International Electronics, Inc.
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212iLM Mullion (ILLUMINATED WEATHER RESISTANT) Keypad

Stand Alone Keypad-Installation Manual

Features:
- ❖ 120 User Capability
- ❖ Illuminated Hardened Keys
- ❖ Programmable 00-99 Second Relay Activation Time
- ❖ Remote Trigger Input (REX)
- ❖ Bell output (timed or continuous)
- ❖ Designed for Heavy Traffic Application (greater than 1 million cycles)
- ❖ Surface Mount
- ❖ Indoor / outdoor Applications
- ❖ Fully encapsulated

Installation:
- ❑ **Section 1:** Unpacking and checking the packing list
- ❑ **Section 2:** Mounting the 212iLM Mullion
- ❑ **Section 3:** Wiring the 212iLM Mullion
- ❑ **Section 4:** Power Up and System Defaults
- ❑ **Section 5:** Programming the 212iLM Mullion
- ❑ **Section 6:** Trouble Shooting

□ **Section 1: Unpacking and checking the packing list**
Open the box, and inside you will find:

Keypad: (1) 212iLM Mullion keypad
Harnesses: (1) 8 Conductor wire harness
Wrenches: (1) Standard 5/64 allen wrench
Hardware: (1) Hardware Pack containing: (2) 8 x1¼" Panhead Slotted Machine Screw; (2) 8 x 1¼"
                Round Head Wood Screw; (2) 6-8 x ¾" Plastic Anchor, (1) 212iLM mounting template.
Literature: (1) 212 Standalone Mullion Instruction Manual

Please check the contents of this package and verify all components in the packing list are present.
Taking this inventory will familiarize you with the components as well as ensure that you have a complete
parts list.

Tools required:
You will need a drill, drill bits1/8, 3/16 & 5/16 (for the plastic anchors), wire strippers, regular & small flat
blade screwdrivers, a marking pen or pencil, some heat shrinkable tubing (for the wire splices), a ruler or
measuring tape, silicone to seal any holes and possibly some electrical tape to hold the wires together or
the template in place.

□ **Section 2: Mounting the 212iLM Mullion**
212iLM Mullion Dimensions: 6 ½"L x 1 ¾"W x 1 1/8"D
Select the appropriate location for the 212iLM Mullion. Mounting height is the same for an electrical
switch, 48" on center. The 212iLM Mullion should be Surface Mounted with a 1/4" hole for the wires
centered approximately 5/8 of an inch underneath the center of bottom mounting hole (refer to the
included mounting template).

Suggested mounting
height is 48"
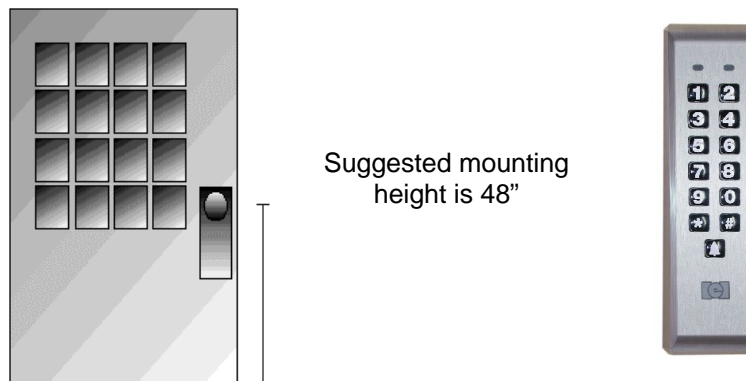
□ **Section 3: Wiring**
### Electrical Specifications:

Operating Voltages:	Max Current Draw @ allowed voltages:	Temperature Tolerance:
12-24V-AC/DC only for input voltage.	53mA@12V, 72mA@24V; 94mA@12VAC, 103mA@16VAC, 108mA@24VAC	Standard, -20° to 130°F.

*Tech note- Although the 212iLM will work with AC or DC voltage, it is recommended to use a filtered
and regulated power supply for it's ability to maintain voltage and reduce the possibility of voltage spikes.

1. Attach the 8-conductor wire harness to the plug in connector on the back of the 212iLM Mullion.
2. Next you will need to attach the relay wires (white/yellow, blue, and brown) to the wire run that is connected to the locking device.
3. The Red and Black wires are connected to the power supply last, BEFORE the power is turned on. Connect positive of the supply to the Red wire and negative to the Black wire.

212iLM Mullion: Wire Colors and Designations:

Pin	Wire Color	Signal Name	Pin	Wire Color	Signal Name
1	Red	V in(+)	5	Blue	Main Relay Common
2	Black	V in(-)	6	Brown	Main Relay NO
3	White/Black	REX	7	White	Bell Relay Contact (A)
4	White/Yellow	Main Relay NC	8	White	Bell Relay Contact (B)

```
1----  o o  ----2
3----  o o  ----4
5----  o o  ----6
7----  o o  ----8
```
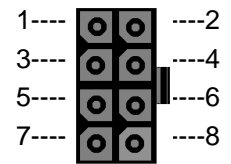
Wiring to a Magnetic Lock: (see below)

The 212iLM Mullion is equipped with a Form C, Dry contact relay. This means that there is no voltage running through the relay (until you supply the common leg of the relay with voltage).
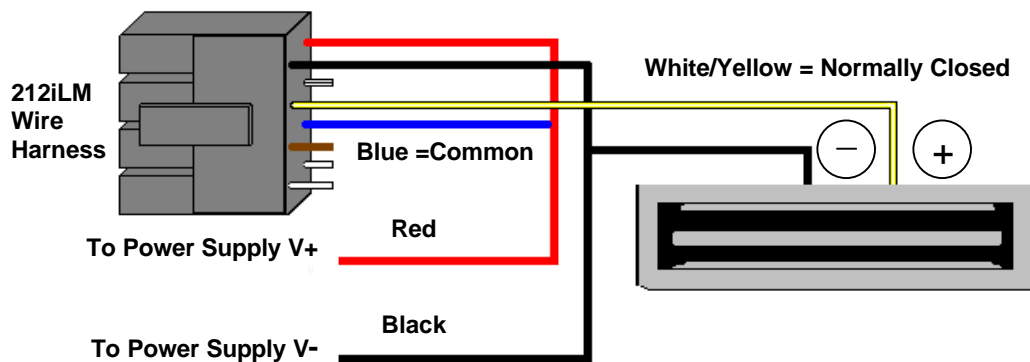
Situation 1:
If you are using a **common** power supply with the 212iLM Mullion and the Magnetic Lock, (that is to say if you have only one power supply for both the 212iLM Mullion and the lock device), you need to run voltage through the common (blue) wire on the 8 conductor wire harness of the 212iLM Mullion

Step 1: Splice together the Blue (common) wire from the 212iLM Mullion harness to the Red wire on the 212iLM Mullion harness and to positive voltage coming from the power supply.
Step 2: Connect the White /Yellow wire (normally closed) from the 212iLM Mullion harness to the Positive connection on the Magnetic Lock.
Step 3: Splice together the Black wire on the 212iLM Mullion to the Negative connection on the Magnetic Lock harness and to negative voltage coming from the power supply.

Example of Wiring to a Electro-Magnetic Lock Using a *COMMON* Power Supply:

Situation 2:
If you are using a **separate** power supply with the 212iLM Mullion and the Magnetic Lock, you need to run voltage from the positive of the power supply to the common (blue) wire on the 8 conductor wire harness of the 212iLM.

Step 1: Connect the Positive (red) wire on the 212iLM Mullion harness to Positive voltage coming from the 212iLM power supply.
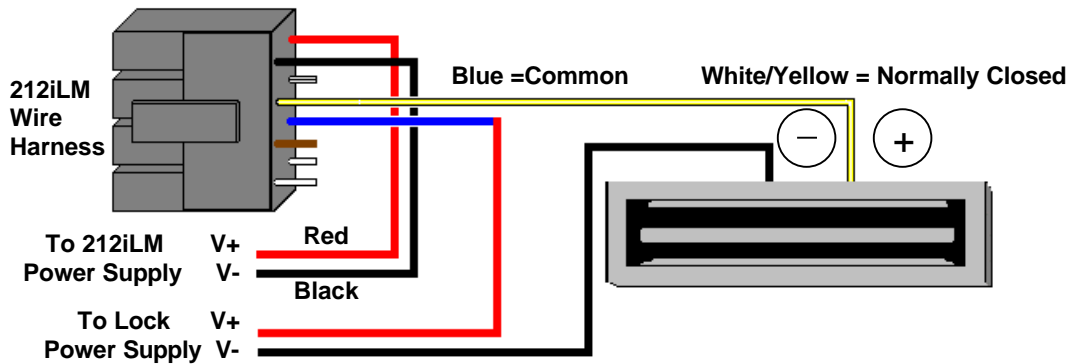**Step 2:** Connect the Negative voltage wire on the 212iLM power supply to the Negative (black) voltage wire on the 212iLM
Step 3: Connect the Blue (common) wire from the 212iLM harness to the Positive voltage on the lock power supply
Step 4: Connect the Negative voltage coming from the lock power supply to the Negative connection on the Magnetic lock.
Step 5: Connect the White/Yellow (normally closed) on the harness to the positive connection on Magnetic Lock.

Example of Wiring to a Electro-Magnetic Lock Using a *SEPARATE* Power Supply:

212iLM Wire Harness

Blue =Common   **White/Yellow = Normally Closed**

To 212iLM Power Supply   **V+**   **Red**
V-   **Black**

To Lock Power Supply   **V+**
**V-**

Wiring to an Electric Strike: (see below)

The 212iLM Mullion is equipped with a Form C, Dry contact relay on board. This means that there is no voltage running through the relay (until you supply the common leg of the relay with voltage).

Situation 1:

If you are using a **common** power supply with the 212iLM Mullion and the Electric Strike, (that is to say if you have only one power supply for both the 212iLM Mullion and the lock device), you need to run voltage through the common (blue) wire on the 8 conductor wire harness of the 212iLM Mullion

Step 1: Splice together the Blue (common) Relay wire from the 212iLM Mullion harness to the Red wire on the 212iLM Mullion harness and to positive voltage coming from the power supply.

Step 2: Connect the Brown (normally open) wire from the 212iLM Mullion harness to the Positive voltage connection on the Electric door strike.

Step 3: Splice together the Black wire on the 212iLM Mullion to the Negative connection on the Electric door strike harness and to negative voltage coming from the power supply.

Example of Wiring to an Electric Strike Using a *COMMON* Power Supply:
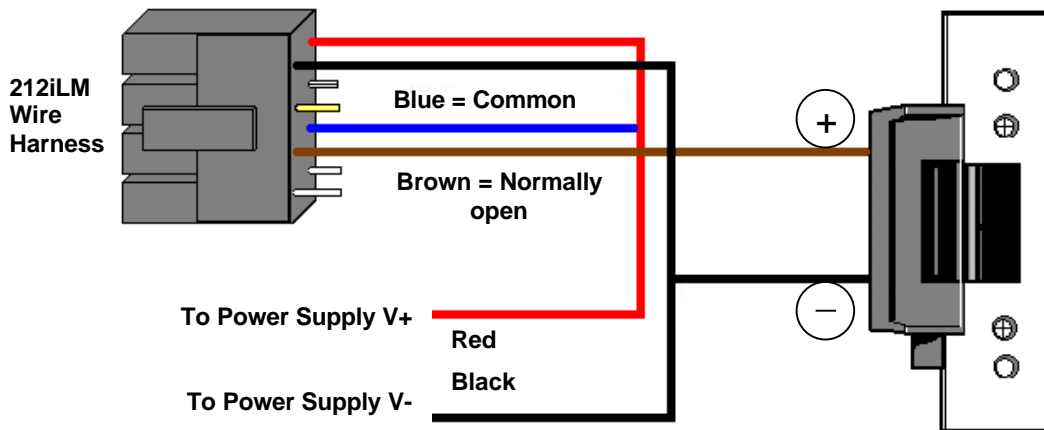
212iLM Wire Harness

Blue = Common

Brown = Normally open

To Power Supply V+   **Red**

To Power Supply V-   **Black**

Situation 2:

If you are using a **separate** power supply with the 212iLM Mullion and the Electric Strike, you need to run voltage from the positive of the power supply to the Brown (normally open) wire on the 8 conductor wire harness of the 212iLM.

Step 1: Connect the Positive (red) wire on the 212iLM Mullion harness to Positive voltage coming from the 212iLM power supply.
**Step 2:** Connect the Negative voltage wire on the 212iLM power supply to the Negative (black) voltage wire on the 212iLM power supply.
Step 3: Connect the Brown (normally open) on the harness to the positive connection on Electric Strike.
Step 4: Connect the Blue (common) wire from the 212iLM harness to the Positive voltage on the lock power supply.
Step 5: Connect the Negative voltage coming from the lock power supply to the Negative connection on the Electric Strike.

**Example of Wiring to an Electric Strike Using a *SEPARATE* Power Supply:**
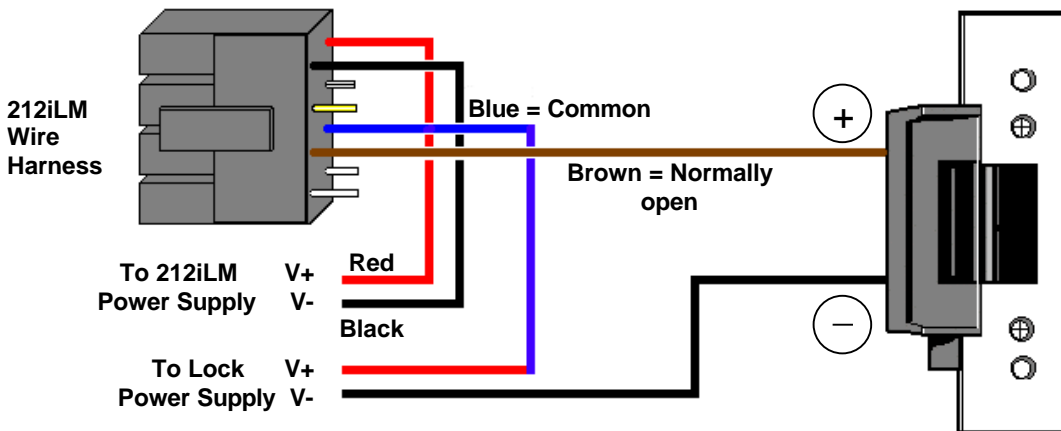
Shunting a Normally Closed Zone: (see below)

Step 1: Connect the Blue (Common) Relay wire from the 212iLM Mullion harness to the Common connection on the door position switch.
Step 2: Connect the Brown (Normally Open) Relay wire from the 212iLM Mullion harness to the Normally closed connection on the Door position switch.

Example of Shunting a Normally Closed Zone
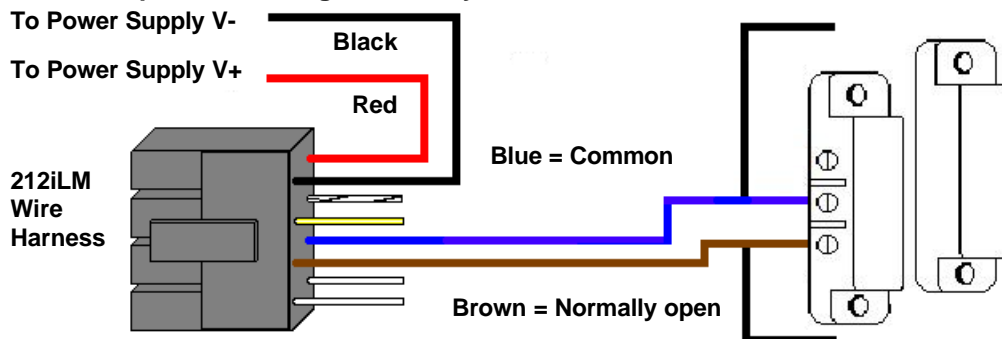
## Wiring to a Request to Exit (Push to release):

The 212iLM Mullion keypad may be wired to accept an input from a remote-switching device. This is a momentary input that will engage the main relay for the same amount of time that the master code is programmed with. This input requires a normally open, momentary closure between the White with a Black trace wire and the Black wire. The only time the REX won't follow the main relay time is if the Master code has been programmed to latch the main relay. In this case, the REX will operate with the default time of 5 seconds. You may wire in several devices parallel to release the door from different locations but they must all be normally open devices. *There is no programming required for this option.*

The 212 iLM needs normally open DRY contacts to operate the relay with the REX input. If your remote exit device sends voltage when it is pressed, you MUST connect an external relay to the wires coming from the REX, then connect the 212iLM Mullion REX connections to the common and the normally open connections on the external relay.

Step 1: Connect the White with Black trace wire on the 212iLM Mullion harness to the common connection on the REX device.
Step 2: Splice a wire to the Black (negative) wire on the 212iLM Mullion harness and connect to the Normally Open connection on the REX device.

Example of wiring to an IEI request to exit device (part # EZ-REX):
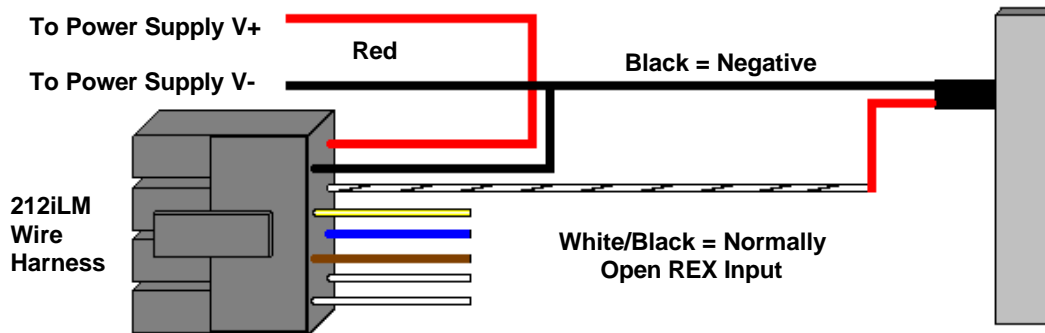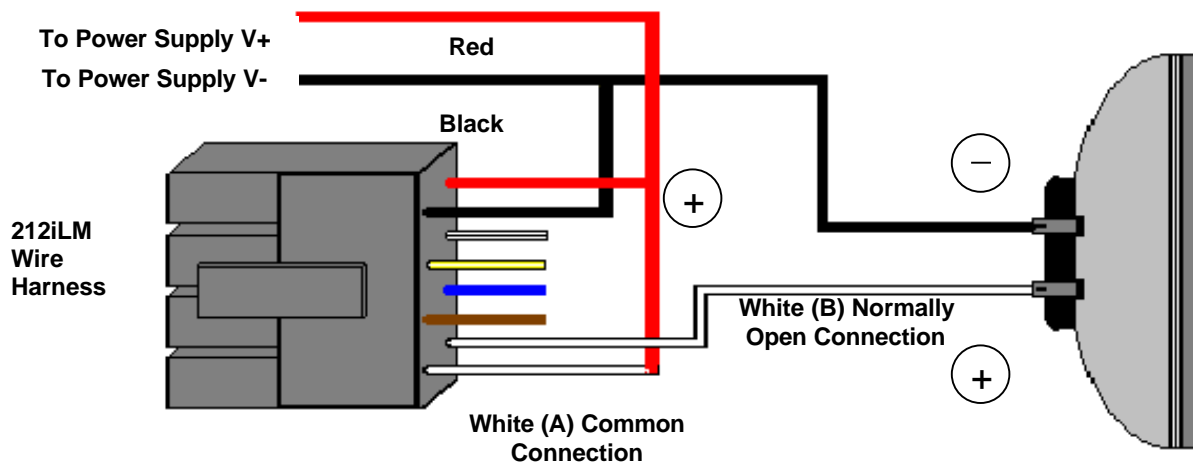

Wiring the Bell Button:

There are 2 white wires on the 8 conductor harness, an **A** (common) and a **B** (normally open) for the bell button. This is a dry contact, normally open form A relay. Connect positive (from power) to common (A) of the 212iLM wiring harness. Connect normally open (B) of the 212iLM harness to positive terminal of bell or speaker. Then connect the negative of bell or speaker to the negative of the power supply.

Step 1: Connect the Black (Negative) wire from the 212iLM Mullion harness to the Negative connection on the doorbell speaker and splice it into the negative wire from the power supply.
Step 2: Connect the White (Common-A) wire from the 212iLM Mullion harness to the Positive connection on the doorbell speaker.
Step 3: Connect the White (Common-B) wire from the 212iLM Mullion harness to the Positive wire from the power supply.

Example of wiring to a Bell or Speaker:

To Power Supply V+   Red

To Power Supply V-

Black

212iLM Wire Harness

White (B) Normally Open Connection

White (A) Common Connection

❑ **Section 4: Power Up**

Making the Power Connections: (The 212iLM Mullion is powered with 12-24 Volts AC or DC ONLY)
Step 1: Connect the Red (positive voltage input) wire from the 212iLM Mullion harness to the positive voltage output connection on the power supply.
Step 2: Connect the Black (Negative voltage input) wire from the 212iLM Mullion harness to the negative voltage output connection on the power supply.
Step 3: Plug in the power supply.

Upon power up, the 212iLM Mullion will cycle through the LED's from left to right twice to indicate proper keypad operation. (If the LED's continue to flash, refer to the trouble shooting section of this manual on page 14). The backlighting will now be on and will dim 15 seconds after the last keypress or 5 seconds after the programming mode has been exited. The red LED should now be on. Perform the Self-Test by pressing 7890#123456*. The LED's will cycle from Green to Yellow to Red and then the sounder will beep three times. Press 1234* and the main relay should energize for 5 seconds and the green LED should light for the time the relay is open. After the relay closes, the green LED should turn off and the red LED should come back on.

System Defaults:
The Door-Gard Keypad is designed for easy installation in a minimum amount of time. The following default values have been factory programmed.

Master Code	**1234**
Audible Key Press Feedback	**On**
Visual Key Press Feedback	**On**
Keypad illumination	**Enabled**
Keypad Dimming	**Enabled**
Door bell select	**Enabled**
Door bell duration	**Continuous**

If it is necessary to change any of these defaults, please refer to the Programming Options Chart after you have familiarized yourself with the programming section.

❑ **Section 5: Programming the 212iLM Mullion**

The 212iLM Mullion supports 120 user codes that will energize the main relay. A user code is stored in the memory of the 212iLM Mullion with an individual user location, and may be 1 to 6 digits in length. Each user code has a corresponding user location. To help with the understanding of user locations, think of them like shelves. The 212iLM Mullion has 120 shelves *(user locations)* in it, and each user code gets put into its own shelf *(user location).* For example: the Master code (factory defaulted to 1234), is always stored as user location 1. Every time a new user code is added, a new user location must be used. To do any programming the 212iLM Mullion must be put into the Programming Mode. The keypad will come out of programming after 45 seconds if no keys are pressed.

Step 1: Entering the Programming Mode.
　　　　Programming mode is accessed by entering the following command.
　　　　99 followed by the # key.
　　　　Next the current Master Code has to be entered. The default master code is 1234.
　　　　Then finish the command by pressing the * key.
Example:　　　99 # 1234 * (the yellow LED will flash to indicate it is in programming.)

　　NOTE: *Entering an additional * at this time will exit programming mode.*

　　If the programming command was done successfully, the 212iLM Mullion starts flashing the yellow LED slowly, indicating that it is now in programming mode. If the yellow does not come on flashing, that is an indication that the incorrect Master code was entered. (See the trouble shooting section of this manual on page 14 if this does not happen.)

Step 2: Changing the Master Code.
　　　　The 212iLM Mullion comes with the factory programmed Master code of 1234. This may be changed to any code that has 1 to 6 digits in length. The 212iLM Mullion also comes set from the factory with a 5-second relay activation time that may be changed to any time from 01 to 99 seconds, or 00 to latch (toggle) the relay.
　　　　The 212iLM Mullion has to be in programming mode before you can change the Master code.

To Change the Master code:
Enter Programming Mode: 99# (Master code) * (Yellow LED flashing slowly).
Next enter user location "1" which is always the Master code's user number followed by the # key.
Next enter in the new Master code followed by the * key *(Yellow LED flashes rapidly).*
Repeat the new Master code followed by the * key. *(Yellow LED will flash slowly).*
If the change was successful, the yellow LED will still be flashing.

Example:　　　1 # 4321 * 4321 *
*Continue programming or press the * key again to exit.*

To Change the Main Relay Activation Time:
Enter Programming Mode: 99# (Master code) * (Yellow LED flashing slowly).
Next enter the relay activation time in a two digit format (01 to 99 seconds or 00 to toggle or latch the main relay.) followed by the # key.
Next enter user location "1" which is always the Master code's user number followed by the # key.
Next enter in the Master code followed by the * key *(Yellow LED flashes rapidly).*
Repeat the Master code followed by the * key. *(Yellow LED Will flash slowly).*
If the change was successful, the yellow LED will still be flashing.

Example:　　　08 # 1 # 4321 * 4321 * (sets output to 8 seconds for the master code of 4321)
Example:　　　00 # 1 # 4321 * 4321 * (sets output to toggle on, toggle off with a code of 4321.)
*Continue programming or press the * key again to exit.*

NOTE: *All user codes will follow the main relay time that is programmed into the master code. If a toggle code is entered as the master code, all user codes will toggle unless otherwise specified.*

Step 3: Adding or Changing User Codes.
User codes may be 1 to 6 digits in length. The 212iLM Mullion has to be in programming mode to add or change users

Enter Programming Mode: 99# (Master code) *
Next enter the user location. (2, 3, 4, etc.) followed by the # key.

Now enter the new code followed by the * key (Yellow LED flashes rapidly).

Repeat the new code followed by the * key (Yellow LED flashes slowly).

If the change was successful, the yellow LED will still be flashing slowly. Codes entered in this fashion hold the relay time programmed with the master code.

Examples: 2 # 6789 * 6789 *
                   3 # 53780 * 53780 *
                   4 # 23966 * 239646 *

*Continue programming or press the * key again to exit.*

Step 4: Creating a User Code With a Different Time, or to Latch/Toggle the Main Relay.

The 212iLM Mullion has to be in programming mode to add or change users

A **latching or toggle** code is used to open the relay for an indefinite amount of time. This operates much like a light switch. When you enter a latching user code, the Main relay will activate and stay opened until the same code or another latching user code is entered to close the relay.

Enter Programming Mode: 99# (Master code) *
Next enter the relay time of "00" followed by the # key.
Next enter the user location. (2, 3, 4, etc.) followed by the # key.
Now enter the new code followed by the * key *(Yellow LED flashes rapidly).*

Repeat the new code followed by the * key *(Yellow LED will flash slowly).*
     If the change was successful, the yellow LED will still be flashing slowly.

Examples: 00 # 12 # 7788 * 7788 *
                   00 # 55 # 6632 * 6632 *
                   00 # 93 # 78651 * 78651 *

*Continue programming or press the * key again to exit.*

A **different output on the main relay** may be desired for one or more users. For example, an individual may require several extra seconds to open a door than everyone else. If the main relay is set for 5 seconds, that person may need 10 seconds. A different output time for individual users is programmed this way.

Enter Programming Mode: 99# (Master code) *
Next enter the relay time of "10" followed by the # key.
Next enter the user location. (2, 3, 4, etc.) followed by the # key.

Now enter the new code followed by the * key (Yellow LED flashes rapidly).

Repeat the new code followed by the * key (Yellow LED will flash slowly).
If the change was successful, the yellow LED will still be flashing slowly.

Example: 10 # 12 # 7788 * 7788 *
                 10 # 55 # 6632 * 6632 *
                 20 # 93 # 78651 * 78651 *

*Continue programming or press the * key again to exit.*

Step 5: Changing the 212iLM Mullion Feedback Options.

The 212iLM Mullion has two keypress feedback options that you may choose from. One is an audio feed back. This will activate the on board sounder every time that a key is pressed. The other is a visual feedback. This will flash the yellow LED on the front of the keypad every time that a key is pressed. These two options are used to verify when a key has been pressed. Both of these options may be used individually, together or not at all. They are enabled by default.

Audio Option:
Enter Programming Mode: 99# (Master code) *
Next press Command number 30 followed by the # key.
Next press "0" for the audio feedback option followed by the # key.
Next press "0" to Disable or "1" to Enable the audio option followed by the # key.
Next press the * key (Yellow LED flashes rapidly).
Next press the * key (Yellow LED will flash slowly).

Example: 30 # 0 # 0 # * * (This will disable the sounder from activating every time a key is pressed).
Example: 30 # 0 # 1 # * * (This will enable the sounder to activate every time a key is pressed).
*Continue programming or press the * key again to exit.*

Visual Option:
Enter Programming Mode: 99# (Master code) *
Next press Command number 30 followed by the # key.
Next press "1" for the visual feed back option followed by the # key.
Next press "0" to Disable or "1" to Enable the visual option followed by the # key.
Next press the * key *(Yellow LED flashes rapidly).*
Next press the * key (Yellow LED will flash slowly).

Example: 30 # 1 # 0 # * * (This will disable the yellow led from activating every time a key is pressed).
Example: 30 # 1 # 1 # * * (This will enable the yellow led to activate every time a key is pressed).
*Continue programming or press the * key again to exit.*

Step 6: Auto-Entry.

Auto entry is used to turn off the star * key. The user only needs to enter their code number without the star key and the relay will activate for the programmed relay time. To use this feature, the user codes must be the same length as the Master code. This feature is disabled by default.

Enter Programming Mode: 99# (Master code) *
Next press Command number 30 followed by the # key.
Next press "2" for the Auto-Entry option followed by the # key.
Next press "0" to Disable or "1" to Enable the Auto-Entry option followed by the # key.
Next press the * key *(Yellow LED flashes rapidly).*
Next press the * key (Yellow LED will flash slowly).
            If the change was successful, the yellow LED will still be flashing slowly.

Example: 30 # 2 # 1 # * * (This will remove the * key from the code).
Example: 30 # 2 # 0 # * * (This will add the * key to the code).
*Continue programming or press the * key again to exit.*

Step 7: Doorbell Option:

When the doorbell feature is enabled there will be visual and audio keypress feedback for the bell button but when the feature is disabled there will be no keypress feedback. This doorbell feature has two modes of operation: timed and continuous. Timed will allow programming of the output for a specified number of seconds with a single short press. The doorbell is set for continuous by default and output bell sounds for as long as the button is pressed.

Enabling or disabling Doorbell Option:
Enter Programming Mode: 99# (Master code) *
Next press Command number 30 followed by the # key.
Next press "5" for the doorbell option followed by the # key.
Next press "0" to Disable or "1" to Enable the doorbell option followed by the # key.
Next press the * key (Yellow LED flashes rapidly).
Next press the * key (Yellow LED will flash slowly).

Example: 30 # 5 # 1 # * * (This will enable the doorbell function).
Example: 30 # 5 # 0 # * * (This will disable the doorbell function).
*Continue programming or press the * key again to exit.*

To set the Doorbell Option for continuous or timed operation:
Enter Programming Mode: 99# (Master code) *
Next press Command number 32 followed by the # key.
Next press "0" for the doorbell option followed by the # key.
Next press "0" for continuous (Or enter a time of 1 trough 99 for timed output.) doorbell operation, followed by the # key.

Next press the * key *(Yellow LED flashes rapidly).*
Next press the * key (Yellow LED will flash slowly).

Example: 32 # 0 # 0 # * * (This will enable the doorbell function for continuos output).
Example: 32 # 0 # 1 # * * (This will enable the doorbell function for a 1 second output).
Example: 32 # 0 # 20 # * * (This will enable the doorbell function for a 20 second output).
*Continue programming or press the * key again to exit.*

Step 8: Enabling or disabling keypad illumination or dimming:

The backlighting dims 15 seconds after the last keypress. It also dims 5 seconds after exiting programming mode. This option is enabled by default.

To enable/disable keypad illumination:
Enter Programming Mode: 99# (Master code) *
Next press Command number 30 followed by the # key.
Next press "3" for the backlighting option followed by the # key.
Next press "0" to Disable or "1" to Enable the keypad illumination option followed by the # key.
Next press the * key *(Yellow LED flashes rapidly).*
Next press the * key (Yellow LED will flash slowly).

Example: 30 # 3 # 1 # * * (This will enable keypad illumination).
Example: 30 # 3 # 0 # * * (This will disable keypad illumination).

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To enable/disable keypad dimming:
If keypad dimming option is set to zero, then the keypad will maintain full illumination at all times. This option is enabled by default.
Enter Programming Mode: 99# (Master code) *
Next press Command number 30 followed by the # key.
Next press "4" for the dimming option followed by the # key.
Next press "0" to Disable or "1" to Enable the keypad dimming option followed by the # key.
Next press the * key *(Yellow LED flashes rapidly).*
Next press the * key (Yellow LED will flash slowly).

Example: 30 # 4 # 1 # * * (This will enable keypad dimming).
Example: 30 # 4 # 0 # * * (This will disable keypad dimming).
*Continue programming or press the * key again to exit.*

Step 9: Reset to Factory Default.

This command is used to erase the entire keypad memory, any programming done prior to this step will be permanently erased including user codes, and it will reset the factory defaults.
When this command has been done successfully, the 212iLM Master code will return to the default of 1234 and the main relay will activate for 05 seconds.

The 212iLM Mullion has to be in programming mode to default it.

Enter Programming Mode: 99# (Master code) *
Next press Command number 46 followed by the # key.
Next press the "0" key five times followed by the # key.
Next press the "0" key five times followed by the # key.
Next press the * key *(Yellow LED flashes rapidly).*
Next press the * key (Yellow LED will flash slowly).
            If the change was successful, the yellow LED will still be flashing slowly.

Example: 46 # 00000 # 00000 # * *
*Continue programming or press the * key again to exit.*
If the Master code is not working or has been forgotten:

Power down the 212iLM Mullion and connect the White with Black trace wire to the Red wire and power up the 212iLM Mullion. This will put the 212iLM Mullion into program mode indicated by the flashing yellow LED. Next enter 46#00000#00000# * * to default the keypad. Power down to remove the White/Black wire from the Red wire.

Step 10: To Exit programming Mode:

Press the star (*) key.

Programming Options Chart

If the pre-programmed default values must be changed or additional functions are desired, the following options may be programmed.

- **Enter programming mode**   **Press: 99 # (master code)***

   The master default code is 1234 and the 212iLM must be in programming to make any changes.

- Changing the master code   Press: 1 # (new code)*(repeat code)*

- Change the main relay activation time: Press: (relay time) # 1 # (mastercode)*(repeat code)*

   All main relay times are entered in a 2-digit format. For example: 08 for eight seconds.

   *Example: Master code with an 8 second relay time: Press: (08) # 1 # 1234 * 1234 **

- Add or change user codes   Press: (user location) # (new code)*(repeat code)*

   Codes entered in this fashion will hold the same relay time that the master code is programmed with. If the relay time is changed after all other programming is done, the codes will not follow the master code for time. You will have to either change time manually or reset defaults and reprogram. User locations are explained in Section 5.

- Add a user to latch the main relay: Press: (00) # (user location) # (new code)*(repeatcode)*

- Add a user with a different output time on the main relay: Press: (relay time) # (user location) # (new code)*(repeat code)*

   *Example: User code with a 8 second relay time Press: (08) # 2 # 1234 * 1234 **

- Turn audible keypress feedback ON   Press: 30 # 0 # 1 # * *
- Turn audible keypress feedback OFF   Press**:** 30 # 0 # 0 # * *
- Turn visual keypress feedback ON   Press**:** 30 # 1 # 1 # * *
- Turn visual keypress feedback OFF   Press**:** 30 # 1 # 0 # * *
- To enable keypad illumination: Press: 30 # 3 # 1 # * *
- To disable keypad illumination: Press: 30 # 3 # 0 # * *
- To enable keypad dimming: Press: 30 # 4 # 1 # * *
- To disable keypad dimming: Press: 30 # 4 # 0 # * *
- To enable the doorbell function: Press: 30 # 5 # 1 # * *
- To disable the doorbell function: Press: 30 # 5 # 0 # * *
- To set the length of time for the bell for continuous operation: Press**:** 32 # 0 # 0 #   * *
- To set the length of time for the bell for timed operation   Press: 32 # 0 # (time) #   * *
- Turn Auto-Entry ON (eliminates using the star key after a code)   Press**:** 30 # 2 # 1 # * *
- Turn Auto-Entry OFF   Press**:** 30 # 2 # 0 # * *
- Erase entire keypad memory and reset defaults: Press**:** 46 # 00000 # 00000 # * *

For a detailed explanation of each option please refer to prior pages 7-11.

Section 6: Trouble Shooting.

Refer to this section if the 212iLM Mullion is not responding correctly to the operation outlined in this instruction manual. The 212iLM Mullion has been designed to operate with 12-24 Volts AC or DC. Verify that the voltage powering this keypad is within these parameters.

Situation 1:   **LED's are slowly cycling from right to left and the Backlighting is off.**

Reason: The 212iLM Mullion has been designed to monitor for low voltage. Once the low voltage has been detected, the keypad shuts down some of its options like backlighting to ensure operation of the keypad until the problem can be attended to.

Solution: Check the output voltage of the power supply with a meter to verify the output voltage rating listed for that device. If it is below the voltage threshold of 7.5 Volts AC or 9 Volts DC, you must increase the voltage to between 12-24 Volts.

Situation 2:   **LED's are rapidly cycling from left to right and the keypad has lost all operation.**

Reason: The 212iLM Mullion has been designed to monitor for over voltage. This is a very "severe" condition and therefore significantly affects the keypad's operation. Once the over voltage has been detected, the keypad shuts down all operation and will not operate until the voltage irregularity has been corrected.

Solution: Check the output voltage of the power supply with a meter to verify the output voltage rating listed for that device. If it is over the voltage threshold of 35 Volts, you must reduce the voltage to under 29 Volts.

Situation 3:   **The Master code is not allowing access to the programming mode.**

Reason: There are a few reasons that this situation could occur. The most common is that the Master code was programmed incorrectly. That is to say that someone entered a user code into user number one. The Master code is always kept in memory with user number "1" and users are in positions "2" through "120".
The other reason this could happen is that the code was simply forgotten.

Solution: Power down the keypad, connect the white/black wire to the Red wire on the 212iLM Mullion wire harness and power back up. The yellow LED will be flashing indicating that the keypad is now in programming mode. Change the Master code by press 1 # (New Master Code) * (Repeat Master Code) * *. When finished with programming, power down the unit, separate the white/black wire from the Red wire on the 212iLM Mullion harness and power back up. The keypad is now ready to use.

**Situation 4:**   **No LED's are lit on the keypad**

  Reason: Power is not reaching the keypad.

Solution: With a meter check the voltage connection at the 212iLM Mullion keypad on the Red & Black wires. Confirm that there is actually voltage at the keypad. If there is no voltage reading at the keypad, use the meter on the power supply to verify that voltage is leaving the power supply. If there is no voltage coming out of the power supply, call the manufacturer of that power supply. If there is voltage at the power supply, but not at the keypad, use the meter to test each of the wires for a break in the wire. You may also use a 12-Volt Battery to power the 212iLM with, in order to verify that it is functioning.

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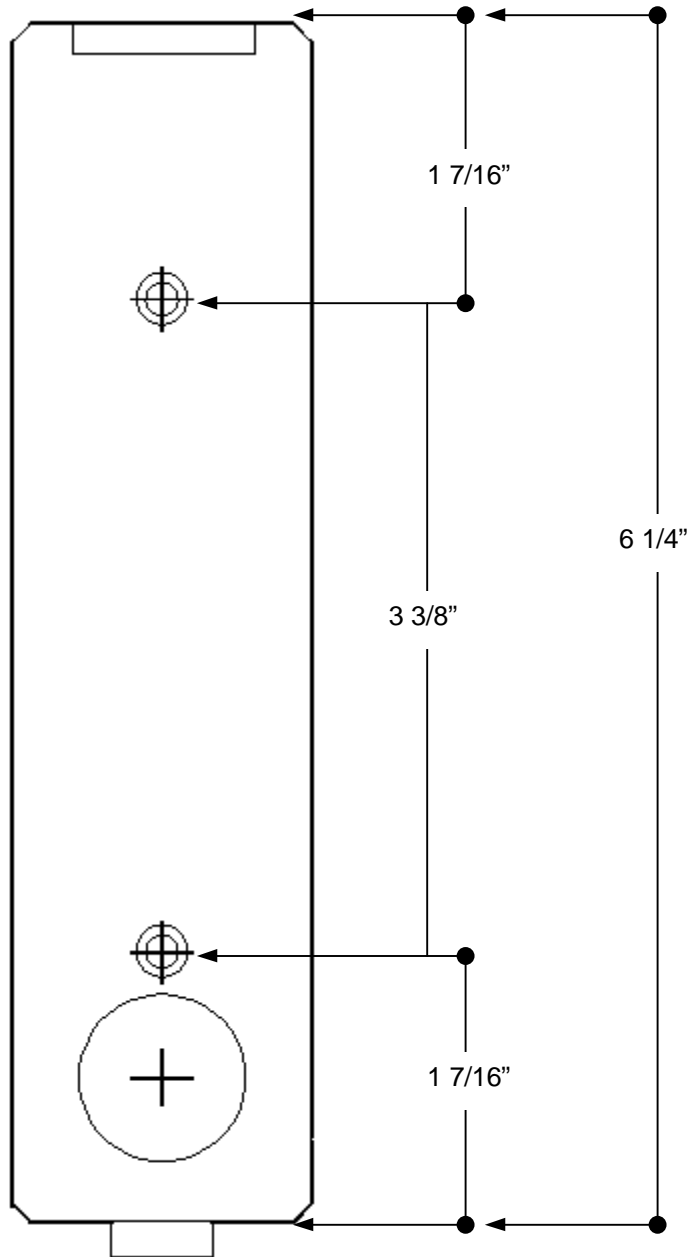
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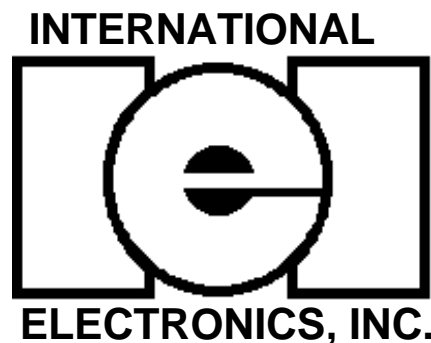
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NOTES:

IEI suggests that you make a record of your installation for future reference.

6051344   **Rev. 1.0**

1 7/16"

1 7/16"

3 3/8"

6 1/4"

Diameter of the mounting holes is: 11/64
Diameter of the wiring holes is: 7/8

This product is designed as a surface mountable product. The access hole for the wires is determined by the amount of wires that will run through the mounting surface.