



T-1 Operating Guide

Multi-Function Belly Pack Transmitter



Photo for reference only. Actual product appearance will vary.

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.

Clean transmitter gently with a damp cloth or dry, compressed air. Do not immerse transmitter in water, or spray with hose. Do not store outside.

Do not drop transmitter or otherwise subject transmitter to physical shock.

Do not expose transmitter to extreme temperatures.

Do not open transmitter enclosure. Transmitter contains no user serviceable parts.

OPERATION

Controls

Transmitters are built-to-suit, and may be equipped with joysticks, potentiometers, paddles, pushbuttons, switches, and other customer-specified controls. Take time to familiarize the operation and arrangement of the controls before operating equipment.

Batteries

This transmitter operates from a pair of standard "D" cell batteries. (Jumbo version requires 3 x "D" cell batteries. Alkaline batteries generally provide longest life. If rechargeable batteries are used, NiMH type are recommended. Batteries are accessible by a cap on the side of the belly pack. No tools are needed to replace batteries. To ensure maximum battery life, be sure to turn the transmitter OFF when not in use. Remove batteries prior to shipping or storing transmitter.

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:

Transmitters with tether cables:

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

Transmitters without tether cables:

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

SPECIFICATIONS

Transmitter

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
Range (line of sight)	Standard range = 500 feet Extended range = 1500 feet International = 500 feet
RF Power Output	Standard range = 5mW Extended range = 100mW International = 60mW (100mW EIRP)
Battery Type	2 "D" size alkaline or rechargeable (Standard model) 3 "D" size alkaline or rechargeable (Jumbo model)
Battery Life (fully charged)	Standard range = Standby, 80 hrs; Transmit, 35 hrs Extended range = Standby, 20 hrs; Transmit, 8 hrs International = Standby, 15 hrs; Transmit, 6 hrs
Controls	User specified toggles, joysticks, potentiometers, or paddles
Led Indicator	Flashing = normal; Double blink = battery low

Enclosure

Belly Pack	High-impact polystyrene, UL94HB Standard: 7-3/4" L x 5-1/4"W x 6-1/2"D Jumbo: 11-1/4" L x 5-1/2"W x 6-1/2"D
Sealing	IP65

Environmental

Storage	-40°C to 85°C
Operating	-10°C to 60°C

Troubleshooting:

ISSUE	SOLUTIONS
Transmitter not working. LED not on or blinking.	Install new batteries. Make sure power switch is on.
Transmitter not working. LED on or blinking.	Make sure E-Stop switch is out (if equipped.) Install new batteries. Make sure receiver is powered. Check receiver fuse. Make sure transmitter is in range of receiver. Make sure transmitter and receiver are matched.
Poor range.	Check receiver antenna and cable for loose connections or damage. Install new batteries. Obstructions, interference, and adverse weather can affect range.
One or more functions do not operate properly.	Verify receiver wiring is correct. Verify control device is operational (solenoid valve, pump, etc.) Inspect transmitter, receiver, and cabling for damage. (Do not open.) Some control systems feature special program logic that can disable functions under certain conditions. Consult factory for specific details.