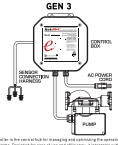
AutoHot

INSTALLATION AND OPERATIONS MANUAL FOR SINGLE FAMILY RESIDENTIAL GEN 3



The AutoHot Controller is the central hub for managing and optimizing the operation of water heating and circulation systems. Designed for ease of use and efficiency, it integrates with a range of wireless and wired devices to monitor and control water temperature, pump activity, and system diagnostics, ensuring both safety and performance.

OPERATING INSTRUCTIONS FOR AUTOHOT® GEN3

INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION OR WARRANTY MAY BE VOIDED

Warning: Disconnect power before making settings inside controller and only operated by professional installer.
Avertissement: Débranchez l'alimentation avant de procéder aux réglages à l'intérieur du contrôleur et n'opérez par un installateur professionnel.

Contact Innovative Group Inc.: 866-495-2734 OR info@innovativegroup.com OR www.autohotusa.com

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PARTS DESCRIPTION

1. Green (+) and White (−) male coils, 6 inch long, with SMC5 connector, for wired indicator.
2. Black (+) and Red (−) male coils, 8 inch long, with SMC5 connector, for wired button.
3. Black (+) and Black (−) male coils, 8 inch long, with SMC5 connector, for NTC temperature sensor.
4. Green (+) and Black (−) female coils, 8 inch long, with SMC5 connector, for wired button.
5. AC output cable (Power output, connect to water pump).
6. AC input cable (Power input, connect to AC power).
7. Female cables, 2 feet long, with SMC5 connector, for the parts.
   Harness included with all units, other harnesses part of other activation devices).
8. Silicon button in controller top.
   Shortly press - Turn on controller.
   Press for 5 seconds - Enter pairing mode

1. Potentiometer A
   Target temperature adjustment (60°F – 120°F / 26~49°C)
2. Potentiometer B
   Target delta adjustment (2°F(1.1°C)~10°F(5.5°C))
3. Potentiometer C
   Target cutdown adjustment (1~60 minutes)
4. +AUXILIT terminal
5. AT+AUX terminal

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OPERATION INSTRUCTIONS

INDICATOR PATTERN DESCRIPTION:

- **STANDBY:** The center button indicator will be off.
- **SCLERING (SEAL):** The red indicator will do 3 second sharp flashing
- **HEATING:** The red indicator will flash slowly.
- **PAIRING:** The red indicator will remain flashing for 15 seconds on until it receives signal.
- **TARGET TEMPERATURE:** The red light indicator will flash fast in sets of three before it reaches lockout, it will stay off if it doesn't reach lockout, it will stay solid ON when it reaches lockout.

PAIRING WITH WIRELESS PUSH BUTTON SUPPORT:

It supports up 10 wireless devices at a time, combination of wireless push buttons and wireless motion sensors)

Press silicon button on top for 5 seconds, while the indicator flashes, press down the wireless button. When the flashing pattern changes, press on the wireless push button to verify that the controller responds. Pairing done if the controller responds to the wireless push button.

CLEARING PAIRING

Unplug the controller from the power outlet, and with the controller unplugged from the outlet, press and hold on the silicon button, plug in the controller to power, the indicator will start flashing fast indicating that pairing is deleted.

WORKING MODES - Demand mode & Temperature mode

- **Demand mode:**

When using a wired activation device, the controller will work as on demand mode.
When the controller powers on, it enters on standby, LED indicator status is off.
Pressing on the wireless push button or the silicon push button in the center of the device will activate the water pump.
The LED indicator will flash fast for 3 seconds and then will change to slow flashing while the pump runs.
When the NTC sensor detects the target temperature, the controller turns off the pump automatically and the LED indicator will turn on and constant.
If reaches target temperature, the indicator goes out when the temperature is lower than target temp.
When run time reaches the set target time, the controller will turn off the pump automatically and the LED indicator will turn on and constant if reaches target temperature.
While in demand mode, pressing the wireless button or wired button, the set runtime will reset.

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- **Temperature mode:**

The controller goes into temperature mode of operation, when the wire harness for the wire push button has been jumped.

In temperature mode of operation, when the controller gets power , it automatically turns water pump on and the LED indicator will blink slowly.

When NTC sensor detects the set target temperature, the controller will turn off the pump automatically and the LED indicator stays red and solid.

If the target temperature is decreased while running, the controller will turn the pump shutoff immediately.

The process will repeat again and again to maintain high water temperature in the lines

The LED indicator keeps a slow blinking pattern during pump's runtime.

In temperature mode, the wireless button or silicon button are disabled.

TECHNICAL PARAMETERS

RATED PARAMETERS	
Working Voltage	AC110 50HZ/ 60HZ
Output Voltage	AC110 50HZ/ 60HZ
Output Power	550W
Static Power	< 1W
Radio Frequency	315/433MHZ
Wireless Receiving Distance	700 feet (open area)

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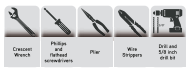
IMPORTANT:

Operation of the pump without being plumbed into water lines may damage the pump and void the Warranty.

Parts included depends on the model:

DROSHA (Gen2 and 3) 1 Control Box 1 PD Series pump 1 Pair of screws and wall anchors 1 Insulation tape 4+Wire nut 1 Manual 1 Hardwired push button 9+Harnesses for activation devices and temp sensor	DROSHA (Gen2 and 3) 1 Control Box 1 ED Series pump 2 Flanges 2 Threaded Nuts 1 Pair of screws and anchors 1 Insulation tape 4+Wire nut 1 Manual 1 Hardwired push button 9+Harnesses for activation devices and temp sensor	DROSHA (Gen2 and 3) 1 Control Box 1 RP Series pump 2 Flanges 2 Threaded Nuts 1 Pair of screws and anchors 1 Insulation tape 4+Wire nut 1 Manual 1 Hardwired push button 9+Harnesses for activation devices and temp sensor
DROSHA (Gen2 and 3) 1 Control Box 1 RD Series pump 2 Flanges 4 Bolts and Nuts 1 Pair of screws and anchors 1 Insulation tape 4+Wire nut 1 Manual 1 Hardwired push button 9+Harnesses for activation devices and temp sensor	All models with USB include: 2 Exterior sheet flex lines 1 Tee with plug 1 Flow and temperature sensor assembly All models with USC include: 2 Exterior sheet flex lines 1 Tee with plug 1 Flow and temperature sensor assembly 1 Check valve 1 Coupling	*Activation Accessories All expansion systems (Gen2 and 3 come with 1 wireless motion sensor, 1 wireless receiver and transmitter) Any other activation accessories are purchased separately and have instructions that come in contact with the system

TOOLS YOU NEED



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INSTALLATION CONSIDERATIONS

Best Location for the Drevative On-Demand Recirculation System

For those using standard plumbing without a return line, typically, this would be at the furthest point from the water heater, commonly under the kitchen or master bathroom. If the hot water supply runs in two different directions from the water heater, you may need more than one On-Demand Recirculation System.

For those with a return line (see figure 1), the pump and controller will be installed near the water heater.

Please see page 7 for instructions on where and how to install, and disregard step 2 through 7 that involve installing the tees and flex lines under the hot water sink.

Electrical Supply:

A 110V electrical supply outlet is required to power the unit. If an outlet is not available, install one. It can be done in accordance with all local electrical codes.

CAUTION:

Do not plug in the On-Demand Recirculation System until all plumbing and wiring connections are completed and the water supply is turned on. Running the circulating pump without water may damage internal components and void the warranty.

Pump Position:

The pump should always be installed in a horizontal position with the motor housing at or with a capacitor box facing up toward the side. Be sure that arrow on the pump casing is pointing from left to right that water is cold water side before connecting the flex lines.

Note

The TS and the lines supplied by Drevative provide maximum flow and performance. Alternative plumbing parts may restrict flow and delay hot water from reaching.

Mount the AutoHot Control Box

Second gen AutoHot® controller is integrated to the pump, there is no separate controller needed. The controller power is supplied by the pump power cord.

IMPORTANT:

MAKE SURE THE LOCKEDIN WHERE TO MOUNT THE CONTROL BOX, MAKE SURE TO ALL THE SENSORS, CABLES, AND POWER

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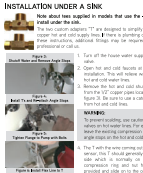
USK INSTALLATION UNDER A SINK



Note about tees supplied in models that use the ⊕USK accessories to install under the sink:

The tees (custom adapters "T" are designed to simplify the installation to 1/2" copper hot and cold supply lines. If there is plumbing other than as shown in these instructions, additional fittings may be required. Consult a plumbing professional or call us.

1. Turn off the house water supply at the main shut-off valve.
2. Open hot and cold faucets at the fixture chosen for installation. This will relieve water pressure from the hot and cold water lines.
3. Remove the hot and cold shut-off valve angle stops and the flexible connectors from the shutoff valves (see figure 2). Be sure to use a cloth basin to drain water from hot and cold lines.

WARNING

To prevent scalding, use caution when removing valves on hot water lines. For ease of installation, leave the existing compression ring and nut from the angle stops on the hot and cold water lines.

4. The T with the wire coming out of it has a temperature sensor. Pick T should generally be installed on the hot side which is normally on the left. Remove the compression ring and nut from the adapter tees provided and slide on to the opposite straight copper line (see figure 3). Attach the elbow end of the tee and tighten firmly (see figure 4).
5. Connect the shutoff valves to the new compression ring and nut and tighten firmly (see figure 4).
6. Assemble the ⊕ of flanges to pump as shown in Figure 5 and tighten it firmly. Attach the elbow-lined flex lines to the 3/4" threaded connection on the tees and the 3/4" threaded connections on the pump. ⊕ of flanges face figure 5 ⊕ ↑↑.
7. Install controller can cable (wire) with screwdrivers, plug it to cable, plug in pump to controller female power cord, per wireless activations if applicable.

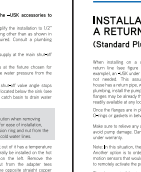


Figure 2
Figure 3
Figure 4
Figure 5
Shutoff Valve
Angle Stop
Flexible Connector
Tee
Tee Fitting
Flange
Pump
Flexible Connector
Shutoff Valve
Angle Stop