

# Installation, Operation & Maintenance Instructions for E-STOP-W Emergency Stop Button

April 2018

Form IOM-E-STOP-W - Rev. A

**WARNING:** This product should be used with Anhydrous Ammonia (NH<sub>3</sub>) only.

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

1. Contact with or inhalation of Anhydrous Ammonia (NH<sub>3</sub>) 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 NH<sub>3</sub>, 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 NH<sub>3</sub>.
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:** E-STOP-W is for emergency use only. Not intended for operational shut-down. Always reset the RSD-E-BOX receiving unit after actuating system with handheld remote or push button remote.

**DESCRIPTION**

The E-STOP-W is a wireless physical palm "emergency stop" push button. Together with the RSD-E-BOX, the system is designed to add physical shut-down capabilities to a stationary anhydrous ammonia (NH<sub>3</sub>) storage tank. In the event of an unintentional product release, the operator may shut-down the electromagnet or pneumatically actuated valves by pressing the E-STOP-W button.

When the E-STOP-W palm button is pressed, it sends an encoded 32-bit ID number and command to the RSD-E-BOX receiver. Only the receiver that has that transmitter's ID in its programmed list of transmitters will respond. One RSD-E-BOX receiver can be easily programmed to respond to up to 15 different RSD-E1 transmitters or E-STOP-W buttons.

**ELECTRICAL SPECIFICATIONS**

Modulation:	FM
Carrier Frequency:	433.92 MHz
Antenna:	Reduced Height ¼ Wave Whip
Transmit Range:	Up to 91.5 meters (300 feet) over open ground
Battery:	2 X AAA Alkaline
Battery Life:	> 10,000 Transmits
Low Battery Voltage:	2.3 Volts Typical (1.15 V per cell)
Operating Humidity:	0 to 100%
Operating Temperature:	-25°C to +80°C (-13°F to +176°F)

**ENCLOSURE SPECIFICATIONS**

Size:	3.7" x 3.7" x 3.2" (L x W x D)
Weight:	1-1/2 lbs.
Enclosure Material:	Plastic
Enclosure Rating:	Weather-proof IP66

**NOTICE**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**E-STOP-W**

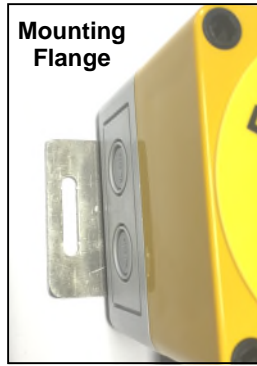


**WARNING:** Any changes or modifications not expressly approved by the Parker Hannifin Corporation could void the user's authority to operate this device.

*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.*

## MOUNTING INSTRUCTIONS

The E-STOP-W enclosure has an IP66 rating and is required to be mounted in the vertical position, antenna pointing to the sky. The enclosure includes a mounting flange at the back with two 1/4" slots on each side for mounting.



## PROGRAMMING RSD-E-BOX RECEIVER (NEW INSTALL) OR ADDING AN E-STOP-W TRANSMITTER

1. Turn the RSD-E-BOX receiver 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 down the palm button on the E-STOP-W until the status LED stops flashing.
4. The receiver has now added the E-STOP-W to its list and is ready to be used.

**NOTE:** To verify the E-STOP-W and receiver have been paired, confirm that the status LED in the box flashes when the palm button on the E-STOP-W 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/E-STOP-Ws per RSD-E-BOX receiver.

## CLEARING ALL HANDHELD TRANSMITTERS / E-STOP-W TRANSMITTERS FROM THE RSD-E-BOX RECEIVER 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/E-STOP-Ws are now cleared from the list. The receiver will need to learn at least one transmitter/E-STOP-W before it can be used.

## RESETTING AFTER A SHUT-DOWN

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

## BATTERY REPLACEMENT

The E-STOP-W system is constantly checking the battery voltage. If the batteries are weak and the voltage is measured below the 2.3V limit, the E-STOP-W will automatically send a "shutdown" command to the RSD-E-BOX. The user will have to determine which E-STOP-W in their system has the weak batteries. It is recommended to replace the batteries on all E-STOP-Ws in the system at the same time to maintain all transmitters in a "healthy" state.

To replace the batteries, un-screw the four fasteners on the top of the E-STOP-W and remove the yellow cover, being careful not to pull on the wires. Replace the batteries with fresh AAA alkaline cells while carefully observing battery polarity. Replace the cover and tighten the fasteners.

**NOTE:** Never store an E-STOP-W with weak or dead batteries. Always remove the batteries if the E-STOP-W will be stored for an extended time. Check batteries, at a minimum, before each season and replace as needed.

### WARNING:

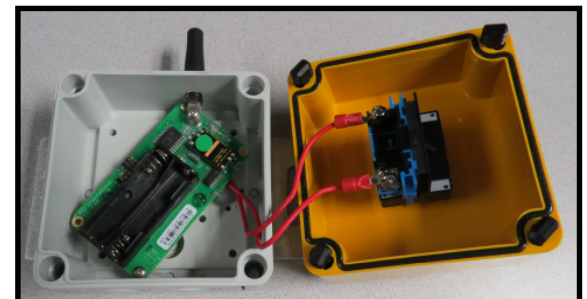
Installing the batteries in the wrong polarity may cause permanent damage to the transmitter.

## 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.



Battery Access Screws (4 total)



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