



MEL-II

Monitored Edge Link

INSTALLATION INSTRUCTIONS

Models: MEL-II-RX10
MEL-II-TX10
MEL-II-TX20



IMPORTANT: READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

The Monitored Edge Link II (MEL-II) transmitter/receiver system provides a wireless connection between a Miller Edge monitored sensing edge and a commercial door operator. MEL-II meets the 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 UL 325 using a Miller Edge Sensing Edge.

Miller Edge Sensing Edge Type	T2 (10K Resistor)	T3 (Diode Capacitor)
MEL-II Receiver Model	MEL-II-RX10	MEL-II-RX10
MEL-II Transmitter Model	MEL-II-TX10	MEL-II-TX20

1-Parts List

Kit Contents:

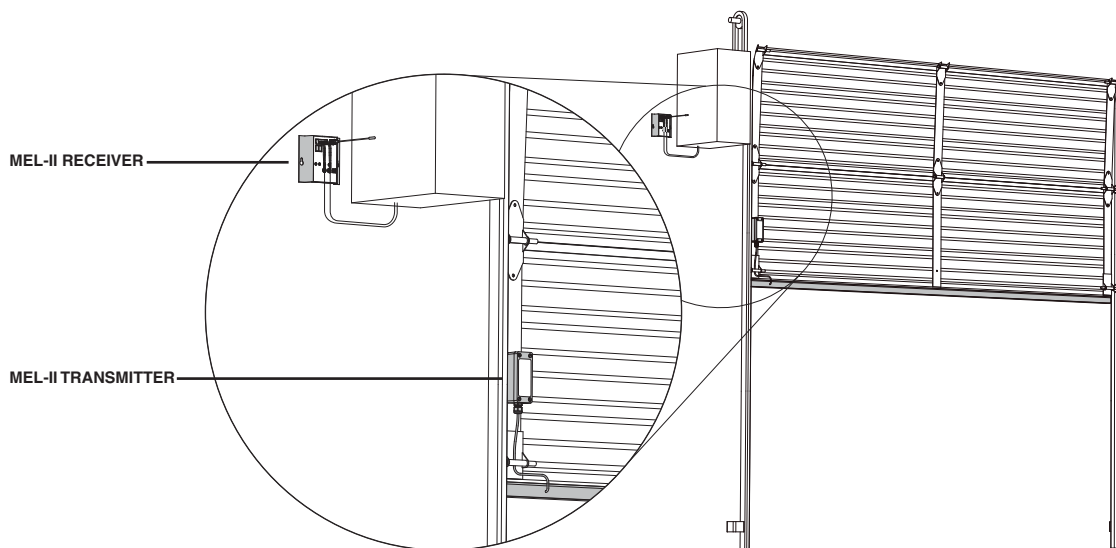
- MEL-II Transmitter
- MEL-II Receiver
- Receiver antenna
- (2) AA lithium batteries
- (4) #6 pan head Transmitter mounting screws

Required:

- 1/8" flat blade screwdriver
- 1/4" flat blade screwdriver
- Miller Edge Sensing Edge

Recommended:

- VOM for test purposes
- Mounting screws as required for Receiver
- Miller Edge Edge Tester (MET-101)

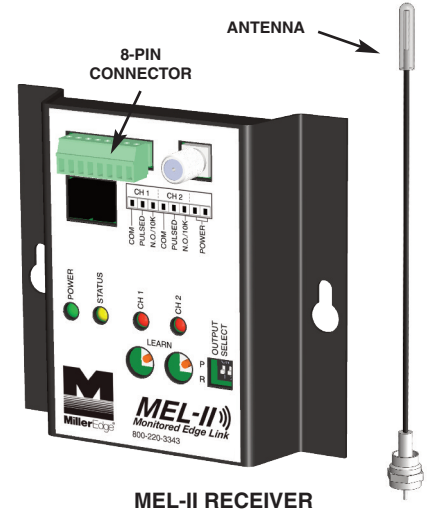


MEL-II COMMERCIAL DOOR INSTALLATION

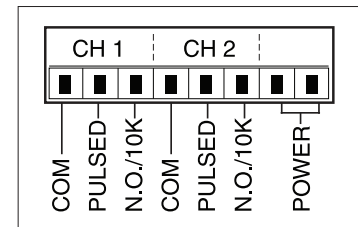
2-Receiver Setup

Please note: It may be easier to pre-learn the Transmitter to the Receiver prior to physically mounting the devices (see Section 3). A sensing edge is not needed for the **learn** process.

- 2-1. Turn the power off to the commercial door operator. Mount the Receiver on or near the operator.
- 2-2. Attach the **antenna** to the Receiver. The **antenna** should be in line-of-sight of the Transmitter.
- 2-3. On the **8-pin connector**, connect the power source (12-24 VAC/DC) to the terminals marked **power** (not polarity sensitive). Next, connect the channel 1 **COM** and the **pulsed** terminals to the operator photo eye inputs (not polarity sensitive). The **output select** dip switch 1 must be set to **P**. Switch 2 has no function.
- 2-4. Apply power to the Receiver. Observe that the green **power** and yellow **status** LEDs are on. The red **CH 1** LED will blink, and the **CH 2** LED will be on solid. After 15 seconds, the **CH 2** LED will go out. If the yellow **status** LED is blinking randomly, the Transmitter has already been **learned** (see Section 3) and is functioning properly.
- 2-5. In limited instances, if you need to utilize the relay output of **CH 1**, instead of the **pulsed** output, simply use the **10K/N.O.** and **COM** terminals (instead of the **pulsed** and **COM**) and set the output select to "R".



MEL-II RECEIVER



MEL-II RECEIVER
CONNECTOR DIAGRAM

FOR NORMALLY OPEN OUTPUT

The **P18** jumper on the Receiver circuit board will need to be cut. Simply remove the 4 screws on the rear of receiver and then remove 4 standoffs to access **P18**, which is located near the **8-pin connector**. Set **output select** DIP switch 1 to **R**.

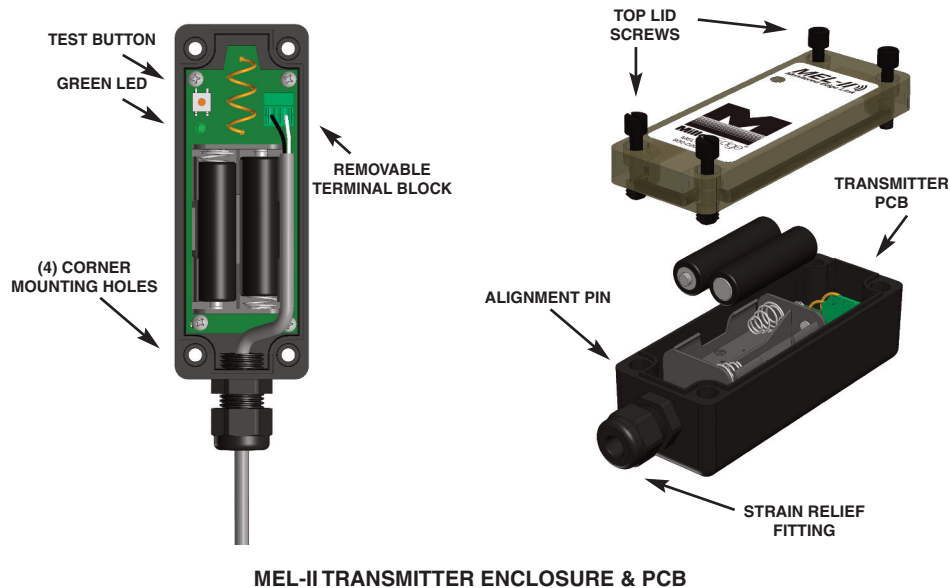
3-Learn Mode

- 3-1. Prior to mounting the Transmitter, remove lid, and insert the batteries, noting their polarity. The green **power** LED should blink once every second. Press the **test** button located next to the green **power** LED, and note that the green **power** 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 red **CH 1** and **CH 2** LEDs turn on.
- 3-3. Within 60 seconds, press the Transmitter **test** button for ~2 seconds. Note that the yellow **status** LED and the red **CH 1** LED on the Receiver blink rapidly. Release the Transmitter **test** button. Channel 1 is now programmed and **CH 1** LED will be blinking rapidly.
- 3-4. Connect the monitored sensing edge to the Transmitter. Press the Transmitter **test** button again and note that the red **CH 1** LED on the Receiver turns on solid.
- 3-4. **To start over or to erase programming**, press and hold both **test** buttons for ~3 seconds until the yellow **status** LED is on steady. The **CH 1** LED will blink and **CH 2** will go out after ~15 seconds. Both red **CH 1** and **CH 2** LEDs will blink slowly. Restart the **learn** procedure.

Power (green)	On steady
Status (yellow)	Blinking intermittently
CH1 (red)	Off when idle / On steady when edge is active
CH2 (red)	Off (not used)

MEL-II RECEIVER: PROPER FUNCTION INDICATED BY LED LIGHTS





4-Install Transmitter and Test

- 4-1. Strip back approximately 3 1/2" of the outer covering of the sensing edge cable, then feed it through the Transmitter **strain relief fitting**. Connect the two edge wires to the **removable terminal block** (not polarized). Dress the wires next to the battery holder and tighten the strain relief. Mount the unit utilizing the 4 **corner mounting holes** of the Transmitter box. Place the lid onto the Transmitter, noting the **alignment pin** and tighten the **top lid screws**.
- 4-2. Test sensing edge for functionality (See Section 5: Indicator Lights for proper LED function).

5-Specifications and Controls: Transmitter Unit

Frequency: 916 MHz, FSK modulation

Indicator Lights:

- Green LED:
 - Flashes every 2 seconds: Indicates monitoring
 - Blinks upon activation and release of the sensing edge: Indicates 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. Reports the edge is activated.



6-Specifications and Controls: Receiver Unit

Power: 12-24 VAC/DC nominal (8-30 V maximum); power may be supplied from the operator or alternatively from an external supply. 100 mA maximum.

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 (10K or N.O.) mode; switch 2 is not used

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

Indicator Lights:

- Power LED (green): Indicates power
 - On solid: Device is powered on
- Status LED (yellow): Indicates status of MEL-II
 - Blinks off: Indicates reception of message with selected address
 - On solid: No Transmitters learned
 - Fast blink: Learn mode
 - Random blink: Transmitter is learned and sending
- Channel LEDs (red): Indicates safety device is active
 - On solid: Active sensing edge
 - Off: No faults (Note: CH 2 LED will go off after ~15 seconds when not used)
 - Fast blink: Termination fault
 - Medium blink: Communications fault
 - Slow blink: Low battery

Connections:

- Power (2)
- Output (3 per channel – COM, Pulsed, N.O./10K)

Modes: Refer to your operator's manual

- Pulsed (photo eye)
- N.O. (normally open)
- 10K resistor

7-FCC Compliance

TRANSMITTER:

MODEL: MEL-II-TX10 or MEL-II-TX20

FCC ID: OYE-MGL916

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 UNDESIRE OPERATION.

RECEIVER:

MODEL: MEL-II-RX10

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.

