Hamilton®

making connections beautifully

Wiring Accessories • Circuit Protection • Lighting Control & Multi-room Audio

4 Channel Radio Receiver / Power Switch with Wireless Switch Plate Controller & Remote Control.

MWM - 4CHPSKIT

MWM-4CHPSKIT 4 channel IP rated wireless switching system can be used to control multiple lighting circuits, garden pumps and other electrical devices. An ideal and simple solution, enabling remote switching to open automatic gates and garage doors. This product is part of the Hamilton Air wireless accessories range, and can be controlled using the supplied 4 channel wall mounted switch plate radio transmitter or remote control throughout your home & garden.

Primary Range	Hamilton Air
Input Rated Voltage	230V AC 50 Hz
Power Output	4 circuits each rated at 5 amps, 1250 watts per circuit. Total pack load MUST not exceed 4000 watts.
Power Consumption	5VA
RF Power	5mW
Relay Load	16 A / 250VAC / AC1
Number Of Channels	4
Sensitivity	1,2u V(-105 dBm) Superheterodyne
Radio Transmission Encoded Operating Frequency	868,32 MHz
Antenna	Integral aerial
Operating Range	Up to 250m in the open area
Transmission Way	Uni-Directional (Encoded)
Coding	Addressing Transmission
Max. Number Of Wireless Controllers / Remote Controls Programmed	113
Optical Signalling Of Transmitters Operation	LED red diode
Operating Position	Vertical (Wall Mounted)
Casing Mounting	Designed to be externally wall mounted using the supplied fixing kit.
Casing Protection Degree	Weather proof IP56
Protective Class	II
Dimensions	196 x 149 x 90mm
Weight	600g
Ambient Operating Temperature	-20˚C to +35˚C
Recommended Location	IP56 Rated - Suitable for year round outdoor use
Standard / Approval	EN 60669, EN 60950, ETSI EN 300 220 -1/2
Included Accessories	MWM-4CHRT-WH-W Wall mounted 4 Chanel Wireless Switch Plate MWM-4CHRC 4 Channel Remote Control. (Both Require CR2032 batteries).

This product <u>MUST</u> be installed by a qualified electrician.

<u>Features:</u>

- Remote controlled 4-channel wireless switch receiver for switching on / off household electric appliances including: Lighting circuits, heaters, fans, air conditioners, pumps, garage doors, gates, barriers, optical and acoustic alarm signalling systems.
- Includes 4 channel wall mounted switch plate MWM-4CHRT-WHW
- Includes 4 Channel Remote Control MWM-4CHRC.

2 operating modes: On/Off & Timed

- **On/Off Mode:** Device changes relay state each time the respective channel button is pressed.
- **Timed Mode:** The circuit will connect for a pre-set time, of between **<u>1 second and 4½ minutes.</u>** This is ideal for switching / activating motors e.g. Opening automatic garage doors and gates.
- Each channel can be programmed and controlled independently.
- This product can be used to control your existing wiring system and can be integrated with Hamilton's Hamilton Lighting System to allow remote switching.
- IP56 Rated - Suitable for year-round outdoor use & designed to be mounted on an exterior wall.
- Compatible with a variety of Hamilton Air wireless accessories.
- Up to 113 controllers can be programmed to control this device.
- This Hamilton Air 4 Channel Power Switch can be used to connect and control LED lamp lighting circuits.
- Supplied with an integral aerial.

Please dispose of electronic equipment responsibly.

CE 1471

Hamilton Air MWM-4CHPSKIT Operating & Installation Instructions

General Description:

The MWM-4CHPSKIT 4 Channel IP Rated Wireless Switching System offers four discrete wirelessly switched circuits. This enables remote control switching of all kinds of lighting circuits and other electrical devices including: Automatic gates and garage door motors, pond pumps and exterior and interior lighting systems.

This product is quick and easy to install, and can be controlled from multiple remote controls and wireless light switches. Up to 113 remote controls or switch plates can be programmed to control the MWM-4CHPSKIT.

The unit can operate 4 channels independently; each can be programmed to function in one of two modes:

- **Timed Mode:**
  Timed mode connects a circuit for a defined period of up to **4 ½ minutes**. After the set time delay, the circuit will switch off automatically. The time delay of each circuit can be can be adjusted independently by turning the white screw on the PCB for each channel.

- **On / Off Mode:**
  The device changes relay state every time the matching circuit button is pressed.

Once setup, additional remote controls, and wireless switch plate controllers can easily be added to the system, offering added convenience should you wish to expand or reconfigure the system to control a new device or circuit.

The IP56 Waterproof casing makes this product suitable for outdoor use, and can be permanently mounted to external walls. This product connects directly to a Mains Voltage 230 VAC powered supply, and can operate continuously.
All Hamilton Air products are energy efficient using only 5VA.

WARNING

1. **DO NOT EXCEED MAXIMUM CIRCUIT LOAD.**
2. **MAXIMUM 1250W power output per circuit.**
3. **Total box load must not exceed 4000W**
4. **4 channels each rated at 5 Amps.**
5. **This device MUST be connected to a dedicated MCB (Main Circuit Breaker).**
6. **All 4 circuits are individually protected by a separate fuse rated at 5 amps.**

This device is designed for single-phase installation and must be installed in accordance with applicable UK and European standards. The device should be connected according to the connection diagram (see page 6) in this operating manual. Installation, connection, and setup should be carried out by a qualified electrician.

DO NOT disassemble device as it may cause an electric shock and will invalidate the guarantee. Before installation, ensure the mains power is isolated and connection cables are not live. Do not install the device if any part is missing or damaged. For technical support contact via:

Post: R Hamilton & Co Ltd • Unit 10 Carrick Business Centre • Bonvile Road • Brislington • Bristol • BS4 5NZ

Web: www.hamilton-litestat.com, Email: technical@hamilton-litestat.com

In the box:

This product is supplied with:

- 1x MWM-4CHPS, Four Channel Radio Receiver / Power Switch.
- 1X MWM-4CHRT-WH-W, Wireless 4 Channel Switch Plate, batteries included.
- 1x MWM-4CHRC, Four Channel Remote Control.
- Wall mounting fixing kit, including 4 x 1 ½ inch round head screws and rawl plugs.
- Installation drilling template.
- 2 spare 5Amp fuses.

Installation:

This product must be installed by a qualified electrician.

Before Installation:

1. Check if the voltage of the power supply corresponds with the voltage rating **230V / 50 Hz.**
2. **TURN POWER OFF** - Make sure the power is disconnected at the distribution board. **Ensure the power is OFF** before starting installation.
3. Ensure there are no metal objects near the position you have chosen to mount the unit. Metal objects can interfere with the aerial and decrease transmitter range.
4. If you install multiple MWM-4CHPS Power Switch receivers, they must be located at least **½ metre (500mm) apart.**
5. Do not install product near any other radio transmitter, including CB radios.

Mounting the Unit:

1. Ideally, the receiver should be mounted outside, high on an **exterior wall** of the building for best wireless coverage.
    a. If installing the unit inside, ensure to mount as high as possible **near windows**.
2. Using the supplied drilling template **(MWM-4CHPS Installation Drilling Template) drill 4 holes** and insert the rawl plugs from the supplied fixing kit.
3. Unscrew the 4 screws to remove the top cover on the enclosure.
4. After removing the top cover, carefully remove/punch through the mounting holes and secure the unit on to the wall using the supplied screws from the fixing kit.
5. Reattach the top cover to the unit and secure with the plastic screws provided to seal the unit.

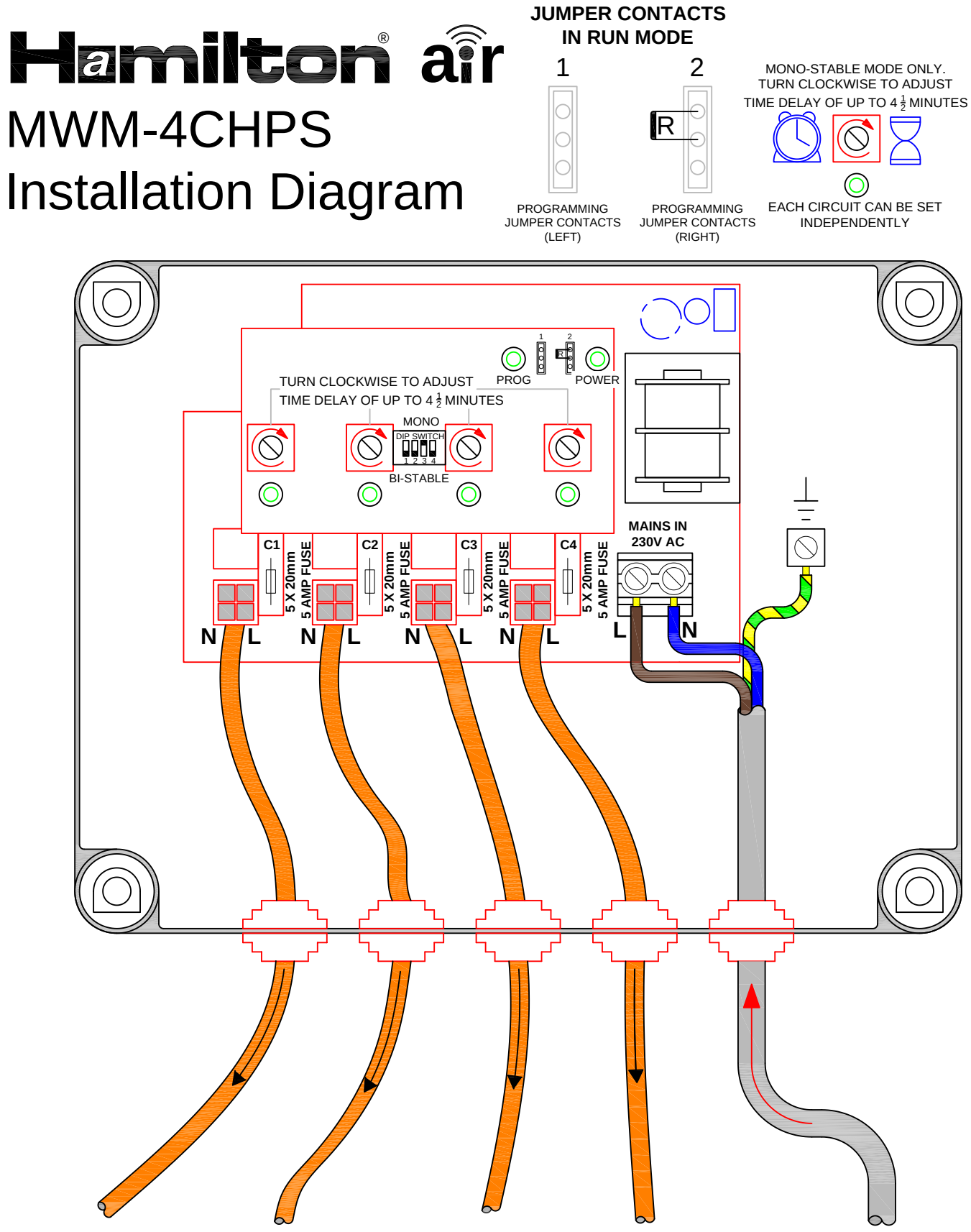
Connecting the Unit:

1. The device **MUST** be installed in accordance with BS 7671:2008 and part P of current building regulations.
2. **Ensure the power is OFF** before connecting any cables and continuing this installation.
3. Feed the cables through the glands into the receiver interior.
4. Connect the cables according to the connection diagram on page 6.

Hamilton controllers work exclusively with all Hamilton Air receivers.

The receiver can be controlled with multiple (up to 113) remote controls and wireless switch plates.

MWM-4CHPS Installation Diagram



Programming Overview:

The MWM-4CHPSKIT can be programmed to control 4 circuits, which can then be operated by any combination of up to 113 remote controls and wireless switch plates. Due in part to its IP56 outdoor rated enclosure it is ideal to control:

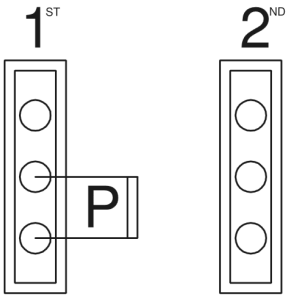
- Outdoor lighting circuits.
- Automatic gate / garage door motors.
- Pond pumps or watering systems.

Programming is simple and once set up, the system is secure and cannot be operated by third party controls.

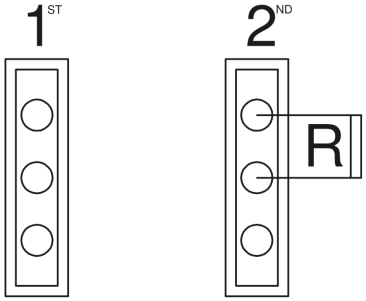
Programming Mode and Run Mode is selected by setting the Jumper Contacts in the following positions.

NOTE: Product is supplied with a spare jumper, only 1 is required to successfully program the unit.

Programming Mode



Run Mode



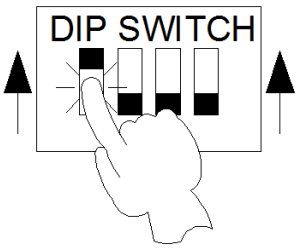
Setting the DIP Switch to Timed or On/Off mode:

- **On / Off Mode:**
  The device changes relay state every time the matching circuit button is pressed.

- **Timed Mode: (Time Delay Mode)**
  Timed mode connects a circuit for a defined period of up to **4 ½ minutes**. After the set time delay, the circuit will switch off automatically. The time delay of each circuit can be can be adjusted independently by turning the white screw on the PCB for each channel / circuit.

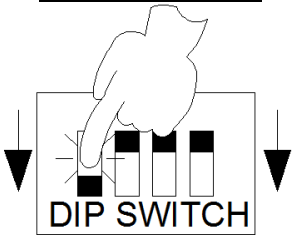
Using the Dip Switch located on the PCB between channel 2 and channel 3, you can switch each circuit between **On / Off Mode** (by putting the Dip Switch into the **DOWN Position**) and **Timed Mode** by putting the Dip Switch to the **UP Position.** Each circuit is **independent** and will need to be programmed separately.

Timed Mode



Pushing the Dip Switch to the **UP** position sets the circuit to **Timed Mode.**

On/Off Mode



Pushing the Dip Switch to the **DOWN** position sets the circuit to **On/Off.**

Programming A Circuit:

The supplied 4 channel switch plate is **pre-programed** to control all 4 circuits. If necessery, you can re-program the switch, or program additional switch plates by following the steps below.

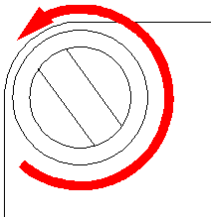
Step 1 –

Turn Power Off and disconnect the mains at distrubution board.

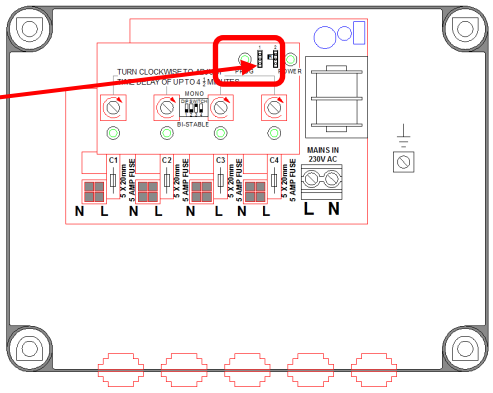
Ensure the power is off and diconnect the mains before continuing the programming procedure.

Step 2 – Remove Cover.

Remove cover by turning the screws in each corner to access the DIP Switch and Jumper Contacts on the PCB.



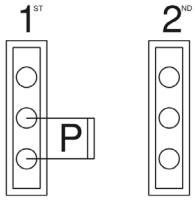
Jumper Contacts



Step 3 – Set Jumper Switch Contacts to Programming Mode & Secure the Cover.

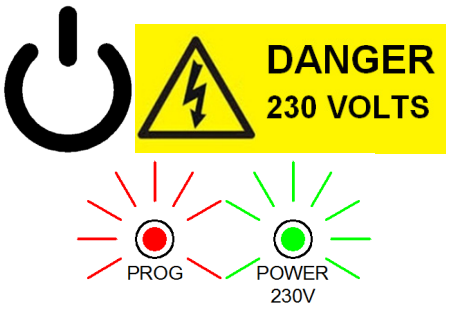
Move the jumper contact into Programming mode (P). As shown in the diagram.

Now secure the cover.



Step 4 – Turn Power On.

*The Programming (PROG) **red** LED should now illuminate.*



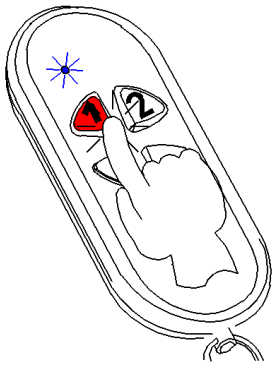
For transmitter:

MWM-4CHRC (4 Channel Remote Control) & **MWM-4CHRTWH-W** (Wall mounted 4 Channel Switch Plate).

Pressing button no.1 results in assigning button no.1 and no.2 respectively to control circuits C1 and C2.

Pressing button no.3 results in assigning button no.3 and no.4 respectively, to control circuits C3 and C4.

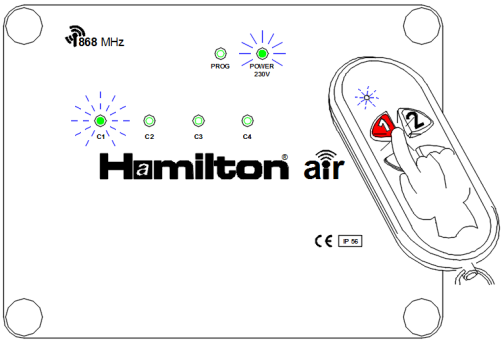
Pressing button no. 4 results in assigning buttons no. 1, 2, 3 & 4 respectively to circuit no. 1, 2, 3, 4.



Step 5 - Programming Remote Controls.

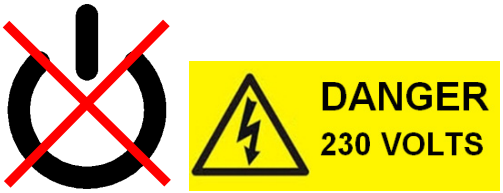
Press the button to program the respective circuits as above. The programming LED will extinguish. Press the transmitter button again and the LED will pulse several times and then come fully on. The transmitter has now been added.

You can now repeat this step for the remaining transmitters.



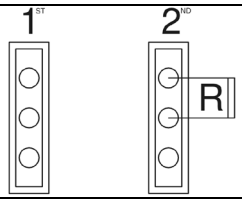
Step 6 – Turn Power Off.

After programming, turn power off & disconnect the power supply before removing the cover.



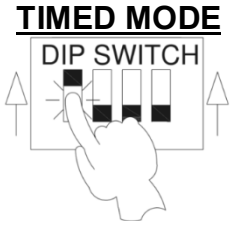
Step 7 – Set Jumper Contacts to Run Mode.

Move the Jumper into the 'Run' possition as shown in the diagram.



Step 8 – Set DIP Switch.

If any circuits are to be set to Timed Mode, set DIP switch to the UP position to select **Timed Mode**.

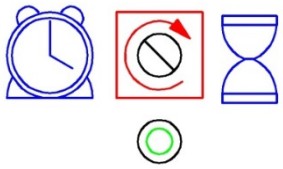


Step 9 – Set Time Delay

For circuits in **Timed Mode**, a time delay of up to 4 ½ minutes may be added to each circuit by rotating the white screw on the PCB clockwise, (above the circuit LED) to increase time delay.

Note:
Turning the scre fully clockwise will give a full 4 ½ minute delay. Turning the screw less than this will add a shorter delay.

TIMED MODE ONLY.
TURN CLOCKWISE TO ADJUST TIME DELAY OF UP TO 4 ½ MINUTES



EACH CIRCUIT CAN BE SET INDEPENDENTLY

Step 10 – Secure Cover & Test.

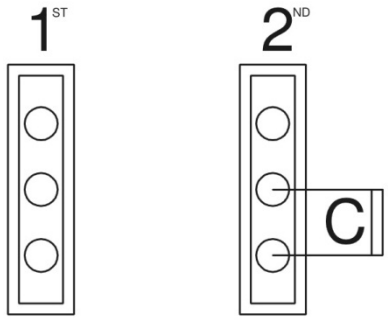
Secure the cover and turn on power to test. ALL 4 circuits are now programmed. Repeat steps 1 to 9 to add additional remote controls or switch plates.

Radio Transmitter Deletion:

This procedure should be performed in case of loss or theft of a remote control.

1. **Disconnect the power supply**. Ensure there is NO POWER to the unit.
2. Move the right hand jumper contact into **Cancelling Mode (C)**.
3. Replace lid.
4. **Connect the power supply**.
5. The PROGRAMMING LED will illuminate.
6. After approximately 3 seconds, the LED will go out.
7. **Disconnect the power supply**. **All transmitters have now been deleted from the memory.**
8. The unit will now need to be re-programmed.
9. Repeat programming steps 1 to 10 on pages 8 - 10.

Cancel Mode



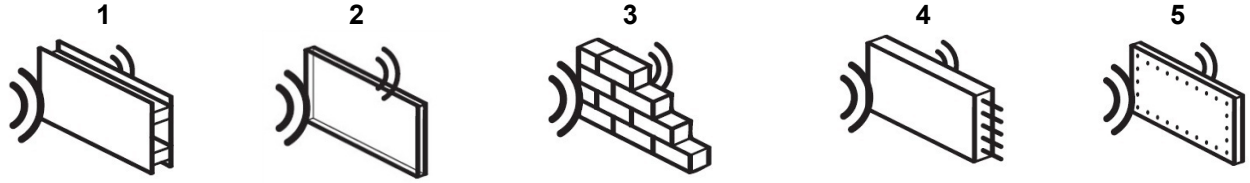
Programming (Left) **Programming (Right)**

This erases all remote controls and switch plate transmitters from the memory.

Co-Operation & Operating Range:

Compatible Transmitters /		MWM-CHPS
MWM - 2CHRT – WH - W	2 Channel Remote Transmitter Battery Powered Switch Plate.	250M
MWM - 4CHRT – WH - W	4 Channel Remote Transmitter Battery Powered Switch Plate.	250M
MWM - 2CH RC	2 Channel Remote Control.	250M
MWM - 4CH RC	4 Channel Remote Control.	250M
MWM - JB4CH RT - M	4 Channel Radio Transmitter (Mains powered)	250M
MWM-JB4CH RT	4 Channel Radio Transmitter (Battery powered)	250M

How radio signal strength can be reduced by internal walls



1	2	3	4	5
Wood & Plaster	Glass	Bricks	Reinforced Concrete	Metal
5% to 20 %	10% to 20%	10% to 40%	40% to 80%	90% to 100%

CAUTION: The given wireless range concerns use in open area, in ideal condition without any natural or artificial obstacles. If there are some obstacles between a transmitter and a receiver, it is advisable to decrease the range by the following: Wood & plaster - from 5% to 20%, glass - from 10% to 20%, bricks - from 10% to 40 %, reinforced concrete - from 40% to 80% and metal - from 90% to 100%. Over or underground medium and high electrical power lines, radio, and television transmitters, GSM transmitters set close to a device system could also decrease range.

Installing the 4 Channel Switch Radio Transmitter Plate (MWM-4CHRT-WH-W).

Mounting & Function

The device can be mounted to any internal wall in various ways:

- Tape mount the unit to the wall using the supplied double sided tape
- Screw mount the unit to the wall using the supplied screws and rawl plugs 5 x (3 x 30) mm.

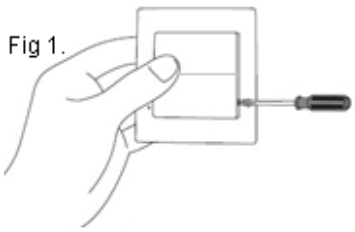
Mounting using Rawl plugs

1. To remove the switch press it on the side and but a screwdriver into the slot and lift the switch away. See (Fig. 1). Repeat to remove the second switch.
2. Find a place on the wall to mount the transmitter, make two fixing holes corresponding mounting holes on the transmitter's base.
3. Set rawl plugs in the holes.
4. Fix the base using the supplied screws into rawl plugs.
5. Clip the switches back in place.

Replacing the Battery

Battery discharge status is signalled by several LED red diode flashes during transmission time.

1. Remove the switch (Fig. 1).
2. Using a screwdriver, lever up the printed- circuit board releasing the bottom latch (Fig. 2), and remove it from the base.
3. Remove the battery from the latch (Fig. 3).
4. Mount a new battery, ensure battery is inserted correctly. The polarisation is marked on the latch. Incorrect battery mounting may cause damage.
5. Put the removed printed-circuit board back in the base.
6. Clip the switch back in place.



DISCLAIMER

This equipment is intended for domestic use only. It must be installed in accordance with the supplied fitting instructions.

No decorative, abrasive or domestic cleaning products should be exposed to the accessory (further information is available on request).

This product is designed to be installed outside and conforms to IP56 weatherproof specification (EN 60669 & EN 60950).

This equipment should be connected to a mains supply of the appropriate voltage (indicated on the product).

Care should be taken not to overload the equipment maximum amperage as indicated on first page of these instructions.

No liability can be accepted if the product is installed or used in any other way than for which it is designed.

GUARANTEE (Applies to UK and Eire)

This accessory is guaranteed against faulty workmanship or materials for a period of twelve months and will be repaired or replaced free of charge on condition that it is returned to Customer Services Dept, and that: (See notes a - e below).

a) The accessory has not been overloaded or connected to a supply other than 230/240 volts 50 Hz.

b) The installation procedure has been carried out correctly.

c) The accessory has not been taken apart or repaired by any unauthorised person.

d) The Bill of Sale (dated) accompanies the accessory for repair or replacement.

e) The product has not been exposed to decorative or cleaning materials.

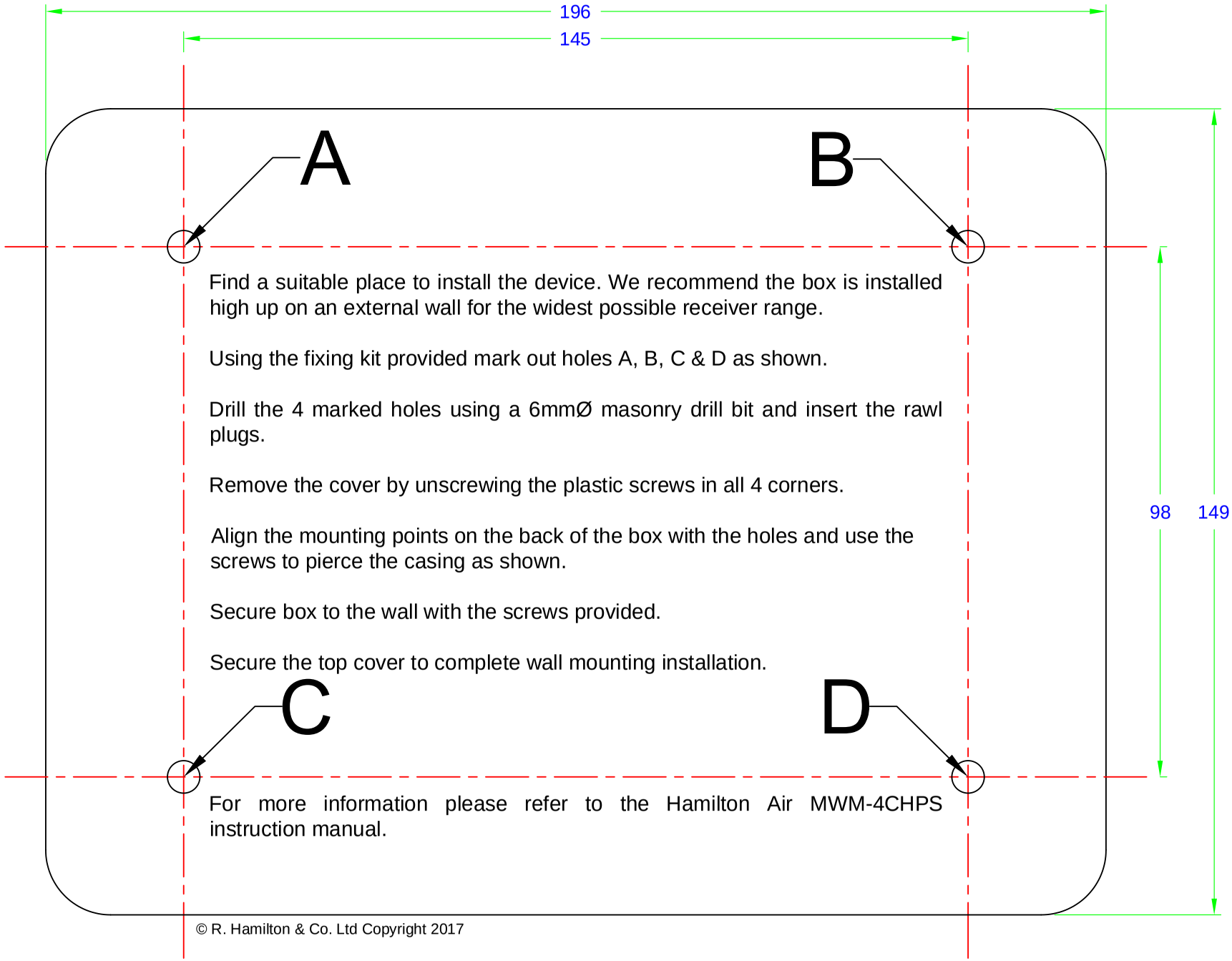
This guarantee does not affect the statutory rights of the consumer. In no circumstances can the company accept responsibility for any consequential loss or damage said to arise from the use of this product.

The electrical inserts used on these accessories are manufactured in accordance with the relevant British and European Standards where applicable.

CUSTOMER SERVICES DEPT.
Quarry Industrial Estate, Mere,
Wiltshire BA12 6LA
(Tel: 01747 860088)
www.hamilton-litestat.com
All accessories are manufactured under an accredited BS EN ISO 9001: 2015 Quality Management System.
E&OE

All products listed conform to current British or European standards and the product information is correct at the time of going to press.	It is the policy of the company to continually improve products as part of our development programme. Therefore, we reserve the right to alter designs and dimensions without prior notice.	All accessories are manufactured under an accredited BS EN ISO 9001: 2015 Quality Management System.
Illustrations and diagrams are reproduced within the limitations of reproductions and printing processes, and are not binding.	Due to manufacturing processes, we cannot guarantee an exact colour match and shadings of certain plate and product finishes.	Correct as at March 2018 E&OE File Reference: MWM-4CHPS KIT Rev C

MWM-4CHPS Installation Template



Find a suitable place to install the device. We recommend the box is installed high up on an external wall for the widest possible receiver range.

Using the fixing kit provided mark out holes A, B, C & D as shown.

Drill the 4 marked holes using a 6mmØ masonry drill bit and insert the rawl plugs.

Remove the cover by unscrewing the plastic screws in all 4 corners.

Align the mounting points on the back of the box with the holes and use the screws to pierce the casing as shown.

Secure box to the wall with the screws provided.

Secure the top cover to complete wall mounting installation.

For more information please refer to the Hamilton Air MWM-4CHPS instruction manual.