emp designs

# 4 Channel Recordable Controller User Guide

**DATE**
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**PREPARED BY**
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# IMPORTANT SAFETY NOTICE

Read this user guide in full before you attempt to use the 4 Channel Recordable Controller.

On receipt of the 4 Channel Recordable Controller, check no damage has occurred whilst in transit. If you suspect any damage, do not use the controller until you have discussed the issue with EMP Designs Ltd.

If you do not fully understand anything contained in the user guide contact the manufacturer by email before use (info@empdesigns.co.uk).

Ensure that all electrical connections and interconnections between external LED's are properly made in accordance with the manufacturers' instructions and no short circuits between channels are made.

All external wiring remains the responsibility of the user.

Whilst EMP Designs Ltd. has made every effort to ensure the 4 Channel Recordable Controller is safe to use and meets the client's specification, the client, prior to each application, should always complete on-site testing.

All external connections should only be made while the power is turned off.

Do not attempt to disassemble the controller in any way. Please return the controller to EMP Designs Ltd. if any servicing is required.

Damage may occur if the controller outputs are continually overloaded or short circuited.

Damage may occur if the power in polarity is incorrect.

Ensure a fuse is fitted to the input supply of the controller.

Avoid places subject to extremely high temperatures or humidity.

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## Power Specification

| Specification | |
|---|---|
| Max input voltage | 12V |
| Voltage Input | 5-12V |
| Operates | 2A per Channel |


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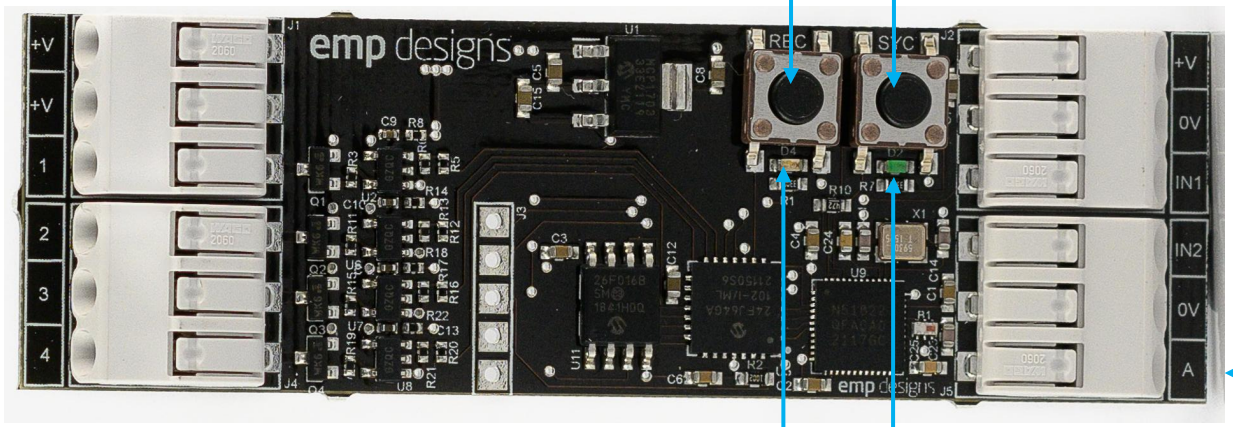
## User Controls





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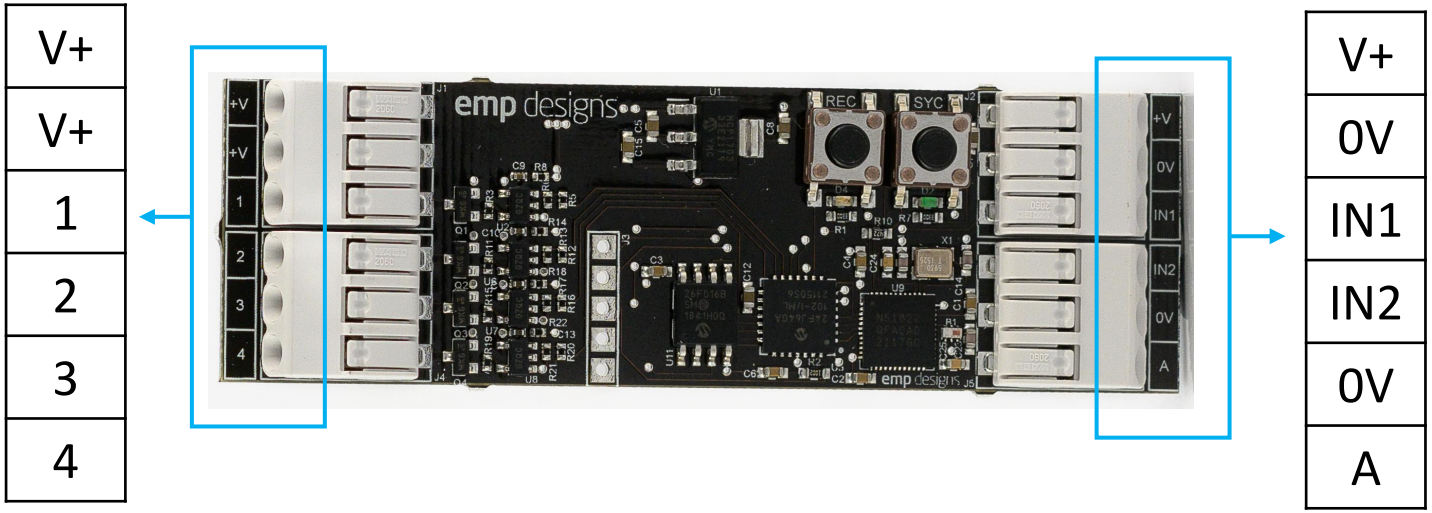
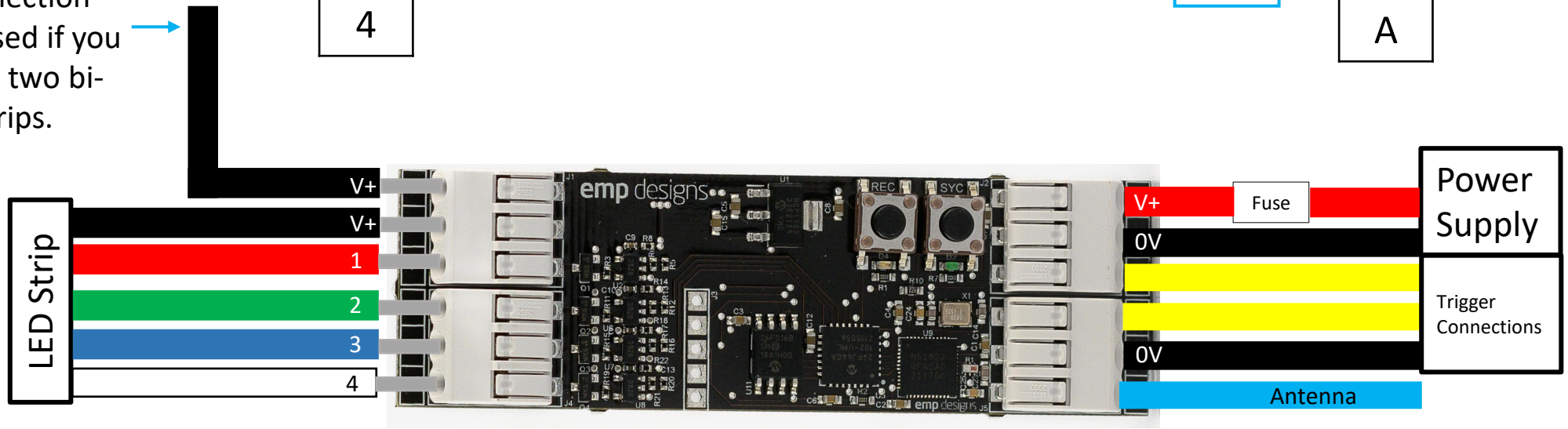
## Wiring Diagram




This connection can be used if you are using two bi-colour strips.




Please note that an antenna should be used. A 100mm piece of insulated 0.5mm$^2$ wire is sufficient for the task.

Please check that your power supply is set according to the voltage of the LED strip. For the 4 Channel Recordable Controller, this can be anywhere between 5 – 12V. Using the wrong voltage could damage the board beyond economical repair. Make sure that the voltage matches the strip requirement and **does not exceed 12Vdc**.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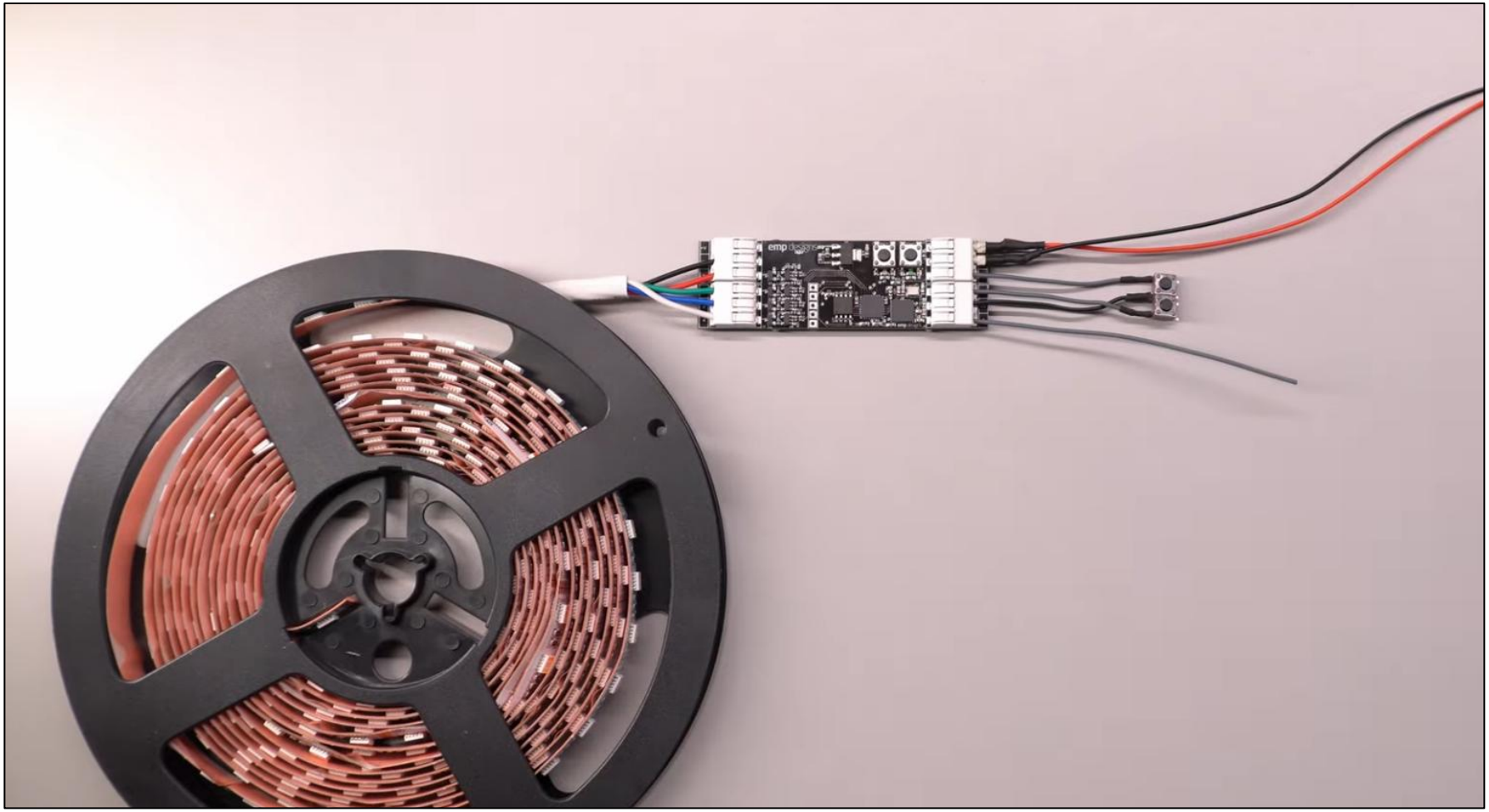
## Example of a Wired 4 Channel Recordable Controller

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## Using the 4 Channel Recordable Controller

**WARNING:** The 4 Channel Recordable Controller has been designed without a casing to maintain its compact size. As a result, its components are exposed and may be damaged, or the board may short circuit if it comes into contact with loose wires or metal objects. Handle with care and ensure the device is used in a clean, controlled environment to prevent potential issues

1. Connect the 4 Channel Recordable Controller in accordance with the wiring diagram on page 6.

2. Press the synchronise switch on a compatible transmitter. The green LED will flash whilst it is in the process of synchronising and will change to being 'ON' when it has synchronised.

3. Once synchronised, it is possible to control the LED strip through the transmitter.


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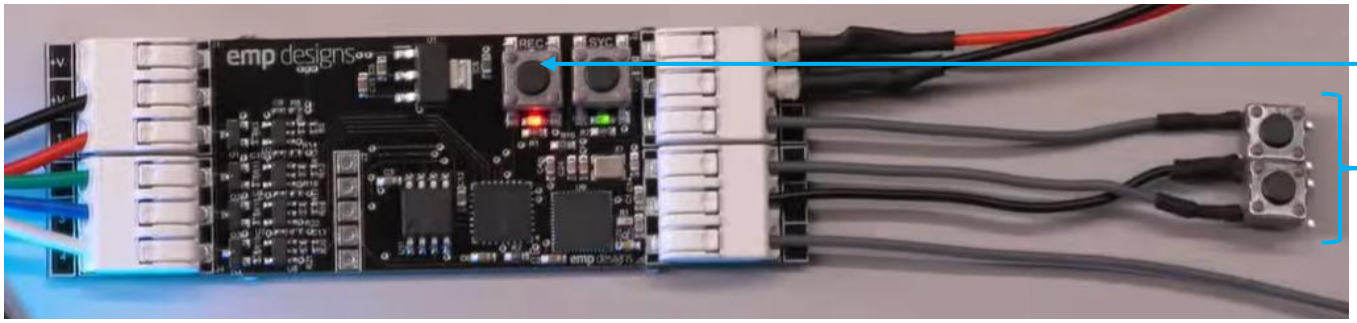
## Recording Patterns

4. Start by streaming the pattern you want to capture. While it’s playing, press and hold both the REC switch and your chosen trigger switch. The system will record the pattern for as long as you keep both switches pressed.  Therefore, to stop recording release both switches.

It is possible to record 2 separate sequences by using the 2 different trigger options.




Press the REC switch and your chosen trigger switch at the same time.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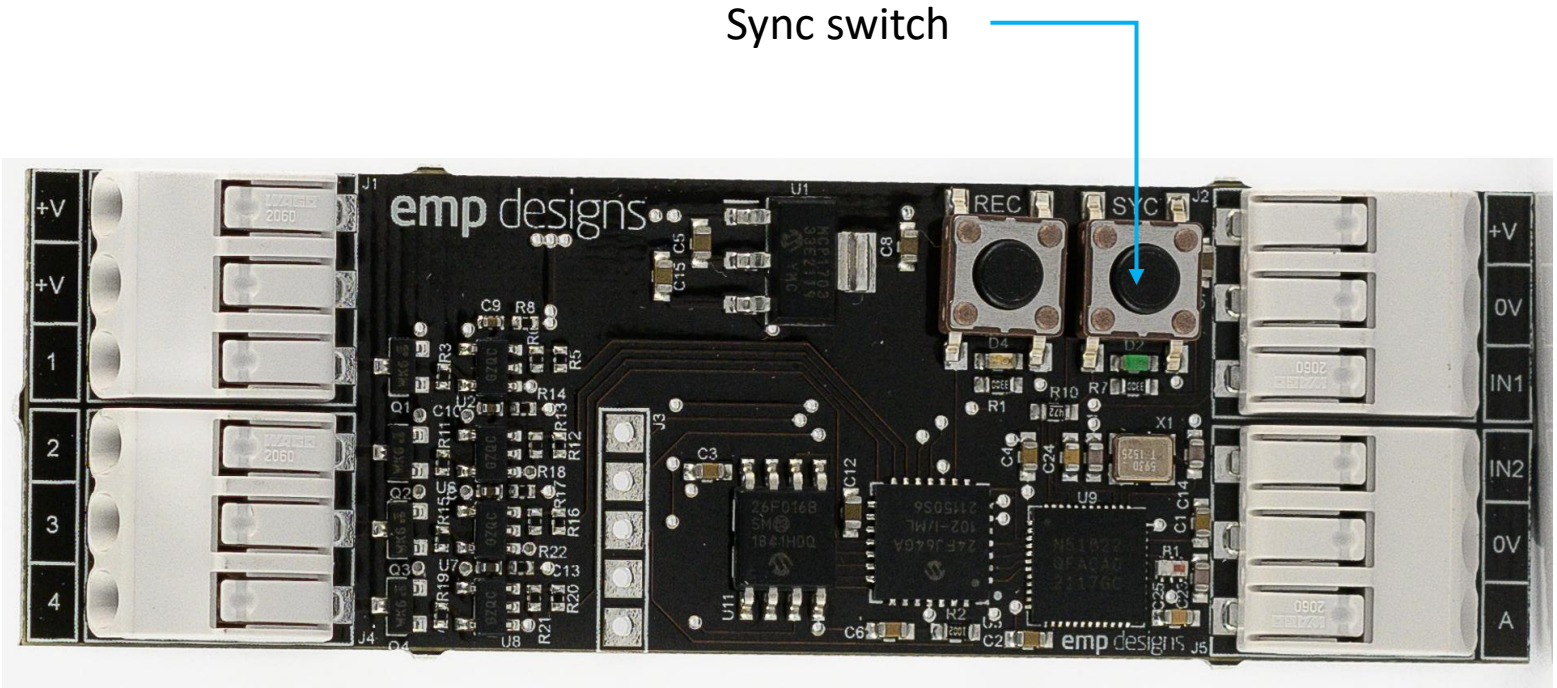
## De-synchronising the 4 Channel Recordable Controller from the Transmitter

5. To de-sync the 4 Channel Recordable Controller from a transmitter press and hold the synchronisation switch until the Radio Sync Indicator (green LED) goes out.





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## Using the Recordings on the 4 Channel Recordable Controller

6. Once you have desynchronised the controller from the transmitter, you can remove the antenna if required.

When you press the trigger switch, the pattern you recorded will play on a continuous loop.


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# YouTube Support

We have a YouTube channel where there is a video demonstrating how to use the 4 Channel Recordable Controller.  The QR below will take you directly to the 4 Channel Recordable Controller Instructional video.

Alternatively, visit our YouTube channel, https://www.youtube.com/watch?v=nLLXm_EL_s8


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# Get in Touch

If you require further support, don't hesitate to get touch.

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