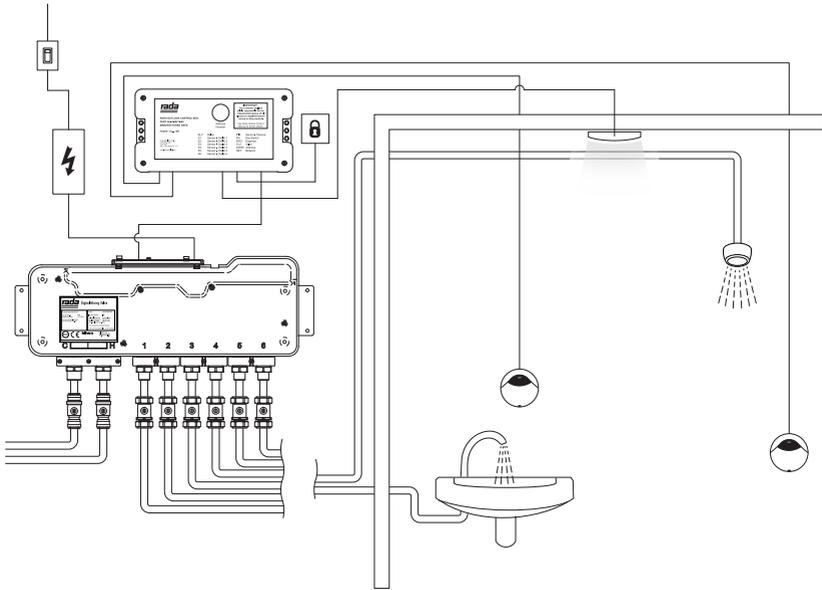




# Rada Outlook



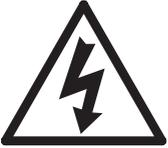
T-logic™ Digital Intelligence



## Quick Install Guide



Caution! Assemble/install only as shown.



Warning! Mains electrical connection.



Isolate from mains electricity.

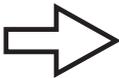


Check for water leaks.



Not suitable for high humidity or water condensation.

For full instructions, see Product Manuals on USB or at [www.radacontrols.com](http://www.radacontrols.com)



1621.117

## SAFETY : WARNINGS

The primary function of this product is to deliver water consistently at a desired temperature. This requires that:

1. It is installed, commissioned, operated and maintained in accordance with the recommendations given in the Product Manuals.
2. Periodic attention is given, as necessary, to maintain the product in good functional order. Recommended guidelines are given in the **PLANNED MAINTENANCE** section of the **Rada Outlook Product Manual**, on the USB supplied or available at [www.radacontrols.com](http://www.radacontrols.com)
3. If this equipment is used in a manner not specified by Kohler Mira Ltd, the protection provided by the equipment may become impaired.
4. This product must be provided with means for local disconnection that is incorporated into the fixed wiring in accordance with the relevant wiring regulations. This **MUST** be a double pole switch which has at least 3mm contact separation in each pole.
5. The electrical installation **must** comply with BS 7671 (commonly referred to as the IEE Wiring Regulations) and all relevant building regulations, or any particular regulation or practice specified by the local electricity supply company.

The use of the word 'failsafe' to describe the function of any mixer valve is both incorrect and misleading. This digital mixer valve incorporates additional shut-off devices to improve the level of safety however, in keeping with every other mechanism it cannot be considered as being functionally infallible.

Where chlorine disinfection is practised, **DO NOT** exceed a chlorine concentration of 50 mg/l (ppm) in water, per one hour dwell time. Such procedures **must** be conducted strictly in accordance with the information supplied with the disinfectant and with all relevant Guidelines/Approved Codes of Practice.

Kohler Mira Limited shall not accept liability in contract, tort (including negligence or otherwise) for any loss of profits, business or anticipated savings, or loss or corruption of data, or any indirect or consequential loss arising out of the customer's use of Rada Outlook. The customer shall be solely responsible for the independent backup of all data/information stored on Rada Outlook. Notwithstanding the foregoing, none of the exclusions and limitations stated above are intended to limit any rights the customer may have under local law or other statutory rights which may not be excluded.

# SPECIFICATION

## Standards and Approvals

The Rada Outlook Mixer Valve complies with all relevant directives for CE marking.

The Rada Outlook Mixer Valve is a type 1 electronic, independently surface mounted control.

<b>General</b>	
Pollution Degree	Mixer Valve - 3 Sensor Box - 2
Protection	Mixer Valve - IP24 Sensor Box - IP20
Connections	Flat face union connections
Installation Environment	Suitable for indoor use only
<b>Pressures</b>	
Maximum Static Pressure	800kPa (8 bar)
Minimum Pressure Loss*	100kPa (1 bar)
Supply Pressure Differential	Equal pressure recommended - Inlet pressures must be stable for optimum performance.
Minimum Flow Rate Per Outlet	6L/min (<500kPa maintained pressure) 8L/min (>500kPa maintained pressure)
<b>Temperatures</b>	
Factory Pre-set (Blend)	38°C
Factory Pre-set Duty Flush	38°C
Programmable Range	Max. 33 - 50°C Min. 30 - 47°C (Full cold can also be selected.) Default at start-up 30 - 50°C
Minimum Blend Temperature Differential from Hot Supply	2°C
Optimum Thermostatic Control Range	30 - 50°C
Cold Water Range	1 - 20°C
Hot Water Range	50 - 65°C (85°C for disinfection)
Temperature Stability	± 1°C at recommended supply conditions
Ambient Temperature	Greater than 1°C, max. 40°C
Maximum Relative Humidity	95% non-condensing
<b>Electrical</b>	
Power Supply	100 - 240V ~ 50Hz - 60Hz, 1.5A
Power to Mixer Valve	12V $\overline{\text{---}}$ 30W (from Power Supply)
Power to Sensor Box	12V $\overline{\text{---}}$ 10W (from Valve)
PIR Sensor	Input = 5V. Output = 5V Logic Level signal. Voltage Free Contacts.
Hand Sensors	5V DC supply provided by the Rada Outlook Sensor Box
<b>Hand Sensors</b>	
Power Input	5V DC supply provided by the Rada Outlook Sensor Box
<b>PIR Sensor (not included)</b>	
Power Input	5V DC less than 50mA or +12V DC less than 50mA
Power Output	Voltage Free Contact 12V DC 0.5A
Output Logic	Normal (unit powered and operational with no detected occupancy) - contact closed Power Failure - contact open Unit Failure - contact open Occupancy Detection - contact open
It should be possible to link more than one sensor together to increase the area covered. This will be done by connecting the relay contacts in series and linking the connected contacts to the Outlook sensor input.	

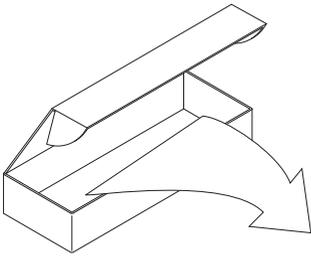
\* The pressure loss of a system (valve and outlet fitting) is the average of the two inlet pressures minus the back pressure, where the back pressure is determined by the flow resistance of any outlet fitting.

## Default Settings

The following table shows the factory default settings of the Sensor Box. These settings can be changed using the "**Rada Outlook Configuration Tool**".

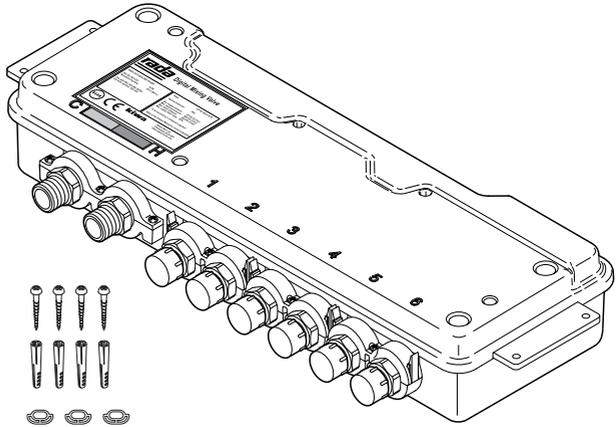
<b>Outlets 1 -6</b>	
Type	Shower
Mode	Timed
Run Time	30 seconds
Duty Flush	Disabled
Pump	Disabled
Fan	Disabled
Number of Outlets for Fan	1
Fan Run On Time	5 seconds
<b>Duty Flush</b>	
Flush Type	Standard
Flush Interval	3 days
Scheduled Flush Time	02:00 am
Flush Temperature	38 °C
Flush Warm-Up Time	1 minute
Flush Duration	2 minutes
<b>Mixer Valve Settings</b>	
Setpoint	38 °C
Maximum Setpoint	45 °C
Minimum Setpoint	30 °C
<b>Thermal Disinfection</b>	
Type	Standard
Maximum Warm-Up Time	1 minute
Target Disinfection Time	5 minutes
Disinfection Timeout	10 minutes
Target Temperature	60 °C

**Note! The internal clock does not update automatically for summer/winter time.**



# 1621.099

□ x 1



□ x 4



□ x 4



□ x 6

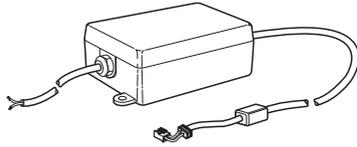


□ x 1

□ x 2



□ x 2



□ x 1

□ x 6



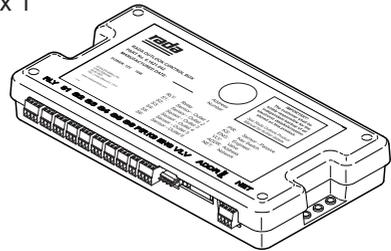
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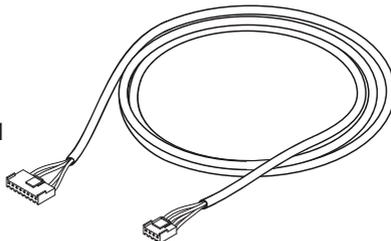
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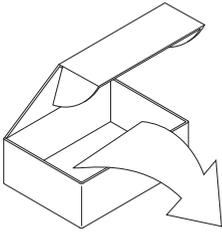


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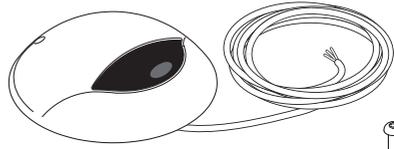
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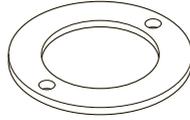


## 1621.112

■ x 1



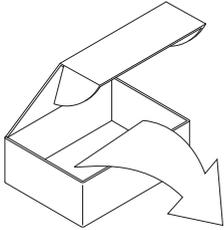
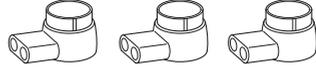
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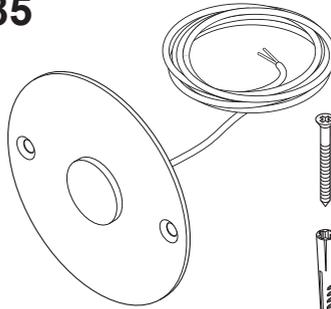


■ x 3



## 1621.085

■ x 1

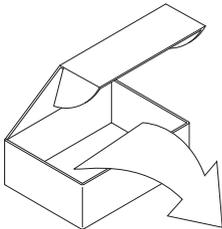


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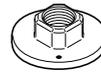
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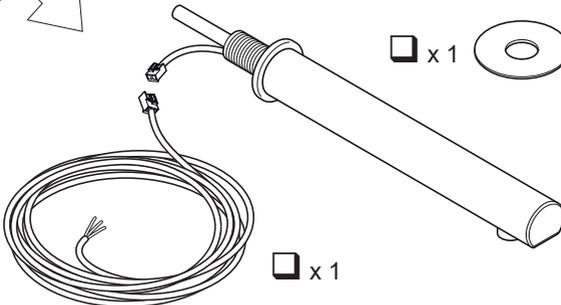
## 1621.136 / 1621.132 / 1621.137

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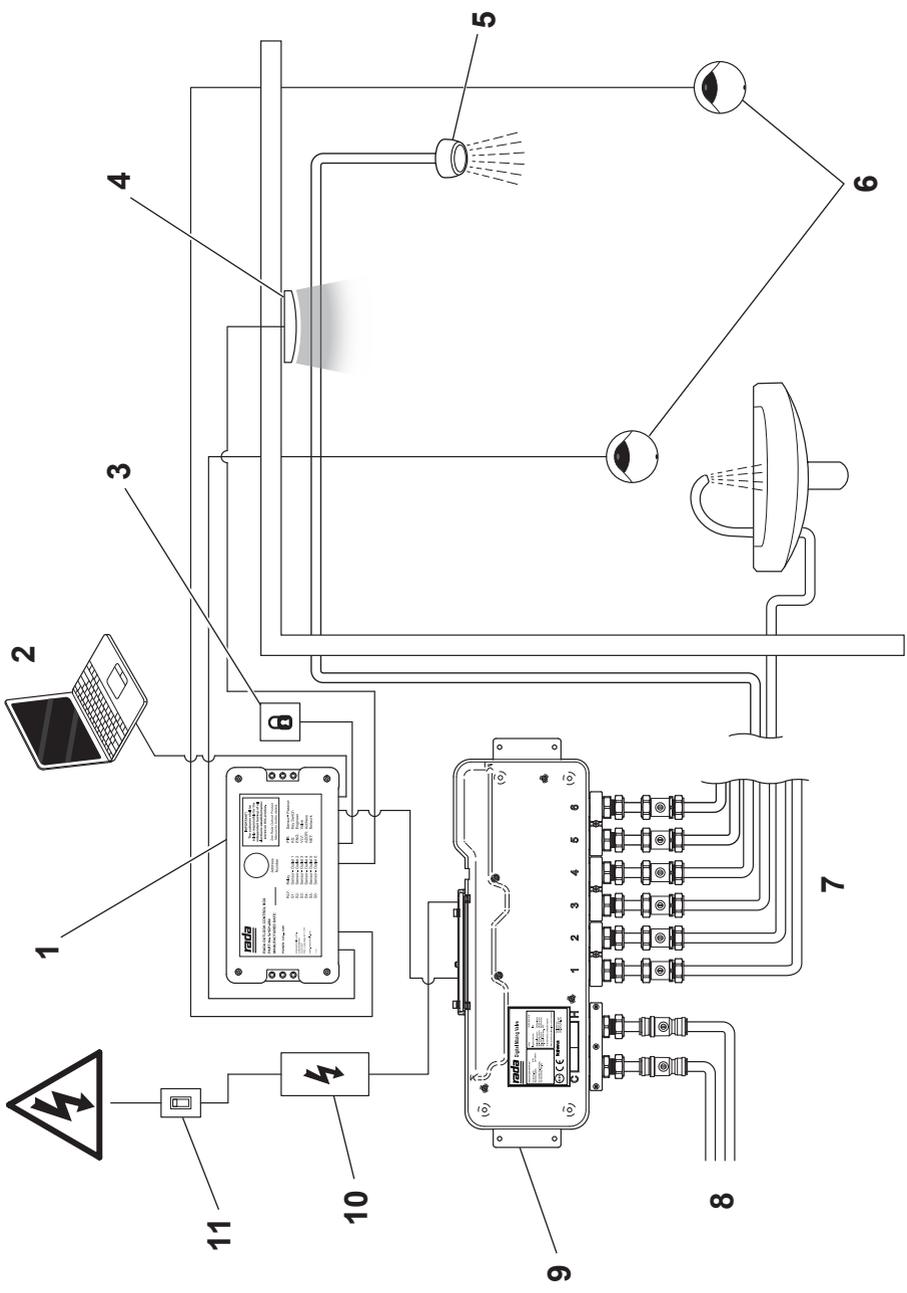
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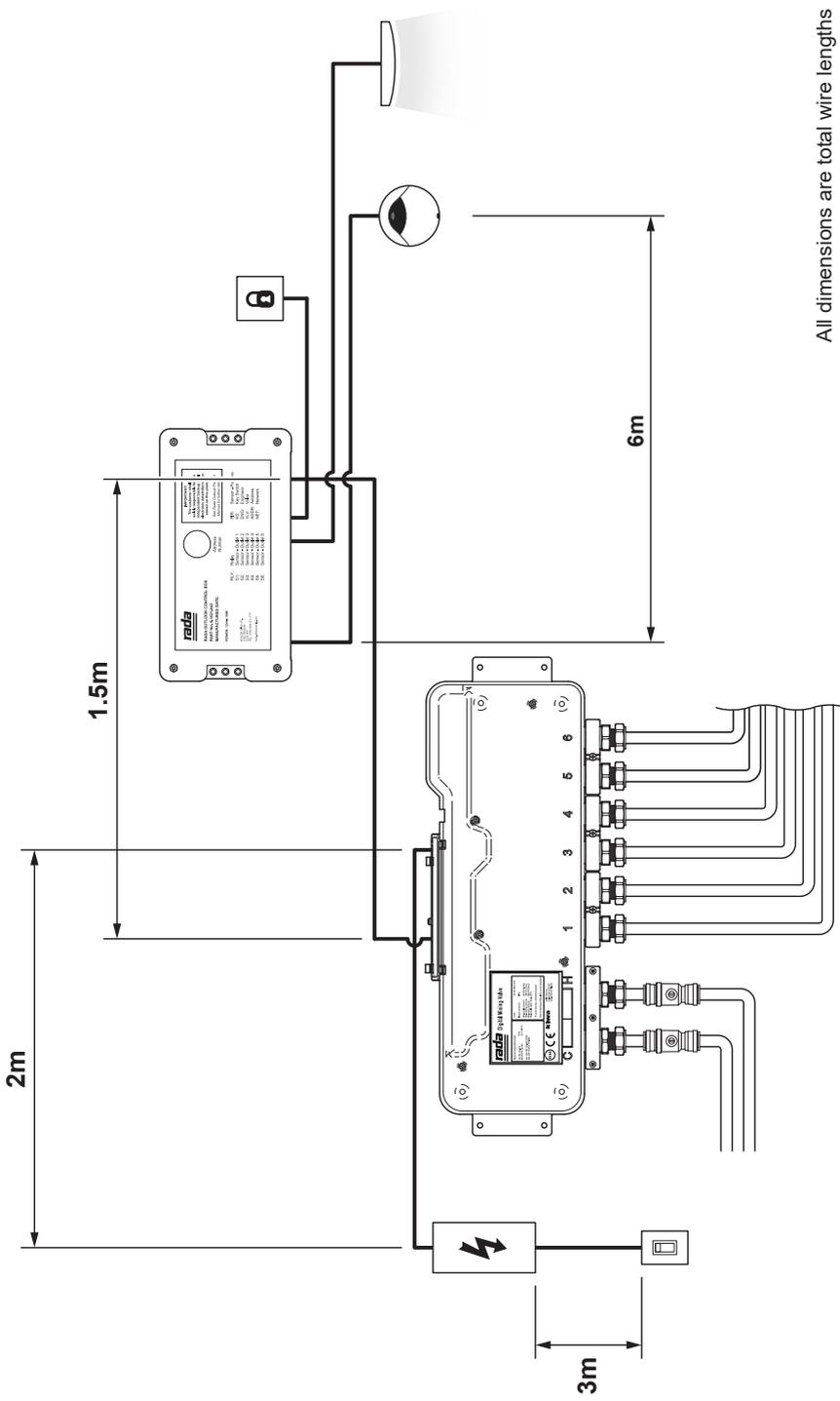


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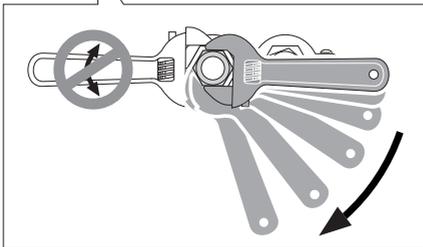
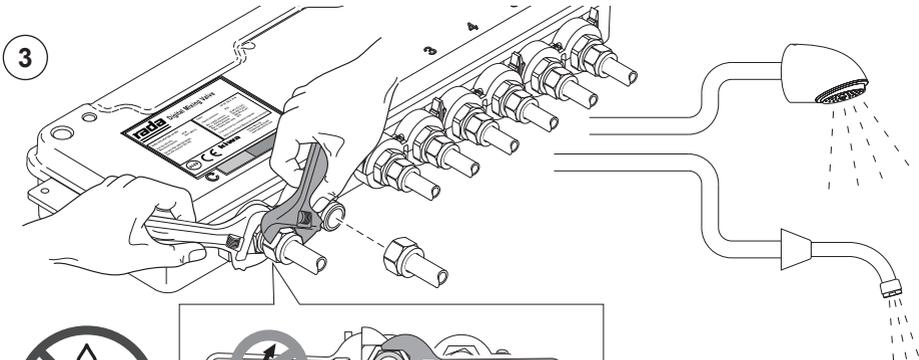
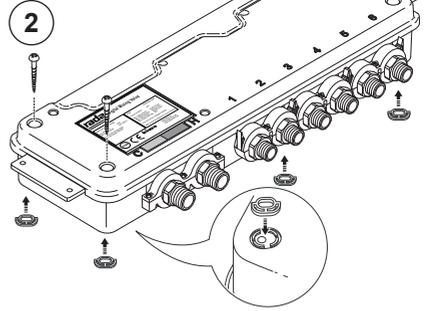
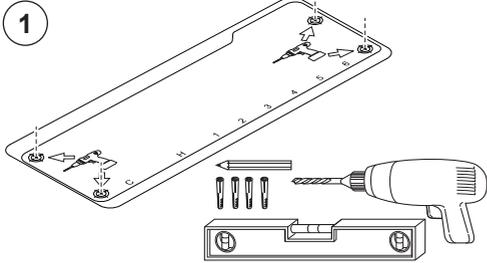
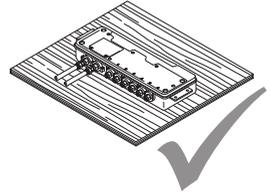
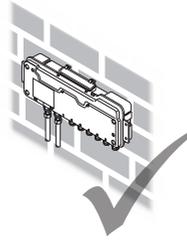
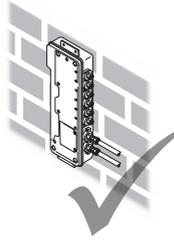
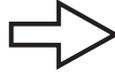


1. **Sensor Box.** Connects Sensors and Mixer Valve. Install in area of low ambient moisture/dry.
2. **Configuration Tool (software & USB cable only).** For use with Windows Laptop/PC to control and log the system.
3. **Key Switch (optional).** To disable the system during cleaning/maintenance.
4. **PIR Sensor (optional).** Required for using the disinfection feature.
5. **Shower or Basin Outlets (up to 6).**
6. **Hand Sensors (up to 6).** One sensor per outlet. Shower sensors to be installed offset from the water stream.  
*(Infrared sensors shown.)*
7. **Water Outlets (up to 6).** Unused outlets should be installed to an open outlet for disinfection feature to be effective.  
*(See “Unused Outlets” for an optional by-pass solution.)*
8. **Water Supplies.** (See “Specifications” table for temperature and pressure values)
9. **Mixer Valve.** Rada Digital Thermostatic Mixer Valve with up to 6 outlets.
10. **PSU (Power Supply Unit).** (See “Specifications” table for input/output values)
11. **Double Pole Switched Fused Spur.**

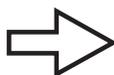


All dimensions are total wire lengths

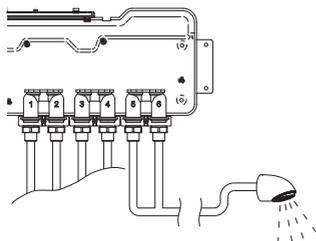
1621.099



#### 4 Unused Outlets (optional)

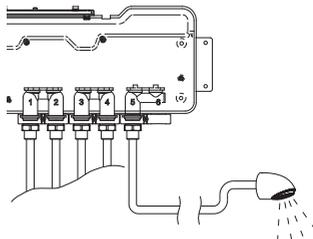
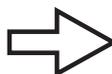
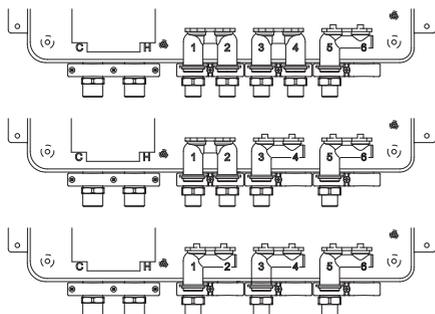
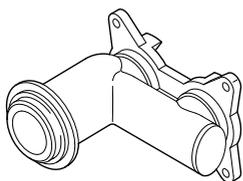


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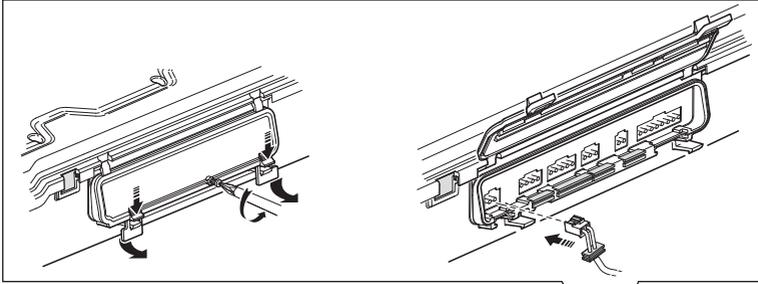


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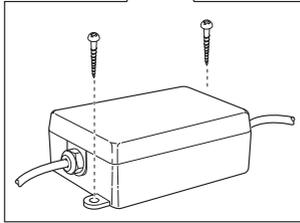
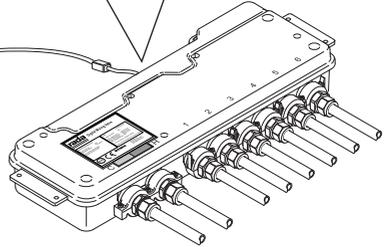
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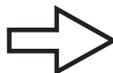
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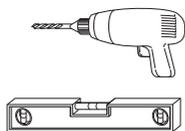
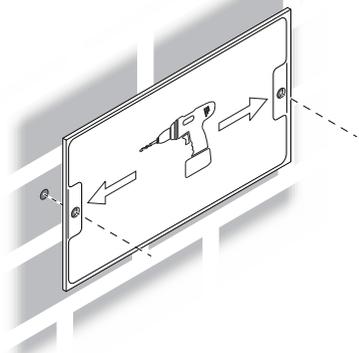
3 AMP



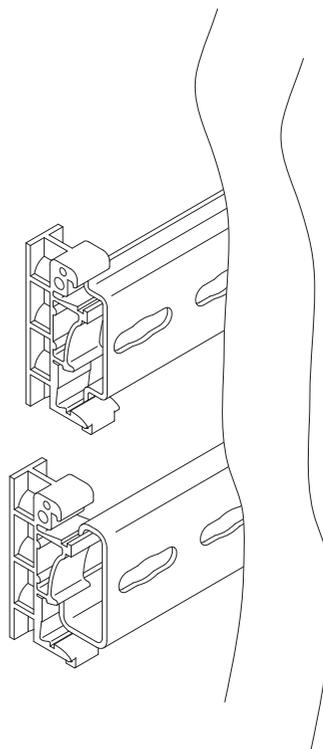
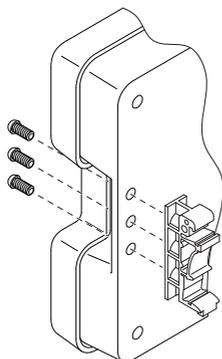
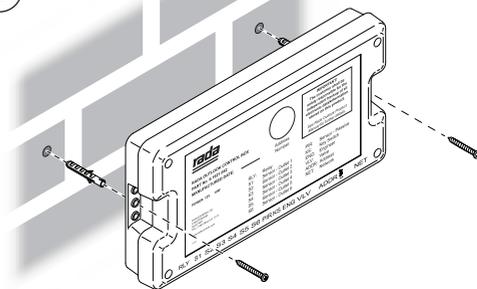
**Isolate mains power supply before making connections.**



1



2

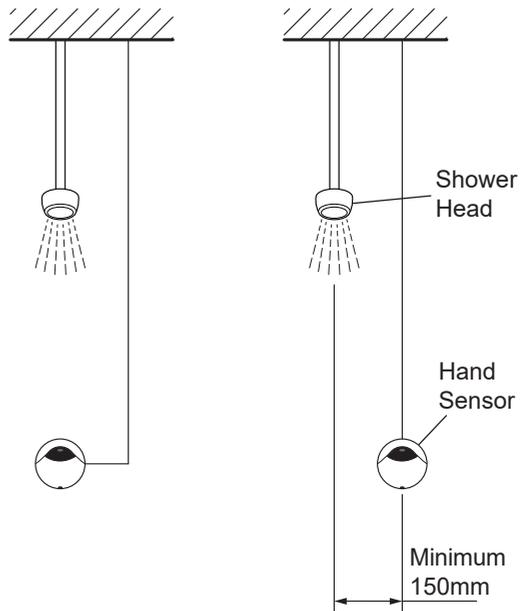


# SENSORS

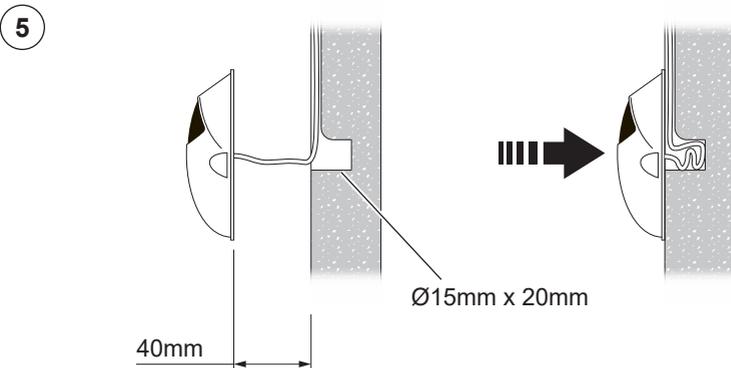
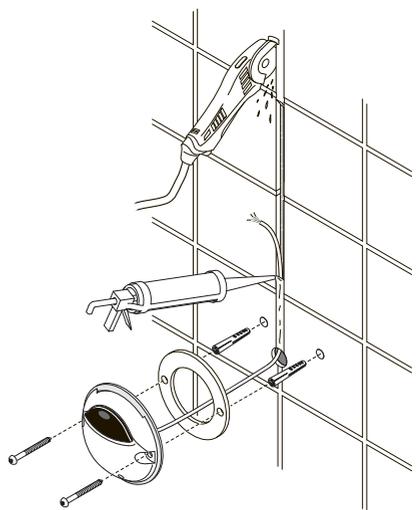
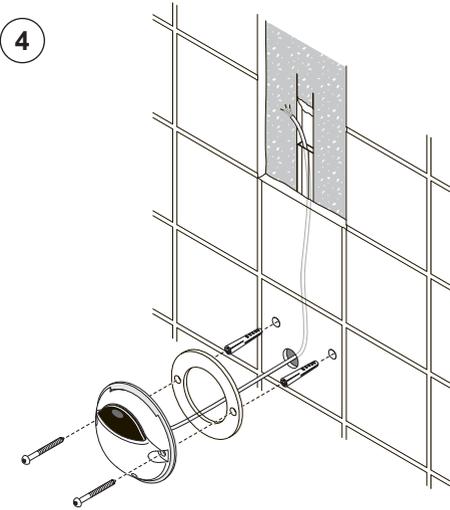
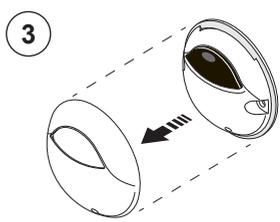
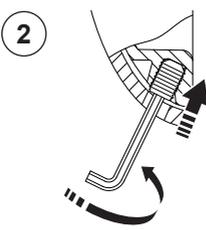
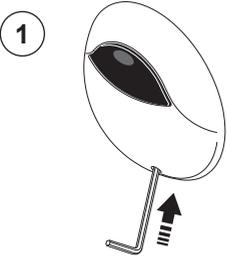
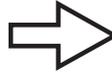
## IR 1621.112

Whilst installation of sensors directly below shower heads/outlet is permitted, it is installer's responsibility to ensure that any water left dripping from the outlets does not inadvertently cause the infrared sensors to accidentally trigger the mixing valve. Build up of limescale/residue within the shower head/outlet may cause water to drip and should therefore be regularly cleaned.

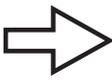
Dripping shower heads may cause sensors to trigger automatically, avoid installing the sensor directly in line with the shower head.



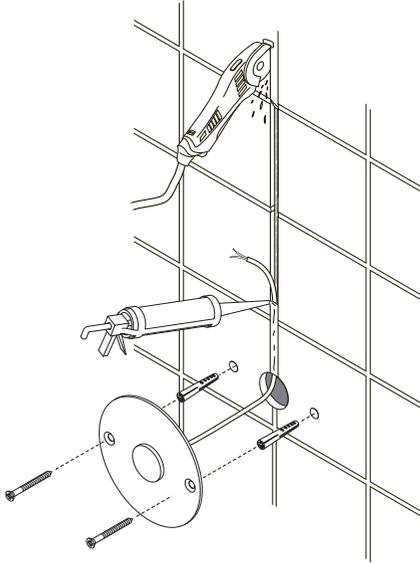
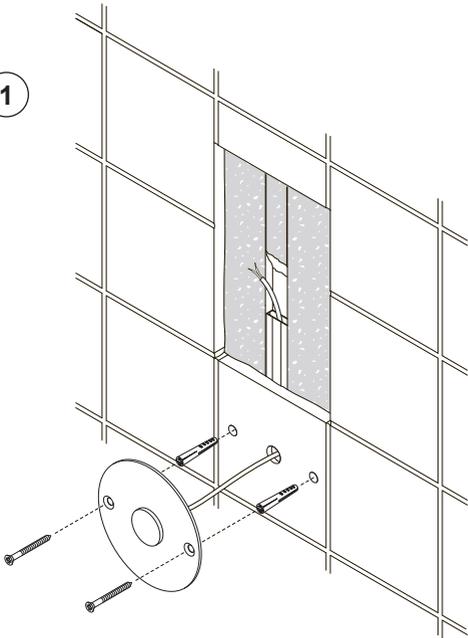
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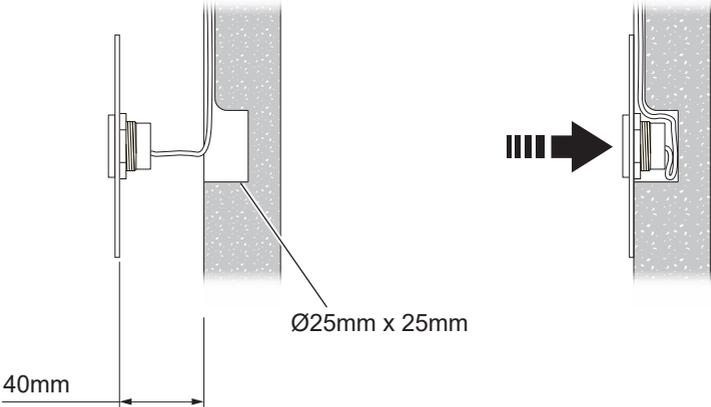
# PIEZO 1621.085



1



2

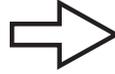


# SENSOR SPOUT

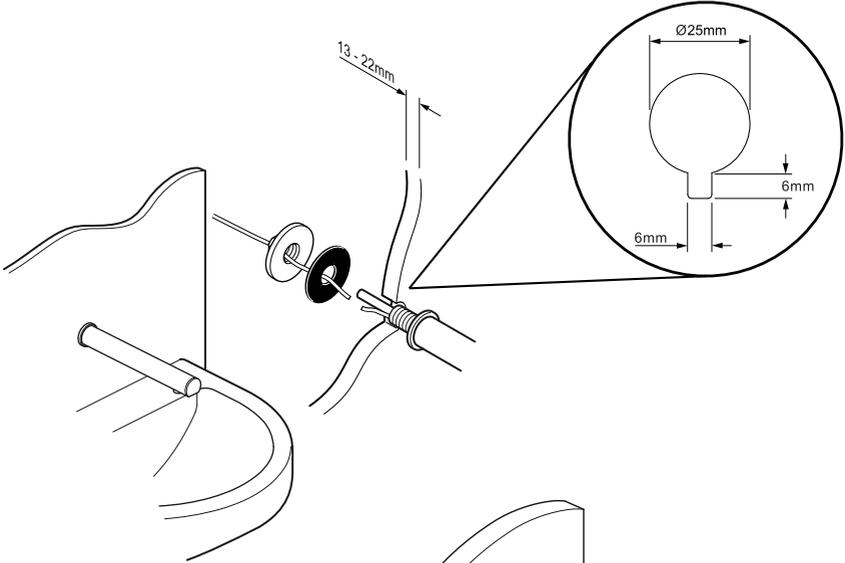
1621.136

1621.132

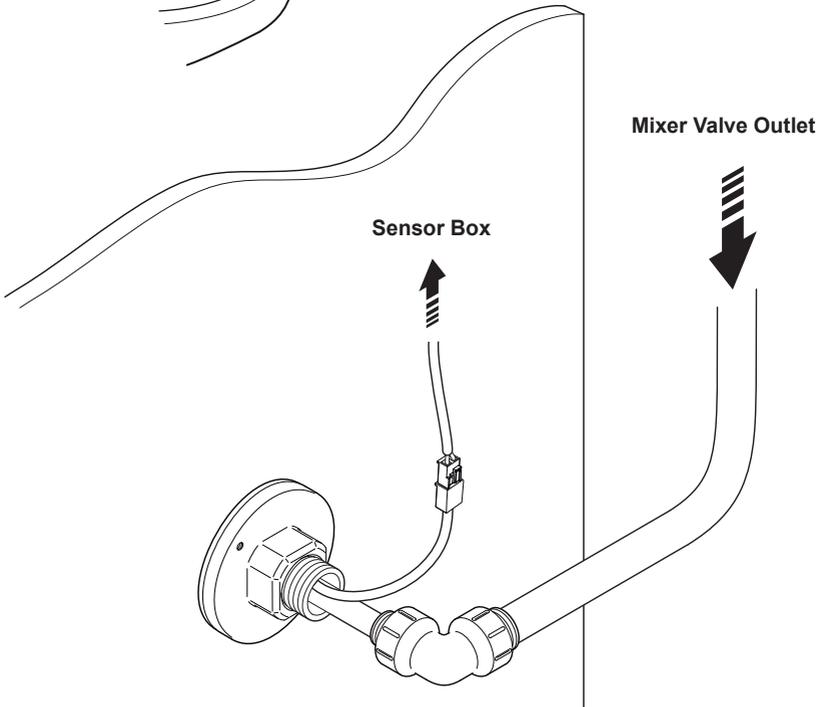
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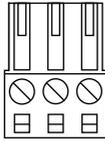
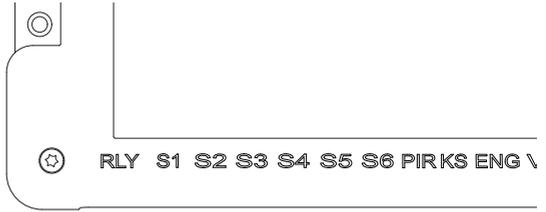
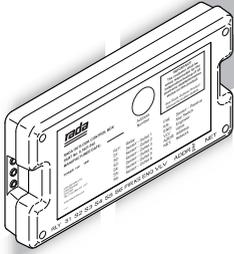


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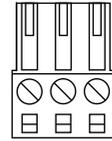


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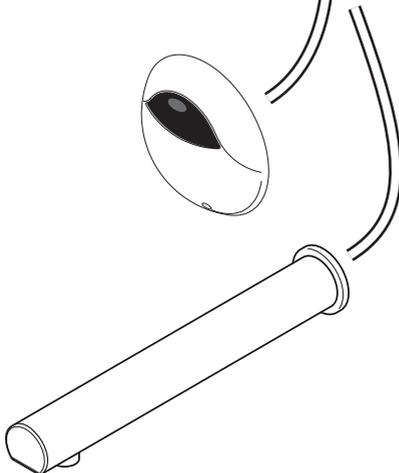
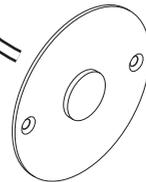
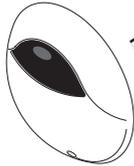




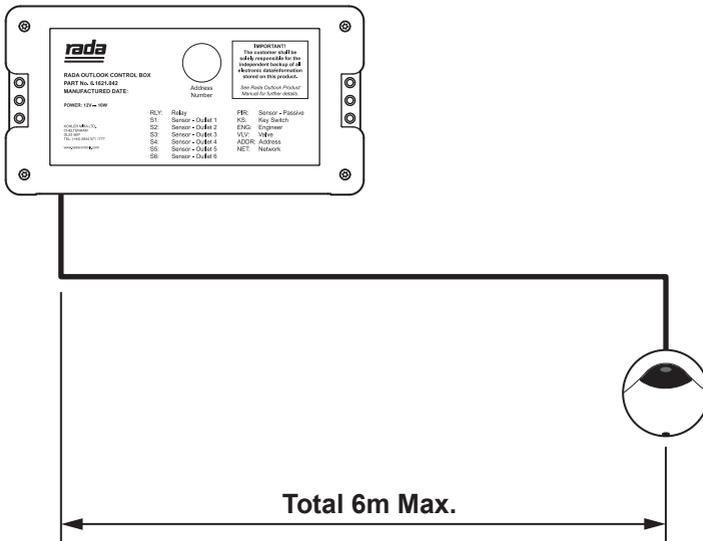
+5V (brown)  
I/P (white)  
0V (green)

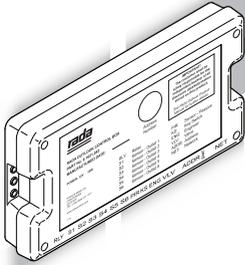


0V (white)  
I/P (brown)

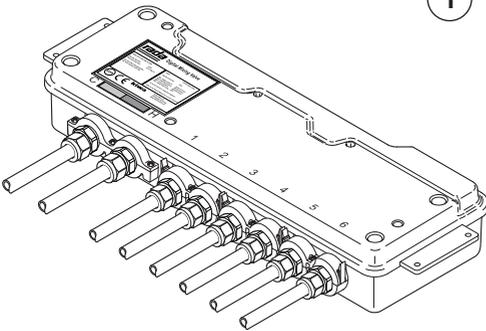
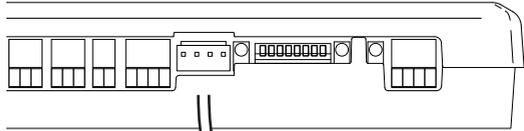


This product is compliant with all CE marking directives with sensor cables up to 6 meters in length. Should the cable be extended beyond this length, you must make sure the installation complies with all relevant directives and local regulations.

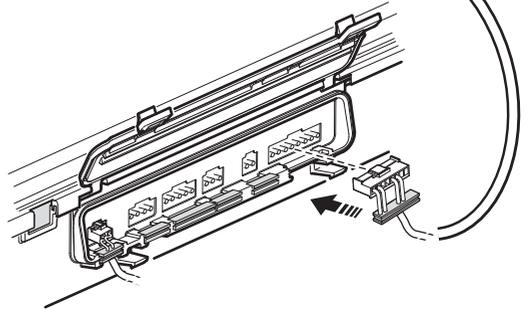




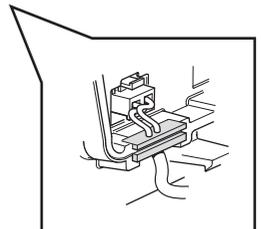
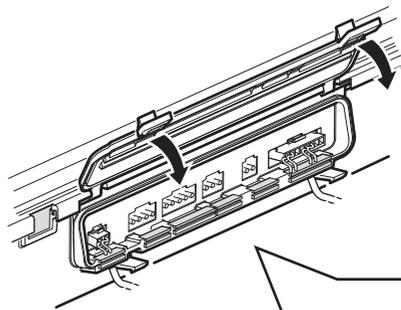
S6 PIRKS ENG VLV ADDR <sup>PWR</sup> NET



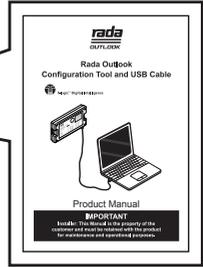
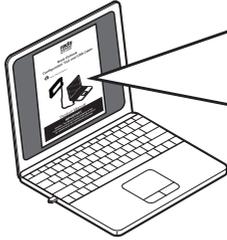
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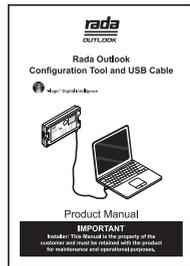
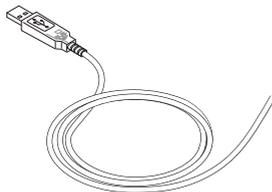
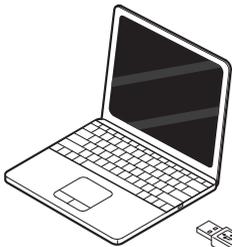
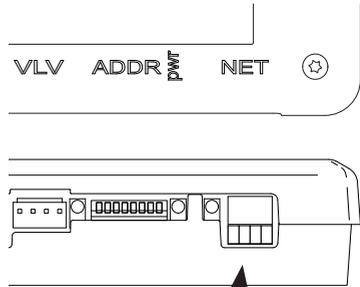
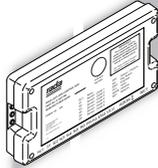
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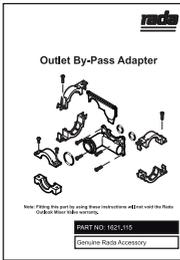
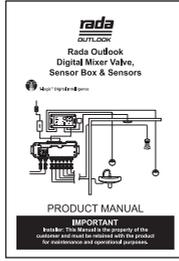
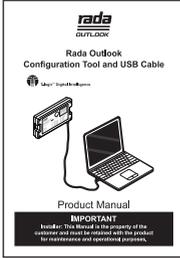


3



4

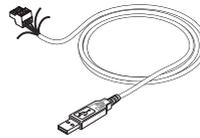




For full instructions, see Product Manuals on USB or at [www.radacontrols.com](http://www.radacontrols.com)



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# CUSTOMER SERVICE

## Customer Services Guarantee

Your product has the benefit of Rada's comprehensive parts and labour manufacturer's guarantee which commences from date of purchase. Full guarantee terms and conditions can be found at [www.radacontrols.com](http://www.radacontrols.com) or contact your in region Rada representative or sales agent for further details.

## Contact Us

If your product is not working correctly please refer to this manual for fault diagnosis and to check that it is installed and commissioned in accordance with our instructions. If this does not resolve the issue, then please contact our specialist teams who will be happy to help.

### For UK based customers support please contact Rada Customer Services

T: + 44 (0)344 571 1777 Please note: UK calls cost 7p per minute plus your phone company's access charge

E: [RadaCustomerServices@RadaControls.com](mailto:RadaCustomerServices@RadaControls.com)

[www.radacontrols.com](http://www.radacontrols.com)

### For customers based in the Republic of Ireland please contact our Rada Service agent

T: + 353 (0) 1 531 9337

E: [CustomerServiceEire@mirashowers.com](mailto:CustomerServiceEire@mirashowers.com)

For customers based in all other geographical regions please get in touch with your local Rada representative or agent whose contact details can be found by visiting our website [www.radacontrols.com/en/contact-us/find-a-partner](http://www.radacontrols.com/en/contact-us/find-a-partner)

## Services

Our UK Rada Customer Service Team can provide **pre-specification** information as well as details on the **UK Rada product Commissioning Service and Maintenance Service Plans** whilst our nationwide team of field-based technicians are here to help if you need a **Reactive Service Call**. We stock a full range of Rada spare parts and fittings which can be purchased over the telephone.

**Note!** Regional services do vary please speak to your Rada representative or Sales agent for information on service provisions provided in your area.

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

Registered Office:  
Cromwell Road,  
Cheltenham,  
Gloucestershire  
GL52 5EP

EU Importer address  
K/E S.A.S.  
3 rue de Brennus,  
93631, La Plaine Saint-Denis,  
France

