

Installation Instructions

M840 wireless keypad



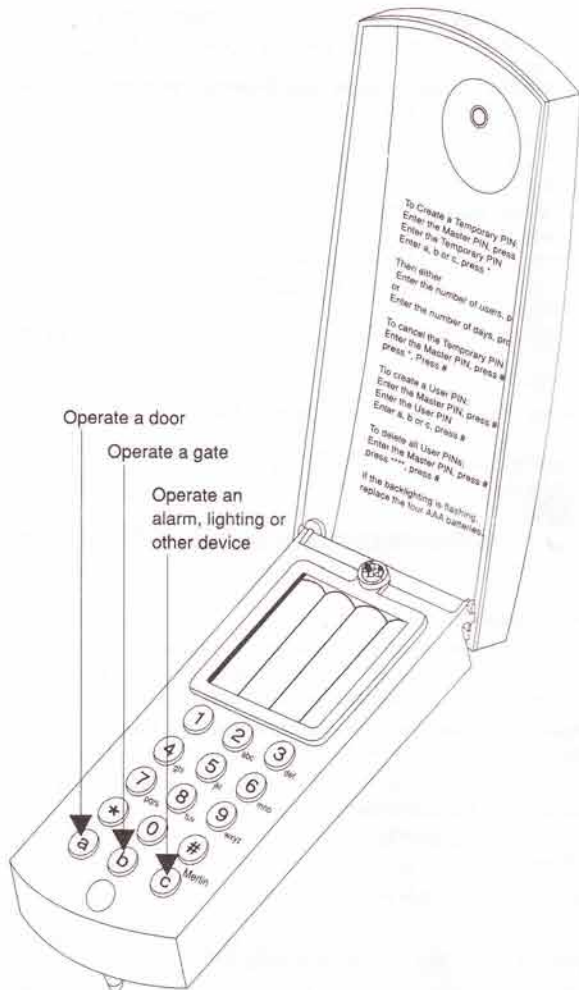
Keep these instructions.

Write down your Master-PIN on this page. Without the Master-PIN you can not change any settings or create User-PINs or Temporary User-PINs.

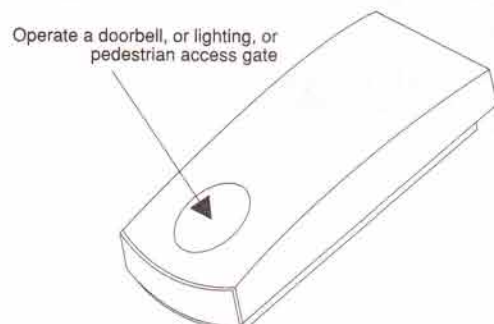
Press any button and the backlighting illuminates the keypad.

A four digit PIN followed by a, b or c will operate one of three devices (for example a door, a gate, lighting or an alarm).

A press on the closed front cover will operate a fourth unsecured device (for example lighting, a pedestrian gate or a doorbell).



The enclosure is UV and water resistant but it is not submersible and should not be subjected to direct sprays of high pressure water.



Installation steps

- Fit batteries
- If batteries are not already fitted, then:
- Remove the battery cover screw
- Fit the four AAA batteries, following the + markings inside the keypad casing
- Refit the battery cover and cover screw

When the batteries are inserted correctly, the backlighting will flash and the beeper will sound

Set the Master-PIN

Caution

Lose the Master-PIN and it's gone for ever. It can't be recovered and it can't be reset. Write it down where you can find it again.

This unit is shipped with a Master-PIN of 1111. You must replace this with your own Master-PIN or else the unit remains insecure and so can be used and re-programmed by anyone.

The Master PIN enables wide programming options (including changing the Master PIN and adding or deleting User PINs) and therefore should not be given out. Users may wish to consider only using the Master PIN for programming and create a User PIN for everyday access.

Removing the batteries or disconnecting the power will not affect the Master-PIN.

To set a new Master-PIN :

- Write down your new Master-PIN here before creating it

- Enter the existing Master-PIN
- Press #
- Enter the new Master-PIN
- Press *, press #

Teach the keypad to the opener or receiver

Up to three openers or receivers can be operated from the keypad. These three devices learn any of the a, b or c buttons from the keypad.

Entering the Master PIN allows the use of these a, b or c buttons.

Each User PIN must end with one of these a, b or c buttons. Alternatively, in Free Access Mode, the a, b or c buttons can be used freely without the need for a PIN.

The b button can be depressed by pushing on the closed flip-up cover. In Free Access Mode (no need for PINs) this turns the keypad into an easily activated large sized entry-button.

- Press the learn button on the opener or receiver for 1 to 2 seconds
- Within 20 seconds (or within 5 seconds for some receivers), enter the Master-PIN and then press the chosen a, b or c button
- Wait 2 seconds and press the chosen a, b or c button again to confirm

Check by the following:

- Wait until the keys are no longer active (when battery powered, this is when the backlighting switches off)
- Re-enter the Master-PIN and press the chosen a, b or c button

If the receiver or opener does not operate, repeat the learning process above

It may be easier to put the keypad into Free Access Mode during this section, so that you don't have to enter the Master-PIN every time you want to use one of the a, b or c buttons. Enter the Master-PIN and press * to disable or enable Free Access Mode.

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Set the User-PINs

You can create four User PINs. If you try to enter a fifth User PIN, it will simply overwrite the fourth PIN.

You can delete all the PINs from memory in one operation, but you can not delete them individually.

User-PINs can not be used to create Temporary-PINs, or to change settings.

Removing the batteries or disconnecting the power will not affect the User-PINs.

To set a User-PIN

- Enter the 4-digit Master-PIN
- Press #
- Enter the new 4-digit User PIN followed by a, b or c (whichever is required to operate the opener or receiver)
- Press #

To delete all User-PINs

- Enter the Master-PIN
- Press #
- Press ****
- Press #

Install the keypad on a wall

You will need a flat surface with a clear width of 75-mm and a clear height of 160-mm.

You will need a drill and suitable screws and anchors.

- Check the keypad is to be placed within radio operating range
- Place the keypad in its expected position
- Enter the Master-PIN (factory pre-set to 1111)
- Press the chosen a, b or c button
- Does the receiver or opener function in response? If not, choose a keypad location that is closer to the opener.

Will the keypad use battery power or will it use a wired power supply?

Battery life depends on usage, but will typically be better than:

24 months if used 2 times a day;

18 months if used 10 times a day;

6 months if used 50 times a day;

10,000 operations if used more than 50 times a day.

To connect to a wired power supply

Check the rating of the power supply; it must be capable of supplying at least 50mA and it can be at any voltage between 12 and 24 V ac or dc

- Remove the batteries
- Add the optional insulator shield over the four battery terminals and two screw terminals
- Fit the optional two M3 screws through the insulator shield and into the screw terminals
- Drill through the battery compartment at the point marked, out to the rear of the keypad
- Pull the wires through the drilled hole
- Strip 20-mm or so from the insulation on the end of the wires
- Attach the wires to the M3 screws (if using a dc supply then note the +ve marking on the insulator shield)
- Thoroughly seal around where the wires enter the keypad casing. Use a permanent flexible sealant. Do not use RTV silicone.

When powered from a plug pack the backlighting stays on continuously after the first button press.

- Attach to the wall

Additional features

Temporary User-PIN

You can create a Temporary-PIN that only lasts a certain number of uses, or only lasts a certain number of days.

It can be cancelled at any time.

Removing the batteries or disconnecting the power will cancel any Temporary User-PIN.

To set a Temporary User-PIN for a number of uses

- Enter the Master-PIN
- Press #
- Enter the new Temporary User-PIN followed by a, b or c (whichever is required to operate the opener or receiver)
- Press *
- Enter the number of uses (say 5, or 14 - anything up to 99 uses is OK)
- Press *

To set a Temporary User-PIN for a number of days

- Enter the Master-PIN
- Press #
- Enter the new Temporary User-PIN followed by a, b or c (whichever is required to operate the opener or receiver)
- Press *
- Enter the number of days (say 5, or 14 - anything up to 99 days is OK)
- Press *

The day counter is accurate to around 1 day per month.

To cancel a Temporary User-PIN

- Enter the Master-PIN
- Press #
- Press *
- Press #

Free Access Mode

Free Access Mode allows the keypad to be used without the need to enter a PIN every time. Simply press a, b or c to operate the door or gate opener or receiver.

Pressing on the flip up cover presses the button on the keypad.

Removing the batteries or disconnecting the power supply will disable Free Access Mode.

- Enter the Master-PIN
- Press *

Repeat this to disable Free Access Mode

Variable active key time after a valid PIN

The a, b or c buttons remain active for five seconds after entering a valid PIN.

This can be changed to any time from 0 to 99 seconds.

Removing the batteries or disconnecting the power supply does not change this setting.

- Enter the Master-PIN
- Press #
- Press **
- Key in two digits for the number of seconds for the a, b or c buttons to remain active after a valid PIN (eg. 00, 05 or 23)
- Press #

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Use as a door-bell button or unsecured transmitter

Pressing the b button, or pressing down on the front hinged cover, without first entering a valid PIN will transmit the fourth channel.

This can allow receiver attached to a doorbell to alert an occupant inside a dwelling that a visitor is at the gate or door. The occupant can press a button to open the door or gate for the visitor.

Alternatively this fourth channel can operate a pedestrian access if your gate opener supports this, and if you have enabled the feature on your gate opener.

Normal entry can be made from the keypad at the gate or door using a User-PIN.

Fit a receiver to a door bell or other device

- Install an appropriate Merlin receiver (M532 or M530P) to the push-button wiring of a door bell or to the input of another device

A separate power supply is usually required for these receivers.

Teach the keypad to the receiver

- Press the learn button on the opener or receiver for 1 to 2 seconds
- Within 20 seconds (5 seconds on some receivers) press the b button (do not enter a PIN first)
- Wait 2 seconds and press the b button again to confirm

Check

- Wait until the backlighting of the keys switches off
- Press the b button again
- If the receiver or other device does not operate, repeat the learning process above

To operate the bell or other device from the keypad

- Press the front cover of the keypad so that it presses on the b button

The receiver should activate the bell or other device that it is attached to

Tamper resistant lock-out

After five validly formatted but incorrect attempts to use the keypad, the keys will be locked for five minutes. Any key press during lock-out results only in a long beep.

This is to reduce the opportunity for unauthorised access from trying each of the 29,997 possible combinations.

Disconnecting the power by removing the batteries will overcome this 5 minute delay.

Reset to the factory settings

This resets the Master-PIN to 1111 and wipes all the User-PINs, the Temporary-PIN and any other custom settings in memory. You can only do this if you know the existing Master-PIN.

- Enter the Master-PIN
- Press #
- Press *
- Press b b b
- Press #

There is no way of extracting information, including a 'lost' Master-PIN, from this keypad's memory.

Therefore, if the Master-PIN is lost, there is no way of changing any setting, including performing this factory reset to return to a known Master-PIN.

Summary of commands and behaviours

Enable Free Access Mode

Master-PIN * (4 short beeps, 1 long beep)

Disable Free Access Mode

Master-PIN * (4 short beeps, 2 long beep)

Change the Master-PIN

Old-Master-PIN # New-Master-PIN * # (4 short beeps)

Add a new User-PIN

Master-PIN # User-PIN a, b or c # (4 short beeps)

Add a Temporary-PIN for n days (1 to 99 days)

Master-PIN # Temporary-PIN a, b or c * n-days # (2 beeps)

Add a Temporary-PIN for n uses (1 to 99 uses)

Master-PIN # Temporary-PIN a, b or c * n-uses * (3 beeps)

Delete a Temporary-PIN

Master-PIN # * # (4 beeps)

Delete all User-PINs

Master-PIN # **** # (5 beeps)

Set time keys remain active (00 to 99 sec)

Master-PIN # ** nn-seconds # (6 beeps)

Master reset

Master-PIN # * b b b # (7 beeps)

b (no PIN entered)

transmit channel 4 (1 short beep)

cover pressed (no PIN)

transmit channel 4 (1 short beep)

Valid-PIN then a, b or c

transmit channel 1, 2 or 3 (1 short beep)

Invalid-PIN then a, b or c

(1 long beep)

1 long beep

Master-PIN # (4 short beeps)

Any key

(1 short beep)

Any key when locked out

(1 long beep)

No power (batteries removed)

timers & counters for lockout & Temporary-PIN reset

Low voltage (below 3.8 V dc)

backlight flashes

High voltage (above 7 V dc)

backlight stays on

5 consecutive Invalid-PINs

locked out 5 minutes

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Specifications

Batteries	four AAA
Batteries life	depends on usage and settings typically better than 18 months
Wired supply	nominal 12-24 V dc/ac maximum 40 V dc, 28 V ac minimum 9 V dc, 9 V ac minimum capacity 50mA
No. of outputs	three secure (require PIN) one non-secure (press cover)
RF output	433.92 MHz FSK
Coded signal	67-bit (32-bit encrypted)
Master-PIN	one, four digit
User-PINs	four, four digit plus channel id
Temporary-PINs	one valid for 0 to 99 uses or valid for 0 to 99 days (accurate to approx. 1 day per month)
Active key time	5 seconds default 0 to 99 seconds possible
Backlighting time	While keys are active, or if powered from a wired supply, continuous

