KP212 Keypad

Installation and Programming Instructions

23852890

SCHLAGE

Specifications

Case Dimensions:
6½"L x 1¾"W x 1⅛"D

Electrical:
Voltage: 12-24VAC/DC

Current: 53mA@12VDC;
72mA@24VDC; 95mA@12VAC
108mA@24VAC

Relay Contacts:
Main Relay (controller): 2A

Bell Relay:
Form A; 1 Amp @ 30VAC/DC

Environmental:

-20° F to 130° F
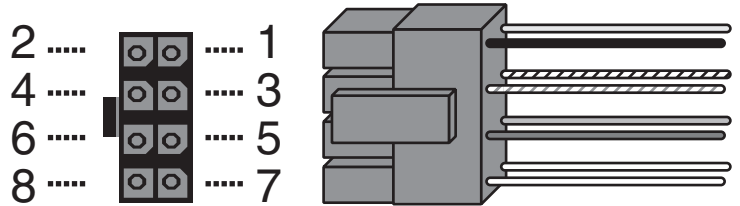For Indoor and Outdoor Use

Description:
Schlage's KP212 keypad combines elegant looks with a mullion mount design in a rugged, vandal resistant case, which you can use for almost any application. The KP212 has hardened backlit keys designed to perform in medium to high traffic areas and in rough duty environments. The electronics are also conformal coated, which makes the keypad suitable for indoor or outdoor applications.

Basic Operation:
To gain access through the door enter your code (1-6 digits) followed by the ✳ key on the keypad.

Packing List:
1) KP212 Keypad

(1) Eight-Conductor Wire Harness

(1) Mullion Hardware Pack

(1) ⁵⁄₆₄" Allen Wrench

(1) Anti-Oxidant Grease Pack

(1) Installation/Programming Manual

Features
- 120 User Capacity
- Programmable Relay Time (0 to 99 seconds)
- Request to Exit (REX) Input
- Vandal Resistant Case
- Sealed for Indoor or Outdoor Applications
- LED's for Relay Status Indication
- Bell Output
- Surface Mount
- Illuminated Hardened Keys
- Rated for Greater than One Million Key Cycles

Applications
- Low to Medium/Heavy Traffic Areas
- Rough Service Environments
- Mullion Frame Mounting
- Dimly Lit Areas

Wire Harness Configuration:

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

# Keypad Installation Procedure:

1. Drill through the back plate using a ¹¹⁄₆₄" bit. Use the template on the back page to accurately mark the mounting holes before drilling. Then drill the mounting holes with a ⁹⁄₆₄" drill bit. Also drill the hole for the wires. This may vary depending on the number of conductors required. Refer to mounting height below.

2. Wire the keypad using the diagrams in the following sections.

3. Mount the KP212 keypad onto the mounting surface using the provided screws. Do no over-tighten the screws, which may result in damage.

Keypad Mounting Height
Mounting height can vary depending on requirements. An appropriate range is typically between 48 and 52 inches on center off the floor.
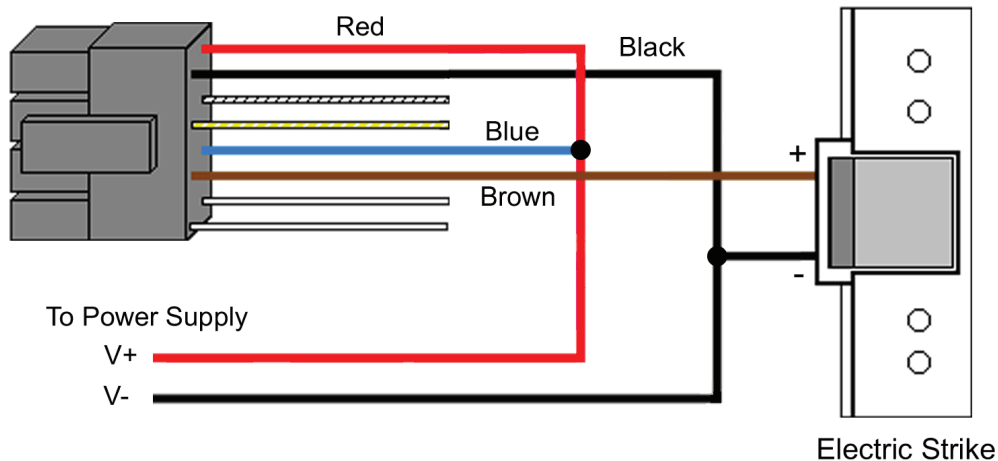
48 - 52"
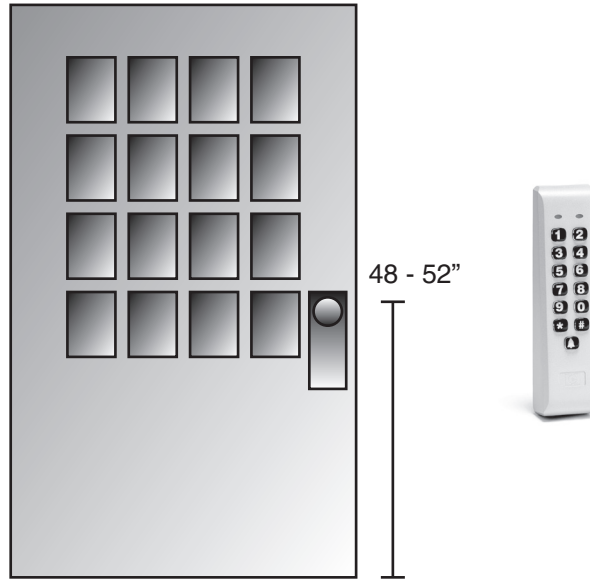
Wiring an Electromagnetic Lock (Maglock)

1. Connect the red (V+) and black (V-) wires to your power supply.

2. Connect the blue wire (relay common) to positive on your power supply.

3. Connect the white/yellow wire (relay normally closed) to the positive connection on your maglock.

4. Connect negative connection on your maglock to the negative on the power supply.

Red

Black

White/Yellow

Blue

To Power Supply
V+
V-

-    +

Maglock (Fail-Safe)

2
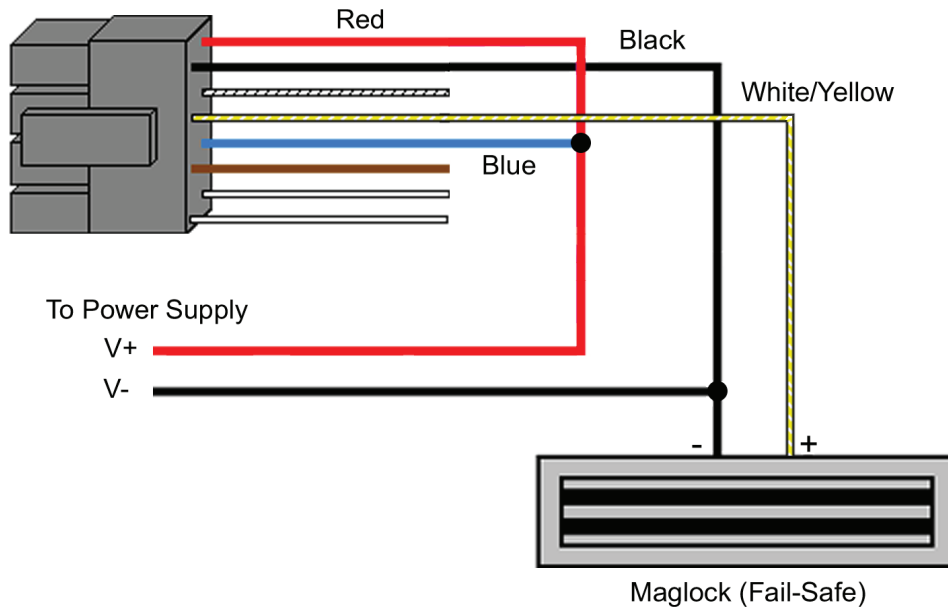
Basic Access Control Using an Electric Door Strike

1. Connect the red (V+) and black (V-) wires to your power supply.

2. Connect the blue wire (relay common) to positive on your power supply.

3. Connect the brown wire (relay normally open) to the positive connection on your door strike.

4. Connect negative connection on your door strike to the negative on the power supply.

Red

Black

Blue

Brown

+

-

To Power Supply

V+

V-

Electric Strike

Shunting a Normally Closed Zone

1. Connect the red (V+) and black (V-) wires to your power supply.

2. Connect the blue wire (relay common) to the common connection on the alarm contacts.

3. Connect the brown wire (relay normally open) to the normally open connection on the alarm contacts.

To Alarm Panel

Red

Black

Blue

Brown

To Power Supply

V+

V-

To Alarm Panel
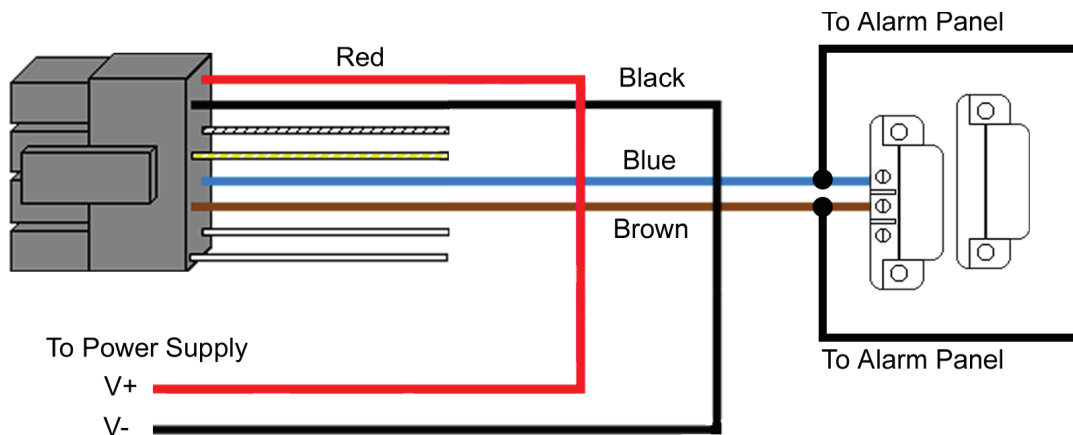
Wiring a Request to Exit Device (REX)

The KP212 is equipped with a REX input. The normally open REX input triggers the main relay for the amount of time you programmed for the master code. If the master code is set to toggle, the REX only triggers the relay for 5 seconds. There is no programming required for the REX to operate.

1. Connect the red (V+) and black (V-) wires to your power supply.
2. Connect the common connection on the REX device to the negative on your power supply.
3. Connect the white/black wire to the normally open connection on the REX device.

Normally Open
Request to Exit Device

Red

Black

White/
Black

REX

To Power Supply

V+

V-
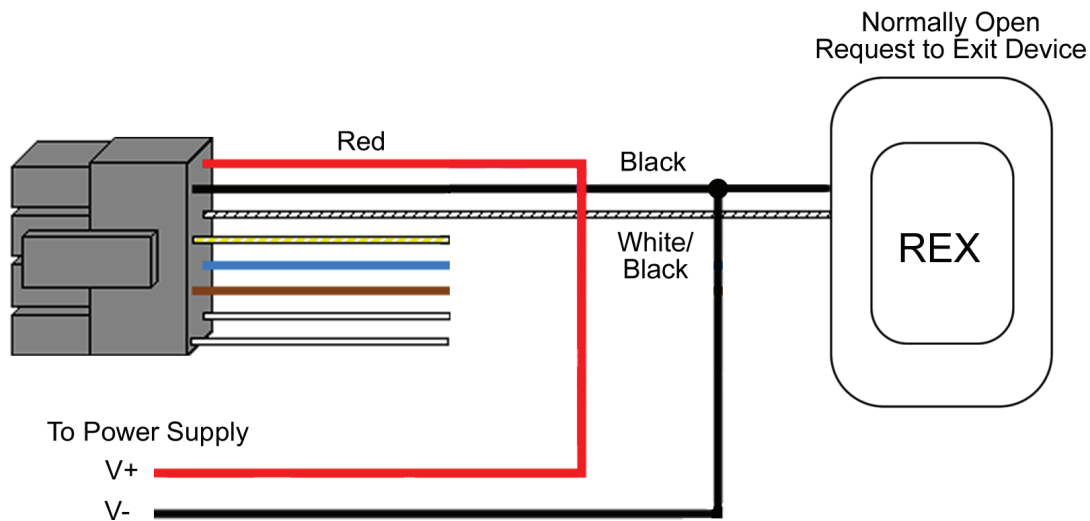
Wiring the Bell Output to a Speaker:

The KP212 keypad has a built in bell button, which triggers a relay output when pressed. This relay is normally open and the contact closes when triggered. You can use this relay output to trigger devices that require a momentary closure, such as a doorbell. The relay output provides a dry contact, but you can run up to 30VAC/DC through it for devices that require power to operate. The diagram below shows these connections.

To Keypad

Speaker

White Wire

White Wire

V+

V-

To Separate Power Supply

4
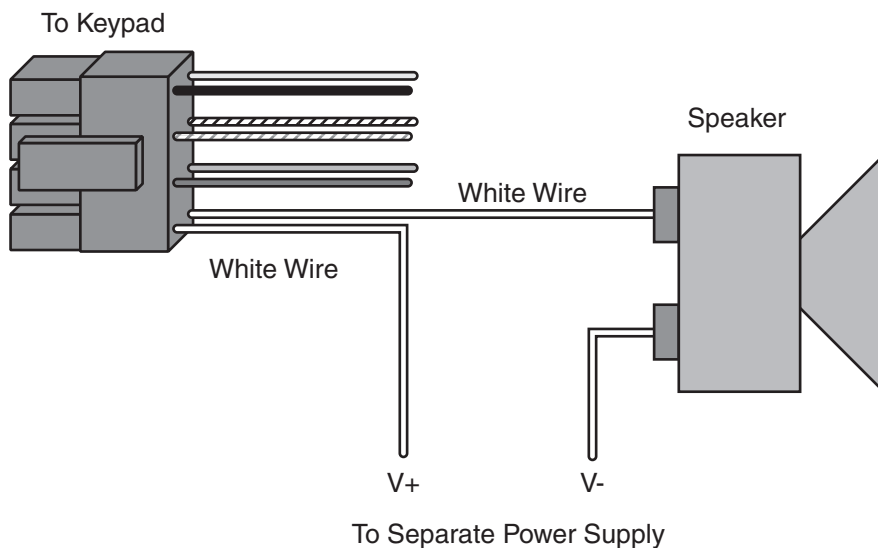
Programming the KP212 Keypad

To program the KP212 you first must enter program mode. To enter program mode enter the following on the keypad: **99 # program code ✱** (default program code is 1234).

Keypad Default Settings

Option	Default Setting	Option	Default Setting
Master Code	1234	Main Relay Time	5 Seconds
Audio Keypress Feedback	Enabled	Visual Keypress Feedback	Enabled
Auto-Entry	Disabled	Door Bell Select	Continuous
Keypad Illumination	Enabled	Keypad Dimming	Enabled

Programming Options Chart

Command/Action	Keys to Enter/Details	
Change Master Code	**1 # new code ✱ new code ✱**	
Change Main Relay Time	**relay time # 1 # master code ✱ master code ✱**	
Add/Change User	**user location # new code ✱ new code ✱**	
	Note: Users programmed with this command use master code relay time.	
Add Toggle User	**00 # user location # new code ✱ new code ✱**	
Add User with Specific Relay Time	**relay time # user location # new code ✱ new code ✱**	
Command 30 Set/Clear Keypad Options (options below, **defaults in bold**)	**30 # option # set/clear # ✱✱**	
Option	**Clear**	**Set**
0 – Audio Keypress Feedback	0 = Disabled	**1 = Enabled**
1 – Visual Keypress Feedback	0 = Disabled	**1 = Enabled**
2 – Auto-Entry	**0 = Disabled**	1 = Enabled
3 – Keypad Illumination	0 = Disabled	**1 = Enabled**
4 – Keypad Dimming	0 = Disabled (always bright)	**1 = Enabled**
5 – Door Bell Select	0 = Disabled	**1 = Enabled**
Command 32 Set Bell Output Time	**32 # 0 # time # ✱✱**	Set timed output (1 – 99 seconds)
	32 # 0 # 0 # ✱✱	Set to continuous
Command 46 Reset Keypad to Default Settings	**46 # 00000 # 00000 # ✱✱**	
Exit Program Mode	Press the ✱ Key	

Notes:

1. The KP212 can store 120 user codes, including the master code. Codes can be from 1 to 6 digits long.

2. When auto-entry is enabled, users with codes the same length as the master code do not have to press the ✱ key after entering their code to enter the door.

3. When keypad dimming is disabled the backlighting remains at full intensity (does not dim).

4. When the door bell output is set to continuous the relay is energized as long the door button is pressed. When you release the button the relay de-energizes.

Programming Examples

Changing the Master Code:
The following example show how to change the master code to 4875 from the default of 1234.

1.	Enter Program Mode	99 # 1234 *
2.	Program New Master Code	1 # 4875 * 4875 *
3.	Exit Program Mode	*

Change the Main Relay Time
The following example shows how to change the main relay time. The master code is 4875.

1.	Enter Program Mode	99 # 4875 *
2.	Change the Main Relay Time	10 # 1 # 4875 * 4875 *
3.	Exit Program Mode	*

Adding User Codes:
The following example shows how to program user 2 with a code of 1749 and user 3 with 9328. The master code is 4875.

1.	Enter Program Mode	99 # 4875
2.	Program User	# 2 2 # 1749 * code *
3.	Program User	# 3 3 # 9328 * code *
4.	Exit Program Mode	*

Programming a Toggle User
The following example shows how to program user 4 as a toggle user with a code of 98773. The master code is 4875.

1.	Enter Program Mode	99 # 4875 *
2.	Change the Main Relay Time	00 # 4 # 98773 * 98773 *
3.	Exit Program Mode	*

LED Indications

LED State	Description
Red Solid	Door Locked
Green Solid	Door Unlocked
Yellow Solid	Programming Error
Yellow Flashing Slowly	Program Mode
Yellow Momentary Flash	Visual Keypress Feedback

Troubleshooting

Issue	Explanation	Solution
LED's cycling slowly from right to left.	The KP212 Mullion is designed to monitor for low voltage. Once low voltage is detected, the keypad turns off the backlighting to ensure operation of the keypad until the problem can be attended to.	Verify the power supply output voltage. 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.
LED's cycling rapidly from left to right and the keypad has lost all operation.	The KP212 Mullion is designed to monitor for over voltage. This is a very "severe" condition and significantly affects the keypad's operation. Once the over voltage is detected, the keypad shuts down all operation and does not operate until the voltage is lowered.	Verify the power supply output voltage. If it is over the voltage threshold of 35 Volts, you must lower the voltage below 29 Volts.
Can't access programming mode using the master code.	The code you are entering is likely not the master code.	Perform the program mode loopback in the following section to enter program mode and reprogram the master code.
No LED's are lit on the keypad.	Power is not reaching the keypad.	First verify there is voltage at the keypad. If not, verify there is voltage at the power supply. If there is voltage, verify continuity on the wires out to the keypad. Otherwise contact the power supply manufacturer or IEI, if there is a problem with the keypad. You also may try power the keypad with a 12V battery to verify operation.

DEALERS/INSTALLERS ONLY! End users must contact the dealer/installer for support. If the keypad still does not work after troubleshooting, please call IEI's techinal support department at 1-800-343-9502 (outside MA) or 1-800-733-9502 (inside MA).

Testing the Keypad
After installing the keypad, IEI recommends that you perform the keypad self-test once a year, to ensure that the keypad is working properly.

- To perform the self-test, with the unit powered up, press the following keys on the keypad: 7890#123456*
- If all 12 key presses are accepted, the keypad enters self-test mode.
- The LEDs alternate three times followed by the sounder beeping three times.

Program Mode Loopback
If you've forgotten the master code use the following loopback connection to enter program mode. Power down the unit, short the white/black wire to the red wire, then power the unit back up. The yellow LED should be flashing. Now change your master code or reset the unit. Power the keypad down and reconnected the wire harness in the original configuration.

Connect White/Black to Red   To Power Supply
Red (V+)
Black (V-)
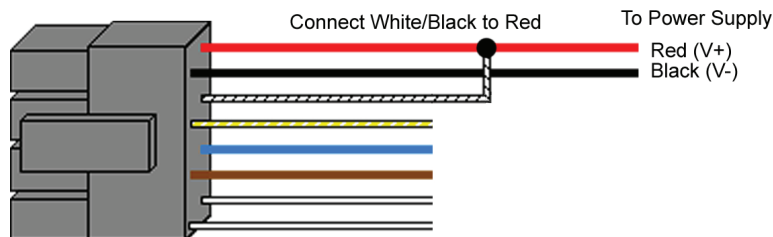
Warranty
International Electronics Inc. (IEI) warrants its products to be free from defects in material and workmanship when they have been installed in accordance with the manufacturer's instructions and have not been modified or tampered with. IEI does not assume any responsibility for damage or injury to person or property due to improper care, storage, handling, abuse, misuse, normal wear and tear, or an act of God.

IEI's sole responsibility is limited to the repair (at IEI's option) or the replacement of the defective product or part when sent to IEI's facility (freight and insurance charges prepaid) after obtaining IEI's Return Material Authorization. IEI will not be liable to the purchaser or any one else for incidental or consequential damages arising from any defect in, or malfunction of, its products.

Except as stated above, IEI makes no warranties, either expressed or implied, as to any matter whatsoever, including, and without limitation to, the condition of its products, their merchantability, or fitness for any particular purpose.

Keypad Mounting Template

Mounting Holes: $1\frac{1}{64}$"

Wiring Hole: $\frac{7}{8}$"

$3\frac{25}{64}$ (3.393)"

$1\frac{7}{16}$ (1.433)"
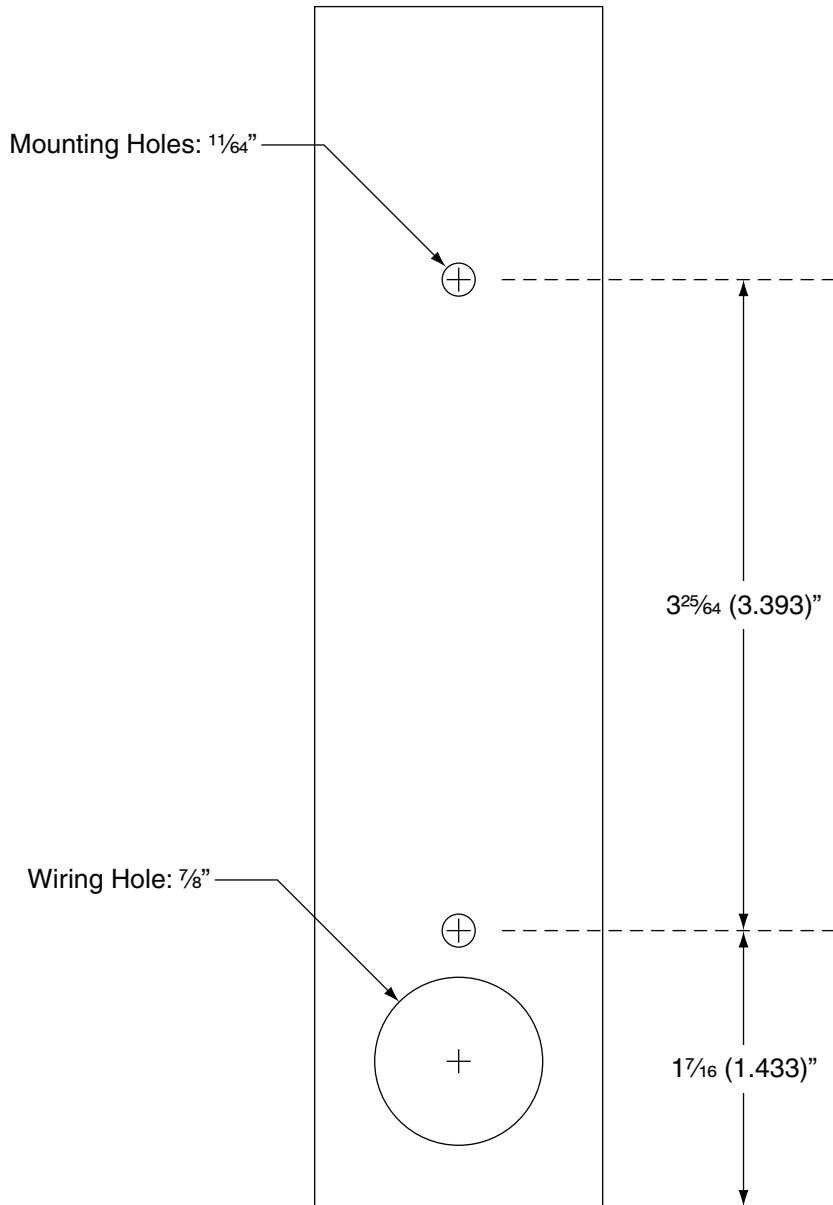
The Schlage keypad is desingd for surface mount applications. You must drill a $\frac{7}{8}$" hole for the wire harness connector, as shown, so the unit is flat against the mounting surface.