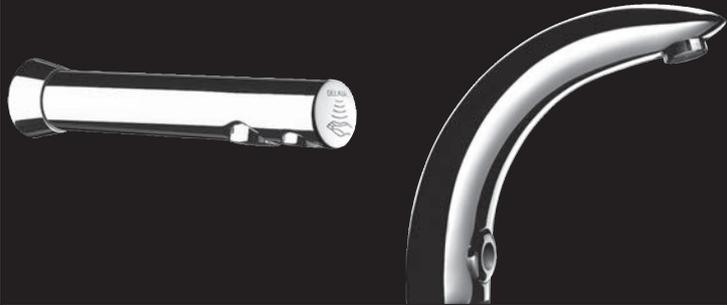
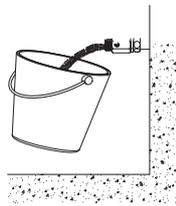


**GB** Electronic Mixer or Tap with 240V mains power supply

**CE** Appliance in conformity with European Rules 89/336/CEE 102.



**GB** Thoroughly flush the pipes to remove any impurities before installing and commissioning the mixing valve.



**OPERATION**

- Valve opens and closes automatically when hands are presented in the detection zone. Comfort shut-off delay is 3 seconds.
- Anti-Legionella duty flush : automatic duty flush for 45 seconds every 24 hours after the last use.
- Anti-blocking safety: a safety delay ensures the valve closes after 45 seconds in case of deliberate abuse or if an object is placed in front of the detection field. Once the object is removed the valve operation will reset automatically.
- Option: the automatic duty flush can be overridden or changed to every 12 hours (see ADJUSTMENTS).

**INSTALLATION**

- Tap: supply with cold or mixed water.
- Mixer: Supply with cold water and hot water at 70°C maximum, and balance cold and hot water pressure ( $\Delta P < 1$  bar). Maximum pressure: 10 bar. Recommended dynamic pressure: 1 - 5 bar. Take care not to pinch the flexibles (fig. J).
- To avoid interference from infrared beams do not install the electronic mixer or tap opposite a mirror or bright object. Do not install two TEMPOMATIC mixers or taps opposite each other.

Deck-mounted model (fig. A)

- Drill a  $\varnothing 34$ mm hole.
- Mount the mixer/tap body onto the washbasin and tighten the two screws 2 (fig. A) onto the fixing flange.
- Ensure a suitable waterproof seal between the mixer and the work plan appropriate to the type of installation.
- Connect the solenoid valve(s) and complete the installation as shown in the CONNECTION section.

Wall-mounted BINOPTIC model (fig. B)

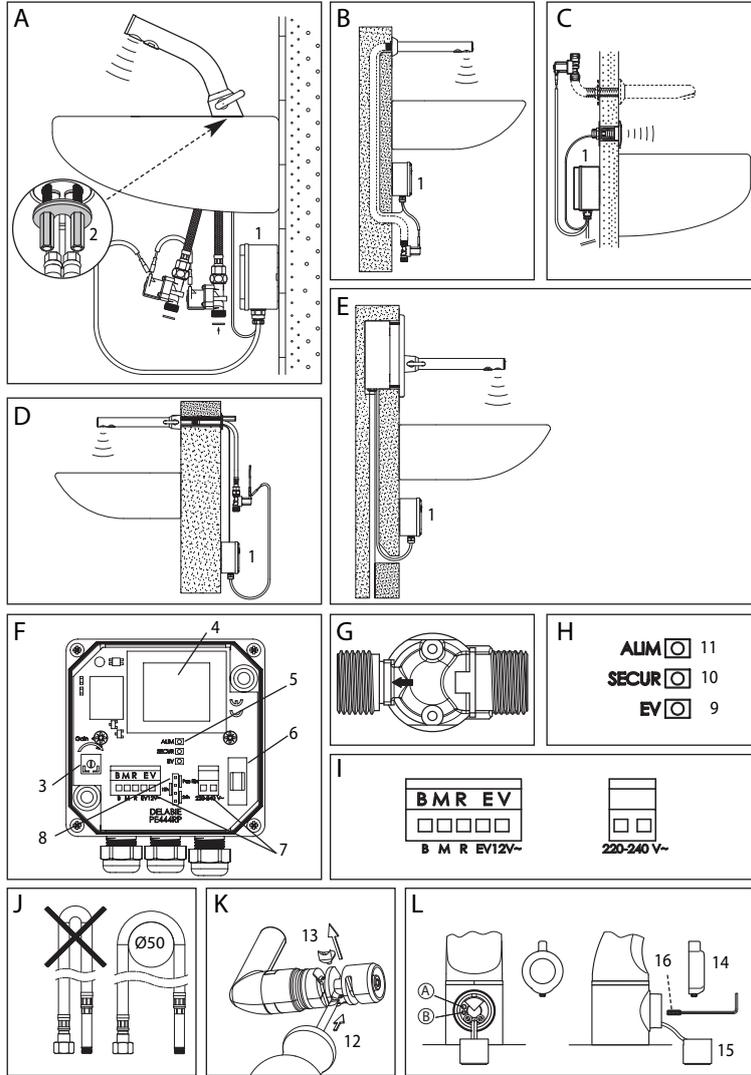
- Mount the spout on the wall. The distance between the top of the washbasin and the detection cell must be at least 150mm. Drill a  $\varnothing 22$ mm hole.

- Connect the solenoid valve and complete the installation as shown in the CONNECTION section.
- Wall-mounted, through-the-wall models
- **TEMPOMATIC** (fig. C): mount the detector support through the wall approximately 50mm above the top of the washbasin (drill a hole  $\varnothing 33$ mm). Mount the spout through the wall in line with the detector and approximately 100mm above it (drill a hole  $\varnothing 22$ mm).
- **BINOPTIC** (fig. D): mount the spout through the wall. The distance between the top of the washbasin and the detector must be at least 150mm. Drill a hole  $\varnothing 35$ mm for ref. 379MCH, and  $\varnothing 22$ mm for ref. 379DER.
- Tighten the nut onto the fixing flange.
- Connect the solenoid valve(s) and complete the installation as shown in the CONNECTION section.

Recessed BINOPTIC or TEMPOMATIC models (fig. E)

**WALL**

- Make a recessing space, minimum size 188 x 162 x 70mm, so that the bottom of the spout is approximately 200mm above the washbasin surface.
- Allow a recess for the water supply pipes and electrical supply to connect to the electronic box.
- Solder two  $\varnothing 12$ mm pipes onto the connectors. It is possible to connect the water supply to the top of the box by turning it upside down.
- Cover with a  $\varnothing 18$ mm sheath.
- Push the 4 legs of the box slightly towards the rear. Two holes at the bottom of the stainless steel casing will allow its eventual attachment to the bottom.
- Seal the box, the tube and the sheath.
- Seal the inside and lower edge of the box with mastic to prevent any water leaking into the wall. Position the silicone seal behind the stainless steel wall plate to ensure a waterproof seal between the wall plate and the wall. Leave a drainage point to allow any residual water to drain away.



**DRY WALLS**

- To attach the box using the 4 legs, strengthen the dry wall with 2 brackets.
- Seal the inside and lower edge of the box with mastic to prevent any water leaking into the wall. Position the silicone seal behind the stainless steel wall plate to ensure a waterproof seal between the wall plate and the wall. Leave a drainage point to allow any residual water to drain away.

**FIXING THE COVER**

- Once the wall has been lined, attach the strips onto the stainless steel case with 4 screws, ensuring that they are level.
- Install the hydraulic unit.
- Feed the detector and solenoid valve cables through the sheath.
- Connect the flexible to the spout and the solenoid valve.
- Snap the cover onto the upper strip. After testing, using a 2.5mm Allen key, tighten the 2 screws under the cover to tighten in place.
- Connect the solenoid valve and complete the installation as shown in the CONNECTION section.

**THE INSTALLER MUST ENSURE THAT:**

- THE RECESSING AREA IS WATERPROOF TO PREVENT ANY INGRESS OF WATER;
- ANY WATER ACCIDENTALLY ENTERING THE RECESSING AREA (E.G. (CONDENSATION, RUN OFF, LEAKS, ETC.), IS NOT STAGNANT AND HAS A DRAINAGE POINT);
- THE INTEGRITY OF THE SEALS BETWEEN THE STAINLESS STEEL WALL PLATE AND THE WALL OR THE WALL PLATE AND THE MIXER/TAP AT LEAST ONCE A YEAR, AND MAKE GOOD IF NECESSARY.

If this advice is not followed, water may leak into the wall. DELABIE cannot be held responsible for any ingress. FOR FURTHER INFORMATION PLEASE CALL TECHNICAL SUPPORT (SEE BELOW FOR CONTACT DETAILS).

**ELECTRICAL SUPPLY**

- Electrical supply: 220-240V / 50 Hz class II without earth connection. Install a 30 mA

circuit breaker before the electronic control box (not supplied). The installation must conform to local Electrical Regulations/Standards and must be installed by a competent, qualified electrician.

- Waterproof electronic box IP65.
- If the supply cable is damaged it must be replaced by the installer.
- The electronic box 1 (fig. A, B, C, D, E) is supplied by 220-240V~.
- Secure the cables in place with a fixed router e.g. a rigid sheath or cable holder.

**CONNECTION - HYDRAULIC (fig. G)**

- Respect the direction of the water flow (see arrow engraved on the mixer/tap body). Install the filters supplied to protect the solenoid valve(s) from foreign bodies.

**CONNECTION - ELECTRICAL (fig. I)**

- Connect the solenoid valves to the terminal EV with the connector provided.
- Connect the detector cable to the BMR terminal via the compression gland:
  - WHITE wire: terminal B
  - BROWN wire: terminal M
  - RED wire: terminal R
- Do not cut or lengthen the detector cable: standard length is 70cm (150 or 500cm lengths are available on request).
- Connect to the power supply using an IEC 60227 PVC insulated twin-core power supply cable (2 x 1.5 or 2 x 1, ext.  $\varnothing 7 - 8$ ) to ensure a waterproof connection, connect the 220-240V~ electrical supply to the 220-240 V~ terminal connector 7 on the control unit via the compression gland. A circuit breaker must be installed ahead of the electronic control unit.
- Tighten the nuts on the compression glands.
- Mount the wall box under the washbasin at least 50cm above the floor with the compression glands facing downwards.
- Replace the fixing screws, cover and seal then close the box.

#### HOW THE ELECTRONIC UNIT OPERATES

- The **YELLOW LED 11** (fig. H) (ALIM) is lit when the power supply is operating.
  - The **GREEN LED 9** (fig. H) (EV) is lit when the detector senses hands in the detection zone and the solenoid valve opens the water flow. When the hands are removed, the flow stops and the GREEN LED goes out.
  - The **RED LED 10** (fig. H) (SECUR) is lit and the flow of water stops if the detector senses hands (or any other object) continuously for 45 seconds; the anti-blocking safety is activated. Once the hands or object are/is removed the system is reset and a new cycle can commence.
- For the electronic unit to operate correctly the ambient temperature should be between 5°C and 40°C.

Fig. H: 9 = Green 10 = Red 11 = Yellow

#### ADJUSTMENT

- The detection distance can be adjusted from 8 to 25cm using the potentiometer " GAIN " 3 (fig. F) located on the electronic unit.
- The duty flush is programmed to flush automatically for 45 seconds every 24 hours after the last use. This can be cancelled or programmed to flush 12 hours after the last use 8 (fig. F) by placing the connecting pins in line with the desired programme.

Fig. F :  
3 = adjusts the detection distance  
4 = safety transformer PRI :  
220-240V~ / SEC : 12V~  
5 = LED diagnostic aids  
6 = fuse (T1AL250V)  
7 = removable connectors

#### TEMPERATURE LIMITATION (MIXERS)

For the UK and Ireland we recommend installing an appropriate, approved thermostatic mixing valve (TMV) to provide safe, anti-scald hot water. Where thermostatic mixing valves are installed the temperature limiter **MUST BE REMOVED** from all point-of-use mixers.

Recommended maximum temperature settings are: bidets 38°C, washbasins and showers 41°C. For all other countries please refer to the relevant hot water safety guidelines.

Side temperature selector (fig. K)

The product is delivered with the maximum temperature limiter engaged. To override it:

- Isolate the water supply.
- Loosen the grub screw at the back of the mixer body using a 4mm Allen key and remove the temperature selector.
- Prise upwards with a flat-headed screwdriver 12 to remove the coloured limiter 13.
- Re-assemble and commission in line with the TMV manufacturer's instructions.
- When used with a TMV, always carry out a cold water failsafe check.

Central temperature selector (fig. L)

The temperature limiter is fixed in position B at the factory. It is possible to change it to position A to limit the temperature, or remove it to override the limiter.

- Isolate the water supply.
- Loosen the locking screw using a 2.5mm Allen key and remove the temperature selector lever 14.
- Carefully pull-out the detector 15 a few centimetres.
- Loosen the limiter 16 using a 2mm Allen key and change the setting or remove the limiter as required.
- Re-assemble and commission in line with the TMV manufacturer's instructions.
- When used with a TMV, always carry out a cold water failsafe check.

#### ADJUSTING THE FLOW RATE

The flow rate is pre-set at the factory at 3 lpm (at 3 bar).

- The flow rate can be adjusted directly on the flow straightener using a 2.5 mm Allen key:
  - Notch n°1 = 3 lpm (at 3 bar)
  - Notch n°2 = 4 lpm (at 3 bar)
  - Notch n°3 = 5 lpm (at 3 bar)



#### REMEMBER

- Sizing the pipes correctly will avoid problems of flow rate, pressure loss and water hammer (see calculation table in our brochure and online at [www.delabie.com](http://www.delabie.com)).
- Protect the installation with filters, water-hammer absorbers and pressure reducers to reduce the frequency of maintenance (recommended pressure: 1 to 5 bar).
- Install stopcocks close to the mixer/tap to facilitate maintenance.
- The pipework, stopcocks, bib taps and all sanitary fittings should be checked at least once a year, and more frequently if necessary.

#### MAINTENANCE AND CLEANING

- Cleaning chrome:  
Do not use abrasive, chlorine or acid-based cleaning products. Clean with soapy water using a cloth or a sponge.
- Frost protection:  
Drain the pipes and operate the mixer/tap several times to drain any remaining water.

#### MAINTENANCE

In sleep mode, the **YELLOW LED 11** (fig. H) is lit. If it goes out, check the power supply at terminal 7 (fig. F) and replace the fuse if necessary. If the problem persists, replace the electronic unit.

If the mixer/tap flows continuously:  
Shut-off the 220-240V~ electricity supply. If the water stops flowing, replace the electronic unit, if not, check the mounting direction of the solenoid valve (fig. G), then clean/rinse the outlet, lifting the valve with a small screwdriver. Replace and do not forget to replace the filter.

If the water does not flow when hands are placed in front of the detector:

- **RED LED 10** (fig. H) is lit : the device is in security mode. An object in front of the detection cell has triggered the anti-blocking security after the comfort shut-off delay. Remove the object.
- **GREEN LED 9** (fig. H) has gone out : the detection cell is dirty or has a bad connection on the BMR terminal.
  - Check and clean the detection cell.
  - Check the direction and the quality of the cables.
  - Check that the wires are not touching.
  - Check that the detector cable has not been lengthened or shortened (standard length: 70 cm).
- **GREEN LED 9** (fig. H) is lit and the water is not flowing : the solenoid valve is not opening.
  - Check that the filter is clean.
  - Check that the voltage to the solenoid valve is 12V ac. If it is, replace the solenoid valve, if not, check that the supply cable is properly connected to the terminal, or that it has not been cut.

**Beware** : do not grease the inside of the mechanism.

**Mixer** : regularly check (as often as necessary) the temperature selector and the mixer's two internal seats on which the mixing key turns. Replace as necessary.

**NB**: The non-return valves should be checked at least once a year.

**CE** Product conforms to current European Directives.

#### After Sales Care and Technical Support

Auckland: 09 624 1115 Wellington: 04 569 8033 Christchurch: 03 348 2356  
email : [tech@macdonaldindustries.co.nz](mailto:tech@macdonaldindustries.co.nz)  
web: [www.macdonaldindustries.co.nz](http://www.macdonaldindustries.co.nz)