

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

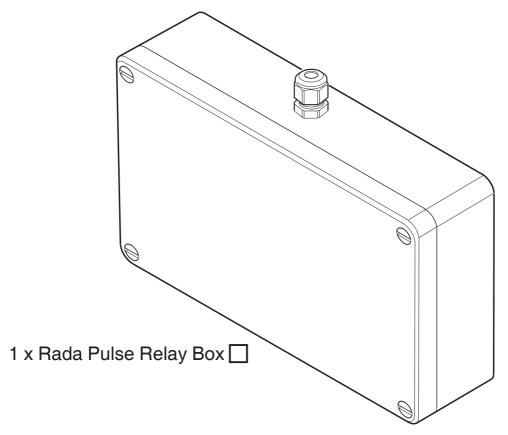
The Rada Pulse range of electronic products combine together to produce a controlled washroom environment offering a high degree of energy and water conservation.

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

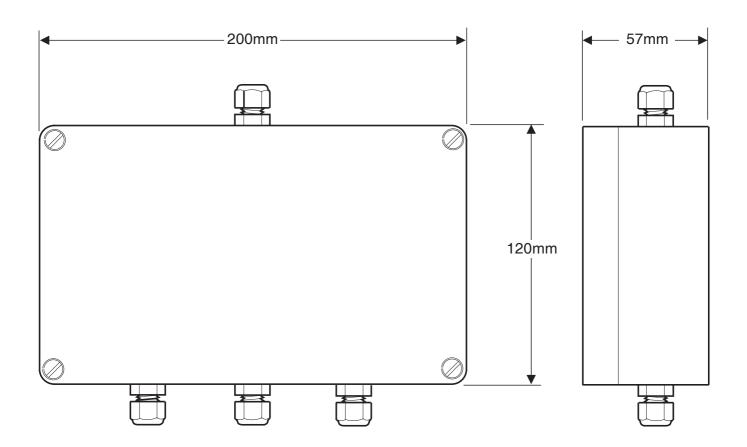
1. Rada Pulse Relay Box Pack Contents



2. Documentation

1 x Product Manual

DIMENSIONS



SPECIFICATION

Rada Pulse Relay Box

Material - Plastic sealed to IP24

Output Fuses - 5 AT

Auxiliary Inputs (from Rada Control Box) - 10 mA 12 V AC

Fan Relay Output - fused at 5 A max. 42 V AC, 10 A potential free contact

Light Relay Output - fused at 5 A max. 42 V AC, 10 A potential free contact

Pump Relay Output - fused at 5 A max. 42 V AC, 10 A potential free contact

Ambient Temperature Range - 0 to 40 °C

Maximum Humidity - 80% at 25 °C

INSTALLATION

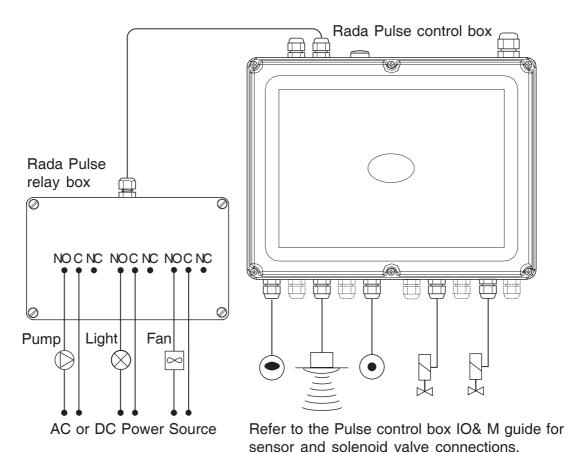
General

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 connect to and be controlled by the Rada Pulse Control Box.

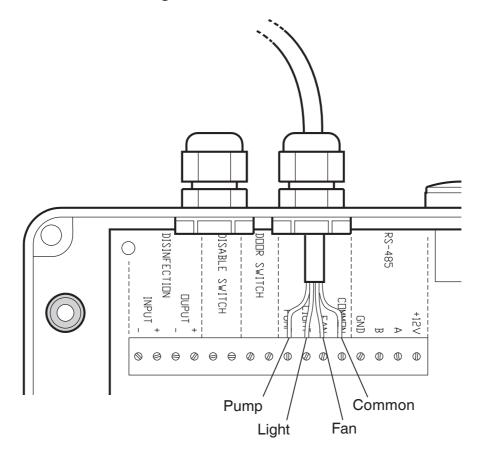


The enclosure is intended for wall-mounting to a suitable flat dry surface which can be easily accessed for maintenance. If the wall is uneven it is advisable to mount the relay box to a board before fitting to the wall. This will ensure the relay box will not become distorted on installation.

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

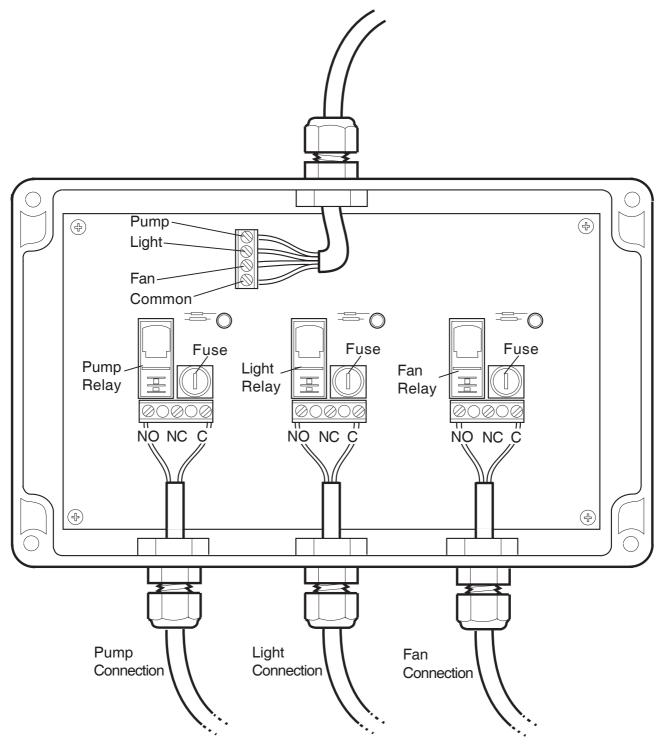
It is intended that all wiring connections to the relay box should be permanent. Mains electric system connections must be made via a double pole fused switch unit fused, with at least a 3 mm contact separation. All AC cabling used on the installation must be HAR approved (2.5 mm²).

- **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 supply 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).



Wiring connections for Rada Pulse relay box Figure 5

FAULT DIAGNOSIS

Symptom	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 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)

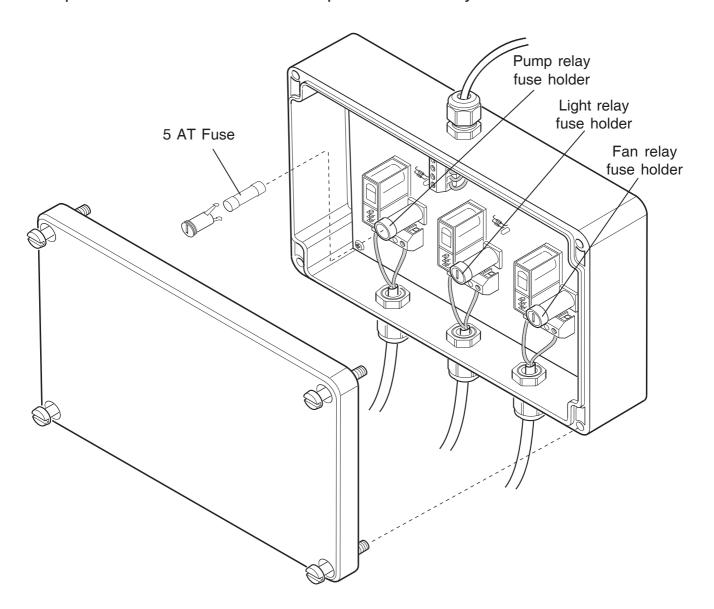
The frequency and extent of attention required will vary according to prevailing site and operational conditions.

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 CARE

Guarantee

Kohler Mira Ltd. guarantee this product against any defects in materials or workmanship for a period of one year from the date of purchase.

To be covered by this guarantee, service work must only be undertaken by Kohler Mira Ltd. or approved agents.

Not covered by this guarantee

Defects or damage arising from incorrect installation, improper use or failure to maintain in accordance with the instructions in the product manual, including the build-up of limescale. Defects or damage if the product is taken apart, repaired or modified by a person not authorised by Kohler Mira Ltd. or approved agents.

After Sales Service - how we can help you

We have a network of fully trained staff ready to provide assistance, should you experience any difficulty operating your Rada equipment.

Spare Parts

All functional parts of Rada products are kept for up to ten years from the date of final manufacture.

If during that period, our stock of a particular part is exhausted we will, as an alternative, provide an equivalent new product or part at a price equating to the cost of repair to the old, bearing in mind the age of the product.

Customer Care Policy

If within a short time of installation the product does not function correctly, first check with the operation and maintenance advice provided in this Manual to see if the difficulty can be overcome.

Failing this, contact your installer to make sure that the product has been installed and commissioned in full accord with our detailed installation instructions.

If this does not resolve the difficulty, please ring your nearest Rada contact who will give every assistance and, if appropriate, arrange for the local Service Engineer or Agent to call on a mutually agreeable date.

Contact:

Rada Controls

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SPECIFICATION ENQUIRIES

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Rada is a registered trade mark of Kohler Mira Limited.

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

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