

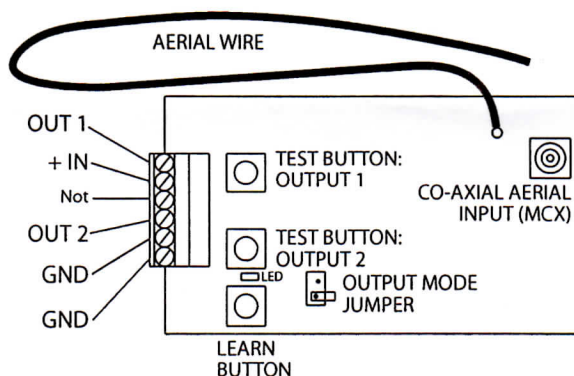
# Installation Instructions

## M530P general purpose receiver controller

The Merlin M530P Receiver Controller is intended for general purpose installation on a wide range of products.

It can learn up to 20 transmitters and has two output channels. It is for use with any Merlin 433 MHz transmitter.

Larger numbers of users can be added by the use of Merlin Fixed Code and Common Access transmitters.



### Specifications

Power supply	nominal 12 - 24 V ac/dc absolute maximum 9 to 28 V ac absolute maximum 9 to 40 V dc
Power consumption at standby:	30 mA max 1 output active: 35 mA 2 outputs active: 40 mA
Output rating	can switch max 0.3A, max +40 V dc can not switch ac or -ve voltages
Output mode	If the MODE jumper is not fitted: Output ON while txr button is held; If the MODE jumper is fitted: Output changes between ON and OFF with each txr button press
Aerial	better results are obtained if the aerial wire is horizontal and straight When fitting the optional external aerial using the MCX connector, snip the plain wire aerial off the board
Connector	6-way 4-mm pitch screw terminals
Dimensions	44 wide x 92 long x 15 high
Compatible with	All Merlin 433 MHz green button txrs, both code hopping and fixed code: M832, M834 (big sized) M832C M834C (big common access) M832F, M834F (big fixed code) M842, M844 (mini txrs) M128 (wireless wall control box)
Radio frequency	433.92 MHz, FSK

### Cautions

Never attempt to switch negative or ac voltages. Do not connect ac or negative voltages to either of the outputs.

Do not exceed the voltage or power ratings of the outputs. If necessary use a relay receiver (Merlin M532) or add a relay between the output of this board and the input to the device under control.

If switching a relay: add a flywheel diode across the input coil of the relay.

### Learning transmitters

The receiver can learn up to 20 different transmitters. If required then some or all of the transmitters can also operate the second output on the card.

To operate Output 1 from a desired button on a transmitter:

- Either press the Learn button for more than 1 second or follow the RTL procedure below (LED turns off)
- Press the desired transmitter button twice (LED flickers once each button press is recognised)

To operate Output 1 from one button and Output 2 from another button on the same transmitter.

- Either press the Learn button for more than 1 second or follow the RTL procedure below (the LED will turn off):
- Press the transmitter button that should operate Output 1 (LED will flicker once the receiver recognises the button)
- Press the transmitter button that should operate Output 2 (LED will flicker once the receiver recognises the button)

You can not operate the same receiver output from more than one button on a transmitter.

A transmitter can either be capable of operating both outputs or only Output 1 - not Output 2 alone.

### Remote Transmitter Learning (RTL)

If enable then you can use an existing learned transmitter to place the receiver into learn mode. It is not possible to delete transmitters from memory using this feature.

To enable or disable RTL, remove power from the board, then reapply the power whilst holding the learn button down for three seconds. The LED cadence will change from 'single flash with pause' (disable) to 'double-flash with pause' (enable).

To learn a transmitter remotely, press and hold both the north and south buttons of an existing learned transmitter together, release them after 2 - 3 s. Within 5 s press the button that normally controls the opener you want to learn a transmitter into. Now the receiver or opener is in learn mode. It is ready to learn the next transmitter it detects.

### Deleting remotes

- Press and hold the Learn button for more than 11 s
- The LED will flash fast as a warning
- After five seconds the LED will flash at twice the rate
- After 11 seconds all the transmitters stored in the card's memory will have been deleted
- Normal LED heartbeat resumes

### LED flashes

off = no power, or in learn mode

one brief flash per second = OK

two brief flashes per second = OK, in RTL mode

one long flash per second = receiving a Merlin transmitter

four flashes per second = preparing to delete all memory

eight flashes per second = about to delete all memory

fast flicker during learning = a txr button has been recognised (press a txr button again to complete learning)