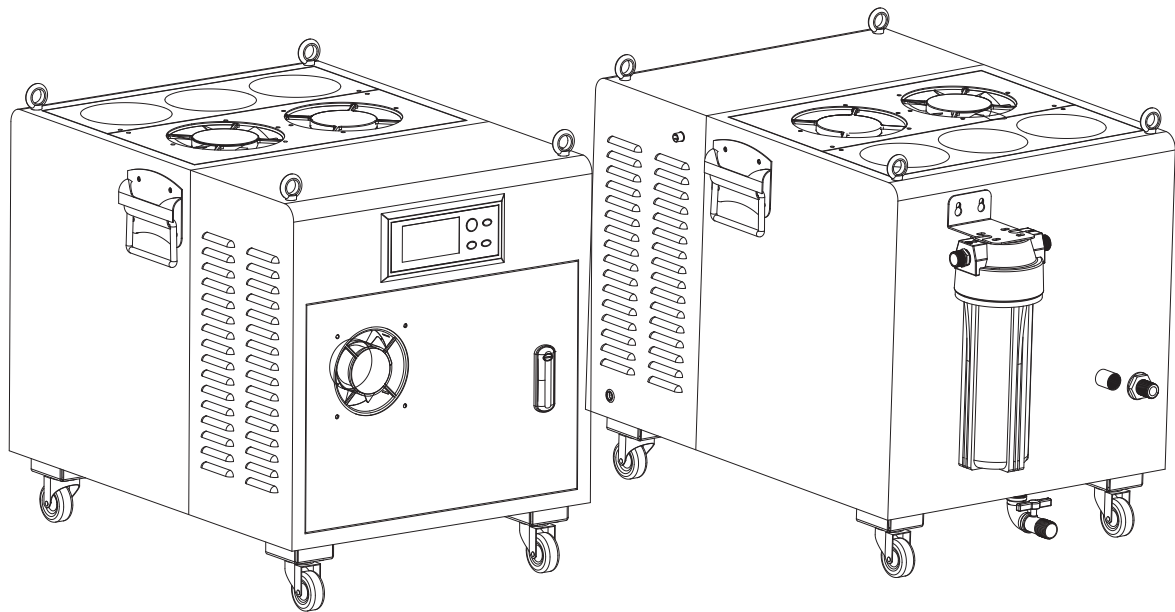




THEPROTECTOR®

Ultrasonic Humidifier

Models: INNO-ULTSNC-HMR450 & INNO-ULTSNC-HMR600



Ultrasonic Humidifier

READ THIS MANUAL

This manual will provide you with information on how to operate, maintain, and troubleshoot your humidifier. Following the instructions will ensure the proper function and extended lifespan of your unit.

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Pictures are for reference only, your unit may be straightly different

PRODUCT COMPONENT IDENTIFICATION

See FIG.1 and FIG.2.

- | | |
|-----------------------------------|--|
| 1. CONTROL PANEL | 6. PRE-SEDIMENT FILTER |
| 2. DOOR LOCK | 7. MOUNTING BRACKET |
| 3. ELECTRICAL PANEL (BEHIND DOOR) | 8. BRACKET MOUNTING HOLE |
| 4. WHEELS | 9. SPRAY OUTLET (Outer Diameter $\phi 120$, Inner Diameter $\phi 116$) |
| 5. ELECTRICAL PANEL AIR INLET | 10. TANK COVER |
| | 11. HANGING HOOK |
| | 12. AIR OUTLET |

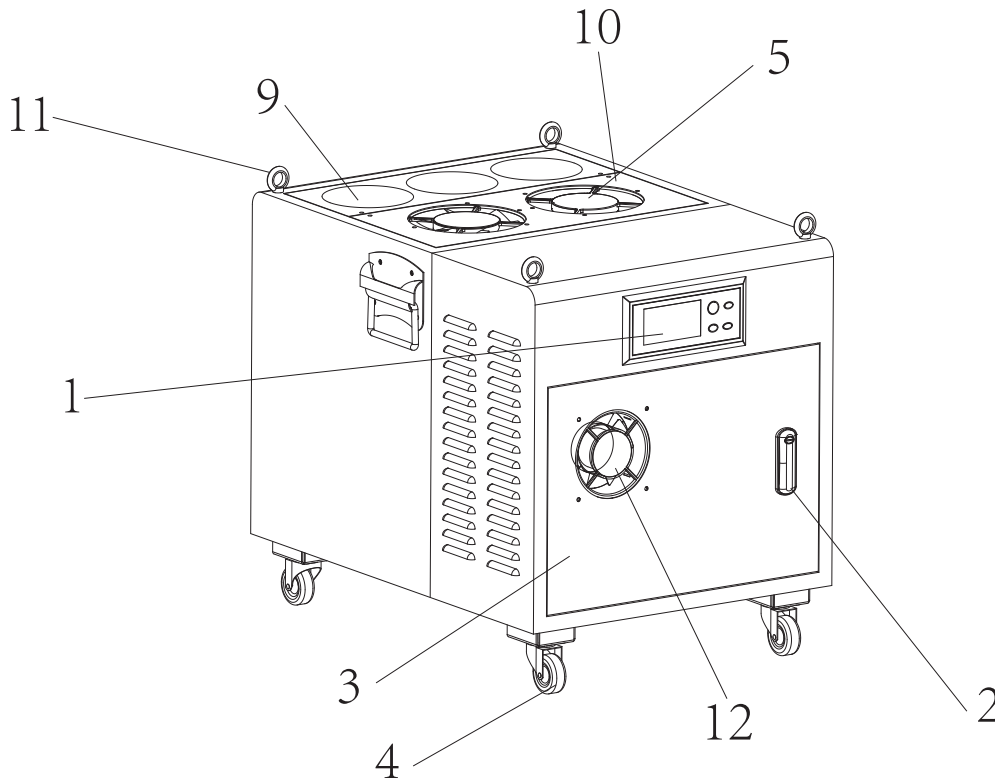


FIG. 1

Humidity sensor connection

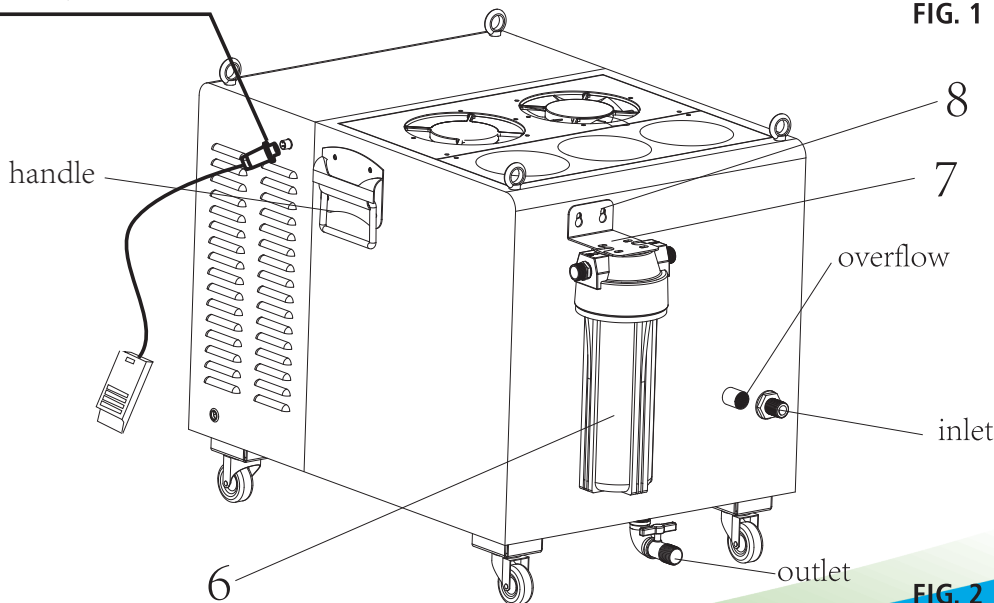




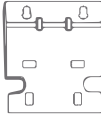








FIG. 2

NOTE:
ensure drain valve is in the closed position, unless outlet drain pipe is being utilized.

ASSEMBLY

Assembly Parts Breakdown					
No.	Parts	Qty.	Specifications	Pic.	Note
1	Filter	1	AS		See FIG.3
2	Filter Element	2	PP		Put one of them into the filter container when using the filter, another one is for replacement after a certain period
3	Connecting Hose	2	500mm length		See FIG.4
4	Spanner	1			Used to loosen the cover of Filter Container when clean the filter, See FIG.10
5	Mounting Bracket	1			Fixed on the side panel, see FIG.3
6	Hose Connector	2	Outer Diameter: DN15(1/4")		See FIG.4
7	Screw	4	ST4*16		See FIG.3
8	Screw	2	M6*16		See FIG.3
9	Flat Washer	8	φ12*6		See FIG.3
10	Nut	2	M6		See FIG.3
11	Humidity Sensor	1	10m length		See FIG.2

FILTER INSTALLATION

In order to keep the machine's water system running smoothly, and to prevent water impurities from flowing into the machine and blocking the solenoid valve and clogging system, be sure to install the water filter using the mounting bracket.

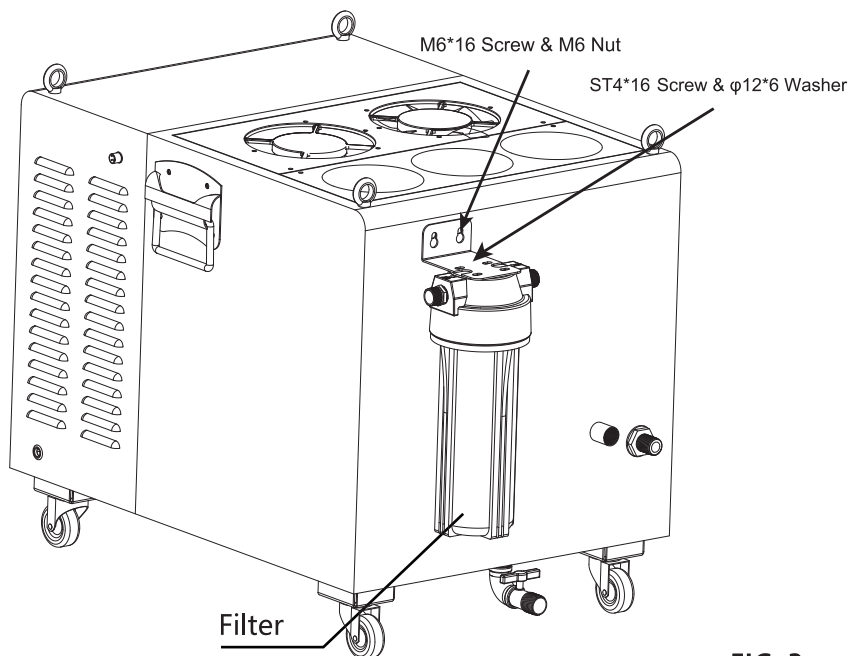


FIG. 3

1. FILTER BRACKET

- Attach bracket to the pre-drilled holes located on the side of the unit.
- Using the four supplied screws, attach the filter underneath the bracket. (see FIG. 3).

Ensure there are no foreign objects inside the tubing before connecting and operating the unit.

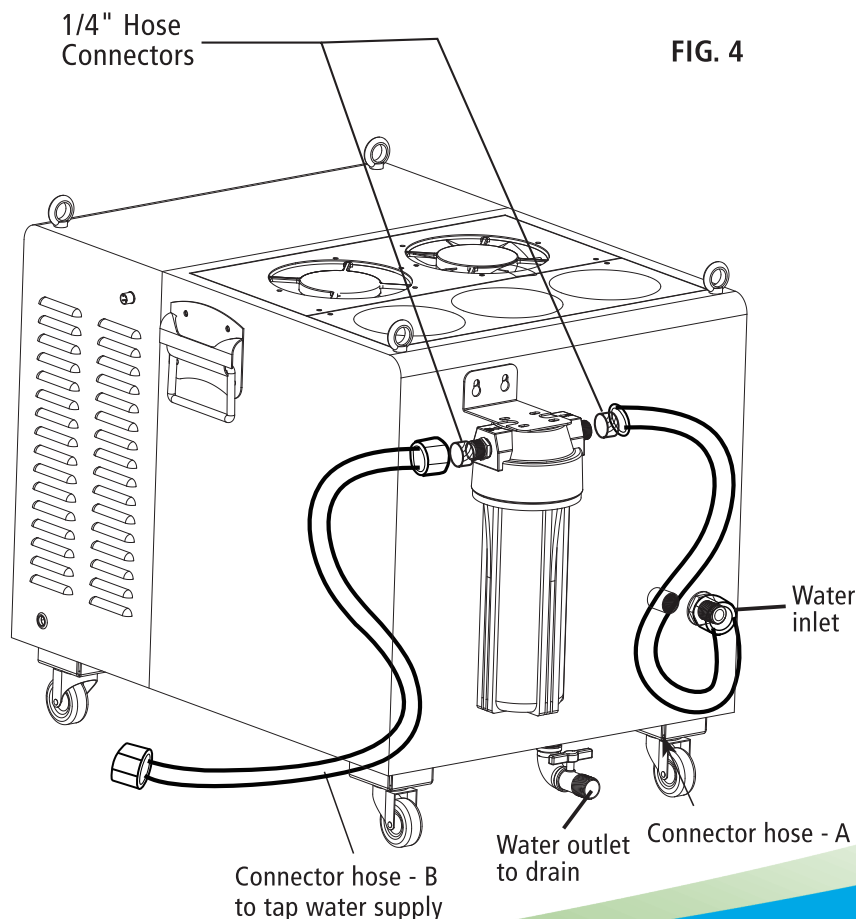


FIG. 4

2. FILTER CONNECTIONS

- Attach hose connectors onto one end of each hose.
- Connector hose - A: The end with the 1/4" hose connector now attaches to the filter. The other end is attached to the water inlet port on the unit. (see FIG. 4).
- Connector hose - B: The end with the 1/4" hose connector now attaches to the filter. The other end to your fresh water supply.

NOTE:

The height of the connector hose - A cannot be higher than the outlet.

PIPE LAYOUT

FOR OPTIMUM PERFORMANCE, INSTALL THE PIPELINE ACCORDING TO THE REQUIREMENTS IN THE OWNER'S MANUAL. SEAL ALL PIPE CONNECTIONS SO THERE IS NO AIR OR WATER LEAKS.

- To prevent water running back into the machine, the spray outlet holes must be pointing upwards at a minimum of 30 degrees.
- The diameter of the spray outlet holes must be .59".
- The distance between the spray outlet holes should be between 3.25" and 8".
- The height at the end on the pipe needs to be higher than the humidifying section, 1/8" rise per foot (see FIG. 5).
- **DO NOT** connect the water pipe with a "trap" as shown in FIG. 6.

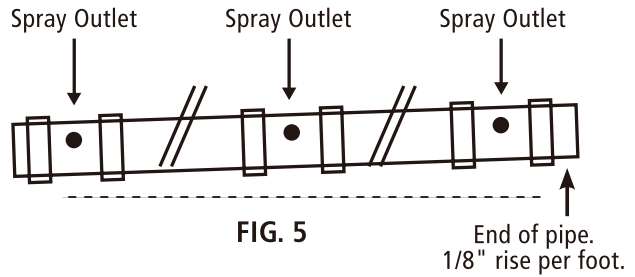


FIG. 5

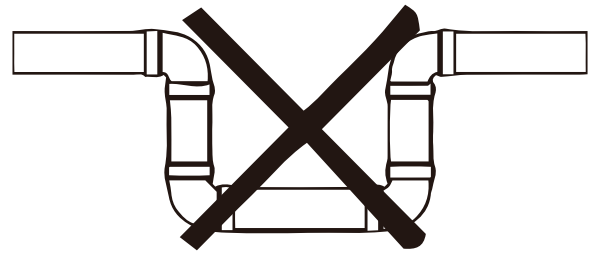


FIG. 6

NOTE:

See FIG. 7. The shortest distance from the machine to the elbow should not be less than 6" otherwise the water may run back on to the machine and effect external parts with water damage.

NOTE:

Water outlet pipe is sold separately.

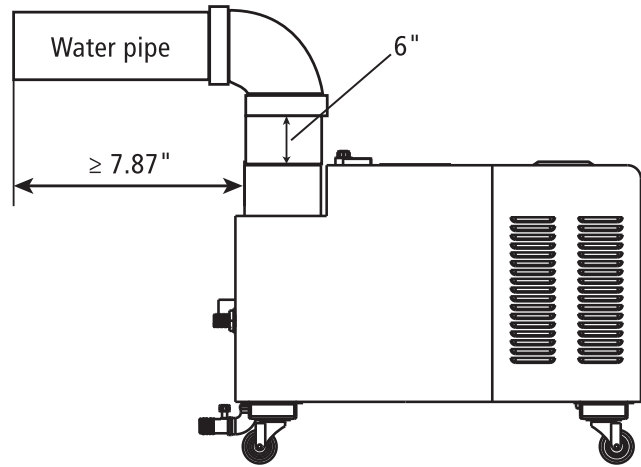


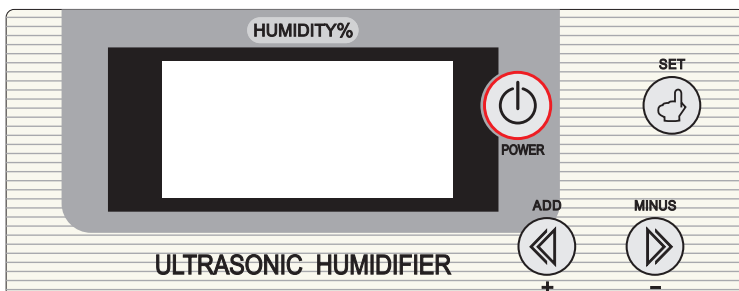
FIG. 7

OPERATION

POWER: Press "POWER" button to start or stop machine.

HUMIDITY: Press "+" or "-" buttons to adjust humidity between 30-90% range.

TIMER: Press "SET" button, then "+" or "-" buttons to set timer range between 1 to 24 hours.



SYSTEM FUNCTION

HUMIDITY CONTROL: Use the humidity sensor to sense the humidity data in the area where you want to control the humidity level. The humidity sensor and cable is included in the product package, just connect the cable to the joint on the machine(see FIG. 2).

When the humidity reaches the set point, the machine will stop automatically. It will automatically start the machine when the humidity in your space rises above the set point. The humidity range is 30-90%; The machine will stop +5% of set humidity and restart below -5% of set humidity.

LOW WATER LEVEL WARNING: When the system detects the water level is lower than the warning level, the machine will stop automatically. The system will warn if water is not refilled in 10 minutes.

FAN DELAY PROTECTION: When the humidifier is turned off the fan will continue to water and cool the unit.

WATER INLET: When the water level in the water tank decreases, the float switch will activate and the water tank will refill automatically and stop filling when the water level rises to the maximum height.

The "FULL" hole is just the overflow point if water exceed the maximum height, leave this hole as it is and don't connect any hose to it. Only when the float switch is broken, the tank won't stop filling water automatically and then water will overflow from the this point.

TECHNICAL PARAMETERS

Model	Power Supply	Power (Watts)	Spray Capacity (pints per day)	Control Manner	Spray Outlet Diameter (inches)	Size (inches)	N.W. (lbs)
INNO-ULTSNC HMR80	110V/60Hz	190W	80	Auto	4.33 Single Outlet	23.62×13.78×18.19	39.68
INNO-ULTSNC HMR150	110V/60Hz	240W	150	Auto	4.33 Single Outlet	23.62×13.78×18.19	39.68
INNO-ULTSNC HMR300	110V/60Hz	450W	300	Auto	4.33 Single Outlet	23.62×13.78×18.19	40.79
INNO-ULTSNC HMR450	110V/60Hz	730W	450	Auto	4.33 Double Outlet	24.80×18.11×22.13	62.83
INNO-ULTSNC HMR600	110V/60Hz	950W	600	Auto	4.33 Double Outlet	24.80×18.11×22.13	66.14

ERROR CODES

Code	Meaning
E1&E2	Humidity sensor failure

TROUBLESHOOTING TIPS

Problem	Possible Causes	Troubleshooting
Indicator off	No power	Check the circuit and recover power supply
	Fuse is burnt	Replace fuse of same specification
	Power switch is off	Start power switch
The supply tank gets no water	No water supply from the pipe	Check water supply valve
	Water inlet solenoid valve is damaged	Replace solenoid valve
	Main control board is damaged	Replace main control board
Automization indicator is on but there is no spray	Inlet water pressure is not enough	Inlet water pressure shall be 5 kg
	Voltage is 5% less than required voltage	Check the voltage
Water flows from the case	Foreign matter in the solenoid valve	Dismantle the solenoid valve to clear foreign matter
	Scale in the water box	Clear the water box
Less spray or no spray	Voltage is too low	Keep normal voltage
	No water in the water tank	Add water to the water tank

MAINTENANCE

MAINTENANCE OF THE WATER TANK

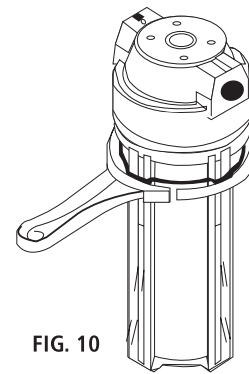
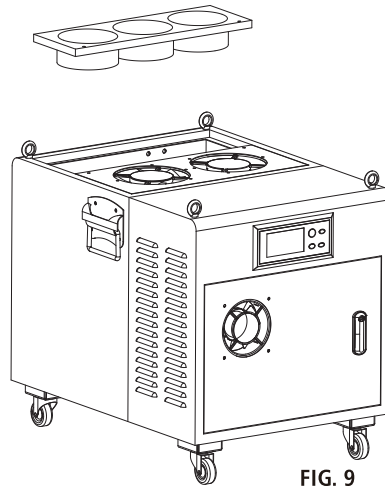
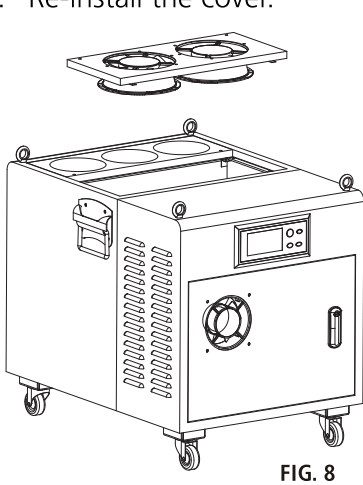
Water should be changed regularly once every 7 days. The automatic computer flushing system helps to minimize dirt and residue in the water tank.

CLEAN THE WATER TANK

The water tank should be cleaned regularly once every 30 days. Please remove the electrical plug from the wall socket before changing the water tank to prevent electric shock.

METHOD TO CLEAN:

1. Remove all water from the water tank, using the water outlet (see Fig. 4 on page 4)
2. Open the top cover and remove the tank cover. Use a soft cloth or brush to clean in and around the water tank. Wash out with clean water.
3. Water should not be spilled on the external components and wires, to prevent short circuit.
4. Do not use detergent to clean any components of atomizer.
5. Re-install the cover.



CLEAN THE FILTER

The filter should be cleaned regularly at least once a month:

1. Unscrew the cover of the filter.
2. Clear the dirt on filter element.
3. Re-install the cover.



THEPROTECTOR LIMITED PRODUCT WARRANTY

Please take the time to read through our Standard Terms and Conditions of the THEPROTECTOR Limited Product Warranty.

How Long Does The Coverage Last?

The product warranty becomes effective from the date of purchase by the purchaser. Coverage terminates if you sell or otherwise transfer the product. The repair of your product under warranty will not extend the period of the warranty. Each part has its own warranty. Please check the warranty list before you place an order.

How Do You Get Service?

Products are to be returned to THEPROTECTOR Tech Support Center under your express account. Address: 10725 Capital St. Oak Park. MI +1 248-542-1831

What is Covered?

Normal wear and tear. We will repair or replace your product if your product is found, within the warranty period, to be defective due to defective materials or workmanship existing at the time of purchase. If any part is no longer available or out of manufacture, THEPROTECTOR will replace it with a functionally-equivalent replacement part.

What is Not Covered?

THEPROTECTOR shall NOT be liable for costs of repair or replacement of a product incurred as a result of:

1. Accidental damage, faults caused by negligent use or care, neglect, careless operation or handling of the product which is not in accordance with the THEPROTECTOR Instruction Manuals.
2. Use of the parts not assembled or installed in accordance with the instructions of THEPROTECTOR.
3. Use of parts or accessories other than those produced or recommended by THEPROTECTOR.
4. External sources such as transit damage or weather.
5. Repairs or alterations carried out by parties other than THEPROTECTOR or its authorized agents.
6. Serial numbers defaced or missing.

THEPROTECTOR warrants the mechanical and electronic components of all THEPROTECTOR series to be free of defects in material and workmanship if used under normal operating conditions for a period from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use THEPROTECTOR shall, at its discretion, either replace or repair the product using suitable new or refurbished parts. In case THEPROTECTOR decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period.

THEPROTECTOR DISCLAIMS ANY AND ALL LIABILITY, INCLUDING ANY EXPRESS OR IMPLIED WARRANTIES, WHETHER ORAL OR WRITTEN, FOR SUCH THIRD PARTY HARDWARE. THE CUSTOMER ACKNOWLEDGES THAT THEPROTECTOR HAS MADE ITS BEST EFFORTS TO MATCH ITS PRODUCTS TO WORK WITH THIRD PARTY HARDWARE OR THE ABILITY TO CONNECT TO AND CONTROL THIRD PARTY HARDWARE FOR THE CUSTOMER'S INTENDED PURPOSE. THEPROTECTOR ADDITIONALLY AND SPECIFICALLY DISCLAIMS ANY AND ALL LIABILITY FOR CHANGES, ADDITIONS OR UPDATES IN ANY WAY TO A THIRD PARTY MANUFACTURES PRODUCTS.

