



R-2 Operating Guide

Optional LCD and pushbutton interface for field adjustment



Care and Handling

- Failure to follow care and handling instructions will void the warranty and could result in unsafe equipment operation.
- Remove receiver from machine prior to welding on machine.
- Do not paint electrical connectors.
- Use only factory provided antenna and cabling.
- Do not open receiver enclosure except to make adjustments to factory settings.
- Use transmitter to test functions. Do not apply voltage to circuit board directly.

OPERATION

General

Receivers are factory configured and programmed for each application. Refer to the wiring diagram for your specific system for receiver wiring and output information.

Special Features

This receiver is compatible with the R-2 Field Programming Tool. Consult factory for information.

Transmitter/Receiver Matching

Transmitters and receivers are shipped from the factory as matched pairs. If a new transmitter is to be used, it must be trained to operate the receiver.

Training procedure:

Receivers with tether connection:

1. Connect transmitter to receiver using tether cable provided.
2. Operate transmitter to verify tether is connected.
3. Disconnect tether, and resume normal operation.

Receivers with learn button:

1. Power on transmitter and receiver.
2. Press "LEARN" button on receiver.
3. Operate transmitter normally.

IMPORTANT!

Read this manual completely before operating system.

Keep this manual available for future reference.

Make sure the area is safe for operating equipment before turning power on or starting equipment.

If you encounter any problem or malfunction, discontinue use immediately, and contact your equipment dealer for service or replacement parts.

CAUTION

Improper operation of these controls could cause damage to equipment. Do not allow anyone to operate this equipment before completely reading all manuals.

NOTICE

Miratron, Inc. controls are not intended for life or safety applications. Miratron, Inc. shall not accept responsibility for installation, application, or safety of machine or systems which utilize miratron, Inc. controls.

SPECIFICATIONS

General

Power Requirement 10-30vdc, 500mA nominal + power to loads
 Fuses Self-resetting type. Outputs protected

Radio

Frequency 902-928MHz, Unlicensed ISM band standard models
 2.4-2.4835GHz, Unlicensed ISM band international option

Type Frequency hopping spread spectrum

Frequency Control Direct FM

FCC id OUR9XCITE: Standard range
 OUR9XTREAM: Extended range
 OURXBEE: International version

Receiver

Sensitivity -104dBm

RF Connector BNC

Output Types Digital, proportional, ratiometric, or unamplified

Digital Outputs Solid state relay, provides supply voltage up to 5-amp

Proportional Current Outputs Adjustable PWM up to 5-amp

Ratiometric Outputs 25% to 75% of supply voltage, 100mA max

Unamplified Outputs Customer specified (0-10v, typical)

Field Wiring 40-position Deutsch connector with 6' pigtail wiring

Enclosure

IP67 fiberglass

Environmental

Storage -40°C to 85°C

Operating -10°C to 60°C



The R-2 receiver is compatible with the optional R-2 Field Programming Tool. Consult factory for information.

Troubleshooting:

| ISSUE | SOLUTIONS |
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| Poor range. | Check receiver antenna and cable for loose connections or damage. Obstructions, interference, and adverse weather can affect range. Check transmitter batteries and replace if necessary. |
| One or more functions do not operate properly. | Check receiver fuse. (May be in receiver and/or wire harness.) Verify receiver wiring is correct. Verify control device is operational (solenoid valve, pump, etc.) Inspect transmitter, receiver, and cabling for damage. Some control systems feature special program logic that can disable functions under certain conditions. Consult factory for specific details. |