



ionmax.com.au  
1300 800 200



# HYBRID UV HUMIDIFIER

ION90



USER MANUAL

## DEAR CUSTOMER

Thank you for purchasing the Ionmax Ion90 Hybrid UV Humidifier. The Ion90 reintroduces moisture into the air to help you maintain a comfortable humidity level in your home. Utilising a combination of UV LED and Bio-photocatalyst technology, the Ion90 sterilises and deodorises the air before allowing it to emit clean, pure mist.

Please read this manual carefully to ensure proper usage and save these instructions for future reference.

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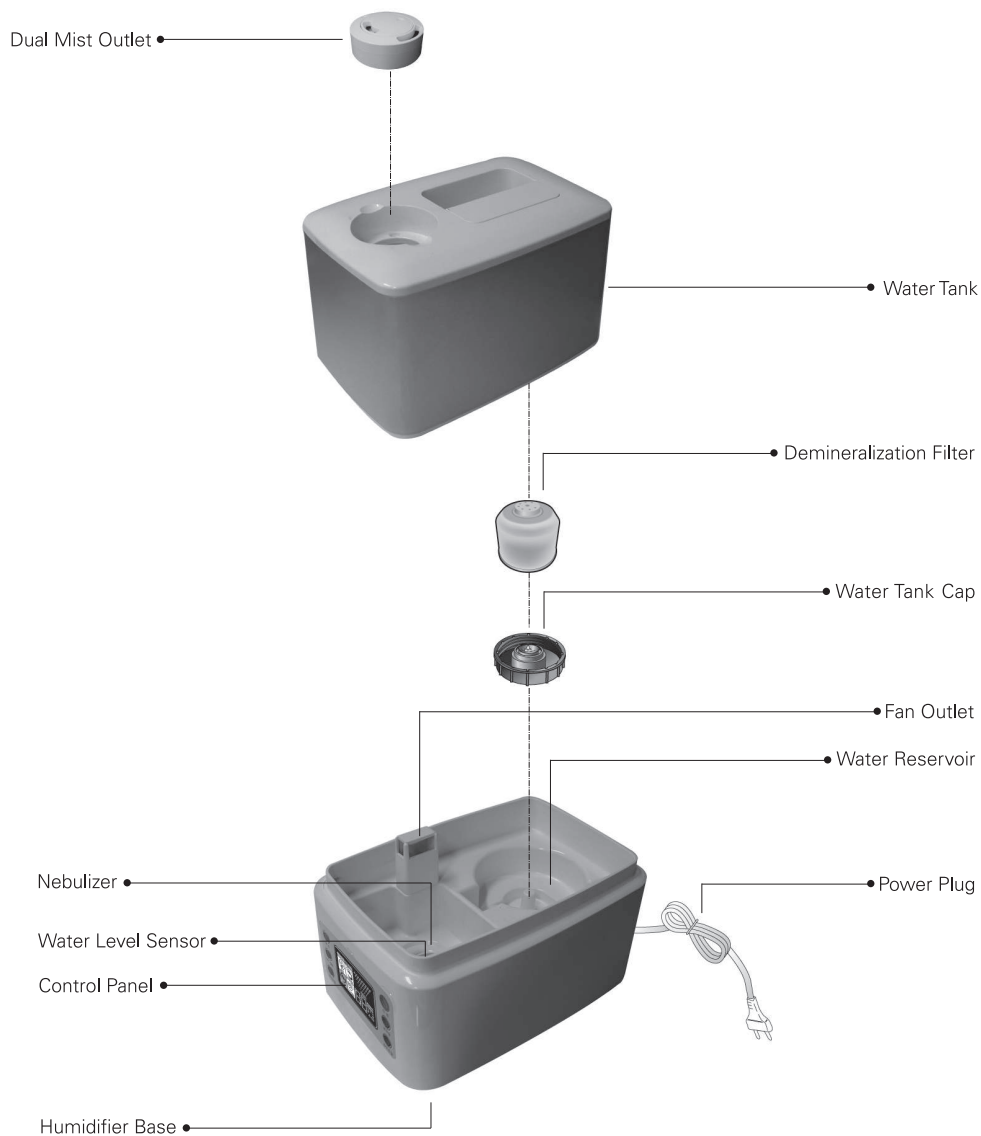
This product includes:

- 1 x Water Tank
- 1 x Demineralization Anti-bacterial Nano-Silver filter

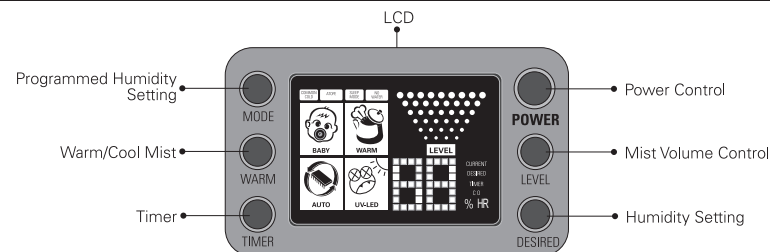
\* Please contact us immediately if any of the above mentioned items are not included

## PRODUCT DESCRIPTION

### Hybrid UV Humidifier - ION90



## CONTROL PANEL DESCRIPTION



### LCD Display:

- Common Cold Mode
- Atopy Mode
- Sleep Mode
- Water Shortage Indicator
- Baby Mode

- Warm Mode
- Auto Mode
- UV Light Sterilization
- Humidity Level Indicator
- Humidity Reading from 40%-75%

- Current Relative Humidity
- Desired Relative Humidity
- Timer Setting of 1-9 Hours
- Continuous Humidification

## TECHNICAL SPECIFICATIONS

Humidification Technology	Ultrasonic Cool and Warm Mist with Humidistat Control and UV Bio Photo Catalyst
Power Consumption	Cool Mist - 40W Warm Mist - 125W UV LED Light - 1W
Coverage	Up to 16m <sup>2</sup>
Tank Capacity	6.5 litres
Humidification Rate	Cool Mist - 300 ml/hr Warm Mist - 400 ml/hr
Continuous Humidification	Cool Mist - Minimum 21 hr Warm Mist - Minimum 16 hr
Empty Weight	3.5 kg
Product Dimension (W x D x H)	180mm (w) x 260mm (d) x 315mm (h)
Humidifier Settings	LED Display Screen <ul style="list-style-type: none"> <li>• Humidity Status</li> <li>• Humidifier Settings</li> </ul>
Features	<ul style="list-style-type: none"> <li>• Auto Mode</li> <li>• UV Bio-Photocatalyst Sterilization and Deodorization</li> <li>• Dual Mist Outlet</li> <li>• Duo - Humidification Methods</li> <li>• Humidity Level Control</li> <li>• Humidification Timer</li> <li>• Hydrostat for Pre-set Humidity Level</li> <li>• Programmed Humidity Settings</li> <li>• Sleep Mode</li> <li>• Water Shortage Indicator</li> </ul>
Regulated Mist Volume	3 levels of Mist Volume
Colors Available	White
Optional Product Accessory	Demineralization Filter or Brush

## GENERAL INFORMATION

### What is Humidity?

Humidity is the amount of dampness or water vapor in the air.

### What is Relative Humidity (RH)?

The Relative Humidity is the relative ratio of the amount of dampness or water vapor in the air, at a specific temperature, to the maximum amount that the air could hold at the temperature, expressed as a certain percentage.

### What are the consequences of low humidity levels to the human body?

When a person is exposed to low humidity levels, his or her hydration levels will be reduced and many negative bodily symptoms either occur or are aggravated.

Some of the common symptoms include:

- Blocked, stuffed or running nose
- Difficulty in breathing
- Sore and dry throat
- Electrostatic shocks
- Dry, scaly and chapped skin
- Sore and dry eyes
- Fatigue, sleeplessness and poor concentration
- Infections and illnesses of our respiratory system like Asthma
- Dry skin disease like Eczema

### What is the desired Relative Humidity Level?

A comfortable atmosphere indoors between 60% to 70% relative humidity is the recommended level.

Humidity Levels	RH (%)
Humidity Level in Air-con Room (indoor)	30% - 40%
Ideal Humidity Level (indoor)	60% - 70%
Outdoor Humidity Level	70% - 95%

\* Recommended by the Guideline  
for Good Indoor Air Quality

### Why use Ultrasonic Technology for humidification?


**Ultrasonic Technology** is an extremely **effective** and **economical** method of maintaining and moderating the relative humidity level in the surrounding air. Ultrasonic Technology works in **soundless** operation and creates high oscillations and vibrations that transform water into fine vaporized mist. The mist is then dispersed into the surrounding air to add humidity into the air.

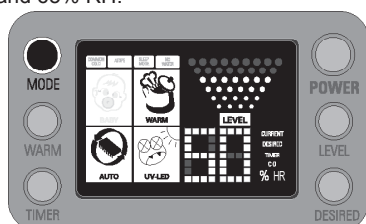
### How does the IONMAX Humidifier ION90 work?

When water is poured into the Water Tank, it flows into the **Water Reservoir**. Here, the water comes in contact with the ultrasonic resonator called the **Nebulizer**. The Nebulizer vibrates in a rapid speed of up to one million times per second. This high-speed vibration causes the water to break up into minute fine droplets that then pass through the **Mist Outlet** to increase the humidity level in the room effectively.

## FEATURES

### AUTO MODE

When set to , the IONMAX Humidifier ION90 will automatically adjust the level of mist volume to accommodate the surrounding humidity level till it reaches the **DESIRED** relative humidity. The desired humidity level is between 50% and 65% RH.



## UV BIO-PHOTOCATALYST STERILIZATION AND DEODORIZATION

Relying on the fan outlet to deliver mist, IONMAX Humidifier ION90 uses a combination of UV LED and Bio-Photocatalyst to constantly sterilize and deodorize the air before allowing it to blow out clean, pure mist.

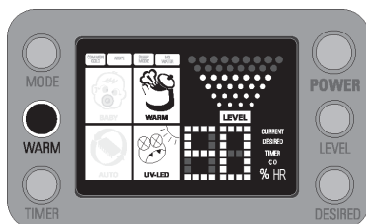
The combination of bio material and photocatalyst acts as an environmental friendly oxidizing agent when activated by ultraviolet ray. When the photocatalyst captures ultraviolet light, it forms activated oxygen from water or oxygen in the air. The formed activated oxygen effectively decomposes smelly particles to achieve maximum deodorization and sterilization effects.

## DUAL MIST OUTLET

For a more comprehensive coverage of the surroundings, the IONMAX Humidifier ION90 has two mist outlets which can be rotated accordingly to your surrounding for optimal efficiency.

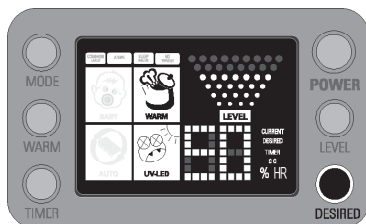
## DUO-HUMIDIFICATION METHODS

The IONMAX Humidifier ION90 has the capability to use two types of humidification methods. **Heat Vapourizing (Warm Mist)** and **Ultrasonic Humidification (Cool Mist)**. Both methods utilise ultrasonic vibrations. It is recommended to use the Warm Mist option if you want humidification to take place faster. The mist that is emitted via the Warm Mist option is around 35°C whilst the Cool Mist option is room temperature.




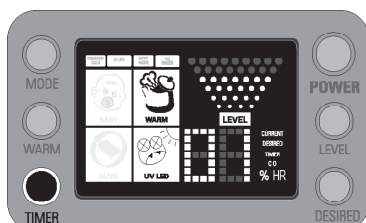
## HUMIDITY LEVEL CONTROL

IONMAX Humidifier ION90 allows you total control in pre-setting and choose from a humidity level of 40% to 75% RH (at an increment of 5%) or even in Continuous mode.



## HUMIDIFICATION TIMER

IONMAX Humidifier ION90 can be programmed to work from 1 to 9 hours or run continuously. The time advances by 1 hour each time the  is pressed.



## HYDROSTAT FOR PRE-SET HUMIDITY LEVEL

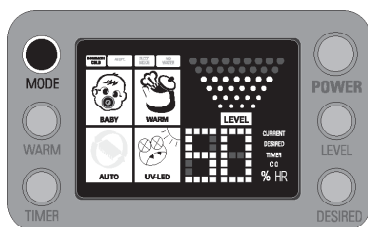
The IONMAX Humidifier ION90 comes with an in-built hydrostat that works as an automatic sensor of the surrounding relative humidity and hence facilitates it to continuously moderate and sustain your desired relative humidity.

When the pre-set or programmed relative humidity is reached, the humidification process will pause automatically. Alternatively, the humidification process will resume again if the relative humidity drops below the pre-set level.

## PROGRAMMED HUMIDITY SETTINGS

### Common Cold

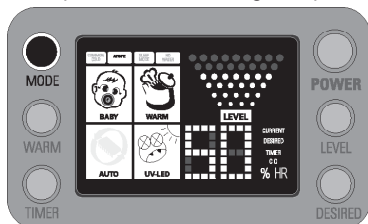
In this mode, the IONMAX Humidifier ION90 will maintain the relative humidity from 56% to 70% RH. It helps to keep the relative humidity high for better breathing as well as to alleviate cold symptoms.



### Atopy

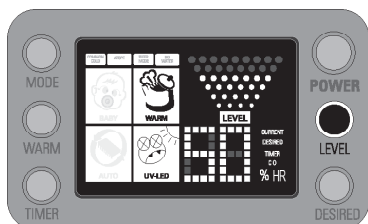
IONMAX Humidifier ION90 is also able to help people with Atopy\* by maintaining the relative humidity from 50% to 62% (at an increment of 2%). This range of relative humidity is also suitable and comfortable for babies.

\*An allergy that makes a person susceptible to certain allergic responses such as hay fever and asthma.



## REGULATED MIST VOLUME

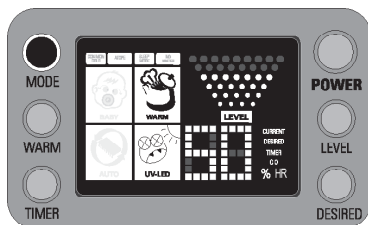
Regulate the mist volume of your IONMAX Humidifier ION90 by choosing between levels of "Low" :•••••, "Medium" :••••• or "High" :•••••.





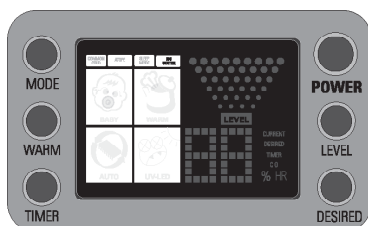
## SLEEP MODE

When set to **SLEEP**, the IONMAX Humidifier ION90 LCD becomes dimmer with the relative humidity set at 60%. It will operate continuously for 8 hours with **WARM** on before powering off automatically.



## WATER SHORTAGE INDICATOR

The IONMAX Humidifier ION90 comes with an inbuilt water shortage sensor that will inform you when the water level is low. The unit will beep 5 times and the **NO WATER** icon will blink continuously to alert you of the status. This is useful in reminding the user to refill the **Water Tank**.



## DEMINEERALIZATION FILTER

When water goes through the Demineralization Filter, it is restructured at an ionic level and the dissolved mineral salts and other additives are removed, thereby softening the water. This aids in reducing mineral buildup at the nebulizer and finer ultrasonic humidification.

## USING THE IONMAX HUMIDIFIER


Ensure that the power cord is removed from the power supply at all times during installation, refilling of water, maintenance and transportation.

### OPERATING NOTICE

- Step 1:** Remove the unit from all packaging. Check and ensure that there are no foreign objects inside the **Water Tank** and **Water Reservoir**.
- Step 2:** Remove the **Water Tank** from the base and fill it with clean, tepid or cool water from the tap. **NOTE:** DO NOT use water above 40°C.
- Step 3:** Empty water from base.
- Step 4:** Fasten the cap of the **Water Tank** snugly and place it back onto the **Humidifier Base**. Please note that whenever a filled **Water Tank** is placed onto the **Humidifier Base**, the sound of gurgling water is normal. This happens when water is travelling from the **Water Tank** into the **Water Reservoir**. Wait for a while for the water to fill up the **Water Reservoir**.



**Step 5:**

Select a stable surface to situate the unit. Plug the power cord into the power supply and switch on. A beep signal will be heard. Press the “**POWER**” button and the unit will commence operation in  mode. Read more on the “**FEATURES**” section to understand the various functions of IONMAX Humidifier ION90. To power off, press the “**POWER**” button again.



**Please note that the unit might stop from time to time if:**

- 1) The programmed relative humidity is met.**
- 2) There is a shortage of water supply.**
- 3) There is a disruption of power supply.**

## CLEANING & MAINTENANCE

**Recommended Maintenance**

It is recommended to clean and maintain the IONMAX Humidifier ION90 **at least once a week.**

**Before you start:**

- **DO NOT** use any detergents, solvents or aggressive agents to clean the unit.
- **DO NOT** use brushes or cloths that are abrasive or might cause scratches or damage to the unit.
- **DO NOT** allow water to sit in the tank for more than 1 week.

**To Clean The Body Casing**

The IONMAX Humidifier ION90 should always be regularly maintained and cleaned. For external maintenance, regularly use a damp cloth to wipe the surface to prevent the accumulation of dust.

**To Clean The Water Tank**

Remove sediments or scale buildup by shaking the **Water Tank** vigorously after refilling the **Water Tank**. Pour out the water and wipe the internal tank thoroughly with a soft cloth.

**To Clean The Water Reservoir**

Pour water away from the **Water Reservoir** as shown in the picture. **DO NOT** let water get into the **Fan Outlet**. Remove sediments or scale buildup inside the **Water Reservoir** by using a damp cloth to wipe the surface.

**IMPORTANT**

- 1) When the Nebulizer is not regularly cleaned, the efficiency of the unit will be compromised or even damaged depending on the severity.
- 2) **DO NOT** clean the Nebulizer with any solvents or aggressive agents.
- 3) **DO NOT** scratch or rub the surface of the Nebulizer with a sharp article.

## STORING GUIDE

To keep or store the IONMAX Humidifier ION90, ensure that water is thoroughly drained, removed and dried from the **Water Tank** and **Water Reservoir** before storing in a cool and dry place.

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	WHAT TO DO?
Humidifier does not operate	<ul style="list-style-type: none"> <li>Power cable not plugged in.</li> <li>Humidifier not switched on.</li> <li>There is a water shortage. (<b>No Water</b> indicator lit up)</li> </ul>	<ul style="list-style-type: none"> <li>Plug in power cable.</li> <li>Push the <b>POWER</b> Button.</li> <li>Refill the <b>Water Tank</b>.</li> </ul>
No Mist Output	<ul style="list-style-type: none"> <li>Desired pre-set humidity level has been met.</li> <li>There is a water shortage. (<b>No Water</b> indicator lit up)</li> <li>Mineral/Sediment buildup at the Nebulizer</li> </ul>	<ul style="list-style-type: none"> <li>Increase pre-set humidity level or wait till surrounding humidity level drops.</li> <li>Refill the <b>Water Tank</b>.</li> <li>Regular maintenance of humidifier</li> </ul>
Mist With Odor	<ul style="list-style-type: none"> <li>Ill-maintained humidifier</li> <li>Water is unclean</li> <li>Stale Water</li> </ul>	<ul style="list-style-type: none"> <li>Regular maintenance of humidifier</li> <li>Remove all existing water in the tank and base, clean with fresh water and refill with fresh water.</li> </ul>
<b>No Water Indicator</b> lits up despite sufficient water	<ul style="list-style-type: none"> <li>Water Level Sensor float stuck</li> <li>Unit not sitting level</li> </ul>	<ul style="list-style-type: none"> <li>Gently release Water Level Sensor float.</li> </ul>

## WARNING AND PRECAUTIONS



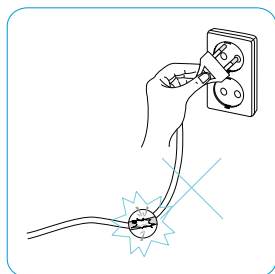
**DO NOT** add any additives into the **Water Tank** unless specified.



**DO NOT** use any detergents, solvents or aggressive agents to clean the humidifier.



**DO NOT** cover any openings or insert any foreign objects inside any crevices of the humidifier.



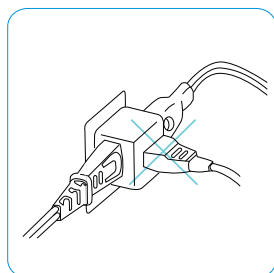
**DO NOT** use the humidifier if the power cord is faulty.



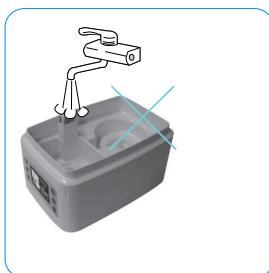
Repairs of humidifiers are only to be made by **qualified service engineers**. Improper repair can cause considerable danger to the user.



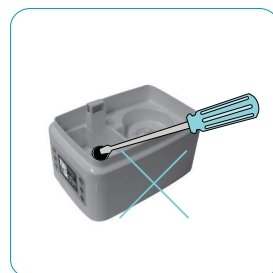
Always choose a **stable and flat** surface to place your humidifier.



Refrain from overloading your power supply with multiple power plugs.



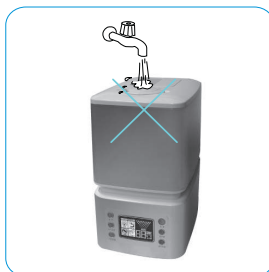
**DO NOT** pour water into the **Fan Outlet** of the unit.



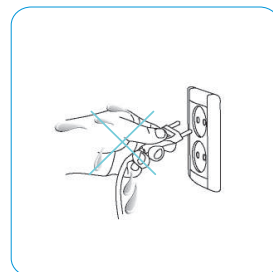
**DO NOT** scratch or rub the surface of the **Nebulizer** with a sharp article. Use the brush provided instead.



**DO NOT** move or incline the humidifier during operation.



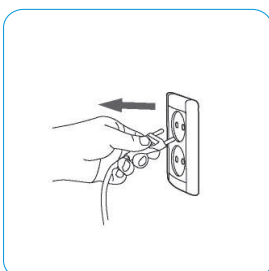
**DO NOT** pour water directly into the **Mist Outlet**. Fill water only through the **Water Tank**.



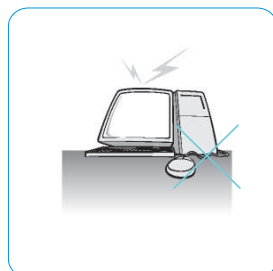
**DO NOT** handle the humidifier or power cord with wet hands.



**DO NOT** immerse the humidifier base into water.



Always unplug the humidifier during installation, refilling of water, maintenance and transportation.



**DO NOT** place humidifier under direct sunlight, high temperature, near computers or sensitive electronic appliances.

## SAFETY INSTRUCTIONS

- 1) Read the operating instructions carefully before using the humidifier and keep them for later reference.
- 2) Persons who are not familiar with the operating instructions, as well as children and persons under the influence of medication, alcohol or drugs are not advised to operate the humidifier, or are only advised to operate it under supervision.
- 3) Only operate the humidifier when it is completely assembled.
- 4) Always ensure that there is sufficient water in the **Water Tank** before operation.
- 5) Use only clean, tepid or cool water to fill the tank.
- 6) DO NOT use **Essential Oil**.
- 7) Always have the **Mist Outlet** and **Water Tank** in place while the unit is operating. Rotate the **Mist Outlet** so that it is aimed away from walls or furniture.



## **Important Notice about Operating the ION90 Humidifiers**

### **Water Overflow**

The ION90 humidifier water feed system relies on gravity and vacuum in the reservoir (tank) to control water flow to the unit. When the tank is installed on the base, a certain amount of water will be drawn from the tank to create a vacuum. If water is already present in the base, overflowing may occur which can cause the unit to appear to be leaking.

To ensure no overflow occurs, please follow the steps below when operating your device:

1. Empty the base of all water during each refill.
2. Completely fill the reservoir (tank) during each refill.

If possible, refill the unit only when the 'empty' light comes on as the base will already be empty.

### **Condensation**

Occasionally, water may pool at the base of the unit due to condensation build-up which may make the unit to appear to be leaking. This can occur when the air temperature drops as warm air holds more water than cold air.

Switching from cool to warm mist increases the air temperature slightly. Reduce the humidity settings to prevent too much moisture from being created.

Do not operate a humidifier in a small room where the temperature is low as condensation may occur on walls and windows.

Air conditioners act as dehumidifiers removing moisture from the air. Turning off or reducing the intensity of your air conditioner will help the humidifier to work more efficiently.



# andatech®

## WARRANTY DETAILS

**Congratulations on your purchase!** It is our aim to provide you with quality products that you can trust. Our products come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or a refund for a major failure and for compensation for any other reasonably foreseeable loss or damage.

You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

### The Guarantee

The product is guaranteed to be free from defects in workmanship and parts for a period of 12 months from date of purchase for domestic use and 3 months for commercial use. Defects that occur within this warranty period, under normal use and care, will be repaired, replaced or refunded at our discretion, solely at our option with no charge for parts and labour. The benefits conferred by this warranty are in addition to all rights and remedies in respect of the product that the consumer has under the Trade Practices Act and similar state laws.

### Proof of Purchase

This warranty is valid for the original purchase and is not transferable. Please keep your purchase docket or receipt as proof of purchase and as proof of date on which the purchase was made. The purchase docket (or a copy) or receipt must be presented with the warranty when making a claim under this warranty.

### Service during the Warranty Period

To claim for warranty, contact us on 1300 800 200 or [info@andatech.com.au](mailto:info@andatech.com.au) to get an RA# (Return Authorization Number). Ensure that the RA# is clearly stated on the outside of the packaging and that the product is properly packaged so that no damage occurs to the product during transit. Shipping of the product back to us for warranty will be at your cost. A product return without the RA# or proof of purchase will not be accepted.

### Extent of Warranty

This warranty is limited to defects in workmanship or parts. All defective products or parts will be repaired or replaced. This warranty does not cover manuals and packaging.

### Normal Wear and Tear

This warranty does not cover normal wear and tear to the product or parts.

### Exclusions

This warranty does not cover:

- Any defect caused by an accident, misuse, abuse, improper operation, lack of reasonable care, unauthorised modification, loss of parts, tampering or attempted repair by a person not authorised by the distributor.
- Any product that has been damaged by a lightning strike either directly or indirectly or a main power surge or liquid ingress.
- The product if it is located outside of Australia.
- Any damage caused by improper power input or improper cable connection.

### Andatech Corporation Pty. Ltd.

PO Box 3038, Nunawading VIC 3131, Australia.

Phone: 1300 800 200 Fax: 1300 883 802 Email: [info@andatech.com.au](mailto:info@andatech.com.au)



**1 YEAR**  
WARRANTY

