

Model: MGL-K20



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 2016 UL 325 requirements for monitored devices and has been certified as a UL 325 recognized component. It is designed for use on operators that comply with 2016 UL 325 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. 10K (T2/blue band) terminated Sensing Edge

Recommended:

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

2-Install Receiver

- 2-1. Mount the Receiver inside the operator cover.
- 2-2. Attach the antenna to the Receiver. An extension cable will be required if the operator cover is metal. Ideally, antenna should be vertical and in line-of-sight of the Transmitter(s).
- 2-3. Connect power (12-24 VAC/DC) to the terminals marked POWER (not polarity sensitive). Determine which monitored interface your operator uses. Connect the COM and the correct output connections (P/N.C., 10K) to your operator. The Output Select dip switch 1 is set to "R" for all operator's requiring either a N.C. or a 10K input, or set to "P" for operator's that require a pulsed input. Switch 2 has no function.
- 2-4. Apply power to the Receiver. Observe that the green and yellow LEDs are on. The Channel 1 red LED will blink, and the Channel 2 LED will be on solid. After 15 seconds, the Channel 2 LED will go out, unless there is a Transmitter associated with it. If the yellow LED is blinking randomly, at least one Transmitter has been Learned and is working.



TERMINAL DIAGRAM

3-Learn Mode

- 3-1. Prior to mounting the Transmitter(s), remove the cover(s) and insert the batteries, noting their polarity. The green LED should blink once every second. Press the Test button, next to the green LED, and note that the green LED flashes rapidly 3 times.
- 3-2. To enter Learn mode for Channel 1, press and hold the Learn button on the Receiver for ~2 seconds until the yellow Status LED blinks rapidly and both Channel 1 and 2 red LEDs are on.
- 3-3. Press the Transmitter test button for ~2 seconds. Note that the yellow Status LED and the red Channel 1 LED on the Receiver blink rapidly. Immediately release the Transmitter Test button. Channel 1 is now programmed. Channel 1 LED will be blinking rapidly (indicating no Edge has been connected) until your 10K Sensing Edge is connected to the Transmitter. Press the Transmitter Test button again and note that the red LED on the Receiver turns on solid.
- 3-4. If needed, perform same steps for Channel 2. Up to 2 different Transmitters may be programmed per channel.
- 3-5. To start over or erase programming, press and hold both Learn buttons for ~3 seconds and release. Both Channel 1 and 2 red LEDs will blink slowly. Restart the Learn procedure.







4-Install Transmitter and Test -

- 4-1. Strip back approximately 4 inches of outer covering of Sensing Edge cable, then feed through Transmitter strain relief fitting. Connect the two Edge wires to the removable terminal SE1 (not polarized). Dress the wires next to the battery holder and tighten the strain relief. Mount unit vertically utilizing the mounting holes at the 4 corners of the transmitter box. Affix lid to Transmitter, noting alignment pin. Repeat for any remaining Transmitters.
- 4-2. Test all safety edges for functionality.

5-Specifications and Controls: Transmitter Unit —

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. Flashes every 2 seconds to indicate monitoring.

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. Reports the edge is activated.

6-Specifications and Controls: Receiver Unit –

Power: 12-24 VAC/DC nominal (8-30 V 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:

- Green LED: Indicates power
 - On solid: Device is powered on
- Yellow LED Blinks off: Indicates reception of message with our selected address
 - On solid: No Transmitters Learned
 - Fast blink: Termination fault
 - Random blink: Transmitters are Learned and sending
- Red LED: Indicates safety device is active
 - On solid: Active Sensing Edge
 - Fast blink: Termination fault
 - Medium blink: Comunications fault
 - Slow blink: Low battery
 - Off: No faults (Note: Channel 2 LED will go off after ~15 seconds if not used)

Connections:

- Power (2)
- Output (3 per channel COM, N.C./Pulse, 10K)

Modes: Refer to your operator's manual

- Pulsed (photo eye)
- N.C. (Normally Closed)
- 10K Resistor



7-FCC Compliance

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.

