INSTALLATION INSTRUCTIONS

Model # MWR13, MWT12, MWTA12

IMPORTANT:
READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION.

The Miller Edge Model MWTA12 and MWT12 safety edge transmitters are designed to provide wireless signal transmission from the safety edge to the motor controls.
The Model MWTA12 includes an Audible Alarm feature indicating the batteries should be replaced. Both the Miller Edge receiver and transmitter have a compact design which allows for easy trouble shooting via the see-thru case.
Selectable features include: coded dip switches and a wire harness for relay options.
The MWR13 houses 3 relays resulting in the ability to initiate 3 distinct commands.

1- Parts List

PART NUMBER

MWR13 Three Channel Receiver
MWT12 Single Channel Transmitter
MWTA12 Transmitter with low battery alarm

Tools Required:
1. 1/8" Flat blade screwdriver for wire connections
2. 1/4" Flat blade screwdriver for top lid screws

Recommended:
DVM for test purposes
(4) #6 - 20 x 3/4" self-drilling screws, as required
Sensing edge (sold separately)

2- Install Transmitter and Test

2-1. Open and unpack the batteries, Transmitter and Receiver units.

2-2. Loosen *Top Lid Screws* on the Transmitter and remove lid. Remove the *Receiver Top Lid* by pressing one side of the snap lock base inward while lifting lid.

2-3. Setting the DIP switches. Switch positions, 1 through 8 in your transmitter(s) must be set identically. Switch #9 in the transmitter will determine which channel's relay in the receiver will be activated. In the transmitter that you wish to activate receiver Channel 1, set #9 to "+", for the Channel 2 transmitter, set #9 to "0", a Channel 3 transmitter would have #9 set to "-".

2-4. Place the two (2) *AA batteries* in their holders on the Transmitter in the proper direction, paying attention to the (+) and (-) ends. Momentarily press the ***Test Button*** on the Transmitter. The *Green Tx LED Indicator* should light for 3 seconds.
To test the Alarm on the MWTA12 Model, press and hold down the ***Test Button***. The Alarm should sound in approximately ten (10) seconds. Release Test Button.

2-5. Route the wires from the safety edge through the Transmitter's *Strain Relief Cable Fitting* for approximately four inches.

2-6. Strip the insulation from the two wires back ¼". Pull the *Terminal Block* off the Transmitter's PCB. Place the safety edge wires in the *Terminal Block* and tighten with screwdriver. Re-seat the *Terminal Block* on the PCB (see Fig. 2-6).

2-7. Re-seat the PCB into the Transmitter Enclosure and securely tighten the *Strain Relief Cable Fitting*.

2-8. Now, compress your safety edge. The *Green Tx LED Indicator* should light for about 3 seconds.

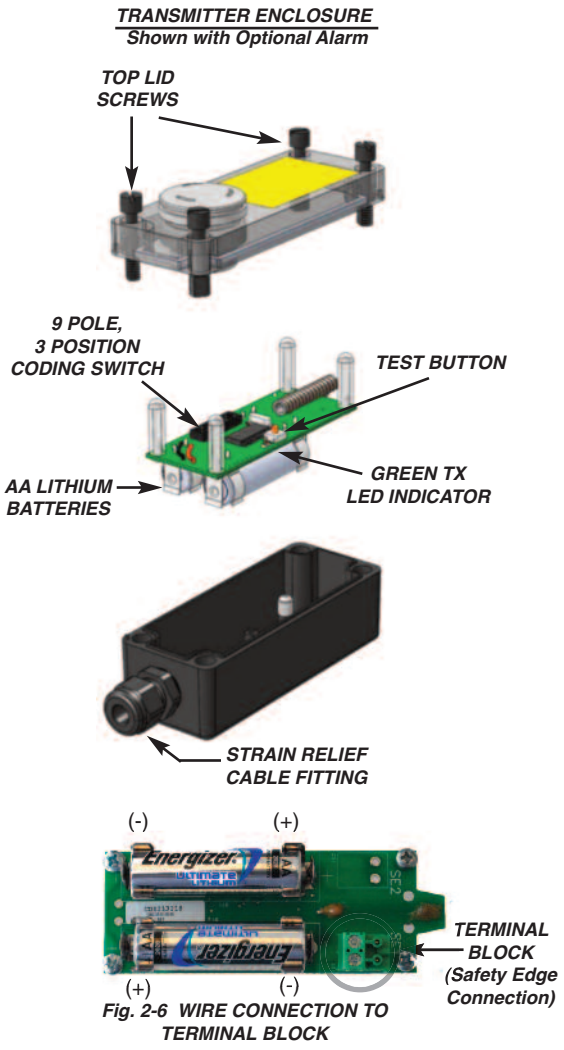


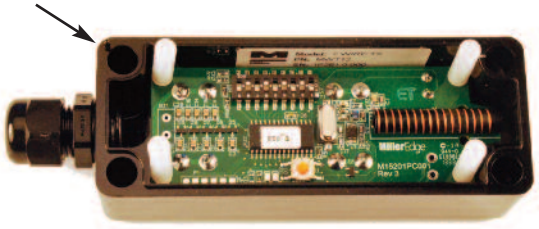
Fig. 2-6 WIRE CONNECTION TO TERMINAL BLOCK

2- Install Transmitter and Test *Cont.*

2-9. The four *(4) Pre-Drilled Corner Mounting Holes* are located on the far corners of the Transmitter Enclosure. Mount the Transmitter to the gate post, door end stile, or bottom angle using (4) #6 - 20 x 3/4" self-drilling screws.
Mount the transmitter with the wire outlet facing down or to the side.

2-10. Replace the cover on the Transmitter and tighten the *Top Lid Screws*, taking care to align the lid.

(4) PRE-DRILLED CORNER MOUNTING HOLES

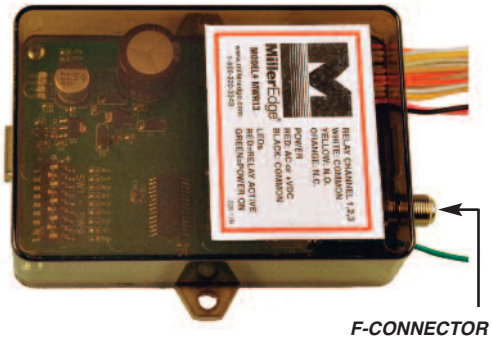


3- Install Receiver and Test

SET DIP SWITCHES 1 THROUGH 8 IDENTICALLY TO YOUR TRANSMITTER(S)

3-1. Mount Receiver inside the operator control box so that the wires from the receiver will reach the terminal strip on the operator.

RECEIVER ENCLOSURE



F-CONNECTOR ANTENNA FITTING

3-2. Wiring:

a. The red (+) and black (-) wires are your power leads. They connect to your operator panel terminals that provide the appropriate power (12-24 VAC/VDC). Black wire is common, Red wire is (+) or AC power.

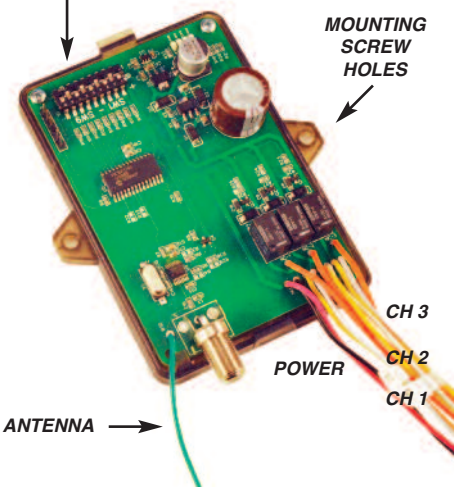
b. The green wire is your standard antenna wire. This must be located outside of any metal enclosure to provide for good signal reception. There is an F-Connector antenna fitting included on the receiver in the event a remote antenna placement is needed.

c. **Channel 1 Connections:** The white wire will go to your operator's low voltage common terminal. If your operator requires a normally open (N.O.) contact, connect the Channel 1 yellow wire to the operator's safety edge input. If the operator requires a normally closed (N.C.) contact, connect the Channel 1 orange wire to the operator's safety edge input.

d. **Channel 2 & 3 Connections:** Follow the same procedure as Channel 1, connecting the corresponding channel wire leads to the desired inputs.

9 POLE, 3 POSITION CODING SWITCH

MOUNTING SCREW HOLES



3-3. **Preliminary Test:**
Confirm that once power is applied to the Receiver, it's green LED is lit. Now compress your safety edge and notice that the correct CH 1, 2 or 3 red LED lights up on the Receiver and the green LED lights up on the Transmitter. Repeat test for each channel on the transmitter.

NOTE: The 9th position coding switch is inactive.

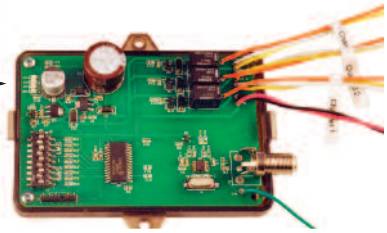
3-4. Replace the Receiver Top Lid.

4- Safety Test

4-1. While closing the door or gate, momentarily activate the safety edge and confirm that the motor stops and reverses the door or gate direction.

LED INDICATORS

CH3 = RED
CH2 = RED
CH1 = RED
POWER = GREEN



INSIDE RECEIVER UNIT

5- *Specifications and Controls: Transmitter Unit*

Code Switch: Selectable 9 pole, 3 position DIP
Frequency: 318 MHz.
Indicator Lights- Tx: Green LED: Tx Data
Mounting: (4) #6 self drilling screws included
Power Source: Batteries: 2 AA, 1.5v Alkaline or Lithium*
*Recommended for extended life in prolonged cold environments. Life expectancy: 2 yrs.
Enclosure Rating: NEMA4
Modulation: On-Off Keying
Cable Connections: Screw clamp type terminal blocks for 14-26 awg wire.
Dimensions: MWT12: 5.75"w x 1.75"h x 1.8"d
MWTA12: 5.75"w x 2.125"h x 1.8"d
Antenna: Integral helical antenna.
Test Button: Momentary push button – Forces the transmission of the transmitter's address.
Low Battery: Model #MWTA12 only 80-95dB Audible Alarm
Transmitted Signal Duration: Typically 4 seconds
Response Time: Nominal 70 msec; end to end

6-*Specifications and Controls: Receiver Unit*

Code Switch: Selectable 9 pole, 3 position DIP
Indicator Lights - Rx: Green LED: Power on; Red LED: Relay energized, indicates safety edge activation
Power Source: 10 to 40 VDC, 10-30 VAC (RMS)
Power Consumption: 16 mA (Idle) with Relay Off; 53 mA (avg.) with Relay On (1 Channel); (Max 128mA, 3 Ch.)
Dimensions: 4.9"w x 3.75"h x 1.2"d
Cable Connections: Integral 18" wiring with #6 spade lugs.
Maximum Operating Distance: 100 Feet

7- *FCC Compliance*

Transmitter:
MODEL: MWT12
FCC ID: OYE-MWT120
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.

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/TVtechnician for help.

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