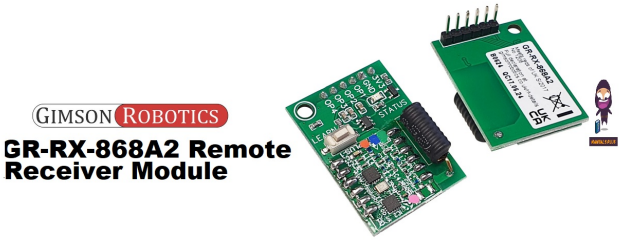

GIMSON ROBOTICS GR-RX-868A2 Remote Receiver Module Instruction Manual

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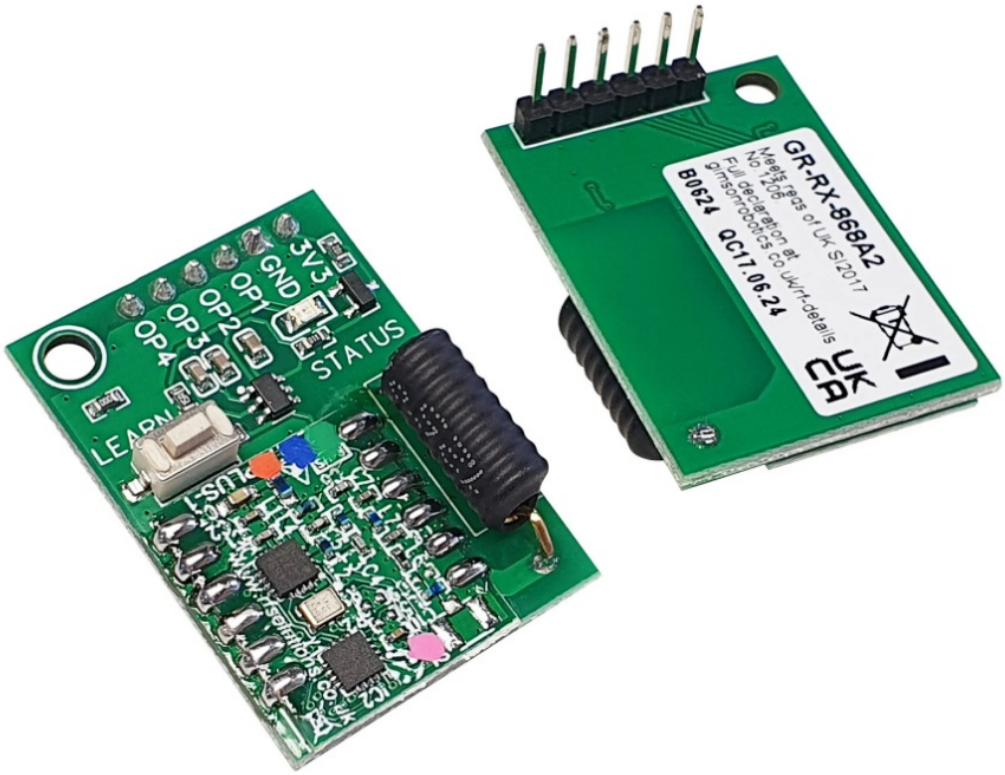
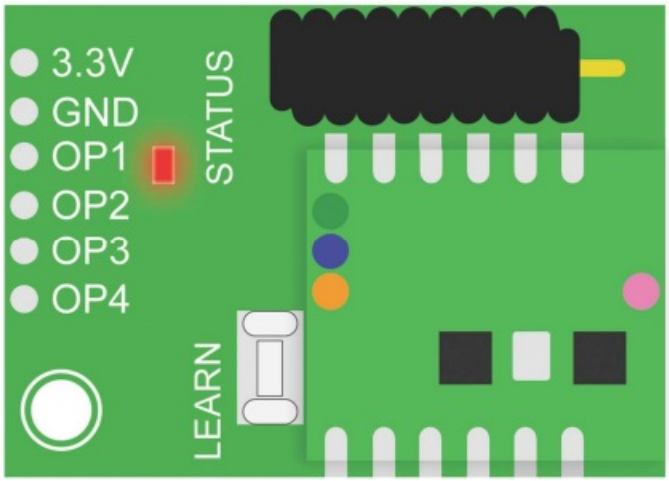


INTRODUCTION

GR-RX-868A2 Remote Receiver Module

- This device provides an interface to the ZPT-8RS RF receiver from RF Solutions Ltd
- The receiver board may be plugged into compatible controllers from Gimson Robotics, to allow for remote operation from transmitters including the FOBBER-82 and the GR-TX-868A.
- The outputs from the control module are based upon a change in a paired remote's button state.
- For example, a transmission of 'button pressed' can lead to the commanded output (OP1 – OP4) going from LOW > HIGH, whereas a 'button released' transmission would cause a HIGH > LOW output transition.

Pairing Process (also referred to as 'Learning' or 'Proarammina)



- To pair a compatible remote, briefly press the small white program/learn button (see illustration to the right), the Red LED should illuminate while you press and then after you release (~1s later) it will flash once to indicate that the receiver is ready to pair to OP1. To program OP2, briefly press again, and afterward, the LED will flash twice, for OP3 press a third time and wait for 3 flashes, or for OP4 a fourth time and then it should flash 4 times.

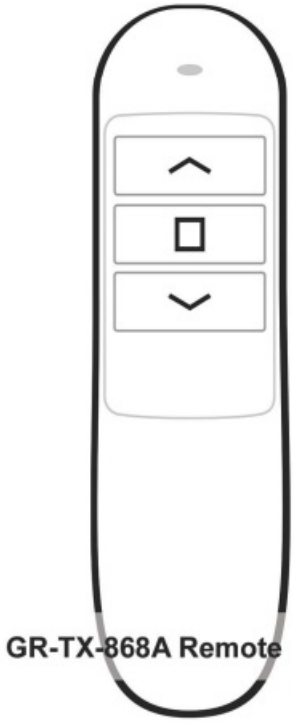
- When you are on the output you wish to program (according to the number of LED flashes) then simply press the desired button on the remote, which you wish to program, and the Red LED will flash twice to confirm pairing.
- Repeat this process for each output and button combination that you wish to pair.
- See the warning below regarding pressing the program button during a power cycle.

Receiver Memory

- A maximum of 30 pairings (output and remote-button combinations) may be stored, which may be across multiple remotes. For example, this could be 15 remotes each paired to 2 outputs, or 10 remotes each paired to 3 outputs.
- **To clear (erase) the memory of your receiver module:** Press and hold the program button for 10 seconds and then release, once released.
- The red LED will flash 3 times to confirm the memory has been erased (note that all stored remotes will be erased from the reciever).

Operating Range

- This receiver module has been tested, in tandem with the GR-TX-868A and the FOBBER-82, for an operating range of at least 80m in open field line-of-sight conditions.
- The effective operating range can be affected significantly by obstacles, surfaces, atmospheric conditions, and nearby sources of electromagnetic interference.
- Large metal objects and surfaces can especially affect the operation range, and so are best avoided. Be aware that operation is possible out of the line of sight, see warnings below.



Technical Information

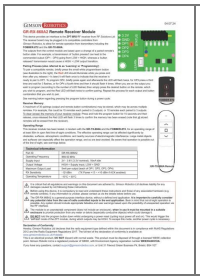
Part ID	GR-RX-868A2
Operating Frequency	869.50 MHz
Supply Input	2V – 3.6V (3.3V nominal). 16mAidle
Output Voltage	HIGH = Supply Input, LOW= GND
Maximum Output Load	5mA per output (each of OP1, OP2, OP3, OP4)
RX Sensitivity	-121dBm (TX Power +13 ~ +15 dBm if ACK enabled)
Operating Temperature	-10°C – 50°C

- It is critical that all regulations and warnings on this document are adhered to, Gimson Robotics Ltd declines liability for any damages caused by not following these instructions.
- Before using this device, it is compulsory to read and understand these instructions and those of any associated hardware (e.g. remote controls). If any information is unclear, please contact us via the details below before use.
- The GR-RX-868A2 is a general-purpose interface device, without a defined end application. It is important to carefully consider any potential risks from the use of radio-controlled inputs in the end application.
- Bear in mind that out-of-sight operation is possible. Any system should include appropriate failsafe and user warnings based upon the possibility of unexpected operation via the RF interface.
- The module is an unprotected component (does not include an enclosure), when in use it must be mounted in a suitable enclosure to provide protection from any water or debris (especially conductive objects) that could damage it.
- DO NOT hold the program button down whilst undergoing a power reset (cycling input power off and on). This would trigger the ‘self-test’ mode of the ZPT module, during which outputs may be HIGH.
- To escape this mode, another power cycle is necessary.

Declaration of Conformity

- Hereby, Gimson Robotics Ltd declares that the radio equipment type defined within this document complies with RoHS Regulations 2012 and the Radio Equipment Regulations 2017.
- The full text of the declaration of conformity is available at: **www.gimsonrobotics.co.uk/rf-details**
- This is an electrical product, DO NOT discard it with normal waste.
- This product must be disposed of through a licensed WEEE collection point. Gimson Robotic Ltd is a registered producer of WEEE, with Environment Agency registration number WEE/DU4031XA.
- If you have any questions, contact **support@gimsonrobotics.com**, or Unit 31 Filwood Green Business Pk, Bristol, BS4 1ET

Documents / Resources

	**GIMSON ROBOTICS GR-RX-868A2 Remote Receiver Module** [pdf] Instruction Manual GR-RX-868A2, ZPT-8RS, GR-RX-868A2 Remote Receiver Module, GR-RX-868A2, Remote Receiver Module, Receiver Module, Module

References

- **User Manual**