

AIRBITAT EVAPORATIVE COOLER



OPERATING MANUAL

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



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SAFETY INSTRUCTIONS

Please read this manual thoroughly prior to installation and operation of the Airbitat City Cooler. The purpose of the safety instructions described below is for the user to use the product safely and correctly to prevent any unexpected risk of injury or damage.

In these instructions, "Servicing" and "Maintenance" refers to the following lists of works:

Servicing	Cleaning of water level sensor, water tank, heat exchanger and fan blades, changing of evaporative media, diagnostics and performance check, repair works related to major components such as fan, heat exchanger, valves, and electrical works.
Maintenance	Cleaning of pre-filters and product exterior.

(!) IMPORTANT:

- Installation of this product should only be carried out by the manufacturer or authorized service agent.
- Servicing and maintenance of the product should only be carried out by the manufacturer, authorized service agent or qualified personnel.

✓ DO :

- Use this product only in a manner intended by the manufacturer.
- Ensure that the red POWER switch is flipped to [O] before inserting power plug into power supply socket.
- Ensure that the power plug is dry before inserting into power supply socket.
- Ensure that the City Cooler is installed and secured on firm and level ground, with castor wheel lock-brakes engaged.
- Ensure that the exterior of City Cooler is clear from and not blocked by any foreign objects during operation to avoid obstruction to air inflow and outflow.
- Ensure that the power cord and water hoses are properly secured and do not present as a tripping hazard.
- Ensure that power and water supplies are disconnected, and castor wheel lock-brakes are disengaged, prior to moving or servicing the City Cooler.
- Ensure that power is disconnected before cleaning the City Cooler.

X DON'T:

- Do not operate the City Cooler with a damaged power cord or plug. Contact the manufacturer or authorized service agent for technical support.
- Do not attempt to dismantle, modify or repair the City Cooler.
- Do not attempt to climb or stand on the unit.
- Do not place any heavy objects on the unit.

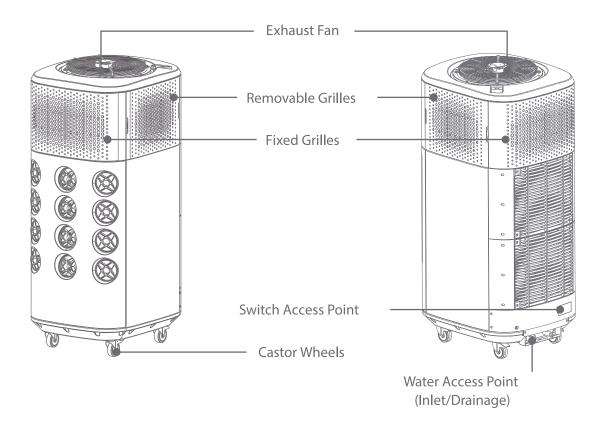


ADDITIONAL SAFETY INSTRUCTIONS

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- · Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.

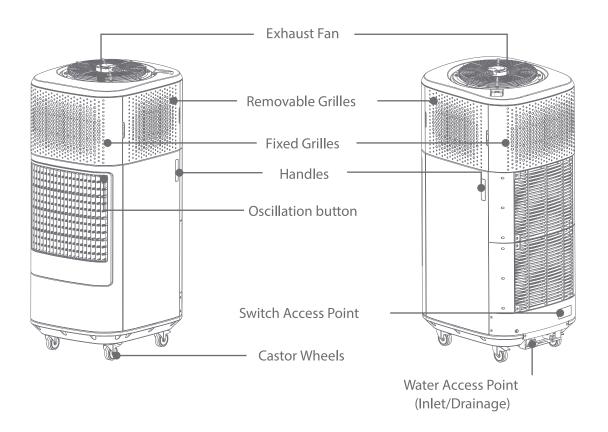
PRODUCT FEATURES

CTC01





CTC02



TECHNICAL SPECIFICATIONS

Model No. : CTC01/02			
Air Flow	(m3/h)	5,200	
Cooling Capacity1	(kW)	16	
	(Ton)	4.5	
	(Btu/hr)	54,600	
Power Supply	(V)	90 - 130	200 - 240
Frequency	(Hz)	50 / 60	
Power Consumption	(kW)	1.3	
Current	(A)	12	6
COP	-	12	
Dry Weight	(kg)	210 / 280	
Dimensions [W x L x H]	(mm)	808 x 940 x 1985	

¹ Based on outdoor ambient condition of 34OC/50%RH

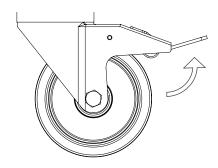


INSTALLATION GUIDE

Please follow the Installation Guide below closely to ensure that the following requirements are met, and to avoid disruption to operation of the City Cooler.

DISENGAGE CASTOR WHEEL LOCK-BRAKES

• Lift the pedal to disengage the castor wheel lock-brake before moving the City Cooler to desired location.



ENSURE MINIMUM CLEARANCE ZONE AND PLACEMENT

• Check and ensure that a minimum 30cm clearance around the unit and a minimum 50cm clearance from the top of the unit is maintained for optimal performance.

Note: Air inflow and outflow occurs around and above the unit. Refer to illustration on the right for reference to inflow and outflow areas.

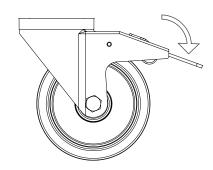
• Ensure that the City Cooler is installed and secured on firm and level ground.





ENGAGE CASTOR WHEEL LOCK-BRAKES

To prevent the City Cooler from moving in, press pedal downwards to engage castor wheel lock-brakes.

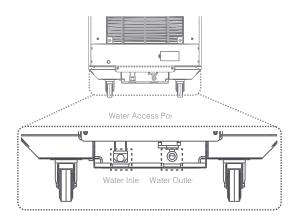


CONNECT WATER SUPPLY AND DRAIN LINE

Connect the water supply and drain line to the unit's water inlet and outlet point respectively.

Note:

- Use new hose sets supplied by the manufacturer or authorized service agent. Avoid using old hose sets.
- Use 0.5inch male thread for water inlet and outlet points.
- The inlet water pressure should not be less than 0.1MPa, and not more than 0.8MPa.
- Ensure that there are no flow impediments and obstruction to the supply and drainage line.



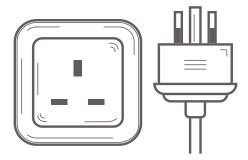


CONNECT TO POWER SOURCE

- Ensure that the red POWER switch is flipped to [O] before inserting power plug into power supply socket.
- Insert power plug to a power supply socket with the minimum Amperes capacity required.

Note: Ensure that an appropriate power socket is utilized according to installation environment. (e.g. weather-proof power supply sockets are to be used for unsheltered outdoor location).

Turn on power supply from power supply socket before switching on the City Cooler.



SYSTEM OPERATION

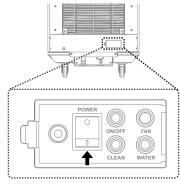
There are 2 modes to City Cooler's system operation.

AUTOMATIC OPERATION MODE

In Automatic Operation Mode, the system will operate on a pre-configured schedule, and can be changed or adjusted via the web-based application or remote control.

Flip the red POWER switch to [I]; an audible beep will sound within 10 seconds, indicating that the unit is powered on.

The ON/OFF button will be lit once the unit is fully powered and operational.



Switch Access Point



MANUAL OPERATION MODE

In Manual Operation Mode, the system will operate manually without or outside of a pre-configured schedule.

Start-up Sequence

Flip the red POWER switch to [I]; an audible beep will sound within 10 seconds, indicating that the unit has been switched on.

Press and hold the ON/OFF button firmly for 1 second. The ON/OFF button will be lit once the unit is fully powered and operational.

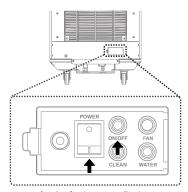
Note: The City Cooler takes approximately 10 minutes to start-up. During the start-up sequence, it is normal for fans to be operating at a lower speed.

Shut-down Sequence

Press and hold the ON/OFF button firmly for 3 seconds. The ON/OFF button will flash when the unit initiates shutdown sequence.

Note: The City Cooler takes approximately 45 minutes to shut-down. Please ensure active power supply during shut-down sequence for the shut-down operations to complete successfully.

During the shut-down sequence, the evaporative media will be dried and water tank will be drained. The fans will automatically stop once the shut-down sequence is completed.



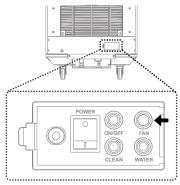
Switch Access Point



MANUAL CONTROLS

FAN SPEED

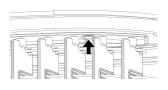
Press the FAN button located at the control panel to toggle through 3 different fan speeds – Low, Medium, High.

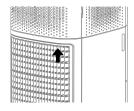


Switch Access Point

LOUVER OSCILLATION (only applicable for CTC02)

Press the OSCILLATION button located at the top right, along the edge of the louver panel, to activate or deactivate automatic louver oscillation function.



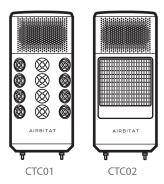




AIRBITAT SMART CONTROL MOBILE APPLICATION

SETTING UP THE AIRBITAT CITY COOLER

- 1. Ensure that the Cooler unit(s) is installed and the power supply switched on. Refer to Page 7 for installation guide.
- 2. Make a note of the Cooler's serial number. You will need this to identify and select the Cooler's serial number during connection. This can be found at the back of the Cooler. You can refer to the last 3 digits of the serial number for easy identification.



DOWNLOADING & INSTALLING THE AIRBITAT SMART CONTROL MOBILE APPLICATION

The Airbitat Smart Control Mobile Application helps support certain features of the Airbitat City Cooler. To install the Airbitat Smart Control Mobile Application, please download and install the mobile application with the instructions below.

Android	iOS
Download Airbitat Smart Control for Android™ (Compatible with Android 5.0 or higher)	Download Airbitat Smart Control for iOS (Compatible with iOS10 or higher)
https://ply.gl/com.innosparks.airbitat.remotecontrol.reactnative	https://appstore.com/airbitatsmartcontrol
Download the app from the QR/URL provide above, or access Google Play Store to search [Airbitat Smart Control] The COLOR of the description of the desc	Download the app from the QR/URL provided above, or access App Store to search [Airbitat Smart Control]
Tap [OK] to accept the download and install the mobile application to your smartphone/tablet.	Tap [GET] to accept the download and install the mobile application to your smartphone/tablet.
Once installation is complete, access [Settings] to enable [Bluetooth] and [Location Services] to detect Airbitat units nearby.	Once installation is complete, access [Settings] to enable [Bluetooth] to detect Airbitat units nearby.



ACCOUNT CONFIGURATION

Please follow the Installation Guide below closely to ensure that the following requirements are met, and to avoid disruption to operation of the City Cooler.

RESETTING ACCOUNT PASSWORD

For security purpose, please login and reset your account password immediately once you have received the initial login information from the manufacturer or authorised service agent.

- 1. Tap on [Reset Password]
- 2. Enter the [Email Address] and tap on [Reset]. An email with further instructions will be sent to the email address provided.
- 3. After password reset, return to the app and log in with [Email Address] and new [Password] to access the app features.

ACCOUNT INFORMATION AND SETTINGS

To access your account information and settings, tap on [>] beside the registered email address.

1. Update

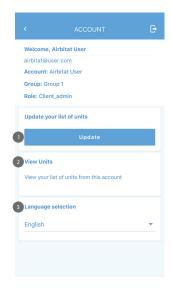
Tap on [Update] to refresh and update the list of units on being assigned and paired to account under [View Units] function.

2. View Units

View the list of units that are currently assigned and paired to the account. Enter the Unit ID in the search field to perform a quick check on unit availability.

3. Language Selection

Select the preferred language to display from the list of available options under [Language Selection].



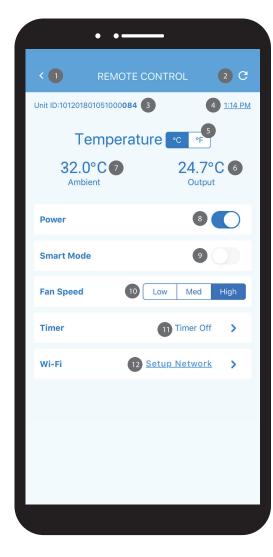


MOBILE APPLICATION FEATURES

The Airbitat Smart Control Mobile Application allows you to easily set up, control and monitor your Airbitat City Cooler onsite via Bluetooth.

- 1. Back Navigate to previous page.
- 3. Unit ID
 Displays the serial number of the Cooler.
- 5. Temperature Scale

 Tap on the "°C/°F" to choose preferred temperature scale.
- 7. Temperature Ambient
 Displays temperature of
 surrounding environment.
- 9. Smart Mode
 When Smart Mode is
 activated, the Cooler will
 detect ambient conditions
 and switch between
 Fan and Boost Mode
 automatically.
 Blue: On
 Grey: Off
- 11. Timer
 Set and save daily operation timing. Refer to Page 16 for more instruction on Timer configuration.



- 2. Refresh
 Tap to retrieve the latest
 information from the Cooler.
- 4. Sync Time

 Tap to sync the Cooler's clock to your smartphone/ tablet's local time.
- 6. Temperature Output
 Displays temperature of cool
 air generated by the Cooler.
- 8. Power On/Off
 Slide button to power on or off the unit.
 Blue: Power On
 Grey: Power Off
- 10. Fan Speed Tap on Low, Med or High for your desired fan speed.
- 12. Wi-Fi
 Connect to Wi-Fi to
 view and configure the
 Cooler settings online.
 Refer to Page 17 for more
 instruction on Wi-Fi
 configuration.

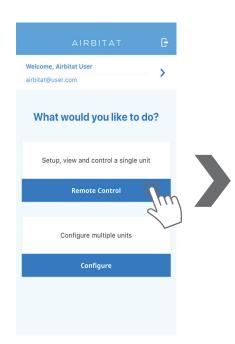


PAIRING AND CONFIGURATION

With Bluetooth (and Location Service for Android devices) enabled, stand within 5 metres of the Airbitat City Cooler unit and launch the application "Airbitat Smart Control".

CONNECTING TO A SINGLE UNIT:

For single-unit set-up, use the [Remote Control] option to set-up, view and control a single Airbitat City Cooler unit.



1. Select the [Remote Control] option Tap on [Remote Control] button to enter the City Cooler selection screen.



Select a Unit
 The App will search for
 Coolers within a 5 metres
 proximity. When a Cooler is
 discovered, the unit's serial
 number will be displayed
 for selection. Identify the
 Cooler's ID and tap on the
 (>) icon to connect.

Note: If you are unable to find any units nearby, move closer to the unit and tap on the (*C*) icon to refresh.



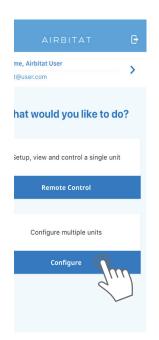
3. Unit Connected
After establishing
connection with the unit,
you will be able to view and
adjust the unit's settings via
the control interface.

Refer to Page 12 for Airbitat Smart Control Functions.

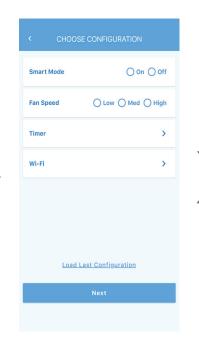


CONNECTING TO MULTIPLE UNITS:

To set-up multiple units easily, use the [Configure] option to save your configuration settings and conveniently push your saved setting to multiple Airbitat City Cooler units.



ect the [Configure] option on [Configure] button to ter configuration screen.



2. Choose Configuration
Set the configurations you want
the Cooler(s) to operate in and
tap on the [Next] button to save
your configurations.

Note ¹: Refer to Page 12 for Airbitat Smart Control Functions

Note ²: You can reload the last saved configuration by tapping on [Load Last Configuration].



3. Send to Units

The App will search for Coolers within a 5 metres proximity, and a list of discovered coolers will be displayed for selection. Identify the Cooler's ID and tap on the [Tap to send ► icon to push configuration selected Cooler.

Note: Please wait till the configuration sending process is successful befor moving away from the uni or exiting the App. If you are unable to find any unit nearby, move closer to the unit and tap on the (\mathcal{C}) icc to refresh.







Sending configuration



Sending configuration failed

4. Configuration Sent

You will be notified when the configuration has been successfully pushed to selected Cooler. For status of sending the configuration, please refer to the images above.



TIMER SETTINGS

The Timer functions allows you to set and save daily operation timing for your Airbitat City Cooler(s). The City Cooler(s) will power on and off according to the Timer settings, for an automated operation.



1. Select [Timer] option

Tap on (>) icon in the [Timer]

section to enter Timer

configuration screen.



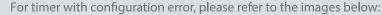
- Customise Daily Timer Settings
 Up to 2 timers can be scheduled per day.
 - Tap on the (-:-) icons under each day (Sunday to Saturday) to input the ON and OFF timer settings
 - Tap on [On] or [Off] to activate Timer settings.
 - Tap on [Save] button to save Timer settings.

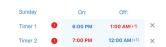
Note: If your OFF timer crosses midnight, the time will be indicated with a (+1).



- 3. Edit Daily Timer Settings
 - Tap on the Time under each day (Sunday to Saturday) to edit the ON and OFF timer settings.
 - Tap on [Save] button to save Timer settings.

Note: You can tap on the (X) icon to clear the timer.





Timer 1 and 2 settings cannot function if timing overlaps.



The ON and OFF timing must be different.

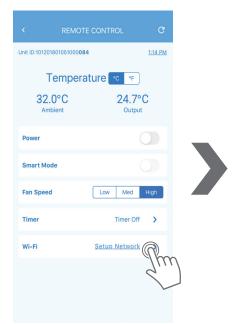


An automatic drying cycle is scheduled after last timer of each day, please give at least a 1-hour gap after the last timer.



WI-FI CONNECTION SETTINGS

Setting up a Wi-Fi connection to the server will allow you to view, control and customise your Airbitat City Cooler settings remotely online.



Select [Wi-Fi] option
 Tap on [Setup Network]
 button to view the list of available connections.



2. Selecting the Wi-Fi network to connect Find the name of the Wi-Fi network you want to connect to and tap on the name.

Note: If you cannot find the Wi-Fi network you want to connect to, or you want to enter the Wi-Fi details manually, tap on [Add New Network] button.



3. Enter Your Wi-Fi Details Key in the Wi-Fi details and tap on the [Save] button.

Note: Saving your network details will allow the Cooler to automatically connect to the Wi-Fi network when in area.

Continued next page



No internet Network is connected but no internet access.



Authentication failed Wi-Fi Protected Access (WPA) and/or network password is incorrect.

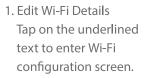
4. Wi-Fi Connected

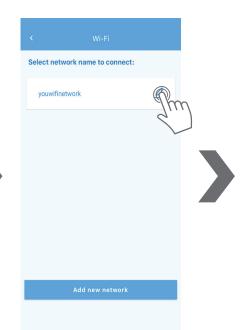
The Status field will appear as Connected upon successful Wi-Fi configuration. For unsuccessful connection, please refer to the images above.



ADJUSTING WI-FI CONNECTION SETTINGS







2. Selecting the Wi-Fi network to edit
Find the name of the Wi-Fi network you want to edit and tap on the ().



3. Edit New Network Details
Key in the new Network
Name and Password,
then tap on the
[Update Network] button.

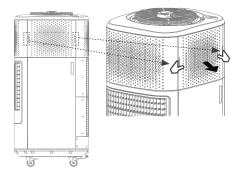


REMOVING THE PRE-FILTERS

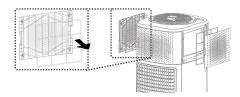
The cleaning frequency is dependent on the environmental conditions and will be specified by the manufacturer or authorised service agent during installation. If not, check with the manufacturer or authorised service agent for recommended cleaning frequency.

HOW TO REMOVE GRILLES AND PRE-FILTERS

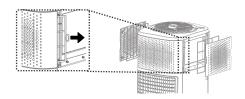
1. Pull grilles from the left and right side of the unit by gripping along the edges at the grip points outwards, and away from the unit to expose pre-filters.



2. Pull pre-filters from the left and right side of the unit outwards and away from unit to remove.

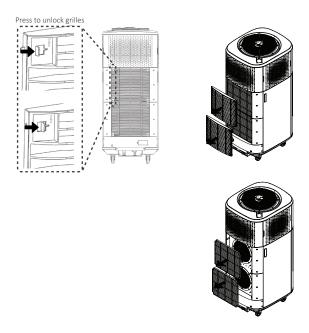


3. Remove pre-filters from the front and rear side of the unit by pulling from the side of the grilles.





4. Press on the spring-release tabs located along the left side of the unit (with the rear end facing you) and pull to release and remove the grilles away from unit. Thereafter, pull to remove the pre-filters.



CLEANING THE PRE-FILTERS

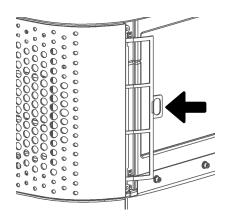
HOW TO CLEAN PRE-FILTERS

Clean pre-filters with vacuum cleaner, or rinse with water to remove the dirt.

Note: For best results, a combination of vacuuming followed by rinsing with water is recommended. If the pre-filters are washed, ensure that they are adequately dried before installing them. Alternatively, replace dirty pre-filters with a new set of pre-filters.

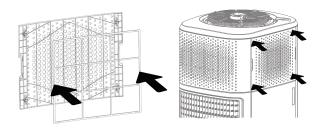
HOW TO INSTALL GRILLES AND PRE-FILTERS (TOP SECTION)

1. Starting with the front panel of the unit, slide one pre-filter into the frame from left until properly secured. Repeat the same steps and slide another pre-filter from the right of the frame. Repeat the same for the back panel of the unit.



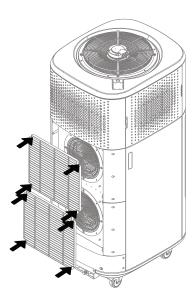


2. To install pre-filters on left panel of the unit, secure the pre-filters to the grille before inserting both pre-filters and grilles into panel. Align grille to the edges of the frame and press inwards on each corner of the grille until a soft click is heard. Check to ensure that all corners are secured in frame. Repeat the same for the right panel of the unit.



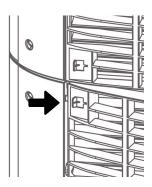
HOW TO INSTALL GRILLES AND PRE-FILTERS (BOTTOM SECTION)

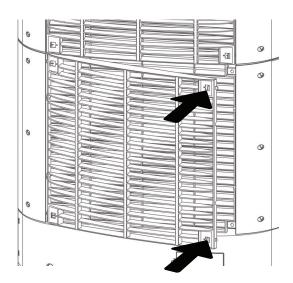
1. To install the pre-filters on the back panel of the unit, align pre-filter to the frame, slide the edges of the pre-filter along the side into the frame, and press inwards until properly secured. Repeat the same for remaining pre-filter.





2. To install the back panel grilles to the unit, ensure that the grilles are in upright position and align grille to the frame. Slide the left side of grille into the frame to fit tab into the slot. Press and hold the tabs on the right before pushing the grille inwards. Ensure that the right hand side tabs are aligned with slots located on the side frame. Once aligned, release the tabs and press inwards firmly to secure grille in place. Repeat the same for remaining grille.







BUILT-IN CLEANING CYCLE

The Cleaning Cycle is engineered to resist bacteria growth and decay, decontaminating the unit from material build-up for hygienic operation and increased service life.

- 1. Prepare Cleaning Agent Mix 5mg of granulated Chlorine with 100ml of water or as specified by the manufacturer or authorized service agent.
- 2. Remove Side Grilles and Pre-filters (Top Section) Refer to Page 20 for instructions on removing grilles and pre-filters.
- 3. Apply Cleaning Agent Pour the mixture from (1) directly on exposed evaporative media.
- 4. Activate Cleaning Cycle Press on the CLEAN button located on the control panel to activate built-in cleaning cycle.

Note: The City Cooler takes approximately 45 minutes to complete the built-in cleaning cycle. Please ensure active power supply during the cleaning cycle for the cleaning cycle to complete successfully. Once cleaning cycle is complete, the unit will revert to its previous operating state.

SCHEDULED SERVICING

For optimal performance and operations, it is recommended to adhere to a minimum servicing schedule of one (1) minor and one (1) major servicing routine per year. Each minor servicing routine should be followed by a major servicing routine every six (6) months, unless otherwise specified by the manufacturer or authorised service agent.

Minor Servicing	Major Servicing
Pre-filters cleaning Water level sensor cleaning General exterior cleaning Performance diagnostics	 Pre-filters cleaning Water level sensor cleaning General exterior cleaning Performance diagnostics Water tank cleaning Heat exchanger cleaning Fan blades cleaning Changing of evaporative media



TROUBLESHOOTING

It is often possible to avoid a service call. Before requesting for service, perform the following checks:

Issue	Possible Cause(s)	Action
Airbitat does not start	No power supply	Check and ensure power supply is on.
Air flow is hot	No water supply (Refer to water level indicator table below)	Check and ensure water supply is on.
Air flow is weak	Air inflow obstruction	Check and ensure a minimum of 30cm clearance is maintained around the City Cooler.
	Clogged pre-filters	Clean pre-filters
Water is detected around City Cooler	External water connections between the unit and supply/drainage point are loose.	Turn off water supply to tighten water fittings. Turn on water supply again after fittings are tightened.
Water Level Indicator Display	Status	Action
Lit	Fan Cooling Unit is operating without water supply.	Check and ensure water supply is on.
Flashing	Sensor Error Unit is unable to detect water level.	Contact your manufacturer or authorised service agent for maintenance or replacement of sensor.
Non-lit	Evaporative Cooling Unit is operating with water supply.	Unit is running optimally. No further action is required.

Should the issue(s) persist, please contact the manufacturer or authorised service agent.

In the event of a malfunction (burning smell, etc.), immediately stop operation, disconnect the power supply plug or turn off the circuit breaker, and consult manufacturer or authorised service agent.