1 - Introduction

The Wireless Keypad (PN 050550) is an encoded radio keypad operating at 433,92 MHz. The best use of the product is on applications where an encrypted radio signal has to be used to control: gates, garage doors, rolling shutters, sun-blinds, anti-burglar appliances, lightings, etc. The code has a very high security coding system (19683 code combinations). The radio transmission is enabled only after the dialing of a security user code. There are up to 4+2 different channels that can activate up to 6 different receivers or relays. The internal memory can store up to 24 different security user codes and 1 Master code.

The product fully complies with the European directives 89/336/CEE, 1999/05/CE and Part. 15 of FCC Rules.

2 - Technical specifications

Number of keys: .............................................................. 12
Number of channels: ................................................... 4 + 2
Supply: ........................................................................ 3 Vdc
Battery duration: ........................................................... about 36 months
Battery type: .......................................................... Lithium CR123A
Current consumption: .................................................. 20 mA
Operating frequency: ...................................................... 433.92 MHz
Modulation: .......................................................... AM/ASK
E.r.p. ........................................................................ 6 mW
Security Code combinations number: ................................. 19683
User security code number: .............................................. 24+1
Transmission duration: ..................................................... until press / 1 sec.
Range in open space: ...................................................... from 150 to 700 m
Operating temperature: .............................................. from 14 °F to 131 °F
Dimensions: .......................................................... 5.7 x 3.07 x 1.25 in
Weight: ...................................................................... 3.24 oz
IP Protection Grade: .......................................................... IP44

3 - Types

PN 050500 / 050520 : Fixed code Radio keyboard without tamper;

4 - Battery replacement

Remove the cover and extract the old battery from the bottom side of the electronic card with an upward traction. Insert the new battery on the battery location, respecting the right polarity.

5 - Installation steps

1. Locate the best position for the installation, avoid metallic surfaces that could decrease the RF emission.
2. Mark the location of the mounting holes using the base as a drilling template.
3. Drill the mounting holes and insert the plugs.
4. Remove the protection strip from the seal.
5. Assemble the base and seal together.
6. Install the base with the screws supplied.
7. Complete steps 8 and 9.
8. Install the keypad to the base.
9. Secure in place with the 2 screws supplied.

6 - Programming wireless keypad

Terms to understand

Master Password: The 5-digit code used to access programming features. Factory default is “11111.” This needs to be changed by the end user for security reasons.

Access Code: The 1 to 5-digit code used to open the gate (24 unique codes are possible). If access code is less than 5 digits it requires the # sign after code is entered. Example: “2 #.” If the code is 5 digits the # sign is not required.

Relay 1: The receiver has 2 relays. P1 (relay 1) is factory wired to the receiver input on the control board.

Relay 2: The receiver has 2 relays. P2 (relay 2) is factory wired to “Open / Free Exit” input on the control board.

Security Code (Dip Switch Code): The keypad does not have dip-switches. Instead, the receiver has a learn mode which can be used to program the keypad to the receiver. The keypad can also be manually programmed if a transmitter is being used.


PUK Code: “Password Unblocking Key.” The PUK code is located inside the keypad and is needed when the master password has been lost. Copy and store in a safe place for future reference. Must be 5 digits long lead with zeros.

“*” Key: located on the keypad is used to cancel last command entered.

Red Light Blinks: When blinking, the keypad is sending a signal to the receiver.

Valid access code was entered.

7 - Master Password

The keypad has a Master Password factory-set to “11111”. If the Master Password remains the default one, the following functions are allowed:

- Insertion of new User Codes;
- Cancellation of stored User Codes;
- Replacement of the Master key itself.

The Master Password and the User code can have up to 5 digits. If the chosen code is shorter than 5 digits, press the key “#” after the last digit, to complete the number, as indicated below:

Example 1: User code 123 : Enter: 1,2,3,B.
Example 2: User code 1234 : Enter: 1,2,3,4,B.
Example 3: User code 12345 : Enter: 1,2,3,4,5,B.

Note: Do not install keypad until “Create Communication with Receiver” has been completed (step 9).

8 - Keypad Programming

Create Access Code: (Code you use to operate the gate)

*CAN NOT BE THE SAME AS MASTER PASSWORD!

1. Enter the Master Password “11111”, (this is the factory default master password).
2. Enter “*” If correct, 2 short beeps (if 1 long beep is heard, start over with step 1).
3. Enter the new Access Code (up to 5 digits), if less than 5 digits, “#” key is required.
4. Enter “*”
5. Enter the new Access Code again to verify.

Create Communication with Receiver: (Code you use to send signal to receiver)

1. Enter “1”. If this access code is for P1 (relay 1) Enter “2” if this access code is for P2 (relay 2). See Note below.
2. If correct, 2 short beeps (if 1 long beep is heard, start over with step 1).
9 - Create Communication With Receiver

Create Communication with Receiver Relay 1: (Security Code/Dip Switches)
1. Carry keypad to receiver location for programming.
2. Enter the Access Code for relay 1 on the keypad and continue to
3. Press the P1 (learn button) on the receiver until LD (green light) comes on and relay clicks.

Create Communication with Receiver Relay 2: (Security Code/Dip Switches)
1. Carry keypad to receiver location for programming.
2. Enter the Access code for relay 2 on the keypad and continue to
3. Press the P2 (learn button) on the receiver until the LD (green light) comes on and relay clicks.

10 - Changing Security Code

This keypad has a virtual dip-switch used to create your Security Code. The virtual dip-switch contains nine 3-position switches. The default Security Code has all nine switches in the center position. To ensure neighboring keypads do not interfere with each other, the virtual switches should be positioned in a random pattern, using the following procedure.

Example of random positioning of the virtual dip-switches to create a Security Code is shown below.

To enter the Security Code, enter the dip-switch number, followed by the dip-switch position character.

The Security Code would be entered as:

<table>
<thead>
<tr>
<th>Dipswitch Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1# 2 3* 4* 5# 6* 7# 80 9*</td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

5. Reenter the Access Code to be deleted.
6. Press the "7" key. If correct, 2 short beeps (if 1 long beep is heard, start over with step 1).

11 - Programming New Master Password:

Programming New Master Password: Once created record here for reference __________

NOTE: The Master Password is NOT an access code. This is a MASTER programming code used to access the programming of the keypad. It is not used to operate the gate.

1. Enter the Master Password “11111”.
2. Enter “8” If correct, 2 short beeps (if 1 long beep is heard, start over with step 1).
3. Enter the Master Password (up to 5 digits), if less than 5 digits, “#” is required.
4. Enter “8”
5. Enter the Master Password again to verify.
6. Press “8” If correct, 2 short beeps - New Master Password is set (If 1 long beep is heard, start over with step 1).

12 - Programming Master Password Back to Factory Default: (11111)

1. Enter “11111”.
2. Press “8” (long beep).
3. Enter PUK code. (PUK must be 5 digits).
4. Press “8”.
5. Enter PUK code to confirm.
6. Press “8” (2 beeps) Master password reset complete.