



**AXIOS LUX ECO Electronic Water Heater
Remote Controller (HMI) Instruction Manual**



User Instructions

This Product is supplied with an accessory box, containing the Valve Pack (Draincock + T&P Valve) and the Human Machine Interface (HMI) kit. The HMI kit includes a 10 m cable that has to be connected to the motherboard mounted on the geyser itself, this cable provides power to the HMI and allows for communication between the motherboard and HMI.

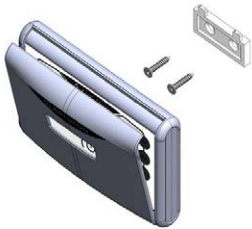


Fig. 1

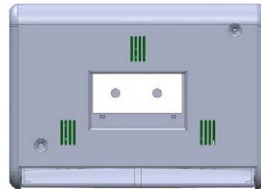


Fig. 2

To mount the HMI, fix the supplied mounting bracket horizontally on the wall using the two screws provided. Align the HMI to the bracket and slide down as shown in Fig.1 and Fig.2.

Product Highlights

Eco Evo Function: This is an intelligent mode in which the product will learn the user’s energy demand and continue to deliver hot water when needed as determined by the product in the learning period. (See Eco Evo section for more)

Anti-legionella: Legionella is a small rod-shaped bacteria which can be found in all fresh water and it grows best between 20° and 45°C. Legionaries’ disease is a pneumonia infection caused by inhaling the Legionella bacteria.

This product has a “thermal disinfection cycle” in place to restrict the growth of this bacteria by raising the temperature of the water above 60° for 60 minutes once a month. This is activated by default (factory setting), but the cycle will start automatically only if the default temperature (65°C) is changed below 60°C.

The activation / deactivation of the “thermal disinfection cycle” can be done through the User Menu (Refer user menu section for more).

Leakage Detection: This product is equipped with a leakage sensor which will detect if there is a water leak and will notify the user with an audio alarm from the HMI module.

Different Operating Modes

This product can operate in different modes,

1. **Manual Mode:** This is the default mode in factory setting. This mode allows users to set the desired temperature between 40° C and 70 °C.
2. **Timer Mode:** This mode allows users to set the time in a day when hot water is required. There are three programs in this timer mode;
 - a. **Program 1, T1** – [Default set time is 05:00] At this set time, hot water will be available at the predefined temperature.
 - b. **Program 2, T2** – [Default set time is 16:00] At this set time, hot water will be available at the predefined temperature.
 - c. **Program 3, T1&T2** – This is a combination of the above 2 programs.
3. **Eco Evo:** *This is the most efficient mode.* No temperature adjustment is allowed by the user in this mode, product will determine the hot water temperature as per the energy demand in the learning period.
4. **Eco Evo Plus:** In this mode the timer programs are activated along with Eco Evo mode. This mode will make sure there is hot water at the pre-determined temperature at the time based on the timer program. No temperature adjustment is allowed in this mode; the user can set the time when the hot water to be used.

For adjusting the temperature and choosing the different modes, refer to the relative sections.

First connection

Product is supplied with a human-machine interface (henceforth referred to as “HMI”), as shown in Fig.3 and Fig.4.

HMI buttons and LEDs are indicated as follows:


- a. Button “ECO EVO”;
- b. Button “T1”;
- c. Button “T2”;
- d. LED “ECO EVO”, on if the function “ECO” is active;
- e. LED “T1”, on if the function “Program 1” (“T1” from now on) is active;
- f. LED “T2” on if the function “Program 2” (“T2” from now on) is active;
- g. LED “HEATING”, on if the heating element is on (heating phase);
- h. Power button “”
- i. Button “+”;
- j. Button “SET”;
- k. Button “-“.



Fig. 3

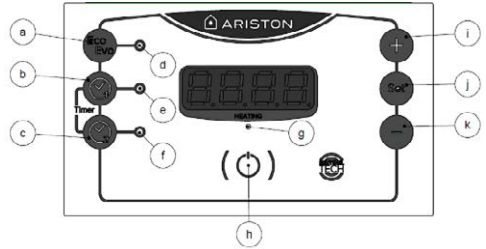



Fig. 4

At the first connection to the power grid, the HMI turns on (LEDs and Display all light up) and after a few seconds, the display shows the sign “OFF” (Fig. 5). This means that the product is linked to the power grid but is turned off. To turn on the product, press the Power button . The display will show the blinking digits 00:00 (Fig.6), it means that the current time has to be set (See section Set Local time). After setting the time, the display will show actual water temperature inside the tank and the “HEATING” LED will be on (Fig.7). The product will start working in Manual mode, the default temperature setting in this mode is 65°C.

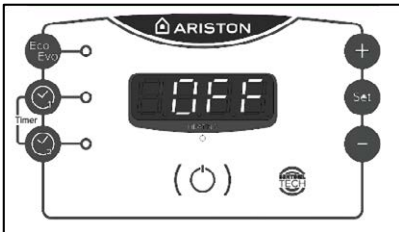


Fig. 5



Fig. 6



Fig. 7

The HMI will be completely off only in case of power outages or after the activation of the Safety Thermostat. The display will always show the actual water temperature in the product during normal operation.

Set Local time

When the unit is first switched on, the device will automatically require the setting of the current time. To adjust the time, press the “SET” button for 2 seconds. Set the hour by using the “+” and “-” buttons and confirm by pressing the button “SET”. Repeat the operation to set the minutes.

If the power supply is removed from the product or in case of a power failure, depending on its duration, time needs to be re-set.

User Menu

To access the User Menu press “+” and “-” buttons simultaneously for 3 seconds. Scroll through the different options using “+” and “-” buttons and then “SET” to confirm the selection. The options are:

1. U01 → Anti-Legionella (Thermal Disinfection Cycle)
2. U02 → Setting max temperature

The “U” letter will be fixed, while the number of the relative option will blink (Fig.8).




Fig.8

1. U01 - Anti-legionella mode: Activating the “thermal disinfection cycle”

It is a water heating cycle at 60°C for 60 minutes, in order to kill the relevant bacteria. This mode is activated by default (factory setting), but the cycle will start automatically only if the default temperature (65°C) is changed below 60°C. Once the disinfection cycle has started, it will repeat every 30 days if the water temperature never reaches 60°C during that period. If the power supply is removed from the product or in case of a power failure, depending on its duration and on the pre-set temperature, the disinfection cycle will re-start. At the end of each cycle, the operating temperature returns to the previously set temperature by the user. When the disinfection cycle is active, the display alternates between the water temperature and the “-Ab-” sign. (Fig. 9).

Caution: During the disinfection cycle, water temperature may be higher than expected, feel the water before use to avoid scalding and injury.

To activate/deactivate the function, when the product is on, access the user menu, select option “U01”, then by using “+” / “-” buttons, select “1” for ON and “0” for OFF, and then press “Power”  button to exit.

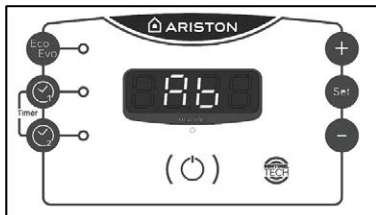



Fig.9

2. U02 – Setting Maximum temperature

Default maximum temperature of this product is 70°C. To reduce the maximum temperature, go to the User Menu and choose the “U02” option. Select the desired temperature between 65°C and 70°C simply by pressing the “+” and “-” buttons and press “Power”  button to exit.

ECO EVO Function

“ECO EVO Function” is an energy efficient mode where the product autonomously manages the water temperature and maximises electricity savings.

When "ECO EVO Function" is activated, the product starts an initial learning period of a week where the product operates at the temperature set by the user and logs the users energy demand. After the initial learning period, "ECO EVO Function" will provide hot water when needed according to user consumption.

During the day, when no water is drawn, the product still guarantees a reserve of hot water.

To reset the “ECO EVO Function” and restart the learning period press the “ECO EVO” button for 3 second, the relevant LED will blink for 5 seconds then the learning period will start again. In order to guarantee proper “ECO EVO” operation, it is recommended not to disconnect the product from the main power supply. In the case of a power outage, depending on its duration, the HMI may retain the Eco Evo memory.

Different Mode Settings

Set Manual Mode: *Default mode.* In this mode, only the “HEATING” LED “g” (Fig.4) is on when heating. Manual mode allows the user to set the desired temperature by pressing the “+” and “-” buttons until the desired temperature is indicated on the display (the setting range is 40°C-70°C). Pressing “SET” button will store the setting and the product will start operating in “Manual” mode.

Set Timer Mode: There are three different timer programs which can be programmed independently of each other. The time can be set in 30 minute intervals.

1. Program 1, T1: Press “T1” button. LED “e” (Fig.4) will switch on to confirm the mode activation. Default set time is 05:00.

To set the temperature and to change the default time, hold the ‘T1’ button for 3 seconds, the time will start blinking. Change the time by pressing “+” and “-” and then press “SET” to confirm. The next step is to set the desired water temperature between 40°C and 70°C, by pressing the “+” / “-” buttons and then pressing the “SET” button to save. The device will start working in “T1” mode.

2. Program 2, T2: Press “T2” button. LED “f” (Fig.4) will switch on to confirm the mode activation. Default set time is 16:00.

To set the temperature and to change the default time, hold the ‘T2’ button for 3 seconds, the time will start blinking. Change the time by pressing “+” and “-” and then press “SET” to confirm. The next step is to set the desired water temperature between 40°C and 70°C, by pressing the “+” / “-” buttons and then pressing the “SET” button to save. The device will start working in “T2” mode.

3. Program 3, T1 and T2: Press both “T1” and “T2” buttons. The LEDs near the buttons will switch on to confirm the mode is active.

When both “T1” and “T2” functions are on, the time and temperature setting must be repeated twice, one for the time, T1 and another for the time, T2.

For periods when the hot water usage is not planned, the water heater is deactivated.

Set Eco Evo Mode: Press ‘ECO EVO’ button to activate this mode. The LED “d” (Fig 4) will be lit to confirm the mode is active. In this mode, the temperature is automatically set by the product itself and as a result, “+”/ “-” and “SET” buttons are deactivated. If pressed, the display will show “Eco” for three seconds. No temperature adjustment is allowed in this mode. To adjust the temperature, it is necessary to deactivate the ‘Eco Evo’ mode. For deactivating this mode, press the ‘ECO EVO’ button again and the relevant blue LED will switch off.

Set Eco Evo Plus Mode: When one of the timer program functions is used together with the “ECO EVO” mode (see “ECO EVO Function” paragraph), the temperature is set automatically by the product itself. The User can set the time at which the hot water should be ready. The “+”/ “-” and “SET” buttons are deactivated in this mode. If pressed, the display shows the sign “ECO” for three seconds. This operating mode guarantees a greater energy saving.

***N.B.** For the temperature setting in Manual and Timer mode, if the user does not make any selection for 3 seconds, the system keeps the last setting. For all the other settings, the system saves the choice just after the “SET” button is pressed.*

Diagnostic / Reset

When one of the malfunctions described below occurs, the product will enter in a “fault status” and the HMI will display a blinking error code. In the “fault status”, the “HEATING” LED also blinks (Fig.8 as an example).

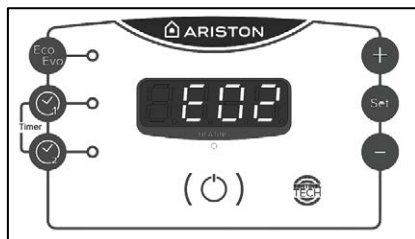



Fig.8

The error codes are the following:

- **E02** → Water Overheating
- **E10 – E11** → NTC Sensor Fault
- **E04** → Dry Heating
- **E50 – E60 – E80 – E92** → Maintenance Request
- **E90** → Heating element Fault
- **driP** → Leakage Detected (see Leakage Detection paragraph)

Reset: To reset the product, switch it off and on again by the pressing  button. If the cause of the malfunction disappears immediately following the reset process, the product will resume normal operation. If the display still shows the error code, then it is necessary to contact the Ariston Call Centre on 010 745 9911.

Leakage detection

The product is supplied with a Leakage Sensor cable, which should be placed in the drip tray as shown in the picture Fig.11. This is to ensure that the sensor will most likely be able to detect a water leak. The function of the Leakage Sensor is to detect water presence in the drip tray and prevent damage caused by flooding.

In the unlikely event that this occurs:

- The sign “driP” will appear on the HMI (Fig.12);
- “HEATING” LED blinks;
- The HMI buzzer starts sounding;



Fig. 11

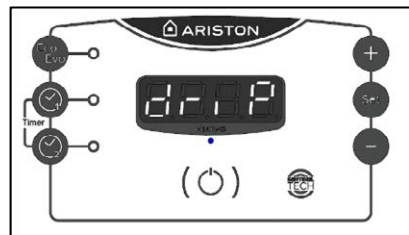




Fig. 12

To stop the sound and switch off the geyser press the power  button. If the HMI is on, the buzzer will start to sound again.

Caution: During the leakage intervention, power supply to the water heater will not be interrupted. To switch off the power supply, press the Power  button on the HMI module.

To reset the water heater, call the Ariston Call Centre on 010 745 9911. When this fault occurs, only a specialized technician can reactivate the water heater.

Power outage considerations

In case of a power outage the user settings will not be lost (operating mode, temperature setting, scheduling setting and Anti-Legionella on/off).

Functions related to the clock will be stored on the HMI for at least 2 hours (ECO-EVO memory, timer programming and Anti-Legionella 30day cycle timing).

In cases where power outages last longer than 2 hours, the following may occur:

- User will need to manually set the time;
- If the user adjusted temperature is below 60°C, the Anti-Legionella cleansing cycle will automatically start;
- Eco Evo mode (if active) will restart the learning period;