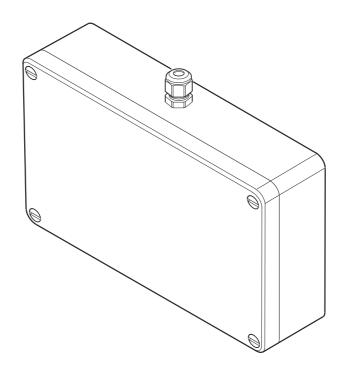


RELAY BOX



PRODUCT MANUAL

IMPORTANT

Installer: This manual is the property of the customer and must be retained with the product for maintenance and operational purposes.

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INTRODUCTION

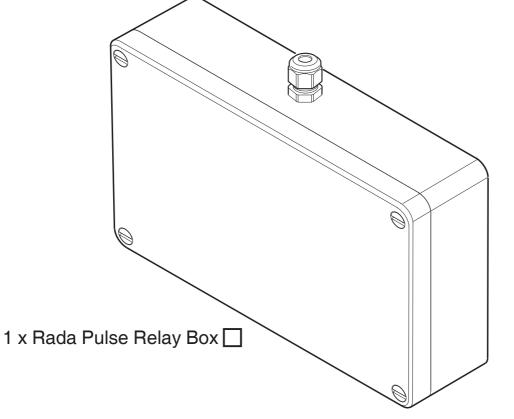
The Rada Pulse range of electronic products combine together to produce a controlled washroom environment offering a high degree of energy and water conservation.

DESCRIPTION

The Rada Pulse relay box is designed to be connected to the auxiliary outputs of the Rada Pulse control box. It provides three switched power relays which enable the pulse system to be used in conjunction with equipment such as pumps, lights and fans. All three relay outputs are fuse protected.

PACK CONTENTS

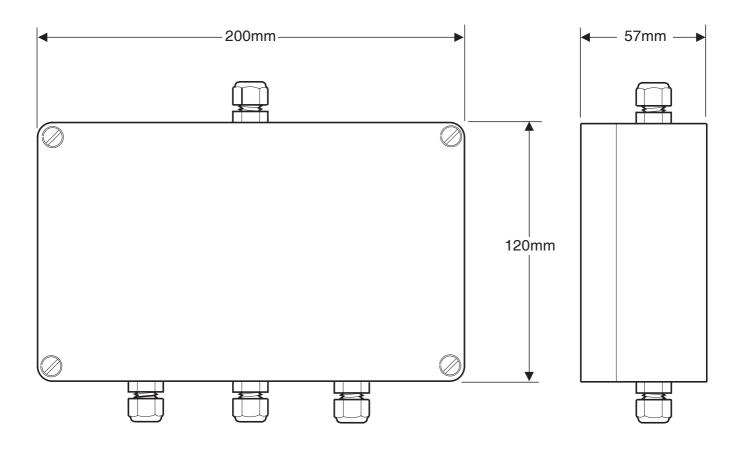
1. Rada Pulse Relay Box Pack Contents



2. Documentation

1 x Product Manual

DIMENSIONS



SPECIFICATION

Rada Pulse Relay BoxMaterial - Plastic sealed to IP24Output Fuses - 5 ATAuxiliary Inputs (from Rada Control Box) - 10 mA 12 V ACFan Relay Output - fused at 5 A max. 42 V AC, 10 A potential free contactLight Relay Output - fused at 5 A max. 42 V AC, 10 A potential free contactPump Relay Output - fused at 5 A max. 42 V AC, 10 A potential free contactAmbient Temperature Range - 0 to 40 °CMaximum Humidity - 80% at 25 °C

INSTALLATION

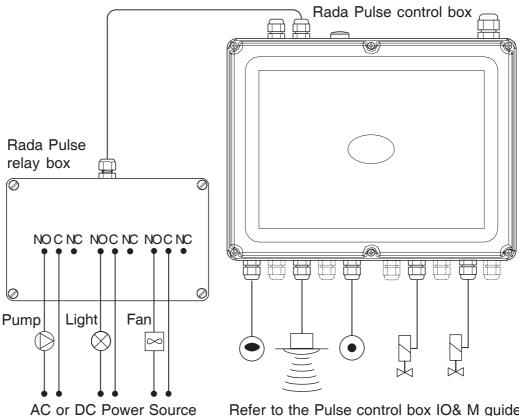
General

The installation and maintenance of this unit must be carried out in accordance with the instructions and information given in this Manual, and must be conducted by designated, qualified and competent personnel.

- 1. Before commencing, make sure that the installation conditions comply with the information given in the **SPECIFICATION** section.
- 2. Care must be taken during installation to prevent any risk of injury or damage.
- **3.** All electrical connections should be undertaken by a competent person and in accordance with the relevant current electrical wiring regulations.
- 4. Isolate mains voltage supplies before removing cover.
- 5. Installations must comply with all current Building and Electrical Regulations in force, and all relevant Guidelines.
- 6. The installation and usage environment of this product must not be subject to extremes of moisture or temperature, unauthorised tampering or wilful abuse.

Installation

The Rada Pulse Relay Box is designed to be connected to and be controlled by the Rada Pulse Control Box.



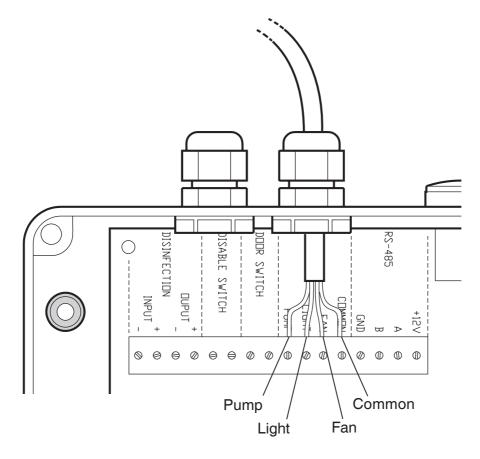
Refer to the Pulse control box IO& M guide for sensor and solenoid valve connections.

The enclosure is intended for wall-mounting to a suitable flat dry surface which can be easily accessed for maintenance. If the wall is uneven it is advisable to mount the relay box to a board before fitting to the wall. This will ensure the relay box will not become distorted on installation.

The appliance is IP24 protected, provided blanking caps are fitted to unused cable holes and the cover seal is fitted correctly.

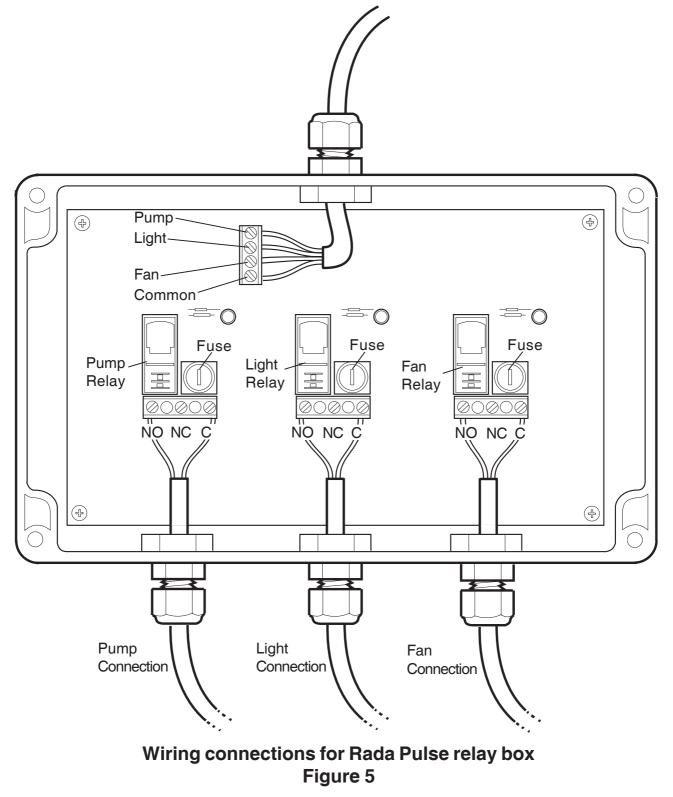
It is intended that all wiring connections to the relay box should be permanent. Mains electric system connections must be made via a double pole fused switch unit, with at least a 3 mm contact separation. All AC cabling used on the installation must be HAR approved (2.5 mm²).

- **1.** Remove the cover from the relay box.
- 2. Mark the positions of the fixing holes for the relay box.
- **3.** Drill and plug the fixing holes.
- 4. Hold the relay box in position and secure with fixing screws.
- 5. Make sure power is isolated to the Rada Pulse control box.
- 6. Connect the auxiliary outputs from the Rada Pulse control box to the Rada Pulse relay box. Refer to the figures 4 and 5 for connection details.



Wiring connections for Rada Pulse control box auxiliary outputs Figure 4

- 7. Make sure the power is isolated to all the auxiliary equipment power supplies.
- 8. Connect the auxiliary equipment and power supplies to the relay box. Refer to Figure 5 for relay connections.
- 9. Fit the cover to the relay box and restore power supply to the Rada Pulse control box and auxiliary equipment.
- **10.** The control box will now need programming with the hand held programmer (refer to the Product Manual for the hand held programmer).



FAULT DIAGNOSIS

Symptom	Cause/Rectification
1. Relays fail to operate	a. Check power to the Pulse control box (power light illuminated on PCB).
	b. Check power to the Pulse relay box.
	c. If there is power to the control box and the control box power light is not illuminated, check fuse in transformer.
2. Individual relay	a. Check relay fuse on PCB. Replace as necessary.
 2. Individual relay fails to operate. a. Check relay fuse on PCB. Replace as necessary. b. Plug the hand held controller into the Rada Pulse control box and check that the auxiliary output for the non operating relay is set up correctly. 	

MAINTENANCE

General

Rada products are precision-engineered and should give continued superior and safe performance, provided:

- **1.** They are installed, commissioned, operated and maintained in accordance with our recommendations.
- 2. Periodic attention is given as necessary to maintain the product in good functional order.

Rada Service Engineers/Agents will call by prior arrangement, if required. Service Contracts may be undertaken, subject to survey - details are available upon request.

Cleaning Procedures

External surfaces may be wiped clean with a soft cloth, and if necessary, a mild washing-up type detergent or soap solution can be used.

WARNING! Many household and industrial cleaning products contain mild abrasives and chemical concentrates, and should **not** be used on this product.

Maintenance Procedures

All Maintenance must be carried out in accordance with these instructions, and must be conducted by designated, qualified and competent personnel.

Always isolate the power supply before carrying out any work on the Rada Pulse system.

Preventative/Precautionary Maintenance

(Planned Maintenance Programmes)

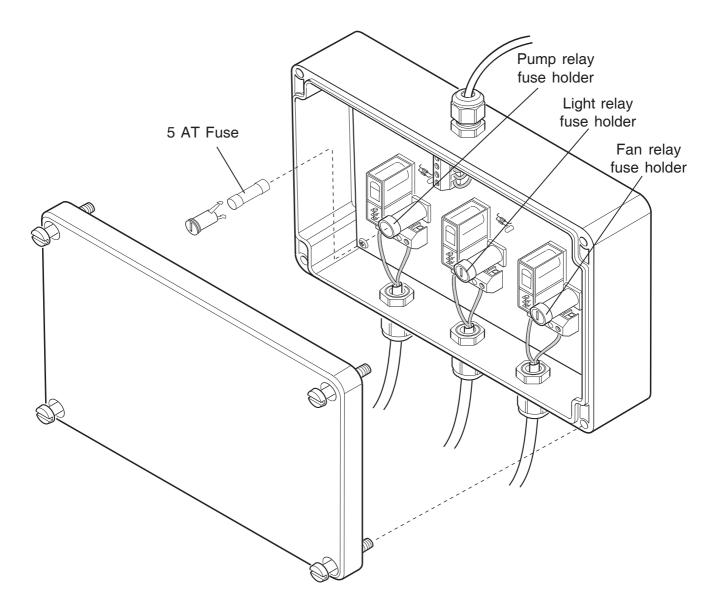
The frequency and extent of attention required will vary according to prevailing site and operational conditions.

External Visual Checks: The product and cabling should be checked for signs of wear or damage, etc. If items are damaged they should be replaced.

Each relay is fused for circuit protection. Always check the circuit for fault conditions before replacing a fuse.

Replacing Fuses

- **1.** Isolate the power to the relay box.
- 2. Remove the cover from the relay box.
- 3. Turn the fuse holder cap anticlockwise to release the fuse and fuse holder cap.
- 4. Replace the 5 AT fuse. **Never** use a fuse with a rating higher than 5 A.
- 5. Replace the box cover and restore power to the relay box.



NOTES

CUSTOMER SERVICE

Guarantee

Your product has the benefit of our manufacturer's guarantee which starts from date of purchase.

Within the guarantee period we will resolve defects in materials or workmanship, free of charge, by repairing or replacing parts or product as we may choose.

This guarantee is in addition to your statutory rights and is subject to the following conditions:

- The product must be installed and maintained in accordance with the instructions given in this user guide.
- Servicing must only be undertaken by us or our appointed representative. **Note!** if a service visit is required the product must be fully installed and connected to services.
- Repair under this guarantee does not extend the original expiry date. The guarantee on any replacement parts or product ends at the original expiry date.
- For shower fittings or consumable items we reserve the right to supply replacement parts only.

This guarantee does not cover:

- Call out charges for non product faults (such as damage or performance issues arising from incorrect installation, improper use, inappropriate cleaning, lack of maintenance, build up of limescale, frost damage, chemical attack, corrosion, system debris or blocked filters) or where no fault has been found with the product.
- Water or electrical supply, waste and isolation issues.
- Compensation for loss of use of the product or consequential or indirect loss of any kind.
- Damage or defects caused if the product is repaired or modified by persons not authorised by us or our appointed representative.
- Routine maintenance or replacement parts to comply with the requirements of the TMV2 or TMV3 healthcare schemes.
- Accidental or wilful damage.
- Products purchased ex-showroom display.

What to do if something goes wrong

If your product does not work correctly, refer to this manual for fault diagnosis and check that it is installed and commissioned in accordance with our instructions.

If this does not resolve the issue, contact us for help and advice.

Technical Helpdesk Service

Contact our Customer Services Team for product advice, to purchase spare parts or accessories, or to set up a service visit.

You can contact us via phone or e-mail - contact details below.

Please provide your model name, power rating (if applicable) and date of purchase.

Rada is a registered trade mark of Kohler Mira Limited.

The company reserves the right to alter product specifications without notice.

Rada Website (www.radacontrols.com)

From our website you can view our full product catalogue or download a brochure.

Spares and Accessories

We hold the largest stocks of genuine Rada spares and accessories.

Service / Repairs

No one knows our products better than our nationwide team of Service Technicians. We can carry out service or repair work to your product both during and after the guarantee period.

You have the assurance of a fully trained Technician, genuine Rada spare parts and a 12 month guarantee on any chargeable work done.

Service Contracts

Regular servicing ensures your product continues to operate at the peak of performance. We offer annual or bi-annual servicing carried out by our fully trained technicians subject to a site survey.

To Contact Us - UK Customer Service & Specification Enquiries

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