input power and the output connection to the valves/solenoids. Input power connection is completed by plugging in the provided 3-prong plug to a properly grounded 120 VAC receptacle. Output connection to the valves/solenoids is completed through a proper termination of the provided 12 VDC, 2-conductor 12 AWG output cord cable and the valves/solenoids to be used. Please note the WHITE wire is the positive voltage output and the BLACK wire is the negative voltage output (Fig. 1).

WARNING: ALL ELECTRICAL CONNECTIONS MUST BE MADE BY A LICENSED ELECTRICIAN OR AUTHORIZED PERSONNEL ONLY.

PROGRAMMING RECEIVER (NEW INSTALL) OR ADDING A TRANSMITTER

1. Turn the power switch ON. Verify the system status LED is solid ON.
2. Press and hold the programming button until the status LED starts flashing (about 5 seconds), then release the button.
3. Press and hold the Emergency Shut-down button on the transmitter until the status LED stops flashing.
4. The receiver has now added the transmitter to its list and is ready to be used.

NOTE: To verify the transmitter and receiver have been paired, confirm that the status LED in the box flashes when the red button on the transmitter is pushed. Once you have verified the pairing, perform a system reset by cycling the power switch OFF and then ON.

NOTE: Maximum 15 transmitters per receiver.

CLEARING ALL TRANSMITTERS FROM THE LIST

1. With the status LED solid ON, press and hold the programming button.
2. After 5 seconds, the status LED will start flashing. Keep holding the button for an additional 10 seconds until the status LED stops flashing. Release the button, and after 10 seconds verify that the status LED turns solid ON.
3. All transmitters are now cleared from the list. The receiver will need to learn at least one transmitter before it can be used.

RESETTING AFTER A SHUT-DOWN

After a shut-down, to reset the system, cycle the power switch OFF and then ON. The status LED will return to solid ON and the system will be ready to operate.

CONTACT SQUIBB-TAYLOR

If you have any additional questions about anything contained in this manual or desire additional copies, please call Squibb-Taylor at 1-800-345-8105.

Figure 1

