

3M Science.
Applied to Life.™



3M Water Purifier Solutions

Operating Instructions

3M™ Filtered Water Dispenser HCD-2

**Separation Purification Sciences Division
3M Thailand Limited**

- Design and color may differ from the picture.
- Unit appearance, specification, etc. are subject to change without prior notice if necessary for improving unit performance.
- The rated voltage of this unit is AC 220V/50Hz only.

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Safety information

Read, understand and follow all safety information contained in these instructions prior to use of the 3M™ Filtered Water Dispenser HCD-2.
Retain these instructions for future reference.

Intended Use:

The 3M™ Filtered Water Dispenser HCD-2 is intended for use in filtering potable water for drinking purposes. The system is typically installed at point of use, and must be installed by a 3M authorized professional installer according to installation instructions.

Explanation of Signal Word Consequences:	
 WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
NOTICE	Indicates a situation which, if not avoided, could result in property damage.

WARNINGS

About the Power Supply

To reduce the risks associated with hazardous voltage and fire:

- Do not plug in multiple devices into the same power outlet or extension cord simultaneously.
- Plug the power cord into a 220V outlet with at least a rating of 10A and power surge protection.
- Please ensure the power plug and power outlet is clean and dry.
- Damaged parts or machine malfunction are only to be repaired or replaced by 3M authorized professionals.

To reduce the risks associated with hazardous voltage:

- Do not operate the machine with wet hands.
- Do not bend the power cord excessively or put heavy objects over the power cord. Ensure your pets do not damage the power cord.
- Do not use the equipment if there is any damage to power cord, plug or the outlet.

Important guide during installation / Use

To reduce the risks associated with fire and explosion:

- Do not place the equipment in area with potential gas leak, or near heating devices.
- Do not put candles, lit cigarettes, or any heating devices on the unit.

Safety information

To reduce the risks associated with hazardous voltage, fire and/or property damage:

- Do not put water containers, chemicals (volatile materials, organic solvents etc.), small metal objects and etc. on top of unit to avoid accidental spillage into the unit to cause electric shock or fire.

To reduce the risks associated with fire and/or property damage:

- Do not place the equipment in an enclosed space where ventilation is difficult, causing overheating at the electrical parts.

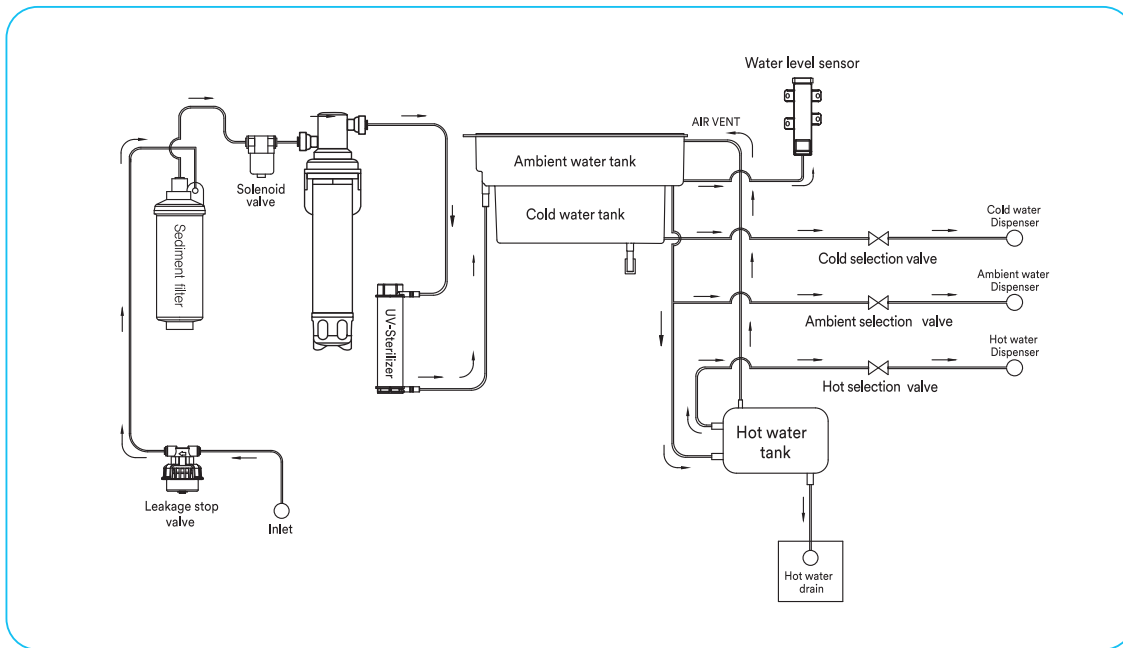
To reduce the risks associated with contaminated water and/or property damage:

- Do not clean the equipment with chemicals that could contaminate the water.

NOTICE

- Do not install in direct sunlight or outdoors exposed to rain/snow. The equipment is designed for indoor use only. Large amount of moisture or dust in the equipment surroundings may damage the equipment.
- Do not tilt the equipment over 45° when transporting the unit. Install and keep the equipment on a flat stable surface. Unstable surface and inclination will cause performance degradation or equipment malfunction.
- Do not connect to hot water source over 100 °F (38 °C).
- Do not use filtered water as water for fish bowl or aquarium. Filtered water may not be suitable for marine life.
- Keep equipment approximately 8" (20 cm) away from the wall and ensure proper ventilation behind the equipment.
- Ensure tubing are securely connected and is not bent or pressed down by any heavy objects.
- Length of the drain tubing should be less than 3 m for proper drainage from the equipment and at least 30 cm away from flat floor.
- Put the auto drain button at **O** to ensure equipment can automatically drain to allow stagnant water to be flushed out of system.
- The disposable filter cartridge **must** be replaced every 6 month, or if any noticeable reduction in flow rate occurs (whichever sooner), to ensure filter effectiveness.
- It is connected to water mains by detachable tubing hose. When you relocate and reinstall the appliance, please do not use the old tubing hose. Use a new tubing hose.
- This appliance is intended to be used indoors.
- Close supervision is required when any appliance is used by or near children.









Water flow schematic diagram



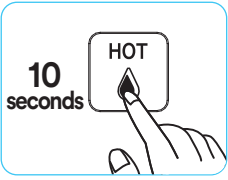
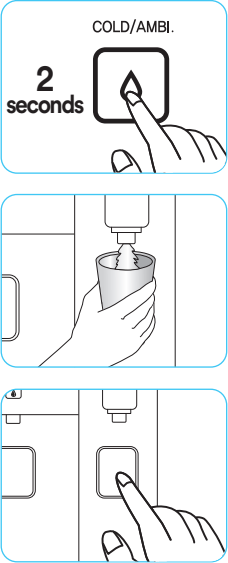
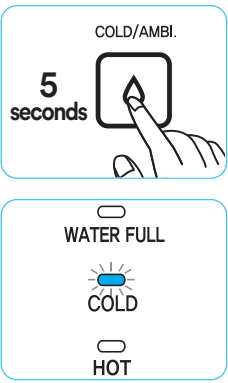
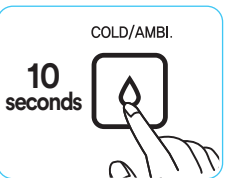
Panel functions and control



Display settings and functions

 <p>WATER FULL</p>	<p>1. Water Full LED Indicator</p> <ul style="list-style-type: none"> • Lights up when water tank is full. (Blue LED)
 <p>COLD</p>	<p>2. Cold Water LED Indicator</p> <ul style="list-style-type: none"> • Lights up when “COLD” is set. (Blue LED)
 <p>HOT</p>	<p>3. Hot LED Indicator</p> <ul style="list-style-type: none"> • Lights up when “HOT” is set. • Red LED : Tank Heating Mode ; Green LED : Instant Heating Mode
 <p>HOT (STAND-BY)</p>	<p>4. Hot (Stand-by) LED Indicator</p> <ul style="list-style-type: none"> • Lights up when “HOT SELECTION” button is selected.(Red LED)
 <p>HOT</p>	<p>5. Hot Selection Button</p> <ul style="list-style-type: none"> • To select hot water • Tap to select between heating modes (Tank Heating Mode, Instant Heating Mode or to turn heating OFF)
 <p>COLD/AMBI.</p>	<p>6. Cold/Ambi. Selection Button with LED indicator</p> <ul style="list-style-type: none"> • Tap to select cold or ambient water. • Green LED : Ambient water; Blue LED : Cold water
	<p>7. Water Dispensing Button</p> <ul style="list-style-type: none"> • Tap to dispense water into containers or cups after selecting the desired type of water temperature (hot, ambient or cold)
	<p>8. Drain Switch</p> <ul style="list-style-type: none"> • I is on for Manual Drain setting. An alert sound will be triggered and water source turned off. • O is off for Manual Drain. Water source will be on for normal operation.

How to use panel functions

 <p>10 seconds</p>	<p>Tank Heating / Instant Heating Mode</p> <ol style="list-style-type: none"> 1. Press “HOT SELECTION” button for 10 seconds. 2. Press “HOT SELECTION” button to change modes <ul style="list-style-type: none"> • Tank heating → Instant Heating → OFF • Tank Heating : Red LED ; Instant Heating : Green LED
 <p>2 seconds</p>	<p>Constant Water Function</p> <ol style="list-style-type: none"> 1. Press “COLD/AMBI.” button for 2 seconds to take ambient or cold water <ul style="list-style-type: none"> • A setting sound “Ding dong” occurs and the “COLD/AMBI.” LED blinks. 2. After 2 seconds, the “COLD/AMBI.” LED will blink Blue (cold water) and then Green (ambient water). Tap the “COLD/AMBI.” button during the respective color blinking period to choose the desired water temperature. 3. After selecting cold or ambient water, press “WATER DISPENSING” button and the water will be dispensed continuously. <ul style="list-style-type: none"> • A “Ding dong” sound will play once. • If no water is dispensed within 10 seconds, this function will cease to exist until the next time it is set up again. • Hot water is not available for constant water function. 4. Press either “COLD/AMBI.” or “WATER DISPENSING” to stop dispensing water. Thereafter, cold water will be selected for future dispense unless Step 1 and 2 is repeated again. <ul style="list-style-type: none"> • A sound “Ding dong-Ding dong” will be played.
 <p>5 seconds</p>	<p>Turning On Cold Water Selection (If “COLD” LED is not lit)</p> <ol style="list-style-type: none"> 1. Press “COLD/AMBI.” for 5 seconds and “COLD” LED turns Blue. Cold water is selected. <p>Turning Off Cold Water Selection (If “COLD” LED is lit)</p> <ol style="list-style-type: none"> 2. Press “COLD/AMBI.” for 5 seconds and “COLD” LED is now turned off. “COLD/AMBI.” LED lights up Green. Ambient water is selected.
 <p>10 seconds</p>	<p>Silent Mode</p> <ol style="list-style-type: none"> 1. Press “COLD/AMBI.” button for 10 seconds. “WATER FULL”, “COLD”, “HOT”, “HOT (STAND-BY)” LEDs will blink 5 times. <ul style="list-style-type: none"> • A setting sound “Ding dong” will play once. <p>Non-Silent mode</p> <ol style="list-style-type: none"> 2. Press “COLD/AMBI.” button for 10 seconds. “WATER FULL”, “COLD”, “HOT”, “HOT (STAND-BY)” LEDs will blink 5 times. <ul style="list-style-type: none"> • A setting sound “Ding dong” will play once.

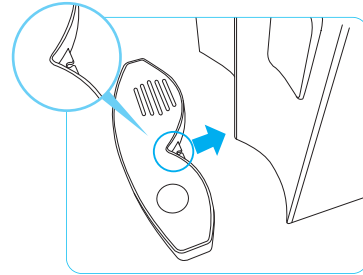


	<p>Dispensing Ambient Water</p> <ol style="list-style-type: none"> 1. Press “COLD/AMBI.” button and see if LED is Green. Ambient water is selected and proceed to dispense water. 												
	<p>Dispensing Cold Water</p> <ol style="list-style-type: none"> 1. Press “COLD/AMBI.” button and see if LED is Blue. Cold water is selected. 2. Press “WATER DISPENSING” button to dispense cold water. 												
	<p>Dispensing Hot Water (Tank Heating Mode)</p> <ol style="list-style-type: none"> 1. Press “HOT SELECTION” button and see if “HOT” LED is Red. Tank Heating Mode is selected and water in tank is hot, ready for dispense. 2. Press “WATER DISPENSING” button to dispense hot water. 												
	<p>Dispensing Hot Water (Instant Heating Mode)</p> <ol style="list-style-type: none"> 1. Press “HOT SELECTION” button and see if “HOT” LED is Green. If it is Green, Instant Heating Mode is selected. <ul style="list-style-type: none"> • A setting sound “Ding dong” occurs and LED blinks 3 times. 2. During Instant Heating Mode, “HOT” LED changes colour to indicate the temperature of water dispensed. <ul style="list-style-type: none"> • Approximately 1.3minutes are required to complete Instant Heating cycle to achieve > 85°C. 												
	<table border="1"> <thead> <tr> <th></th> <th>Green (Blinking)</th> <th>Orange (Blinking)</th> <th>Green (Light)</th> </tr> </thead> <tbody> <tr> <td>Instant heating Level</td> <td>Level 1</td> <td>Level 2</td> <td>Completion</td> </tr> <tr> <td>Hot water temperature</td> <td>Under 60 °C</td> <td>60~85 °C</td> <td>More than 85 °C</td> </tr> </tbody> </table>		Green (Blinking)	Orange (Blinking)	Green (Light)	Instant heating Level	Level 1	Level 2	Completion	Hot water temperature	Under 60 °C	60~85 °C	More than 85 °C
	Green (Blinking)	Orange (Blinking)	Green (Light)										
Instant heating Level	Level 1	Level 2	Completion										
Hot water temperature	Under 60 °C	60~85 °C	More than 85 °C										
	<ol style="list-style-type: none"> 3. After Instant Heating is completed, “HOT” LED turns Green and “HOT (STAND-BY)” LED turns Red and blinking with beeping sound “Ding Ding Ding” upon completion of Instant Heating process. <ul style="list-style-type: none"> • Hot water can only be dispensed upon completion of Instant Heating process. 4. Press “HOT SELECTION” button and “WATER DISPENSING” button to dispense hot water. <ul style="list-style-type: none"> • Hot water can be contained for 10mins without any dispense. 												
	<p>Note: When hot water is being constantly dispensed, temperature of the hot water can be below 50°C. Instant Heating process starts off automatically and hot water can only be dispensed when instant heating is completed.</p>												

Cleaning the water dispenser

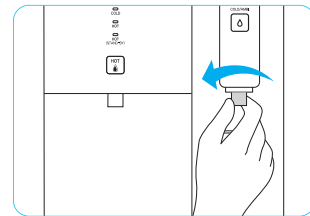
Installing the Water Tray

Push the centre of water tray until you hear the “clattering” sound. The water tray is now in place.

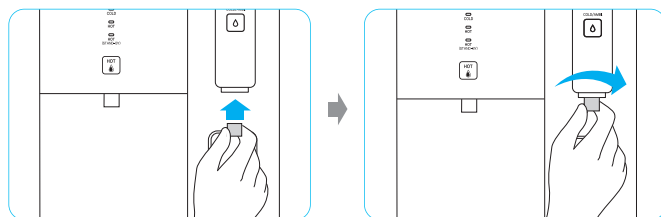


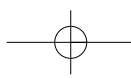
Cleaning the water dispensing spout

1. Turn faucet deco to the left and disconnect it from the body of the dispenser.



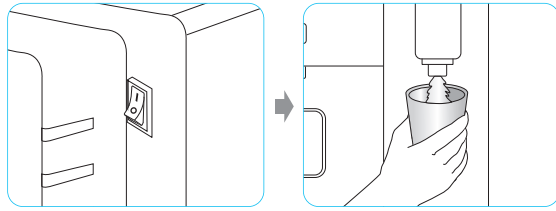
2. After cleaning, turn the faucet deco to the right to place it back.



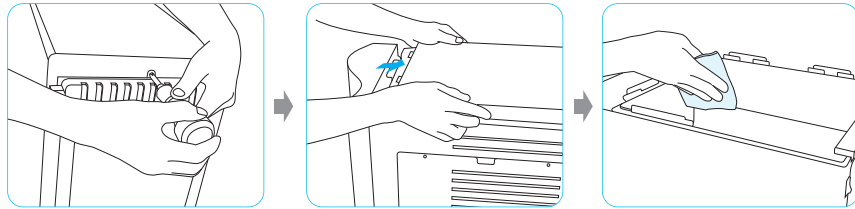


Cleaning the water tank

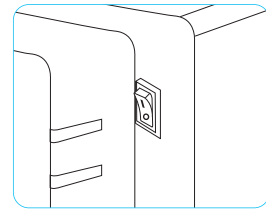
1. Shut off source water valve.
2. Turn drain switch to I at the rear of the unit to drain the ambient/cold tank water.
 - Beeping sound will start, drain the cold/ambient tanks manually.



3. Remove the screw on the back of the unit and detach the water tank cover. Use a soft cloth to clean the water tank. Place back the water tank cover and then secure the screw back.



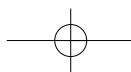
4. Turn on the source water valve and turn the drain switch to O at the rear of the unit.



5. Check if cold/ambient water is served after 40 minutes. If it is, drain to flush the tank with filtered water completely and the dispenser can be used again after the tank is full.

When cleaning the tank, please take note of the following:

1. Wash your hands before commencing the cleaning. Put on sanitary gloves and clean the tank with a soft cloth or dry cleaner.
2. Do not use any chemicals or detergent.
3. Discard any used cleaner and soft cloth after cleaning.
4. Ensure that the tank cover is closed properly and the water filter is installed properly after cleaning.
5. Clean the tank at least once a month.



Maintenance of water dispenser

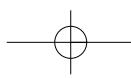
Section		Details
Installation	Location	The unit can be installed at places with low water pressure that are within water quality range.
	Environment	<p>Do not install the unit in the following places:</p> <ul style="list-style-type: none"> • Anywhere that will expose the unit to direct sunlight • Anywhere near toilets • Anywhere with fluctuating temperatures devices
Use	Water dispensing spout	<p>The spout should be cleaned at least once a week. If any foreign liquid or items come into contact with the spout, the spout should also be cleaned.</p> <p>Avoid drinking directly from the dispenser and do not allow dirty items or utensils to come into contact with the spout.</p>
	Water gutter	<p>Do not pour any other liquids into the gutter other than water from the unit.</p> <p>Ensure that the gutter is cleaned at least once a week and pour away excess water in the gutter when possible.</p>
Maintenance	Self-maintenance	Ensure that the spout and the gutter are maintained regularly according to the schedule listed above.
	Filter replacement	<p>Ensure that there is 5 minutes of flushing.</p> <p>Do not allow external shocks to the filter.</p>

Troubleshooting guide

Issues	Checking points	Actions
Display is not switched on or not operational	The power plug could be not properly inserted into its socket.	Ensure that the power plug is now inserted properly into its socket.
Ambient and cold water is not served	The water supply might be disconnected.	Ensure that the unit is properly connected to a proper water source and wait for at least 80min for the water to cool to desired temperature.
Dispensed cold water is not cold enough or not at desired temperature	The unit was just connected to a power source.	Water is still in the process of cooling down and being produced. Wait for 2 hours for initial start up.
	Cold water had been dispensed in large amounts previously or had been dispensed frequently.	There is insufficient cold water in the unit and new water from the source is being cooled down. This process takes approximately 80 minutes.
Hot water is not hot enough, or not at desired temperature.	The hot water is switched off.	Set the hot water to instant heating method or hot water tank method.
	Hot water is set to instant heating method.	Press "HOT SELECTION" button to start the heating of the water in tank. Wait for at least 1.3 minutes to complete the heat up.
	There is no water in the hot water tank.	It takes approximately 40 minutes to fill up the tank.

Technical specifications

Filtration System	3M™ AP2-C405-SG Drinking Water Filtration System UV Lamp
Removal Capabilities	Up to 99.95% of Protozoan cysts – Cryptosporidium and Giardia Cyst, Lead, Benzene, Toxaphene, P-Dichlorobenzene (Tested in accordance to NSF Standard 53) Chlorine Taste and Odor (Tested in accordance to NSF Standard 42)
Micron Rating	0.5 micron
Filtration Capacity	4,000 liters
Flow Rate	2 liters per minute
Storage Tank Capacity	Ambient Water – 4.6 liters Cold Water – 3.0 liters Hot Water – 0.57 liters Total Storage Tank Capacity – 8.17 liters
Power Consumption	Cold Water – 100 W Hot Water – 450 W Instant Heating – 1500 W
Dimensions	290 x 497 x 474 mm
Net Weight	17.7 kg



Limited Warranty:

Separation Purification Sciences Division, 3M Thailand Limited warrants this Product (including the filter cartridge) will be free from defects in material and manufacture for the following periods from the date of purchase: One (1) year for the Product. This warranty does not cover failures resulting from abuse, misuse, alteration or damage not caused by 3M Thailand Limited or failure to follow installation and use instructions. No warranty is given as to the service life of any filter cartridge or membrane as it will vary with local water conditions and water consumption.

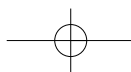
3M Thailand Limited makes no other warranties or conditions, express or implied, including, but not limited to, any implied warranty or condition of merchantability or fitness for a particular purpose or any implied warranty or condition arising out of a course of dealing, customer or usage of trade.

The remedy stated in this paragraph is Customer's sole remedy and 3M Thailand Limited exclusive obligation.

This warranty gives you specific legal rights, and you may have other rights which may vary from country to country.

Limitation of Liability:

3M Thailand Limited will not be liable for any loss or damage arising from this product, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. Some countries do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.





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