



# INSTALLATION INSTRUCTIONS

Model # MGL-K20

## Monitored Gate Link



### IMPORTANT:

#### READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

The Monitored Gate Link (MGL) transmitter/receiver system is intended to provide a wireless connection between a monitored safety edge and a motorized operator that controls the associated gate. MGL meets the UL 325-2016 requirements for monitored devices and has been certified as a UL 325 recognized component. It is designed for use on operators that comply with UL 325-2016 using a T2 terminated edge sensor.

### 1-Parts List

#### PART NUMBER

##### Kit Contents:

1. MGL-TX20 Transmitter unit
2. MGL-RX20 Receiver unit
3. Receiver antenna
4. (2) AA lithium batteries
5. (4) #6 pan head transmitter mounting screws

##### Required:

1. 1/8" flat blade screwdriver
2. 1/4" flat blade screwdriver
3. T2 (10K/BLUE BAND) terminated sensing edge

##### Recommended:

- VOM for test purposes
- Mounting screws as required for receiver

### 2-Install Transmitter and Test

- 2-1. Open and unpack the antenna, batteries, transmitter and receiver units.
- 2-2. Loosen screws from the top cover and remove the lid.
- 2-3. Route the wires from the monitored edge through the strain relief cable fitting for approximately four inches.  
Strip the insulation from the two wires back  $\frac{1}{4}$ " and secure the wires in the terminal block marked SE 1. (not polarized.)
- 2-4. Place the two AA lithium batteries in their holders in the proper direction, paying attention to the (+) and (-) ends.
- 2-5. Tuck the wires connected to the SE terminal block neatly and pull the excess wire back through the strain relief. Securely tighten the cable fitting.

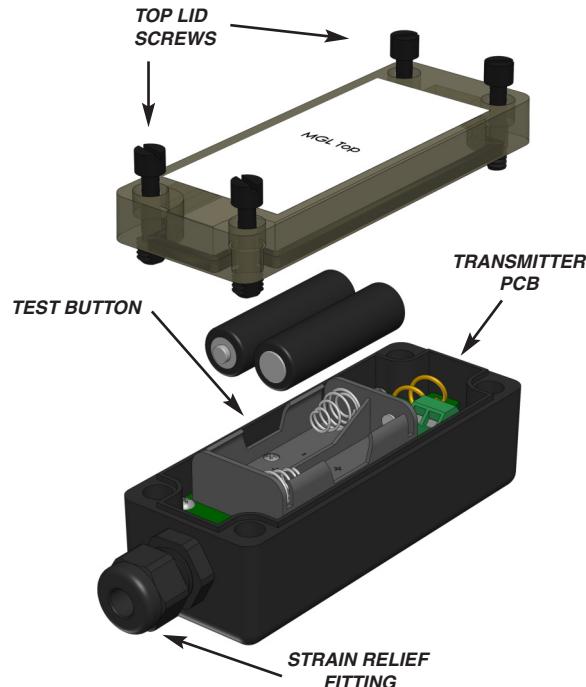


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(2-6) EDGE WIRING TO SEI TERMINAL BLOCK

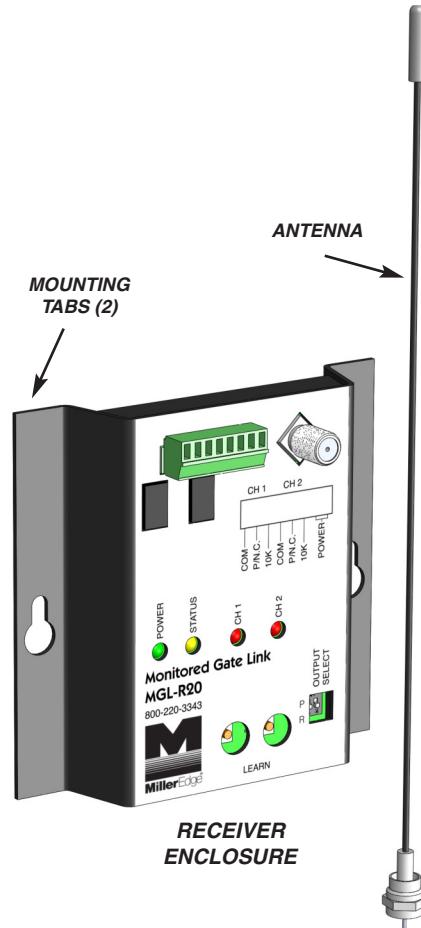
- 2-6. Momentarily press the “test” button. The green Tx data LED should flash.
- 2-7. Mount the Transmitter to the gate using #6 – 20 x 3/4” self-drilling screws. The mounting holes are located under the top lid screws. Mount the transmitter with the wire strain relief facing down.
- 2-8. Replace the cover on the transmitter and tighten the screws taking care to align the lid.

*\*Note the alignment pin located in the upper left corner.*



### 3-Install Receiver and Test

- 3-1. Mount the receiver inside the operator cover using the pre-drilled mounting holes, as shown.
- 3-2. Attach the antenna to the receiver RF board. An antenna extension cable may be required if the operator chassis is metal.
- 3-3. Connect your power source to the terminals marked “power”. 12-24 VAC/DC. Your output connections (COM and 10K or P/N.C.) will be determined by your operator’s requirements. The “output select” DIP switch will need to be set accordingly: Switch 1 set to “P” for pulsed output. Switch 1 set to “R” for N.C. (normally closed) or 10KΩ resistor output. Switch 2 has no function.
- 3-4. Confirm that the transmitter and receiver are powered on.
- 3-5. Green power LED stays on; channel 2 red LED will be blinking.
- 3-6. To enter “learn” mode, press CH1 (in the learn section of the PCB). The red led remains on and the amber status LED will blink.
- 3-7. Activate the transmitting edge and note the red and amber LEDs will blink alternately rapidly. Then the red LED will go out and the amber LED remains on.
- 3-8. Channel 1 is now programmed. Repeat for Channel 2 (if desired).
- 3-9. To start over or erase programming, press and hold both buttons for 3 seconds. The LEDs will blink rapidly and then go into “fault” mode. Repeat the programming steps above.



## 4-Safety Test

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4-1. While moving the gate in the desired direction, momentarily activate the Safety Edge and confirm that the gate stops/reverses direction.

## 5-Specifications and Controls: Transmitter Unit

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**Frequency:** 916 MHz, FSK modulation

**Indicator Lights—Tx:** Green LED: Tx Data, Flashes upon activation and release of the external safety device to indicate transmission

**Mounting:** 4 corner screws (provided)

**Power Source:** Batteries: 2 AA, 1.5v lithium\* or alkaline

*\*Recommended for extended life in prolonged cold environments. Life expectancy: 2 years*

**Dimensions:** 1.80"W x 4.78"H x 1.75"D

**Test Button:** Momentary push button—forces the transmission of the transmitter's address and sensor status

## 6-Specifications and Controls: Receiver Unit

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**Power:** 12-24 VAC/DC nominal (8-30V max); power may be supplied from the operator or alternatively from an external supply

**Cable Connections:** Screw clamp type terminal blocks for 18-26 AWG wire

**Learn Buttons:** Used to associate a transmitter with the desired receiver channel

**Output Selector:** Select "P" for Pulsed, or "R" for Relay mode; switch 2 is not used

**Dimensions:** 4"W x 4.74"H x 1"D

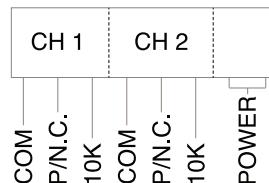
**Indicator Lights—Rx:**

- Yellow LED blinks "off"; indicates reception of message with our selected address  
If flashing: learn mode
- Red LED: indicates safety device is active  
If flashing: rapid blinking indicates a termination fault; slow blinking indicates a low battery condition on the associated transmitter

**Connections:**

**Modes:** Refer to your operator's manual

- Pulsed (photo eye)
- N.C. (normally closed)
- 10KΩ resistor



## **7-FCC Compliance**

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### **Transmitter:**

MODEL: MGL-TX20

FCC ID: **OYE-MGL-916**

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATIONS 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.

### **Receiver:**

MODEL: MGL-RX20

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part15 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 may be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Changes or Modifications Not Expressly Approved By The Party Responsible For Compliance Could Void The User's Authority To Operate The Equipment.

