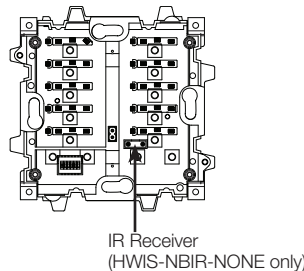


International seeTouch®

Keypads
Keypad Base Units
HWIS-NB-NONE
HWIS-NBIR-NONE
15 V $\overline{\text{---}}$ 100 mA



Important Notes

Please read before installing.

Codes: Install in accordance with all local and national electrical codes.

Environment: Ambient operating temperature: 0 °C to 40 °C (32 °F to 104 °F), 0-90% humidity, non-condensing. Indoor use only.

Cleaning: To clean, wipe with a clean damp cloth. Do not use any chemical cleaning solutions.

Faceplates: Must be used with Lutron faceplates. Do not paint controls or faceplates.

Wallboxes: Lutron recommends using a 35 mm (1 3/8 in) deep wallbox, minimum.

Keypad Wiring:

LED Count: Each International seeTouch Keypad counts as 20 LEDs. An external power supply may be required depending on the total LED draw of all keypad devices on the processor.

Wire type: One pair 1.0 mm² (18 AWG) for power. One pair 0.5 mm² to 1.0 mm² (22 AWG to 18 AWG) twisted/shielded for data. Lutron® wire, model #GRX-CBL-346S-500, may be used.

Configuration: Daisy-chain, star, or t-tap.

Maximum wire length per run: Each home run on a link may be up to 305 m (1 000 ft).

Maximum wire length - total: The total length of wire on a single link (all home runs combined) may be up to 1 220 m (4 000 ft).

Maximum Number of Keypads Per:

Each home run	10 keypads
Keypad Link	32 keypads

Technical Assistance

If you have questions concerning the installation or operation of this product, call **Lutron's Headquarters**. Please provide exact model number when calling.

Worldwide Headquarters USA
Lutron Electronics Co., Inc
TEL: +1.610.282.3800
FAX: +1.610.282.1243
Technical Support: 1.800.523.9466
Toll-free: 1.888.LUTRON1
www.lutron.com

European Headquarters United Kingdom
Lutron EA Ltd.
TEL: +44.(0)20.7702.0657
FAX: +44.(0)20.7480.6899
Technical Support: +44.(0)20.7680.4481
Freephone: 0800.282.107
www.lutron.com/europe

Asian Headquarters Singapore
Lutron GL Ltd.
TEL: +65.6220.4666
FAX: +65.6220.4333
Technical Support: 800.120.4491
www.lutron.com/asia

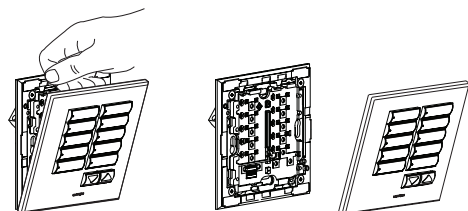
LUTRON
Lutron Electronics Co., Inc. 7200 Suter Road, Coopersburg, PA 18036 USA
Lutron EA Ltd. 6 Sovereign Close, Wapping, London E1W 3JF, UK
Lutron GL Ltd. 15 Hwa Chiang Road #07-03, Singapore 089316

Installation

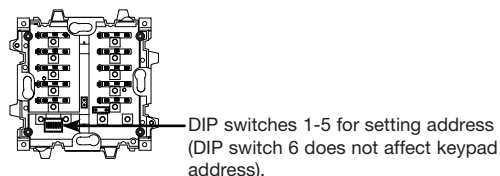
1 Disconnect power to the keypads. Turn OFF all circuit breakers connected to the HomeWorks processor or keypad link auxiliary power supply.

WARNING: To avoid the risk of electric shock, locate and lock MCB (supply breaker) in the OFF position or remove fuse. Failure to turn off power can result in serious personal injury and/or property damage.

2 Remove faceplate and button kit. Remove currently installed faceplate and button kit (if applicable) by gently prying from the top.



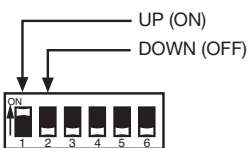
3 Address keypads. Assign a unique address to each keypad using the DIP switch settings. Record the address for future programming purposes.



Set DIP switches 1-5 to give the keypad a unique HomeWorks system address from 1 to 32.

#	Switch Settings	Address	#	Switch Settings	Address	#	Switch Settings	Address	#	Switch Settings	Address
1	[Diagram]	9	[Diagram]	17	[Diagram]	25	[Diagram]	33	[Diagram]	41	[Diagram]
2	[Diagram]	10	[Diagram]	18	[Diagram]	26	[Diagram]	34	[Diagram]	42	[Diagram]
3	[Diagram]	11	[Diagram]	19	[Diagram]	27	[Diagram]	35	[Diagram]	43	[Diagram]
4	[Diagram]	12	[Diagram]	20	[Diagram]	28	[Diagram]	36	[Diagram]	44	[Diagram]
5	[Diagram]	13	[Diagram]	21	[Diagram]	29	[Diagram]	37	[Diagram]	45	[Diagram]
6	[Diagram]	14	[Diagram]	22	[Diagram]	30	[Diagram]	38	[Diagram]	46	[Diagram]
7	[Diagram]	15	[Diagram]	23	[Diagram]	31	[Diagram]	39	[Diagram]	47	[Diagram]
8	[Diagram]	16	[Diagram]	24	[Diagram]	32	[Diagram]	40	[Diagram]	48	[Diagram]

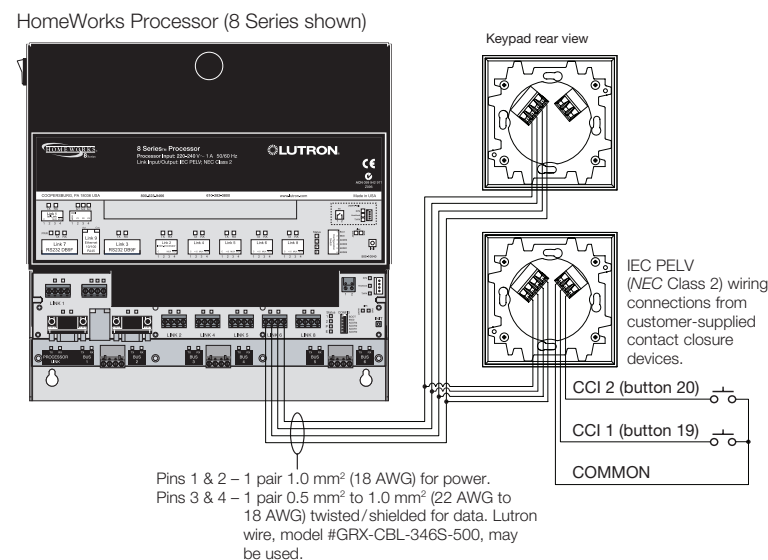
Example: Setting Switch #1 ON.



4 Keypad Wiring.

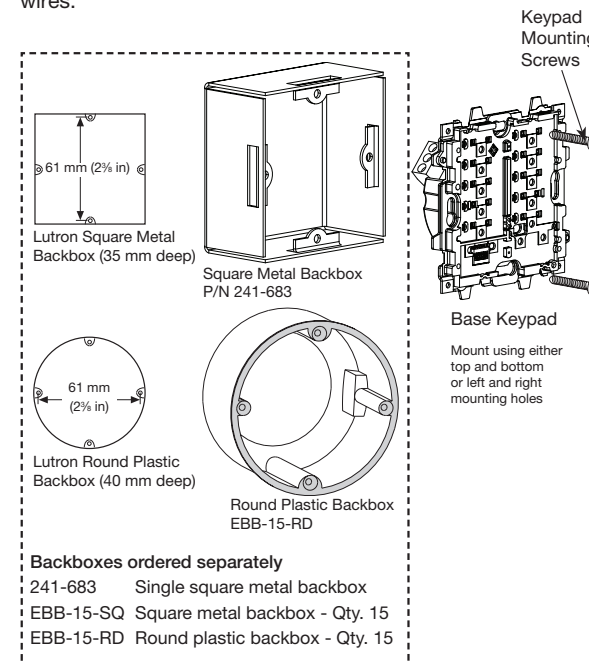
Strip insulation to 10 mm (3/8 in). Unplug keypad link terminal block from the keypad. Connect wiring to terminal block as shown below. Each terminal will accept one or two 1.0 mm² (18 AWG) wires. Plug the keypad link terminal block back onto the keypad circuit board. Be sure to orient the terminal block correctly. Connect external input closures (if applicable). All International seeTouch keypads accept two low-voltage dry contact closures (see below).

When using the input closures: Verify compatibility of external devices. The input closures are intended for use with devices that provide dry contact closure outputs. The input closures may be used with ground-referenced, solid-state outputs if the outputs have an on-state saturation voltage of less than 2 V $\overline{\text{---}}$ and an off-state leakage of less than 50 μ A. Dry contact or solid-state outputs must be capable of switching 15 V $\overline{\text{---}}$ at 10 mA. The outputs must stay in the closed or open states for a minimum of 40 msec. If there is any question as to whether the contact closure device is compatible with these specifications, contact the manufacturer of that device.



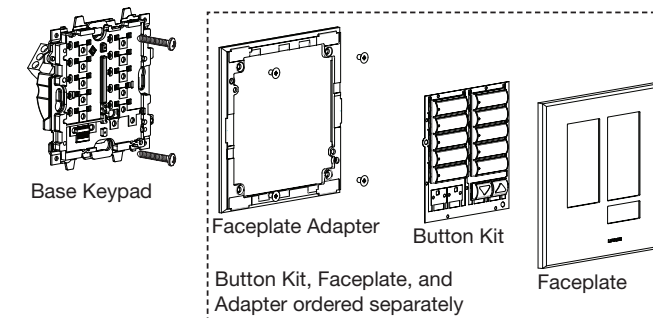
5 Mount and align Keypad.

Push all wires back into the wallbox and fasten the control to the wallbox using the screws provided. Do not overtighten. Do not pinch the wires.



6 Attach Button Kit and Faceplate.

If available, attach faceplate adapter using screws provided with the Faceplate/Button Kit. See instructions included with Faceplate/Button Kit.



7 Turn power ON at MCB (circuit breaker) or replace fuse.

Symptom	Cause and Action
LEDs don't light up when buttons are pushed.	Power is not present at keypad. • Make sure HomeWorks processor is powered. • Check for 15 V $\overline{\text{---}}$ between pins 1 & 2 on the keypad connector. • Remove connector from back of keypad, check connections and replace.
LEDs cycle from top to bottom sequentially.	Keypad is properly powered but is not communicating with the processor. • Verify that the processor is powered. • Check that keypad wires 3 & 4 are properly connected. • Check that keypad link is plugged into correct connector at the processor. • Verify that link is configured for keypads in the HomeWorks software. • Check the HomeWorks software to make sure the keypad is programmed and addressed correctly.
LEDs light when pressed, but the system response isn't correct.	• Check keypad for proper address. • Check HomeWorks software system programming.

Limited Warranty (Valid in the US, Canada, Mexico, and the Caribbean)
For warranty information, see the Limited Warranty that shipped with the product.

Limited Warranty (Valid in European Union and Asia)

What This Warranty Covers
Lutron warrants each new Unit to be free from defects in materials or workmanship under conditions of normal use and specified ambient temperature when installed and operated in accordance with Lutron product specifications and applicable EU and local safety regulations.

What This Warranty Does Not Cover
This warranty does not cover:
1) Damage or improper operation determined by Lutron to be due to abuse, misuse, or accident, such as: (a) Use of incorrect line voltages; (b) Use of incorrect fuses or breakers; (c) Failure to follow operating instructions provided by Lutron; (d) Failure to maintain and operate equipment in accordance with applicable EU and local safety regulations; (e) Failure to maintain equipment under specified ambient temperature; (f) Unauthorized or improper repairs or adjustments; (g) Vandalism; and (h) Fire, flood, "Acts of God", and other problems beyond the control of Lutron.

2) Labor costs to remove and reinstall electronic fixture packs and/or ballasts.
3) Components and equipment external to the Lutron Unit, such as: (a) Lamps; (b) Ballasts, sockets, and fixtures; (c) Wiring between ballasts and lamps; (d) Building wiring; (e) Other manufacturers' equipment, such as: 1. Time clocks; 2. Audio-visual equipment; 3. Motion detectors; 4. Photosensors; 5. Driveway sensors; 6. Pressure pads; 7. Shades; and 8. Spas.
4) The cost of repairing or replacing property other than the warranted Unit.

What Lutron Will Do
To the extent permitted by law, Lutron will, at its option, repair or replace any Unit that is defective in materials or manufacture which, in Lutron's opinion, has been properly installed, wired, insulated, used, and maintained. Lutron shall not be required to remove, install, or re-install any defective Unit. Credit will be granted against the purchase price for replacement parts according to the following schedule:
For the first 2 years from the date of installation 100%
For years 3, 4, and 5 from the date of installation 50%
For years 6, 7, and 8 from the date of installation 25%

How To Get Service
Promptly notify Lutron if you believe the Unit is defective. Send the defective Unit, postage prepaid, with a brief written description of the problem to:
Lutron EA Ltd.
Lutron House
6 Sovereign Close
Wapping, London E1W 3JF England

Domestic and International patent(s) may be pending.
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