

SSW-iLM Keypad

Note: This product is designed to be installed and serviced by security and lock industry professionals

Specifications

Case dimensions:

6 1/2" L x 1 3/4" W x 1 1/8" D

Electrical:

5-12VDC Only

Current draw:

5VDC: 28mA typical; 60mA max
12VDC: 27mA typical; 77mA max

Bell relay: (form A)

1amp @ 30VDC
500ma @ 125VAC

Environmental:

-20° F to 130° F



Features:

- Vandal Resistant Case
- Sealed For Indoor or Outdoor Applications
- LED's For Relay Status Indication
- Bell Output
- Surface mount
- Illuminated hardened keys
- Rated at greater than one million key cycles

Applications:

- Low-Medium/Heavy Traffic Use
- Rough Service Environments
- Mullion Frame Mounting

For use with the following:

- Most Wiegand electronic access control panels.
- Any IEI Secured Series door control module (DCM).
- IEI Stand Alone Access Control.

Functionality:

Combining elegant looks and mullion mount design in a rugged vandal resistant case, IEI's new Door-Gard Series Mullion keypad can be utilized for most any application. Designed to perform in medium-high traffic and rough duty environments, the IEI Door-Gard Series Mullion has hardened backlit keys. Encapsulated electronics makes the Door-Gard Series Mullion keypad suitable for indoor or outdoor installations. The keypad is activated by entering any 1-6 digit programmed code followed by the star * key. IEI offers the Door-Gard Series Mullion keypad as model SSW-iLM, a keypad only version for use with an IEI controller or in Wiegand applications.

Packing List: (SSW-iLM)

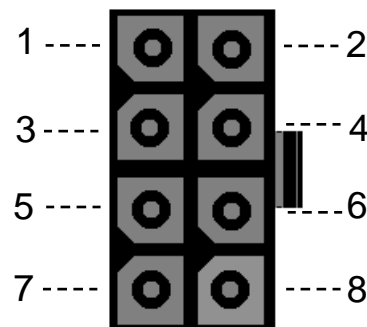
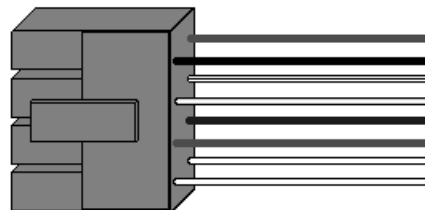
IEI Door-Gard Mullion keypad	(1)
Eight conductor wire harness	(1)
8 x 1 1/4" Panhead Machine screws	(2)
8 x 1 1/4" Panhead wood/sheet metal screws	(2)
5/64" Allen wrench	(1)
Anti Oxidant Grease	(1)
Instruction manual w/template	(1)

Wire Requirements:

Maximum distance with stranded **shielded** :

18 AWG - 1000'
20 AWG - 500'
22 AWG - 250'

Wire Harness Configuration

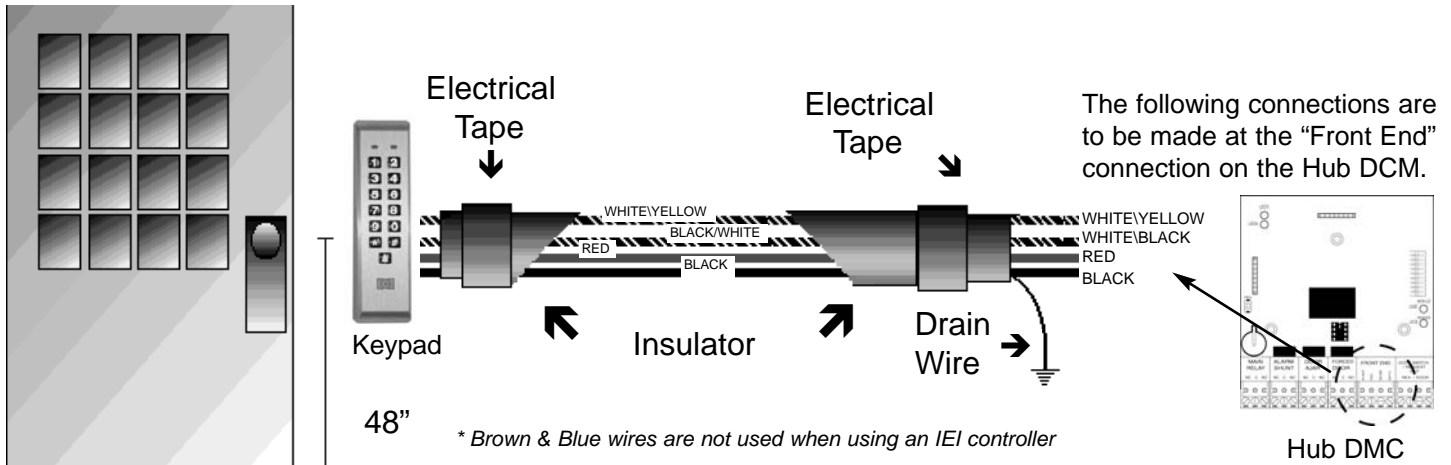


Pin	Wire color	Signal name
1	Red	V in (+)
2	Black	V in (-)
3	White/Black	Data 0
4	White/Yellow	Data 1
5	Blue	LED 1
6	Brown	LED 2 (not used)
7	White	Bell Relay Contact (A)
8	White	Bell Relay Contact (B)

To Install:

- Step 1:**
- Drill through the back plate using a 11/64" bit. Use the template provided to accurately mark the holes needed for mounting. Drill the mounting holes with a 9/64" drill bit, also drill the hole for the wire run (size determined by number of wires used).
- Step 2:**
- Be sure to strip back the insulator from the wire run, and tape the shield to the jacket.
 - Connect the eight conductor harness supplied with the SSW-iLM keypad to the five conductor wire run for Wiegand connection or four conductor for an IEI Hub DCM as shown in the diagrams below.
 - Apply Anti Oxidant grease (supplied) to the keypad connector.
- Step 3:**
- Place the Door-Gard Series Keypad on the wall or back box, and secure with the provided screws. **DO NOT OVER TIGHTEN. (Damage may occur)**

Wiring the Door-Gard Mullion Keypad to an IEI Hub DCM



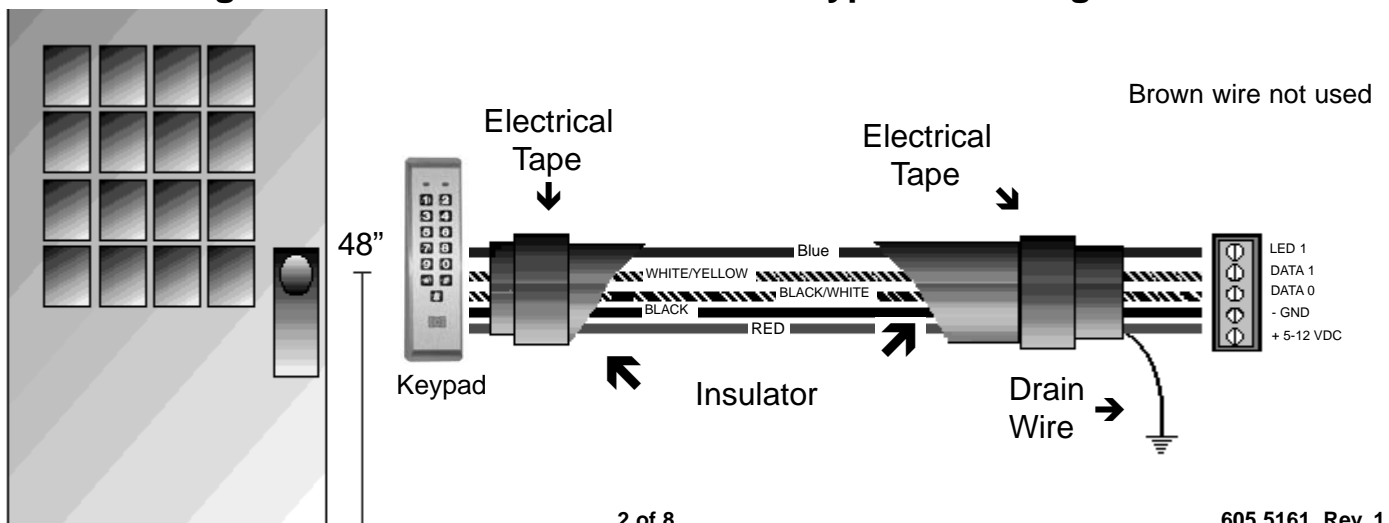
Wiring the SSW-iLM to an IEI Hub DCM requires a four conductor, stranded and **shielded** cable to be wired between the two units. Maximum lengths are as follows:

- 22 AWG stranded : 250 feet
- 20 AWG stranded : 500 feet
- 18 AWG stranded : 1000 feet

The drain wire from the wire run must be attached to ground. Ground is the FT1 tab located on the HubMax/Minimax backplane. At the mullion keypad, the drain wire and foil shield should be cut back with the insulator and taped with electrical tape. The eight conductor harness connects into the eight pin connector on the SSW-iLM keypad. **You may use two keypads to one Hub DCM for in/out operation. Parallel both readers on the same wire run from the Hub DCM.**

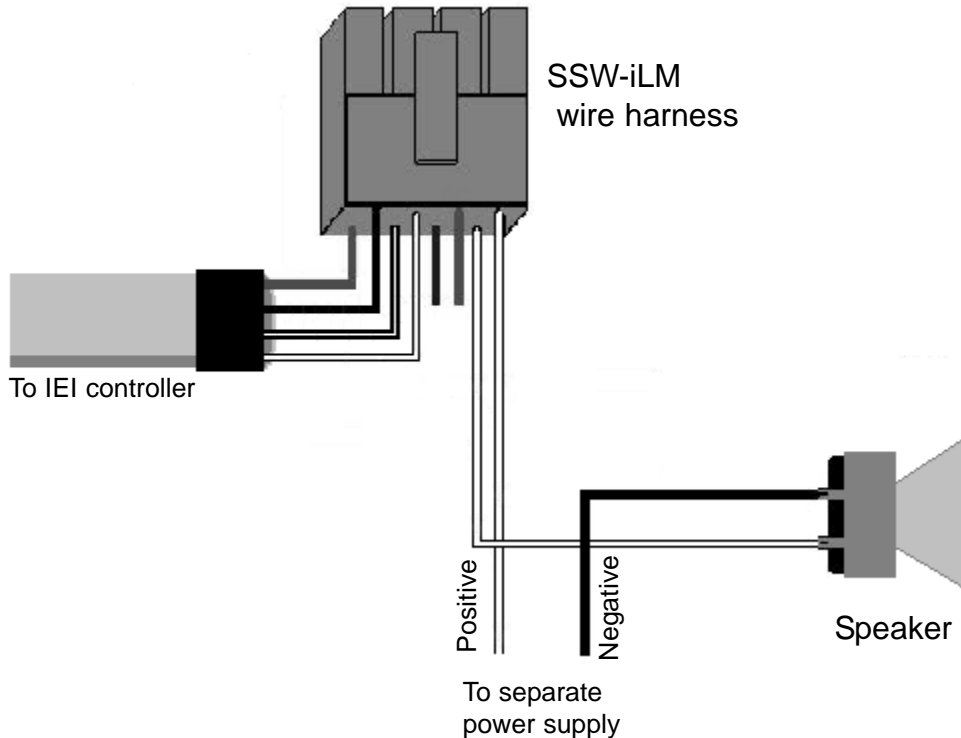
Note: If two keypads are desired the extra keypad # is SSW-iLM.

Wiring the Door-Gard Series Mullion Keypad to a Wiegand Panel



Wiring the bell output to a speaker

With the SSW-iLM you can use the bell button to trigger an external device such as a door bell or like devices that require a momentary closer to operate. This is easily accomplished by either using the dry contact provided or you can run up to 24VDC or 120VAC through one leg of the bell output (A) and connecting the other leg (B) to the power in on your device. Then connect the negative connection on your device to the negative on your power supply (as shown below).



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.

Front End Designation	HFE (Hub Front End)
Mullion Keypad Program Code	6789
Audible Key Press Feedback	On
Visual Key Press Feedback	On
Log Event Recording	IN
Keypad illumination	Enabled
Keypad Dimming	Enabled
Door bell select	Enabled
Door bell duration	Continuous
To Exit program mode	* (until the yellow led stops blinking)

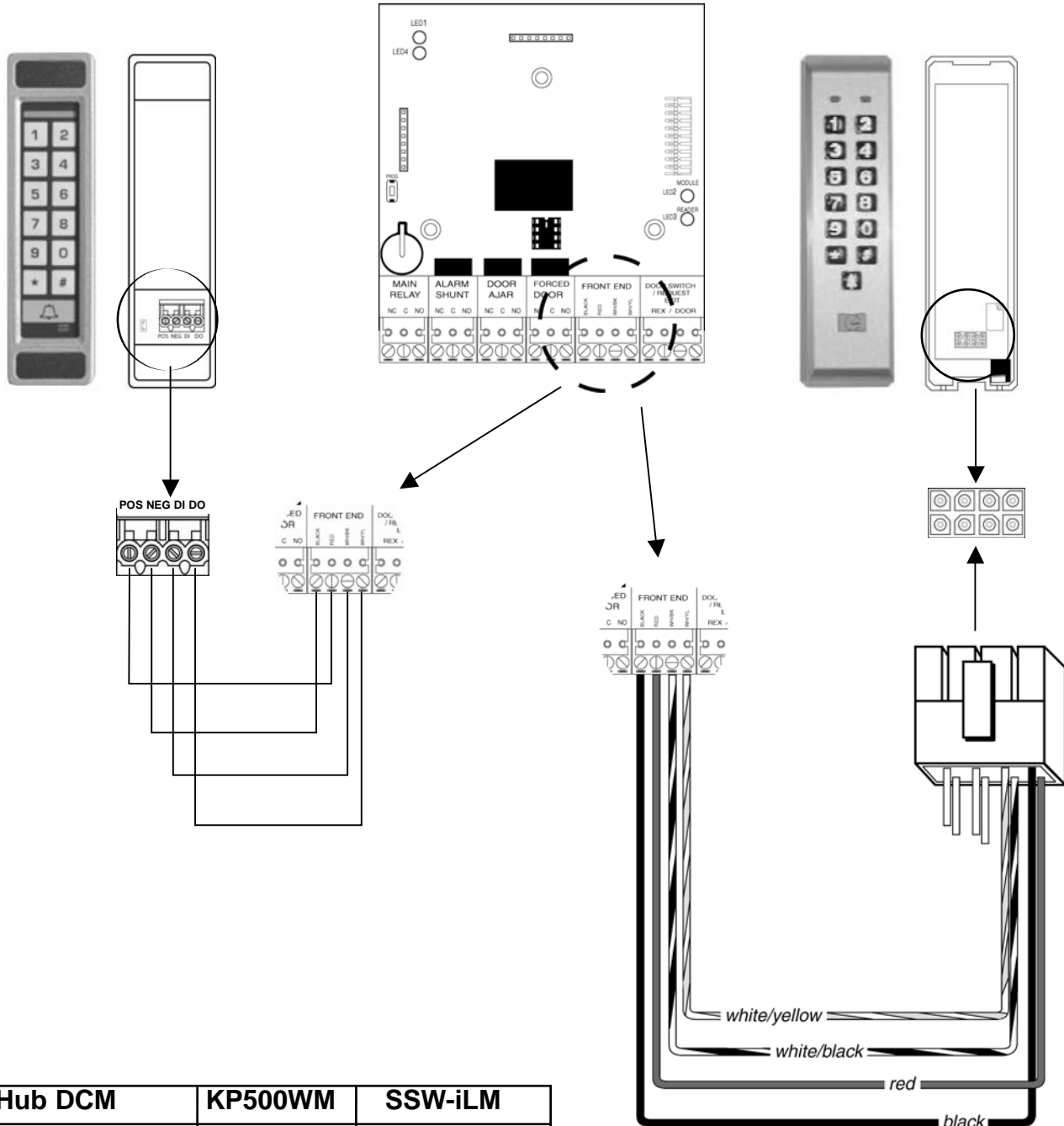
Wiegand Defaults

Red LED	Enabled	Interpulse spacing	640 Usecs
Red LED State	Low	Pulse width	160 Usecs
Green LED	Enabled	Group ID	0
Green LED State	High	Side ID	0
Format	26 Bit		

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.

Self Test: While the unit is powered up, enter the following on the Mullion keypad: **7890#123456***. If all 12 key presses have been verified, the keypad will enter self test mode. The LED's will alternate three times and the sounder will beep three times followed by a flickering yellow LED. Press any key to return to normal operation.

Replacing the IEI KP500wm mullion keypad (discontinued) with an IEI SSWiLM



Hub DCM	KP500WM	SSW-iLM
RED	POS	RED
BLACK	NEG	BLACK
WHITE/YELLOW	DO (DATA OUT)	D1 (WHITE/YELLOW)
WHITE/BLACK	D1 (DATA IN)	DO (WHITE/BLACK)

Programming The Door-Gard Mullion Keypad

All programming is controlled by a unique Master Programming Code.

Components Requiring Programming:

- **Door-Gard Mullion Keypad (default SSW-ILw keypad program code- 6789):** IEI or Wiegand format, Door-Gard Keypad Programming Code.
- **IEI Stand Alone Controller or IEI Hub DCM (default Master Code 1234):** All PIN number additions, deletions, access to control functions.
- **Wiegand Panel/Controller:** Program as if card number (up to 6 digits in length) into the Vendors panel via the Vendors software.

Door-Gard Mullion Program Options Chart

To Enter Door-Gard Mullion Keypad program mode: 099 # "program code" * (Default program code 6789)

The keypads yellow LED will flash twice rapidly indicating that you are in program mode.

Change Program Code	Press	90 # 0 # 0 # "new code" * "repeat code" *
Visual Key-press feedback on	Press	91 # 0 # 1 # * *
Visual Key-press feedback off	Press	91 # 0 # 0 # * *
Audible Key-press feedback on	Press	91 # 1 # 1 # * *
Audible key-press feedback off	Press	91 # 1 # 0 # * *
Output Selection - Wiegand	Press	91 # 3 # 1 # * *
Output Selection IEI Secured Series	Press	91 # 3 # 0 # * *
Secured Series Recording status OUT	Press	91 # 4 # 1 # * *
Secured Series Recording Status IN	Press	91 # 4 # 0 # * *
Wiegand Red led enable	Press	91 # 5 # 1 # * *
Wiegand Red led disable	Press	91 # 5 # 0 # * *
Wiegand Red led state High	Press	91 # 6 # 1 # * *
Wiegand Red led state Low	Press	91 # 6 # 0 # * *
Wiegand Green led enable	Press	91 # 7 # 1 # * *
Wiegand Green led disable	Press	91 # 7 # 0 # * *
Wiegand Green led state High	Press	91 # 8 # 1 # * *
Wiegand Green led state Low	Press	91 # 8 # 0 # * *
Enable keypad illumination	Press	91 # 11 # 1 # * *
Disable keypad illumination	Press	91 # 11 # 0 # * *
Enable keypad dimming	Press	91 # 12 # 1 # * *
Disable keypad dimming	Press	91 # 12 # 0 # * *
Default Mullion keypad to IEI Controller mode		96 # 0 # 0 # * *
Default Mullion keypad to 26 bit Wiegand mode		96 # 1 # 1 # * *

Programming the Bell output

To enable the door bell feature	Press	91 # 13 # 1 # * *
To disable the door bell feature	Press	91 # 13 # 0 # * *
To set door bell duration	Press	92 # 4 # 01-99 # * * (time must be set in a two digit format)
To set door bell to continuous	Press	90 # 4 # 0 # * *

If there is a need to change your Wiegand format from 26 Bit, use the chart below

92 #	Option #	Value # **
	1 -Wiegand Format	1 thru 8 (defaults to 1 = 26 bit) -see below
	2 -Inter-pulse spacing	1 thru 255 (defaults to 32 = 640usecs)
	3 -Pulse Width	1 thru 255 (defaults to 8 = 160 usecs)
93 #	ID Type #	ID Value # **
	0 -Site ID	0 thru 999 (defaults to 0)
	1 -Group ID	0 thru 999 (defaults to 0)

Wiegand Formats

Format	Frame Size	Largest PIN Value	Largest Site Value	Largest Group Value
1	26 bits	65535	255	N/A
2	28 bits	32767	255	N/A
3	29 bits	524287	255	N/A
4	30 bits	65535	255	15
5	31 bits	65535	255	31
6	32 bits	8191	2047	63
7	36 bits	1048575	255	N/A
8	29 bit	524287	255	N/A

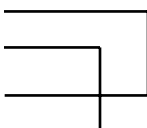
System Defaulting the SSW-ilm Mullion via wiring

If the four data wires are shorted in one of the two configurations shown below on power up, the option will be set. Remove power after you hear the 3 beeps then reconnect the data lines to their proper working configuration.

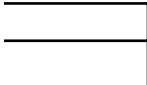
Defaults SSW-iLM and sets it in Hub Front End mode

Red		+12VDC
Black		- GND
Wht/Blk		(DAO)
Wht/Yel		(DA1)
Blue		(LED1)
Brown		(Not Used)

Defaults SSW-iLM and sets it in Wiegand 26 bit mode

Red		+12VDC
Black		- GND
Wht/Blk		(DAO)
Wht/Yel		(DA1)
Blue		(LED 1)
Brown		(Not Used)

If the local program code is lost or forgotten, power down the system, connect the wire harness as shown below then power the system up. Change your local program code then power down the system and restore the wire harness to its original configuration and power back up.

Red	- +12VDC
Black	- GND
Wht/Blk	- No connection
Wht/Yel	
Blue	
Brown	

If this product does not seem to operate properly, please call our Technical Support Department toll free at 1-800-343- 9502 (781-821-5566).

We understand your time is valuable, and we know that calling our Technical Support Department will ensure that you'll make the most profit possible with your IEI product. Thank you for your purchase. We appreciate your business.

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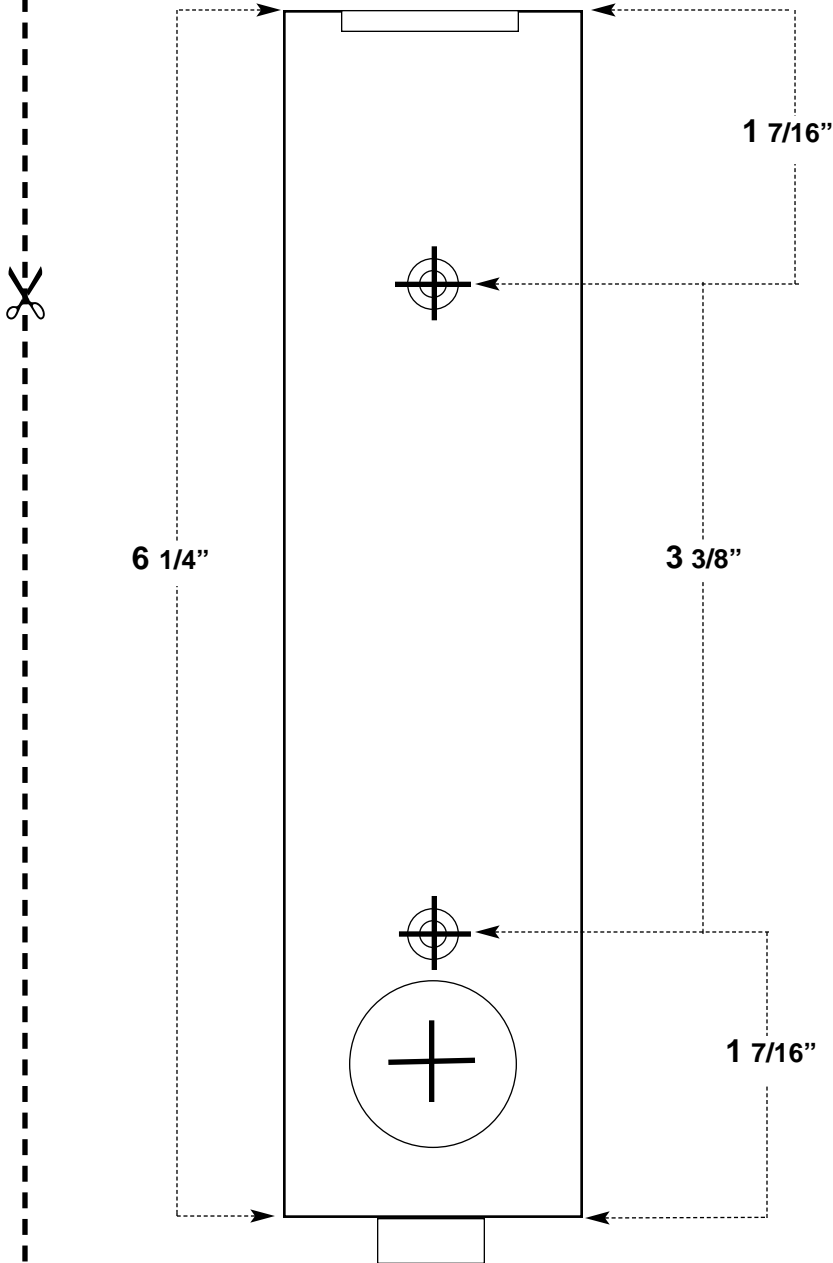
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781-821-4443 (FAX)
FAX ON DEMAND 781-821-0734 (FROM YOUR FAX MACHINE)

Mounting Template for iLM



Diameter of the mounting holes -11/64"
Diameter of the wiring hole -7/8"

This product is designed as a surface mountable product. The access hole for the wires is determined by the size of the connector. You must drill a 7/8" hole to allow the connector to fit into the mounting surface so the keypad will fit flat on the surface.