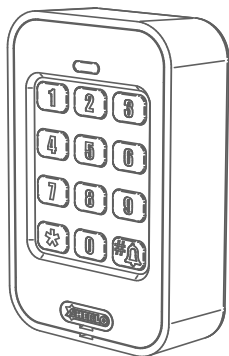


# Operating Instructions

**SHERLO**  
TRONICS



**KEYPAD** Compatible  
**WIRELESS ACCESS**  
**CONTROL**

**micro**<sup>™</sup>

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## Technical Specifications

|                        |   |
|------------------------|---|
| Battery supply voltage | 2 x AA Alkaline batteries<br>(voltage range: 2.4V - 3.3V) |
| External power input   | 10V-14V DC input  |
| Wireless range         | 100m line of sight / 30m indoors                          |
| Operating temperature  | -10°C to +55°C  |
| Operating humidity     | 0 - 90%   |
| Outputs                | 9 Channels + 1 Doorbell output                            |
| Housing material       | ABS Black   |
| Rating                 | IP55  |
| Battery life           | 2-3 years or dependant on Usage                           |
| Usage life             | 60 000 activations  |
| Code length            | 1 - 10 digits   |
| Memory capacity        | 1000 unique codes   |

## Approvals

This product is approved for use in Residential, commercial and Light Industrial Environment and Complies with the essential protection requirements of the R&TTE Directive 1999/EC on the approximation of the laws of the Member states relating to electromagnetic compatibility and radio spectrum.

### Certifications:

ETSI EN300 220-V2.4.1  
ETSI EN301-489-3 V1.4.1  
ETSI EN301-489-1 V1.9.2  
IEC 60950-1:2005 + A1:2009



## Changing the Master Code

The following procedure will enable the user to change the default Master Pin no: **1 2 3 4** or the currently stored Master Pin no to a new Master Code.

The Master Pin no must always be stored at address **0**  
The Master Pin no can be used to trigger a receiver. The Master Code always outputs on Channel 1 and cannot be changed.  
The Master Pin no may be set between 1 & 10 Digits.

### Enter the following keystrokes:

1. Enter Program Mode **\* Master Code \*** "RED LED ON"
2. Select menu **0 #** "GREEN LED ON"
3. Select **0 #** "GREEN LED FLASHES"
4. Enter a new 1-10digit code **New Master Code #** "LEDS OFF"
5. The Unit Auto Exits

**Example:** To change the default Master Code **1 2 3 4** with say a new Master Code of **1 2 3 5**

### Follow the Keystrokes below:

**\* 1 2 3 4 \***  
**0 # 0 #**  
**1 2 3 5 #**  
**#**

## Adding a User Code

The following procedure allows you to add up to 999 User codes to the Keypad.

Please take note of each address you program a user code to. You can at a later stage Delete the code from the user if a code is forgotten or needs to be replaced.

### Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 1 # "GREEN LED ON"
3. Select user address between 1 - 999 # "GREEN FLASHES"
4. Select a Channel of either 1-9 # "RED FLASHES"  
*Eg:-"Channel 1 for Gate full open, Channel 2 for a Pedestrian open"*
5. Enter a **1-10 digit pin number** # "ORANGE to GREEN ON"
6. Continue with step 3 - 5 if you need to add more users
7. To Exit from Program press # "LEDS ALL TURN OFF"

**Example:** To program a pin no of : 7 4 8 2 to User no 5 to work say on a pedestrian gate programmed to Channel 2

### Follow the Keystrokes below:

\* 1 2 3 4 \*  
1 # 5 # 2 #  
7 4 8 2 #  
#

## Delete a User Code

The following procedure allows you to Delete individual User codes from the Keypad.

Please take note of each address you Delete. You can at a later stage add a code back to the system.

### Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 2 # "GREEN ON"
3. Select 2 # "GREEN FLASHES"
4. Select user address between 1 - 999 # "RED-GREEN FLASHES"
5. Continue with step 4 if you need to Delete more users
6. To Exit from Program press # "LEDS ALL TURN OFF"

**Example:** How to Delete User no 5

**Follow the Keystrokes below:**

\* 1 2 3 4 \*

2 # 2 #

5 #

#

## Learn the Keypad Channels into Receivers

The following procedure allows you to learn the keypad unit into up to 9 receiver channels. This enables you to have up to 9 unique functions for example : Open a gate with one code, open a garage door with another code & pedestrian opening with a third code, or even arm an alarm with a fourth as the Keypad is equipped to output up to 9 Channels.

Please check the respective receiver model no for compatibility. Compatible receiver models are: RX1-150; RX2-150; RX3-150 RX1-500; RX4-500

**NB: Please note the Default RF Frequency is 403MHz. Follow page 10 to change to 433MHz if you have a 433MHz Receiver.**

### Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 3 # "GREEN ON"
3. Select 3 # "ORANGE FLASHES"

*Now place the applicable receiver unit into learn mode.  
The next step will enable the Keypad to transmit out a RF Channel much the same as when you press the button on a remote control.*

4. Press either button **1 - 9** to transmit out the Channel no that you want learned into the Receiver unit.  
Once the code is learned into the receiver the receiver will beep. Continue with step 4 if you wish to program in more Channels.  
Please first place the receiver into learn mode before you proceed to step 4. "GREEN to ORANGE FLASHES"
5. To Exit from this mode press # "LEDS ALL TURN OFF"

## Holiday Mode Lockout

This function allows you to lockout the keypad so that none of the user codes operate. This mode is useful when one goes on holiday and does not want anybody to gain access to their property. Only the Master Code will be active while Holiday mode is enabled.

**Note:** When Holiday Mode is On the unit will not transmit when a valid User Pin code is entered. The Red LED will come on when a correct code is entered. In Normal Mode the Green LED will come on when a correct code is entered.

### Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 4 # "GREEN ON"
3. Select 4 # "ORANGE FLASHES"
4. Select one of the following options: "ORANGE LED FLASHES"
  - 1 # Normal Mode "RED FLASHES twice then Exits"or
  - 2 # Holiday Mode On "RED FLASHES twice then Exits"
5. The Unit Auto Exits

**Example:** How to activate Holiday Mode so that the Keypad is locked out and does not accept any User codes

### Follow the Keystrokes below:

\* 1 2 3 4 \*  
4 # 4 #  
2 #  
#



## Setting anti-hack wrong code attempts

This function sets the number of consecutive wrong codes that the Keypad will accept before it locks out the keypad.

The factory default setting for wrong codes is **\*unlimited\*** or zero (0) so the unit will need to be set anywhere between 1 to 255 attempts.

When a number is set the unit will lock out its keypad and sound a warning tone for 60 seconds.

Setting 0 will enable the unit to accept an **\*unlimited\*** amount of wrong code attempts. For High Security environments it is recommended that you set a wrong code attempt value of 6.

### Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 5 # "GREEN ON"
3. Select 5 # "ORANGE FLASHES"
4. Set a wrong code no between 0 - 255
5. To Save press # "RED/GREEN LED ON THEN ALL OFF"

**Example:** How to program say 6 wrong code attempts lock out

### Follow the Keystrokes below:

\* 1 2 3 4 \*

5 # 5 #

6 #

## Backing up the unit to a microSD card

This function allows the user to create a backup onto a microSD card. This backup file can easily be edited on a computer using Notepad, for quick programming of user PIN codes. Especially useful if you need to program more than 50 users.

microSD  = Easy

### Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 6 # "GREEN ON"
3. Select 6 # "ORANGE FLASHES"
4. Select the \* to start the backup "RED LED FLASHES for 15sec"
5. The unit will automatically switch off when complete

Note:- If no card is detected the unit will sound a 2 second warning beep and then switch off.

**Warning:** Never leave a microSD card in the unit as it will get damaged when you close the lid.

**Example:** How to backup the unit to a microSD card

Open up the unit and insert a formatted FAT32 microSD card.

The backlighting will turn on and then the buzzer & RED/GREEN LED will flash for 2 seconds. The unit is now ready for backing up.

**Follow the Keystrokes below:**

\* 1 2 3 4 \*

6 # 6 #

\*

## Restoring the unit

This function allows you to Restore a backup from a microSD card. Especially useful if you need to clone multiple keypads around a large building.

Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 7 # "GREEN ON"
3. Select 7 # "ORANGE FLASHES"
4. Select the \* to start the backup "RED LED FLASHES for 15sec"
5. The unit will automatically switch off when complete

Note:- If no card is detected the unit will sound a 2 second warning beep and then switch off.

**Warning:** Never leave a microSD card in the unit as it will get damaged when you close the lid.

**Example:** How to backup the unit to a microSD card

**Follow the Keystrokes below:**

\* 1 2 3 4 \*  
7 # 7 #  
#

## Setting the Frequency


This procedure allows the user to change the Frequency of the unit. The two available frequencies are 403.55MHz & 433.92MHz.

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 8 # "GREEN ON"
3. Select 8 # "ORANGE FLASHES"
4. Select one of the following options: "ORANGE LED FLASHES"  
1 # 403.55MHz (Default)  
or  
2 # 433.92MHz
5. To Save press # "RED/GREEN LED ON THEN ALL OFF"

## Learn the Keypad Door-bell button into a Receiver

**Please note: This mode is not recommended for access control applications.** # 

The following procedure allows you to learn the dedicated Doorbell button into a receiver module.

The Doorbell Button  works much the same way that a remote control works. When you press the button the keypad will transmit an RF coded signal. If you attempt to learn in the doorbell button to a receiver please press the button two to three times to learn the signal to our receiver units.

Please check the respective receiver model no for compatibility. Compatible receiver models are:  
RX1-150; RX2-150; RX3-150; RX1-500; RX4-500

## Defaulting the Master Code only

This function allows you to Default the Master Code back to the original 1;2;3;4. The procedure needs to be done using a microSD card loaded with a "Default.txt" 0000,1,1234 file that can be downloaded off our web site on the Downloads section under Keypad "Default". Once this is done, you will need to Re-learn the Keypad into the applicable Receivers. Refer to page 5 "Learn the Keypad Channels into a Receiver" The User codes will not change and will stay programmed as before. Please note: Defaulting will reset the Frequency back to Standard 403MHz, refer to page 10.

### Do the following procedure

Save the "Default" File to a formatted microSD card. Then open the Keypad and insert the microSD card into the card holder. Remove power from the Keypad. Then re-apply power. The Keypad will chirp and the RED LED will flash to confirm that the Master Code is defaulted back to 1234. You will need to reprogram in the Channels to the receivers, refer to page 5, & set Frequency if it was on 433Mhz.

## Defaulting the User Codes only

This function allows you to Default all the User Codes. The keypad will still work if it is coded into various receivers. All that you will need to do is program in User codes with the applicable Channel no for the keypad to continue operating.

### Enter the following keystrokes:

1. Enter Program Mode \* **Master Code** \* "RED LED ON"
2. Select menu 9 # "GREEN ON"
3. Select 9 # "ORANGE FLASHES"
4. Select the 9 9 9 # to Default "GREEN ON" for 15sec"
5. The unit will automatically switch off when complete

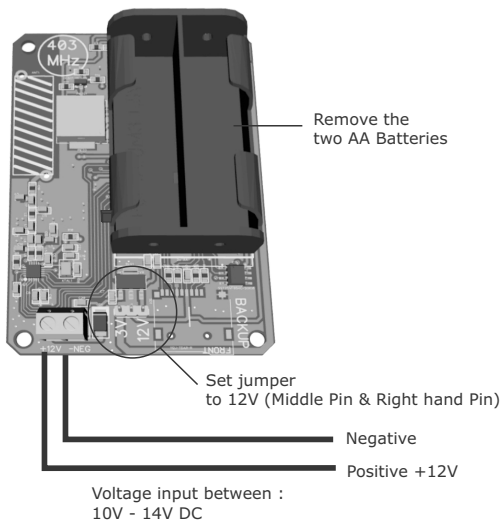
## Mounting the Keypad

1. Remove the screw cover using a flat screw driver.
2. Remove the brass screw.
3. Lever the Keypad up using a screw driver and carefully lift the front out.
4. Position the base of the keypad on the surface & mark the four hole positions.
5. Drill a 5mm Hole if going through masonry, or a 4mm hole through metal.
6. Insert the plastic plugs provided and screw together if on masonry. If mounting on a metal surface use the supplied self-tapper screws.
7. Insert the Lid back onto the base and screw together until the lid is securely fastened for a waterproof sealed part. The brass screw should be well tightened for best results.



## Wiring the unit to 12V DC

Follow the diagram below if you wish to power the unit with a permanent 12VDC power source. Please remove the batteries from the battery holder to prevent damage from leakage.



## Warranty Policy

The goods supplied by Sherlotronics shall be subject to the provisions of sections 55 to 57 of the Consumer Protection Act (68/2008) except where the provisions of the warranty contained in the Sherlotronics documentation are more favourable to the purchaser. Subject to the warranty contained in the Sherlotronics product documentation, if applicable, Sherlotronics products are warranted for a period of **(24 Months)** after delivery. However, it is expressly noted that batteries carry a **(6 Month)** warranty due to the nature of these products being such that they are subject to possible misuse. For equipment not of Sherlotronics manufacture the warranty as supplied by the original manufacturer will apply if such warranty is more favourable to the purchaser than the relevant provisions of the Consumer Protection Act (68/2008). Such warranty is valid only once full payment has been received for such goods.

Any warranty may be voidable on any equipment which:

- i) Has not been installed in accordance with the installation instructions provided.
- ii) Has been subject to misuse or which has been used for any purpose other than that designed for by the manufacturers.
- iii) Has damage caused as a result of handling during transit, atmospheric conditions (including lightning), corrosion of metal parts, water damage, leaking batteries, insect infestation, power surges or other forces outside of the control of Sherlotronics.
- iv) Has been repaired by a person NOT previously authorised by Sherlotronics.
- v) Has been repaired with components not previously tested, passed or authorised by Sherlotronics.

We will not be liable under this policy for any loss or damage caused by us or our employees or agents in circumstances where:

- i) There has been a failure to install the product in accordance with the installation instructions provided by Sherlotronics , or
- ii) a failure to abide by the safety instructions provided by Sherlotronics , or
- iii) there is no breach of a legal duty of care owed to you by us or by any of our employees or agents
- iv) such loss or damage is not a reasonably foreseeable result of any such breach, and any increase in loss or damage resulting from breach by you of any term of this contract.