Instruction Manual

RSR-DMX

15-Channel DMX Controller

2024
Version 2.2.0

For more information relating to the RSR-DMX see the Wireless Module Application Sheet, Wireless RAK Application Sheet, and Wireless Device LED Diagnostics.

For programming a Wireless system, including the device in this manual: Wireless Module Programming Guide

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1 What is the RSR-DMX?

The RSR-DMX is a 15-Channel wireless controller which can interface with DMX interfaces such as colour-changing lights or fibre optics.

2 Installation

⚠WARNING

Installation should only be carried out by a competent electrician.

- RSR-DMX modules should be mounted in areas that are adequately ventilated, dry, and outside of any metal-enclosed casings that may interfere with the wireless signal.
- Modules should be mounted vertically, with the terminals at the bottom.
- Ensure that cable clamps are securely fitted on the supply and load cables.
- While the modules are designed to be completely maintenance-free, they should be mounted in an accessible location should investigation or re-addressing of the units be necessary.

STEP 1:		Remove the cover by removing the two screws at the bottom of the unit, pulling the bottom of the cover away from the bottom, and lifting it. Set the two cable clamps aside.
STEP 2:		Connect the 12V PSU and the DMX Output. The RJ45 port or three-way terminal port may be used.
STEP 3:		Fit the supplied cable clamps and ensure the cable is unable to move.
STEP 4:		Replace the cover and replace the screws.

3 Initial Checks

The setup button can be used as a manual on/off switch to test the circuit.

The internal LED on the unit will flicker when the module receives ANY Rako wireless message, which is a useful diagnostic indicator. This function becomes inactive after 20 minutes to avoid a nuisance light spill but can be re-activated by pressing the setup button.

Should the module not respond to any of the above, further investigation must be made before proceeding any further.

4 Programming the RSR-DMX

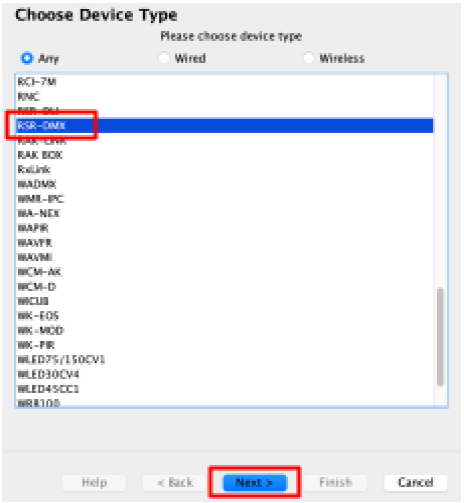
The following steps assume:

- A Project File has been created
- Rooms have been added
- Channels have been added
- A HUB or a RAMPI has been set up as a communications device

If any of the above are still required, see the Wireless Module Programming Guide.

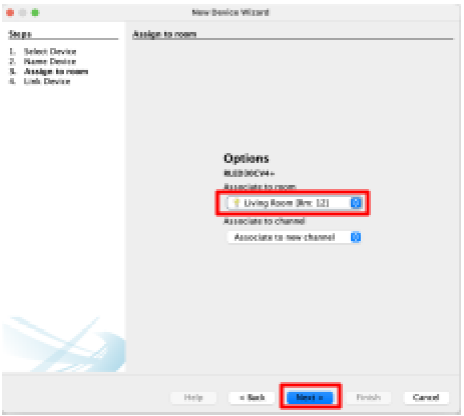
1. In Rasoft Pro, go to File > New Device

2. A device menu will pop up, select the RSR-DMX and select 'Next'



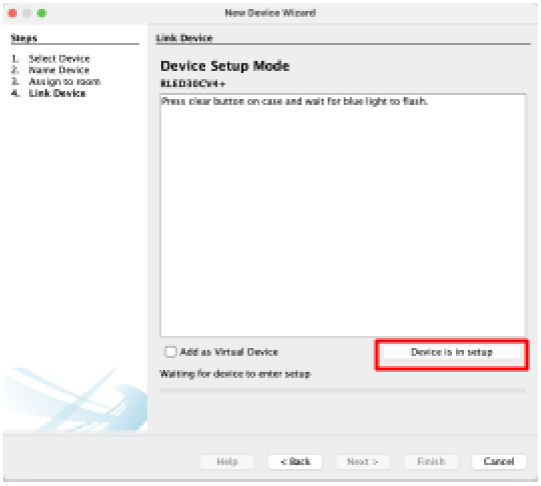
3. Assign the RSR-DMX to the desired Room and Channel, and select 'Next'

   NB
   For more than one Channel, select the first Channel, subsequent Channels will automatically be assigned.



4. To put the device into setup mode, press and hold the button on the top right of the RSR-DMX, and the LED will begin to flash. Release the button; the LED should continue to flash.

5. Select 'Device is in setup', this will send an 'Ident' command to the device in setup mode, once this is complete, the LED on the device should no longer be flashing.



6. Select 'Finish', the device is now paired and in the project file.

5 Setting DMX Driver Addresses

DMX drivers require an address in order to be controlled by the RSR-DMX, the number which is set on the DMX driver will relate to the starting address in the Room the RSR-DMX is programmed in, for example:

DMX Driver Address	Rako Channel Starting Number
001	1
002	2
003	2
004	3
005	4

NB
Although the addressing structure above is the most common, DMX drivers vary in their configuration, read the manufacturer's instruction manual for specific instructions.

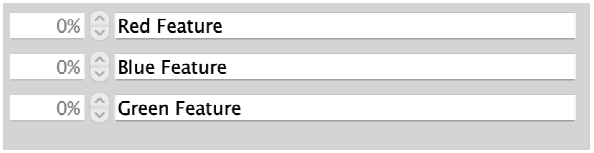
6 Colour Wheel

If the RSR-DMX is used for colour control, the outputs on the RSR-DMX can be controlled using a colour wheel in the Rako App, where selecting a colour will automatically mix the Channels without needing to do it individually.

The colour wheel is not enabled by default, for a colour wheel to show in the Rako App, the Channels need to be labelled as below:

Example:

A colour wheel in the App called “Feature” would have the following channel names:



Appendix 1 - Wiring Example