

# R-1 Operating Guide

### LCD and pushbutton interface for field adjustment



## 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.

### **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.

## 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.

### **Special Features**

This receiver features field adjustments. Refer to label inside lid for specific instructions.

#### 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.

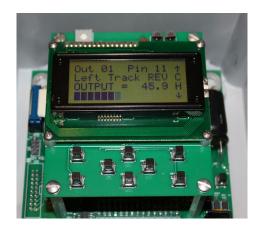
#### Receivers with learn button:

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

### **SPECIFICATIONS**

JI ECII ICATIONS		
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
	Туре	Frequency hopping spread spectrum
	Frequency Control	Direct FM
	FCC id	OUR9XCITE: Standard range
		OUR9XTREAM: Extended range
		OURXBEE: International version
	Sensitivity	-104dBm
Receiver	RF Connector	BNC
	Output Types	Digital, proportional, ratiometric, or unamplified
	Digital Outputs	Solid state relay, provides supply voltage up to 5-amp
	<b>Proportional Current Outputs</b>	Adjustable PWM up to 5-amp
	Ratiometric Outputs	25% to 75% of supply voltage, 100mA max
	Unamplified Outputs	Customer specified (0-10v, typical)
	Standard Adjustments	Min, Max, Ramp up, Ramp down, Threshold
	Field Wiring	40-position Deutsch connector with 6' pigtail wiring
Interface	Keypad	8-pushbuttons
	LCD	4-line x 16 character backlit LCD
Enclosure		IP67 fiberglass
Environmental	Storage	-40°C to 85°C
	Operating	-10°C to 60°C

The R-1 receiver features a built-in programming interface for field adjustments. Refer to label inside lid for information on navigating the menus, using diagnostic features, and adjusting settings.



### **Troubleshooting:**

<u>ISSUE</u>	<u>SOLUTIONS</u>
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.

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