

MR-2614 Annunciator Installation Instructions



1.0 General Information

The basic MR-2614 Annunciator has 8 zones consisting of a red alarm LED and a yellow trouble LED. There are four common LEDs for alarm (red), supervisory (yellow), trouble (yellow) and power (green). There are four switch inputs that are used as follows: 1) Reset, 2) Signal Silence (this function is not UL listed), 3) Acknowledge, 4) Local Lamp Test. There can only be one basic annunciator attached to the FACP.

The enhanced Annunciator, MR-2614EH, has all the features of the basic MR-2614 and also includes yellow supervisory LEDs for each of the 8 zones, connections for off-board LEDs and a service terminal port. The off-board LEDs allow for Zones 1 to 72 or a graphic annunciator; zones 1 to 8 are repeated for convenience of graphic annunciation. The MR-2902 Annunciator Strip, MR-2622 Annunciator Strip and the MR-2915 LED Driver are connected to the Annunciator by ribbon cables. The three connectors on the Annunciator are labelled P1 to P3. Each connector handles 24 zones with each zone having 3 LEDs, alarm, supervisory and trouble. P1 is for zones 1 to 24, P2 is for zones 25 to 48 and P3 is for zones 49 to 72. The MR-2902 Annunciator Strip handles 24 zones. Each MR-2622 and MR-2915 controls 8 zones. Up to 3 MR-2622s or MR-2915s can be chained together to provide up to 24 zones per chain. Each MR-2622 will require a jumper for addressing. No jumpers are set on the MR-2915 for addressing purposes. The service terminal allows for addressing the annunciators so that multiple annunciators can be connected to the FACP. Each annunciator will display the same information. There can be up to 8 MR-2614EHs per FACP, or one basic MR-2614 and up to 7 MR-2614EHs per FACP.

For graphic annunciators, the off-board LEDs are interfaced to the MR-2614 using the MR-2915 LED Driver, which drives up to 8 zones of 3 LEDs each. There is a 50 pin connector for connection to a wirewrap socket. The LEDs would be connected to the wire-wrap legs of the socket.

1.1 Technical Specifications

MR-2614

Voltage	24VDC
Normal Current	20 mA
Max. Current	
MR-2614	115 mA
MR-2614EH	155 mA
Switch SPST	N/O momentary contact

MR-2622

Voltage	24 VDC
Normal Current	5 mA
Maximum Current	125 mA

Data Communications

Maximum Distance	900m (3000 ft), 22 AWG
Communication Wire	18 to 22 AWG Twisted Pair

Power

Power Wire	18 AWG
Maximum distance	300m (1000 ft)

Note: The MR-2614 requires 24 VDC for correct operation.

2.0 Installation

2.1 Mounting

These mounting instructions are specifically for the MR-2614S, MR-2614EHS and the MR-2614EHS+MR-2622S annunciator packages.

1. Choose a suitable place for mounting, considering all applicable codes and standards.
2. Remove the screws from the top and bottom of the annunciator.
3. Remove the section(s) from the backplate.
4. Mount the backplate in the location chosen.
5. Bring the wiring from the control unit through one of the holes provided in the backplate.
6. Attach the wiring from the control unit to the pigtail on the MR-2614 board. See section 2.2 *Wiring* below for wiring instructions.
7. Replace the section(s) into the backplate. Remember to reconnect any ribbon cables between the sections.
8. Replace the screws from the top and bottom of the annunciator.

2.2 Wiring

All wiring must be in accordance with applicable codes and standards. For reliable communications, the MR-2614 must be powered from the fire panel. If an external power supply is used, 1) the negative of the power supply must be connected to the Aux Power negative of the fire panel; 2) it must be UL/ULC listed for use with fire alarm systems.

MR-2400 Control Unit

The MR-2400 Control Unit is connected to the MR-2614 Annunciator by 4 wires, 2 for communications and 2 for power. The communications wiring is polarity sensitive. Wiring is done as shown in Figure 1.

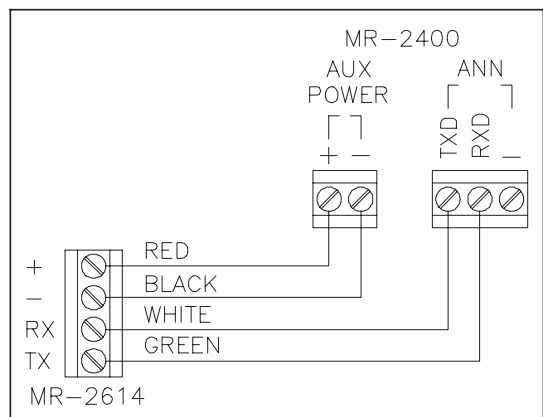


Figure 1: MR-2400 Wiring

MR2900 Control Unit

The MR-2900 control unit is connected to the MR-2614 Annunciator by 4 wires, 2 for power and 2 for communications. The wiring is polarity sensitive. Wiring is as shown in Figure 2. The MR-2900 panel requires that the MR-2109-3 communications board be installed.

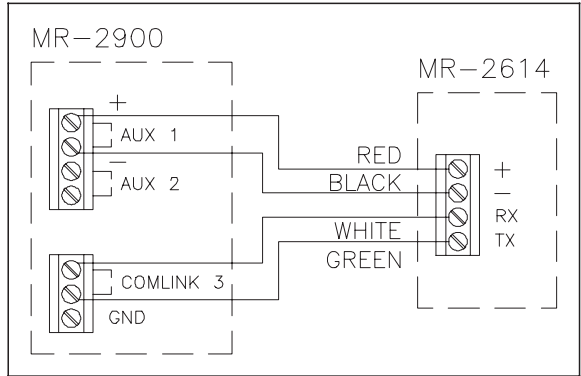


Figure 2: MR-2900 Wiring

MR-2608 Control Unit

The MR-2608 control unit is connected to the MR-2614 annunciator by 4 wires, 2 power and 2 communications. The wiring is polarity sensitive. Wiring is as shown in Figure 3.

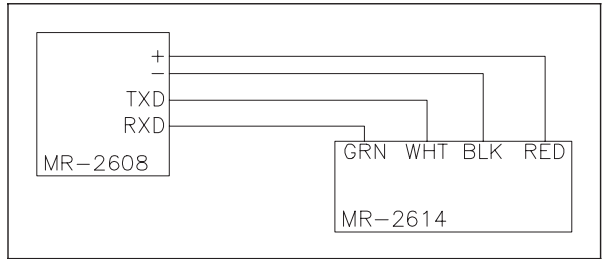


Figure 3: MR-2608 Wiring

MR-2616

The MR-2616 control unit is connected to the MR-2614 Annunciator by 4 wires, 2 power and 2 communications. The wiring is polarity sensitive. Wiring is as shown in Figure 4. Do not use Aux Pwr 1 on the MR-2616 for the MR-2614 as Aux Pwr 1 is for resetting 4 wire input devices.

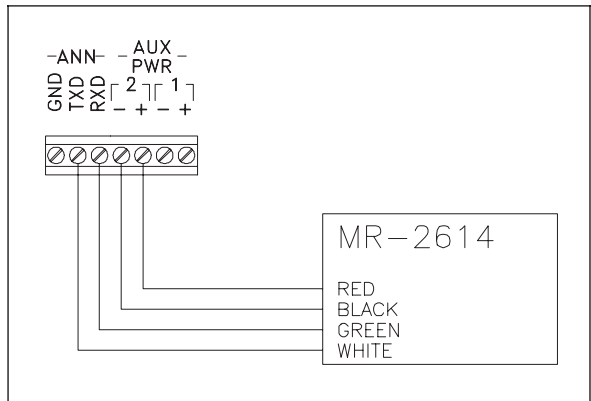


Figure 4: MR-2616 Wiring

Multiple MR-2614EH

Up to 8 MR-2614EH annunciators can be connected a FACP. If more than one MR-2614EH is used, the wiring is done as a daisy chain starting from the panel and going to each MR-2614EH in turn (see Figure 5). The 3.9 k resistor across the pigtail terminations must be removed from all MR-2614EH annunciators except the last one.

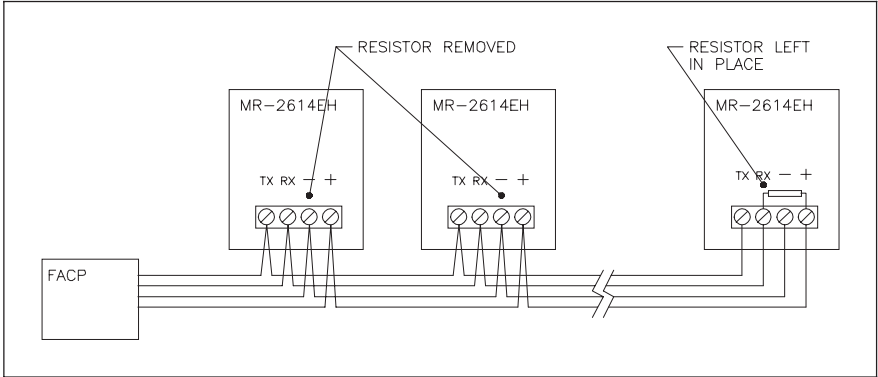


Figure 5: Wiring Multiple MR-2614EH Annunciators

2.3 LEDs

In addition to eight LED zones on the MR-2614 itself, up to 72 LED zones can be connected to the LED expansion ports (P1, P2, P3 see Figure 6). P1 is for zones 1 to 24, P2 is for zones 25 to 48 and P3 is for zones 49 to 72. The eight zones on the MR-2614 are same as the first eight zones of P1.

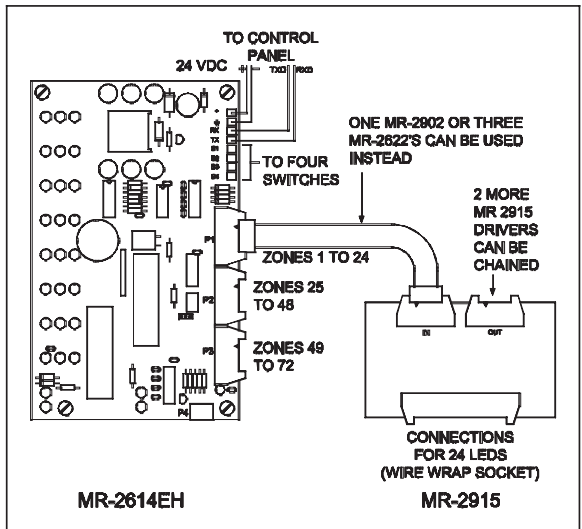


Figure 6: LED connections

MR-2915

The MR-2915 LED Driver has a 50 pin connector for connection to the LEDs. The LEDs are wired to a 50 pin socket which the MR-2915 plugs into. The pin-outs are shown in Figure 7. Note: All LEDs wired to the same MR-2915 share a common positive. The MR-2915 is self addressing in terms of the octet it displays. The first one in a chain does zones 1 to 8 (25 to 32, 49 to 56), the second does zones 9 to 16 (33 to 40, 57 to 64) and the third (last) does zones 17 to 24 (41 to 48, 65 to 72).

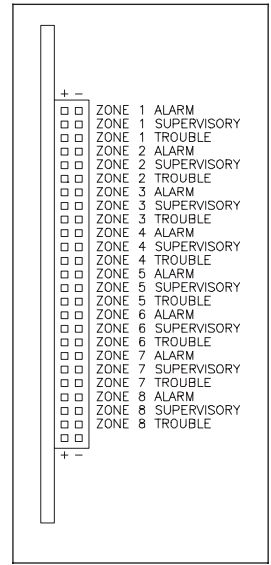


Figure 7: MR-2915 LED Pin-Outs

MR-2622 Jumper Settings

The MR-2622 LED strip provides 8 zones of 3 LEDs (alarm, supervisory, trouble) each. These can be used as the first (1 to 8), second (9 to 16) or third (17 to 24) octet of a set of 24 zones. The first octet also does zones 25 to 32 and zones 49 to 56, the second octet also does zones 33 to 40 and zones 57 to 64, and the third octet also does zones 41 to 48 and zones 65 to 72 depending on which set of 24 they are connected to. The jumpers for setting the octet are located just below the ribbon cable connector (see Figure 8). There are three pairs of holes. Soldering a wire jumper across the required pair will set the MR-2622 to be the first, second or third octet. There is a trace on the board jumpering the pair for the first octet. This will need to be cut if the board is for the second or third octet.

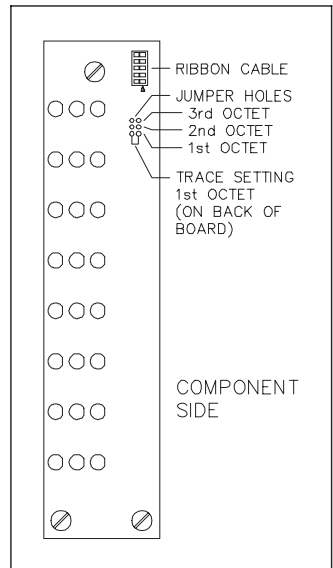


Figure 8: MR-2622

3.0 Programming

The MR-2614EH annunciator is programmed through the service terminal connection at the bottom of the board, marked P4. This connection is a special 4 pin connector. The MR-2614EH uses serial communication of 9600 baud, 8 data bits, no parity and 1 stop bit. Normally, programming is required only when there is more than one MR-2614EH being used.

There are three program settings for the MR-2614EH, the ID number, the use of supervisory LEDs and the flash mode of LEDs. Under normal circumstances, only the unit ID will need to be programmed. The other two settings are handled by the factory.

The commands available for programming are:

- Redraw the programming screen. This screen will show the current settings and the programming commands.

- (id)N Set the ID of the MR-2614EH. This can be from 1 to 8. The default value is 1. This value will need to be changed only if there are more than one MR-2614EH being used.

- 1 S The MR-2614EH uses separate alarm and supervisory LEDs for each zone.

- 0 S The MR-2614EH will map supervisory signals to the alarm LED for each zone.

- 0 F The MR-2614EH will flash LEDs when a new signal is received.

- 1 F The MR-2614EH will not flash the LEDs when a new signal is received. This is for future usage.



LT-2029 Rev. B

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