

INSTALLATION AND OPERATION INSTRUCTION

2WT-2RA-R6 RADIO FREQUENCY (RF) TRANSCEIVER

WARNING:

Read this manual completely before installation and operation of this device.

This device is for in-door use only.

Danger with high voltage 120 VAC or 277 VAC.

There are risks of electrical shock if this device is not installed properly.

This device must be installed by qualified personnel.

Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning (Part 15.21)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Interference Statement (Part 15.105 (b))

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

DESCRIPTION

The 2WT-2RA-R6 is a radio transceiver module. These modules are used to make a system consisting of a master device and slave devices. Each slave device also contains two (2) electromechanical relays on it. Refer to TECHNICAL DATA for relay rating. The master device will control the slave device(s) and can send an "on" or "off" signal to each slave device. The slave device will then open the relays for a received "off" signal or close the relays for a received "on" signal. The relays on the slave modules are normally closed (NC).

INSTALLATION

AC power supply connection:

Warning: Turn power off before you connect this device to your power supply. Make sure your power supply voltage matches the receiver power supply requirements: 120 VAC or 277 VAC.

Attach the power cable to the female Mate N Loc connector located in the housing of the 2WT-2RA-6A unit.

Load Connection:

Warning: Make sure the power supply voltage matches the voltage of the load to be controlled. Otherwise fire or damage to the device or load may occur and it may cause electrical shock.

A male Mate N Loc connector is located at the end of the cable protruding from the 2WT-2RA-R6 housing which plugs into the load to be controlled.

Warning: Make sure the load to be connected does not exceed the relay rating. Otherwise fire or damage to the device may occur. Please refer to **TECHNICAL DATA** for relay rating.

OPERATION

Warning: Make sure your power supply voltage matches the receiver power supply requirements: 120 VAC or 277 VAC. Otherwise there is electrical shock hazard.

Warning: The load must match the relay rating. Otherwise fire or damage to the receiver may occur.

After the master and slave devices are properly connected to the power supply and load, turn the power on. The load attached to the slave device(s) can then be turned on or off by the 2WT-2RA-R6 master device.

TECHNICAL DATA

Power Supply: 120 VAC or 277 VAC.

Antenna: Internal.

Frequency: 915 MHz

Operation Temperature: -20 °C to 60 °C (-4 °F to 140 °F)

Number of relays on receiver: 2

Each relay rating:

- 20A resistive load 277 VAC
- 10A Ballast load 120/277 VA

Certification: FCC compliance

This device complies with Part 15 of the FCC Rules. If this device is operated in compliance with the following requirements, it can be operated without notification and free of charge in the area of the United States of America.

Radio Frequency Transceiver**Model No.: 2WT-2RA-R6**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

FCC ID: V4D-ET915TRANSM1**RF Exposure (OET Bulletin 65)**

To comply with FCC RF exposure requirements for mobile transmitting devices, this transmitter should only be used or installed at locations where there is at least 20cm separation distance between the antenna and all persons.

To comply with FCC's RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Warning: Changes or modifications made to this device not expressly approved by Orion Energy Systems may void the FCC authorization to operate this device.