

ACCESS CONTROL KEYPAD
Cat. No. 54A00-1
Installation Instructions and User's Guide



DI-021-AX541-00AAR2243
(54100-1)

INSTALLATION

ENGLISH

WARNINGS AND CAUTIONS

- Read and understand all instructions. Follow all warnings and instructions marked on the product.
- Do not use this product near water - e.g., near a tub, wash basin, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
- Never push objects of any kind into this product through openings, as they may touch dangerous voltages.
- **SAVE THESE INSTRUCTIONS.**

WARNINGS AND CAUTIONS

- Never install communications wiring or components during a lightning storm.
- Never install communications components in wet locations unless the components are designed specifically for use in wet locations.
- Never touch uninsulated wires or terminals unless the wiring has been disconnected at the network interface.
- Use caution when installing or modifying communications wiring or components.

DESCRIPTION

The Model 54A00-1 Leviton Access Control Keypad is a weatherproof and vandal resistant piezoelectric keypad designed to interface with the Leviton line of automation controllers. Each valid code can be used to arm and disarm the security system, activate an electric door strike or magnetic locks, activate lighting, operate a garage door, operate a security gate, set off a panic alarm, and many other functions.

The keypad is encased in a stainless steel investment casting that will complement any décor. It mounts in a single gang switchbox or to the surface of any wall indoors or outdoors. The keypad has a red LED that is illuminated when the security system is armed and a green LED that is illuminated when it is disarmed.

INSTALLATION

The Model 54A00-1 requires the use of one serial port on the controller and one programmable voltage output.

Run a 4-conductor cable from the controller to the location of the Model 54A00-1 Access Control Keypad and install as follows

NOTES: maximum distance 50 feet.

1. At the keypad location, using the supplied B-GEL water-tight wire splice connectors, connect the black, red, white, and brown wires of the keypad cable (P/N: 54A03-1) to the corresponding wires of the 4-conductor cable as follows:

Keypad Cable (P/N: 54A03-1)	4-Conductor Cable
Black	Black
Red	Red
White	White
Brown	Green

2. Insert the keypad cable into the connector on the back of the keypad.
3. Install the 54A00-1 to the surface of any wall using the supplied wall anchors and screws or to a single gang switchbox using the supplied machine screws.
4. Adhere the top (with LED cutouts) and bottom (with Leviton logo to bottom right) overlay to the 54A00-1 by removing the backing and pressing into place.
5. At the controller location, connect the black, red, green, and white wires of the keypad communications cable (P/N: 54A02-1) to the corresponding wires of the 4-conductor cable using the supplied wire splice connectors as shown.
6. Connect the green wire of the keypad communications cable (P/N: 54A02-1) to one of the programmable voltage outputs on the controller as shown. Configure the voltage output as an "Armed" output
7. Connect the red wire of the keypad communications cable (P/N: 54A02-1) to the Auxiliary 12V output on the controller as shown.
8. Insert the modular connector of the keypad communications cable (P/N: 54A02-1) into one of the serial ports on the controller as shown. Configure the serial port to Pro-Link.

OPERATION

The piezoelectric buttons on the Model 54A00-1 work simply by tapping the surface, and do not require an actual physical movement. The piezoelectric feature means that the sleek keys can be operated with a bare finger or a snow-covered glove equally well. With the depression of each key, the 54A00-1 will emit a short tone and flash the red LED.

To enter a code, press each digit of the code (up to 10 digits). After the code has been entered, press the '#' key to send the code to the controller for verification. If you make a mistake while entering the code, press the '*' key to cancel the previously entered digits and start over. If there is a 10 second delay between entering digits, the keypad will cancel previously entered digits. When a previously entered code has been canceled, either by pressing the '*' key or when there has been a 10 second delay, the 54A00-1 will emit two short tones and flash the red LED two times.

When connected to an Leviton security system, if the system is armed to a security mode (i.e. Away, Day, Night, Vacation, etc.), the red LED is illuminated. If the security system is disarmed (i.e. Off mode), the green LED is illuminated.

When connected to a Lumina or Lumina Pro, or if you want a custom function for the LED, you can programmatically illuminate the red or green LED by turning the corresponding voltage output on and off. When the output is turned on, the red LED is illuminated. When the output is turned off, the green LED is illuminated.

PROGRAMMING

The Leviton controller monitors the serial interface for incoming keypad codes (messages). An incoming code that matches a stored message in the controller can be used to activate macros (e.g. activate an electric door strike, magnetic locks, lighting, etc.). When a code is matched, the macro corresponding to the matching message is activated. The keypad is capable of sending up to a 10-digit code to the controller. The controller can store as many codes there are available Messages.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at **Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9** or by telephone at **1 800 405-5320**.

LEVITON LIMITED WARRANTY

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that products manufactured by Leviton under the Leviton brand name ("Product") will be free from defects in material and workmanship for the time periods indicated below, whichever is shorter: • **OmniPro II and Lumina Pro:** three (3) years from installation or 42 months from manufacture date. • **OmniLT, Omni Ite, and Lumina:** two (2) years from installation or 30 months from manufacture date. • **Thermostats, Accessories:** two (2) years from installation or 30 months from manufacture date. • **Batteries:** Rechargeable batteries in products are warranted for ninety (90) days from date of purchase. **Note:** Primary (non-rechargeable) batteries shipped in products are not warranted. **Products with Windows® Operating Systems:** During the warranty period, Leviton will restore corrupted operating systems to factory default at no charge, provided that the product has been used as originally intended. Installation of non-Leviton software or modification of the operating system voids this warranty. Leviton's obligation under this Limited Warranty is limited to the repair or replacement, at Leviton's option, of Product that fails due to defect in material or workmanship. Leviton reserves the right to replace product under this Limited Warranty with new or remanufactured product. **Leviton will not be responsible for labor costs of removal or reinstallation of Product.** The repaired or replaced product is then warranted under the terms of this Limited Warranty for the remainder of the Limited Warranty time period or ninety (90) days, whichever is longer. This Limited Warranty does not cover PC-based software products. **Leviton is not responsible for conditions or applications beyond Leviton's control. Leviton is not responsible for issues related to improper installation, including failure to follow written installation and operation instructions, normal wear and tear, catastrophe, fault or negligence of the user or other problems external to the Product.** To view complete warranty and instructions for returning product, please visit us at www.leviton.com.

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WEB VERSION

The following is an example that shows an arm/disarm code of '1234' that will be used in conjunction with programming in the controller to toggle the arming mode of the system between Away (armed in away mode) and Off (disarmed):

- Enter the digits for each message under "Setup, Names, Messages". Each code can be up to 10 digits long: Message 1 = 1234
- Configure the voltage output to control the LEDs, under "Setup, Installer, Control". If the green wire is connected to Output 1, configure "Output 1" to "Armed". The red LED will illuminate when the system is armed and the green LED will illuminate when the system is disarmed.
- Configure the serial port and baud rate, under "Setup, Installer, Expansion, Serial Function". If the 54A00-1 is connected to Serial Port 1, configure "Serial 1 Function" to "Pro-Link" and configure "Serial 1 Rate" to "9600" baud.
- This example will use a flag to track the state of the arming. In the example, Flag 1 is named "Armed Flag".

Create the following programs:

```
WHEN ARM AWAY: Armed Flag ON
WHEN OFF: Armed Flag OFF
WHEN RECEIVE 1234 &IF Armed Flag OFF: PROGRAM ARM AWAY
WHEN RECEIVE 1234 &IF Armed Flag ON: PROGRAM DISARM
```

Every time "1 2 3 4 #" is entered at the 54A00-1, the system will toggle between Away (armed in away mode) and Off (disarmed) and the red and green will toggle accordingly.

Example 2:

Additional codes and programs can be entered for other functionality. For example, a code of '12341' can be to activate an electric door strike that is connected to Output 2. In this example the green LED is illuminated when the door strike is engaged (locked) and the red LED will illuminate when the door strike is disengaged (unlocked).

- Enter the digits for each message under "Setup, Names, Messages". Each code can be up to 10 digits long: Message 2 = 12341
- Configure the voltage output to control the LEDs, under "Setup, Installer, Control". If the green wire is connected to Output 1, configure "Output 1" to "General Purpose". The red LED will illuminate when the output is turned on and the green LED will illuminate when the output is turned off.
- Configure the voltage output to control the door strike, under "Setup, Installer, Control". If the door strike is connected to Output 2, configure "Output 2" to "General Purpose".
- Configure the serial port and baud rate, under "Setup, Installer, Expansion, Serial Function". If the 54A00-1 is connected to Serial Port 1, configure "Serial 1 Function" to "Pro-Link" and configure "Serial 1 Rate" to "9600" baud.
- In the example, Output 1 is named "Red LED" and Output 2 is named "Door Strike".

Create the following programs:

```
WHEN RECEIVE 12341: Door Strike ON FOR 5 SECONDS
WHEN Door Strike ON: Red LED ON
WHEN Door Strike OFF: Red LED OFF
```

Every time "1 2 3 4 1 #" is entered at the 54A00-1, the output will turn on to disengage the electric door strike for the specified amount of time (i.e. 5 seconds). The red LED will illuminate whenever the door strike is disengaged (unlocked) and the green LED will illuminate whenever the door strike is engaged (locked).

SPECIFICATIONS

Dimensions:	3-3/8W x 5-1/8H x 7/16D
Nominal Voltage:	10 – 13.7 VDC
Current Consumption:	25mA maximum
Operating Ranges:	-40°C to +70°C (-40°F to +160°F), 100% Relative Humidity

FCC Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

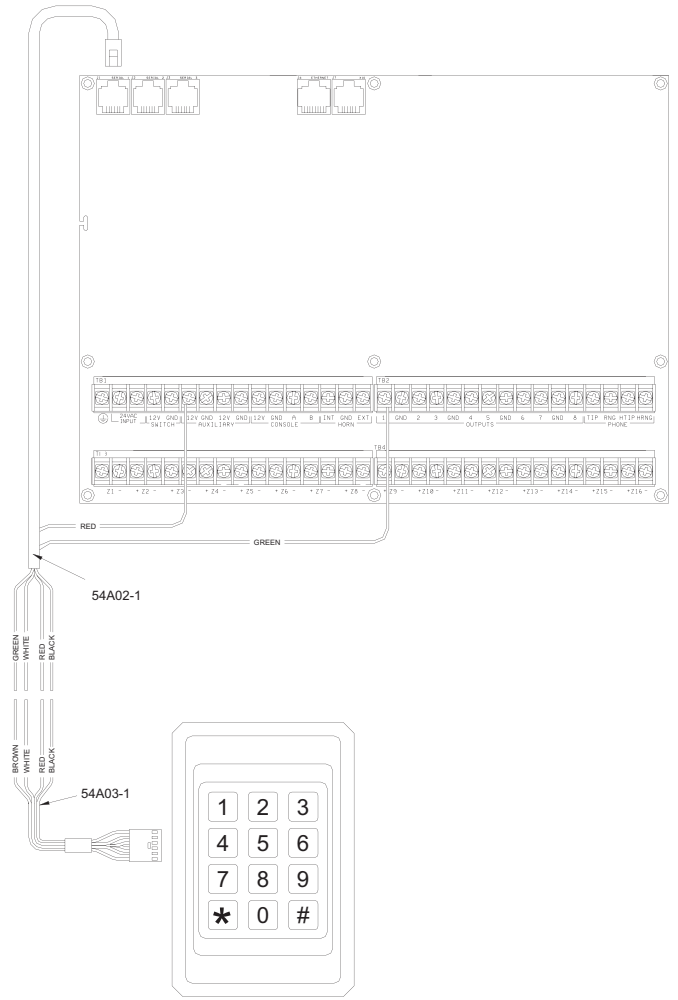
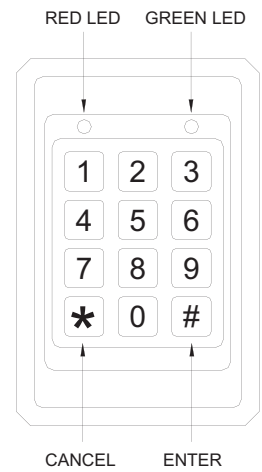


FIGURE 1 - Model 54A00-1 connections



WEB VERSION