





(See illustrations on page 1-2).

The instruction manual describes FM Mattsson Electronic, battery powered. The instruction also applies for the mains powered (AC) version, with the exception of what concerns the battery and batteryholder. The Electronic for mains power is connected to 6V transformer only.

Installation

- ❶ Screw on the tubes/tube to the Electronic-mixer/tap. Position the plastic ring on the underside with the flange upwards, and attach the mixer to the basin/sink. The required hole diameter is Ø 35mm.
- ❷ Fasten the Electronic-mixer/tap to the basin/sink with, in turn, packing, bracket and nut. Spanner jaw width 13 mm.
- ❸ Attach the adapter(s) to the inlet tube(s), and use appropriate supporting insert bush(es). The adapter holds both check-valves and inlet filters. Connect the hot-water to the left and cold-water to the right.
- ❹ The Electronic mixer/tap is brought into operation by removing the sensor protecting tape. At this moment, all objectives must be removed from the basin.
- ❺ Position your hand under the sensor eye to start the water flow (if this is not automatically initiated). Pull your hand back, which initiates a basic calibration where the mixer/tap detects and finds the proper setting relative to the basin. This is performed during appr. 5 seconds. When installed in extremely brilliant basins, this calibrations can be incorrect, and the mixer/tap opens and closes repeatedly. Then a recalibration is required and performed as follows: Take out the battery, see 13 and 14, and wait 1 minute at the least before it is repositioned, see 15. Reassemble the top cover and place the hand under the sensor, some way up from the basin bottom, to start the flow. Keep the hand in this position as long as water is flowing (appr. 5 sec). The calibration is now performed at a shorter distance and reflections from the basin is not longer causing interference with the sensor.

Settings

- ❻ The flow delay after the hand is removed is preset to 2 sec. This time is adjustable from 1 to 4 sec.
- ❼ To adjust the flow delay, a narrow screwdriver or similar is inserted into the hole by the sensor, and kept under pressure in this position for appr. 6 sec until the sensor LED is flashing. In most cases the water is flowing during this operation. Press the screwdriver again, and depended on how long the screwdriver is held under pressure, the flow delay is adjusted accordingly. The water is flowing during this operation. Returning to normal operation mode is automatic.

Electronic with flow control button

If the mixer/tap is equipped with a button by the sensor instead of a hole, the button is activated similarly as described above with the screwdriver. Electronic with flow control (with button) is equipped with further two setting options. Double-click of the button shuts off the water for appr. 3

min (applicable by cleaning the basin). Reset to normal is done by a single click on the button or by automatic return after 3 min. Pressing the button for 2 sec activates continuous flow for appr. 2 min. (applicable when filling). Reset to normal is done by a single click on the button or by automatic return after 2 min.

Mixer

- ❸ Colder water is obtained by turning the mixing lever backwards (clockwise) and warmer water forwards.

Preset fixed temperature

- ❹ Remove the red/blue markplug.
- ❺ Undo the screw (2,5 mm socket head) and set desired temperature with the lever.
- ❻ Remove the lever and replace it with the enclosed cover plug.

Check-valves and filters

- ❻ Check-valves and filters are located in the connector(s). Those are dismantled downwards as shown in illustration. Clean the filters at functional problems. Open filters is a basic condition for undisturbed operation.

Battery replacement

When the battery is about to loose power, the sensor LED is flashing when water is flowing.

- ❻ Undo the screw on the underside using a 3 mm socket head key and lift off the top cover.
- ❼ Take out the battery by lifting the back end first.
- ❺ Wait, 1 min at the least, before a new battery is put in. Lithium CR-P2 6V (DL 223). Insert the connector end first. Make sure the battery is correctly positioned, see illustration.
- ❻ Secure the top cover, and put the hand under the sensor to activate the flow. Pull out the hand, and the basic calibration, described in §5 is performed.

Replacement of electronic device and battery holder

- ❻ Undo the screw on the underside using a 3 mm socket head key and lift off the top cover.
- ❼ Take out the battery by lifting the back end first. Pull apart the connecting wires, and also take out the wires with the attached springs from the battery holder (pull upwards). Note that (-) pole is the one at front and (+) pole the rear. Undo the screws for the battery holder and the electronic device, using a 2 mm socket head key. When only the battery holder is replaced, the power wire and screws for the electronic device are not undone.

19 Take out the battery holder and the electronic device, and remove the plastic ring.

20 Reposition the plastic ring and the new electronic device.

21 The electronic device is placed in the upper position.

22 Fasten the electronic device and the battery holder with the screws. Connect the wires and put the battery cords back. The black (-) to the front and the red (+) at the rear.

23 Put in the battery, with the connectors first. Make sure that the battery is correctly positioned, see illustration.

24 Fasten the top cover with the screw and put a hand under the sensor to start water flow. Pull the hand back, and the basic calibration as in §5 is performed.

Solenoid valve replacement

Close the main supply valve. Untighten the screw on the underside with a 3 mm socket head key, and take off the top cover, see §13. Pull apart the wire connectors and unthread the solenoid valve, shaped as a cylinder, below the battery, using a larger screwdriver. Reassemble in reversed order.

Cleaning the aerator

Frequently loosen the aerator and clean the insert. If the screens has lime deposits, these are removed with a vinegar solution.

Troubleshooting

No water is delivered

<u>Cause</u>	<u>Action</u>
Water is shut off	Open supply valve
The sensor is covered	Remove what is covering the sensor
Battery is out of power	Replace battery
Battery is incorrectly attached	Adjust the battery position
Filters are clogged up	Clean the filters

Water does not stop flowing

<u>Cause</u>	<u>Action</u>
The solenoid valve is defective	Replace the solenoid valve
The electronic device is defective	Replace the electronic device

The water starts flowing without activating the sensor

<u>Cause</u>	<u>Action</u>
The sensor is covered or dirty	Remove what is covering the sensor and/or clean it
The electronic device is defective	Replace the electronic device

The water flow opens and shuts off repeatedly

<u>Cause</u>	<u>Action</u>
The basin surface is brilliant	Recalibrate see § 5

The water flow is too low

<u>Cause</u>	<u>Action</u>
The supply pressure is too low	Check the supply and valves
Filters, aerator and valves are clogged up	Clean filters, aerator and valves

The water flow is too high

<u>Cause</u>	<u>Action</u>
Preset flow valve is not installed, or is too much open	Restrict the flow with the preset flow valve

Dripping water

<u>Cause</u>	<u>Action</u>
Defective solenoid valve	Replace the solenoid valve

The LED is flashing when activated

<u>Cause</u>	<u>Action</u>
Battery is out of power	Replace the battery

The water temperature is not adjustable

<u>Cause</u>	<u>Action</u>
The supply valves are incorrectly set	Adjust the preset valves
Filters are clogged up	Clean the filters
Unsuitable supply temperatures	Adjust the supply temperatures

Technical information

Water pressure	30-1000 kPa
Hot water	Maximum 80°C
Water flow	Maximum 6 l/min.
Flow delay	1-4 sec
Battery lifetime	Appr. 3 years or 750.000 operations
Battery	Lithium CR-P2 6V, camera model (DL 223)

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