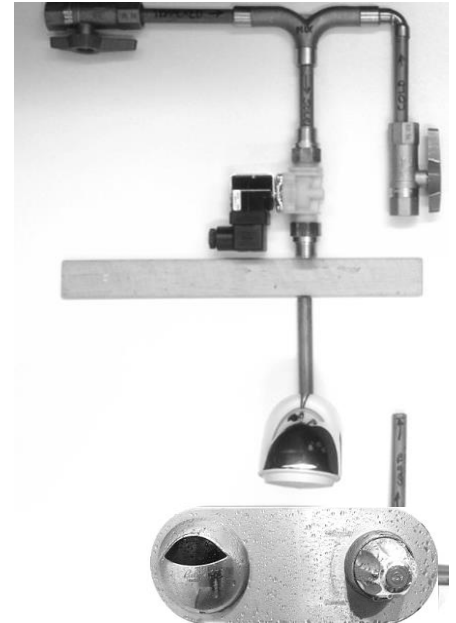


## Rada Pulse 120 Sensor Operating System with Temperature Adjustment for Showers

### Installation instructions

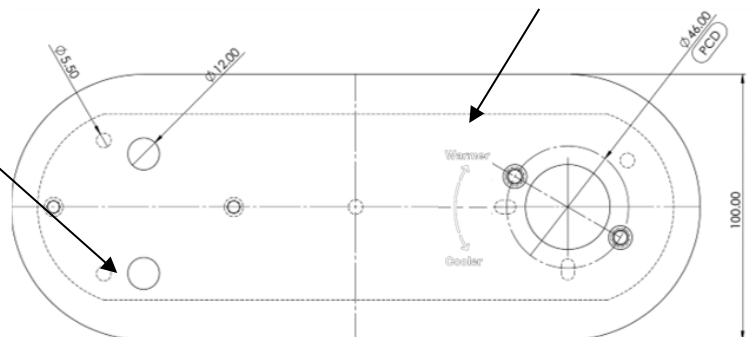
#### 1. OVERVIEW

- Please read these instructions in conjunction with the Rada Pulse Product Manual
- The Rada Pulse system is supplied with warm water from a TMV set at a fixed temperature. The temperature adjustment system described below enables cold water to be fed into the warm water flow to allow the user to reduce the warm water temperature.
- At commissioning ensure that the cold-water tap is turned off prior to adjusting the TMV to a required maximum warm water temperature.
- Layout of Pulse temperature adjustment pipework shown.
- Note: Cover Plate must always be horizontal with sensor on the left.



#### 2. ELECTRICAL ROUGH-IN

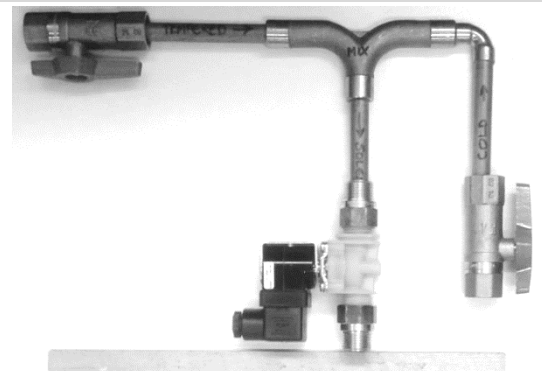
- Using the Cover Plate as a template orientate it so that the 'Warmer' and 'Cooler' text is the correct way up
- Locate and install an electrical conduit directly behind the lower 12 mm hole on the left side of the Cover Plate to run up inside the wall into the ceiling to the Rada Pulse Control Box.
- At installation, the standard 3 metre Rada sensor cable may need to be extended to reach the Control Box, using Cat 5 or "Figure 8" wiring.



#### 3. PLUMBING ROUGH IN

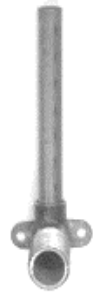
##### Above ceiling installation

- Shower Breaching Piece and pipe tails. Note orientation of sweep Tee piece.
- Rada Pulse Solenoid Valve.
- Ball Valve / Non-Return Valves.



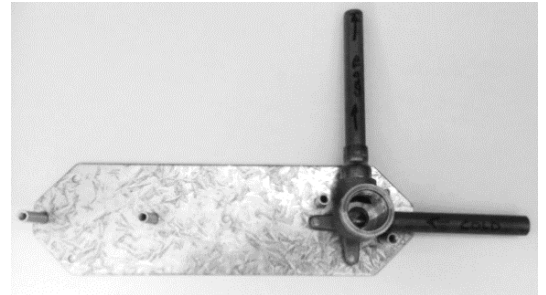
#### **Below ceiling inside wall installation**

- 15mm No.19BP Elbow (for showerhead)
  - 2+ metres above floor recommended (check architectural detail).



#### **Stop Cock Body installation**

1. Install Back-Plate Assembly (incorporating Recessed Stop Cock Body), long edges horizontal.
2. Screw to a noggin so that rear of plate is 40-42 mm behind finished surface of wall e.g., tiles, cladding, etc.



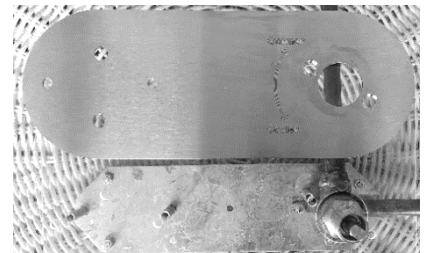
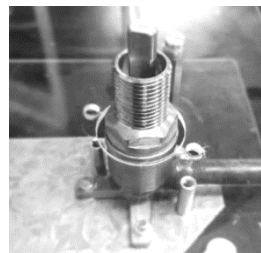
### **4. WALL CLADDING INSTALLATION**

Once electrical and plumbing rough-in has been completed:

1. Install internal wall cladding e.g., Villaboard and wall tiles etc.
2. Create a 30 mm clearance hole in the cladding to allow the 15 mm No.19BP Recessed Stop Cock Body to protrude.
3. Create a 12 mm hole in the cladding to allow the sensor cable to be drawn through the conduit up into the ceiling.
4. Use a sealant to fill the gap between the Cover Plate and the Stop Cock Body so that water cannot leak behind the wall.

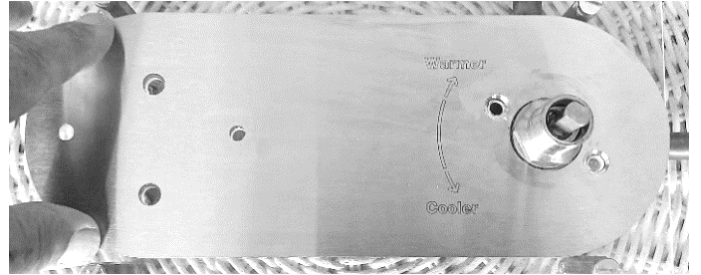
### **5. COVER PLATE & TOP ASSEMBLY INSTALLATION**

1. Screw the 1/4 Turn Top Assembly (including gasket/washer) into Stop Cock Body.



### Drill screw & cable holes through the wall

1. Locate Cover Plate (long edges horizontal) so that the top of the Recessed Stop Cock Body aligns with and enters the 32 mm diameter hole in Cover Plate.
2. Using the plate as a template hold it flush against the wall
3. Drill the 4 only 4 mm clearance holes and 1 only 12 mm hole (the lowest one) through the panel or tiles then into and through the panel. Remove Cover Plate.



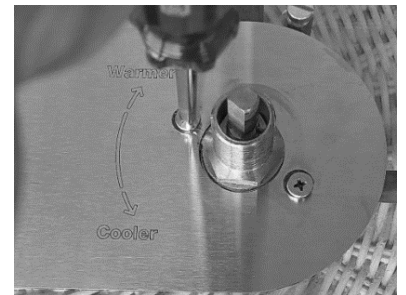
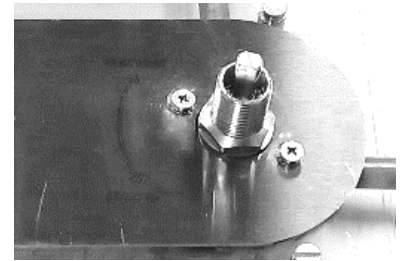
### Affix gasket to Cover Plate

1. Peel off brown paper adhesive protection from gasket.
2. Affix to underside of Cover Plate.
3. Black side without adhesive to face the wall.



### Install Cover Plate

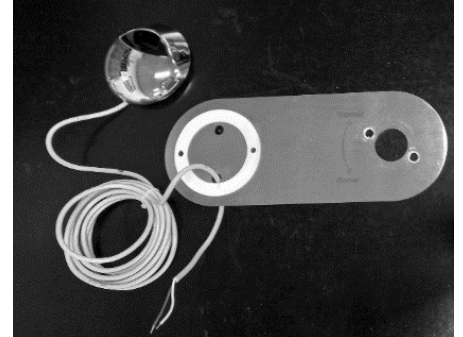
1. Secure Cover Plate to wall by locating the 32 mm diameter hole over the ¼ Turn Tap Top Assembly.
2. Screw 2 only M4 x 40 mm stainless steel countersunk screws into the countersunk holes, through the wall into the M4 threaded stand-offs on the Back Plate.
3. Before tightening the screws, apply silicone sealant under the screw heads and into the holes in the Cover Plate and into the gap between the 32 mm hole and the Top Assembly. Do not overtighten the screws.
4. Clean away any excess sealant.



## 6. INSTALL RADA PULSE 120 SENSOR

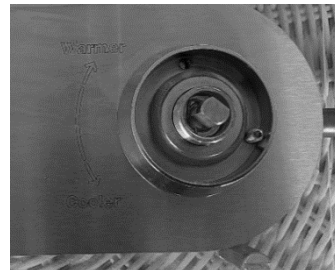
### Install the Sensor

1. Fit the white sensor gasket between the underside of the sensor and the Cover Plate.
2. Draw the Rada 120 Sensor cable up through the lowest 12 mm Cover Plate hole, then through the conduit to the Control Box. Do not cut sensor cable short. Extend the cable if necessary.
3. Screw 2 only M4 x 50 mm stainless steel countersunk screws through the sensor mounting holes into and through the wall into the M4 standoffs.
4. Before tightening the screws, squeeze some silicone sealant under the screw heads and into the mounting holes in the sensor.
5. Locate the chrome sensor cover over the installed sensor using grub screw to hold in place.



## 7. INSTALL TAP HANDLE

1. Install the Dress Flange with gasket and Tap Handle.
2. Locate gasket to underside of the Dress Flange and screw onto the Top Assembly.
3. Fit the tap handle as per instructions. Ensure the anti-vandal grub screws are tightened against the Cover Plate.



## 8. ENSURE WATER FROM SHOWER CANNOT LEAK INTO AND BEHIND THE WALL

1. Apply sealant around the perimeter of the Cover Plate Gasket, to prevent any water leaking behind the wall.
2. Wipe excess sealant away.
3. Once the product has been commissioned and showers are operating, ensure no water leaks behind the wall.



## 9. REFER TO THE RADA PULSE PRODUCT MANUAL

1. Install and commission as per the Rada Pulse Product Manual.