kaden°

OWNER'S GUIDE

Evaporative Air Coolers

Safety Information
Owner's Information
Warranty

Models

Classic Evaporative Air Coolers:
KC17 | KC21 | KC27 | KC32

Low Profile Evaporative Air Coolers:
KL16 | KL22 | KL25 | KL28

This page is intentionally blank

TABLE OF CONTENTS

This page is intentionally blank

WARNINGS AND IMPORTANT INFORMATION

IMPORTANT

READ ALL INSTRUCTIONS BEFORE USING THE APPLIANCE.

Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

WARNINGS: **WHEN IGNORED, CAN RESULT IN SERIOUS INJURY OR DEATH.**

CAUTIONS: **WHEN IGNORED, CAN RESULT IN MINOR INJURY OR PRODUCT DAMAGE.**

SHALL / MUST / IMPORTANT: **INDICATES A MANDATORY REQUIREMENT OF THIS MANUAL.**

SHOULD: **INDICATES A RECOMMENDED REQUIREMENT OF THIS MANUAL.**

Any deviations from these instructions may void the warranty. As a result, the customer and/or installer may be charged a fee for product non-warranty related call outs. Also, note that failure to comply with these instructions may preclude servicing of the unit**.**

DISCLAIMER: This document is a guide only. Laws, regulations and industry standards can vary between States and Territories. Accordingly, this guide **MUST BE** read in conjunction with, and subject to, all laws, regulations and industry standards applicable in the State or Territory in which the products are installed. You **MUST** ensure that the installation of the products will comply with those laws, regulations and standards, and that the products recommended to customers are fit for the purpose for which they are intended.

WARNING

REGULATORY / INSTALLATION / SAFETY

This appliance **SHALL BE** installed in accordance with:

Manufacturer's Installation Instructions.

Current AS/NZS 3000 (electrical codes).

Local Regulations and Municipal Building Codes including local OH&S requirements.

Local water authority regulations

Duct fixing regulations, EPA guidelines and HB276-2004 "A Guide to Good Practice"

ALWAYS comply with the following precautions to avoid dangerous situations and to ensure optimum performance.

This appliance **MUST BE** installed, maintained and removed by an Authorised Person.

DO NOT place any articles on or against this appliance

DO NOT use or store flammable materials near this appliance

DO NOT spray aerosols in the vicinity of this appliance while it is in operation

DO NOT modify this appliance

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.

IMPORTANT

MODELS COVERED IN THIS MANUAL

Kaden Low Profile	KL16	KL22	KL25	KL28	Kaden Classic	KC17	KC21	KC27	KC32

Product warranty excludes faults and failures caused by improper use and abuse; fair wear and tear; or failure to follow instructions regarding service and maintenance. It is very important that you maintain your ducted evaporative cooler and have it serviced regularly. It is a condition of warranty that you adhere to the maintenance and service requirements as set out in this manual. Compliance with these requirements will prolong the useful life of your ducted evaporative cooler and help ensure it operates efficiently. The "Service Maintenance Schedule" on page 17 specifies specific items to be performed at prescribed intervals by qualified licensed technicians. The schedule should also be fully completed and retained as a record of who carried out the service, the date and actions taken.

IMPORTANT: Failure to carry out the requisite maintenance, servicing and recording requirements may void your product warranty.

Please refer to the "Terms of Warranty" document accompanying your ducted evaporative cooler.

EVAPORATIVE COOLER OPERATION

INTRODUCTION

Congratulations on your purchase of a Kaden Cooling system. For you to achieve the performance and efficiency expected from your new cooler, please ensure the installer is a qualified trades person, that the installer has commissioned the unit before you commence operating, and you take the time to read the contents of this manual.

In some Australian States it is mandatory that your cooler installation is issued with a certificate of compliance to guarantee the installation workmanship. Please check with your installer or the local plumbing authority or association. The Kaden cooler is covered by the product warranty as outlined in this manual.

HOW DOES YOUR EVAPORATIVE COOLER WORK?

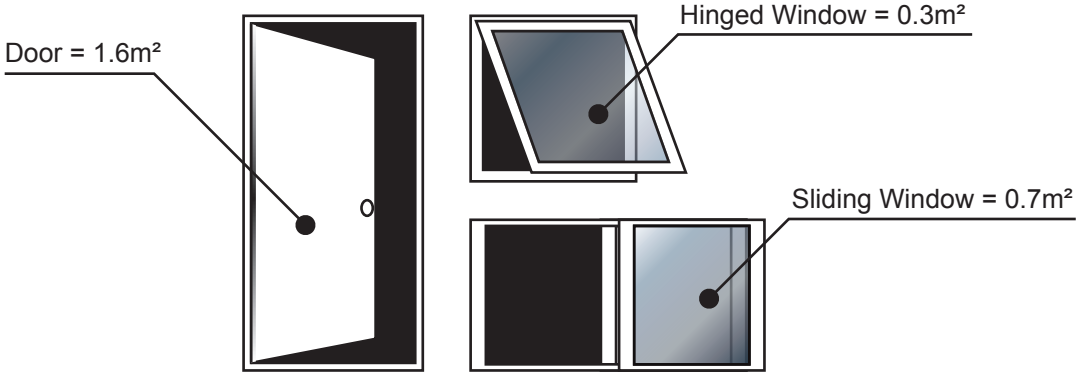
The amount of cooling available from any type of cooling system is dependent on the outside weather conditions. Your evaporative cooler works best on hot, dry days. It is essential to provide the required amount of ventilation (for your evaporative cooling system to function properly) by opening windows/doors whenever the cooler is operating. Air is drawn in through the filter pads resulting in 100% fresh cool air entering the home. The movement of this cooled air through your home will draw the heat out of the house, so be sure that doors or windows are open to expel this heat to outside.

Whenever possible start the cooler early to prevent the build up of heat within the house, and on sultry or humid days your cooler may work better with the fan **ONLY** running and the pump turned OFF. Stale air, cigarette smoke and fumes can be quickly cleared and replaced with fresh air by turning the fan to manual mode.

BEFORE OPERATING YOUR EVAPORATIVE COOLER

Make sure enough window and/or door area is open for the unit to work correctly. The following table gives a guide to the amount of open area required for each model in m², and also gives suggestions on how to provide this.

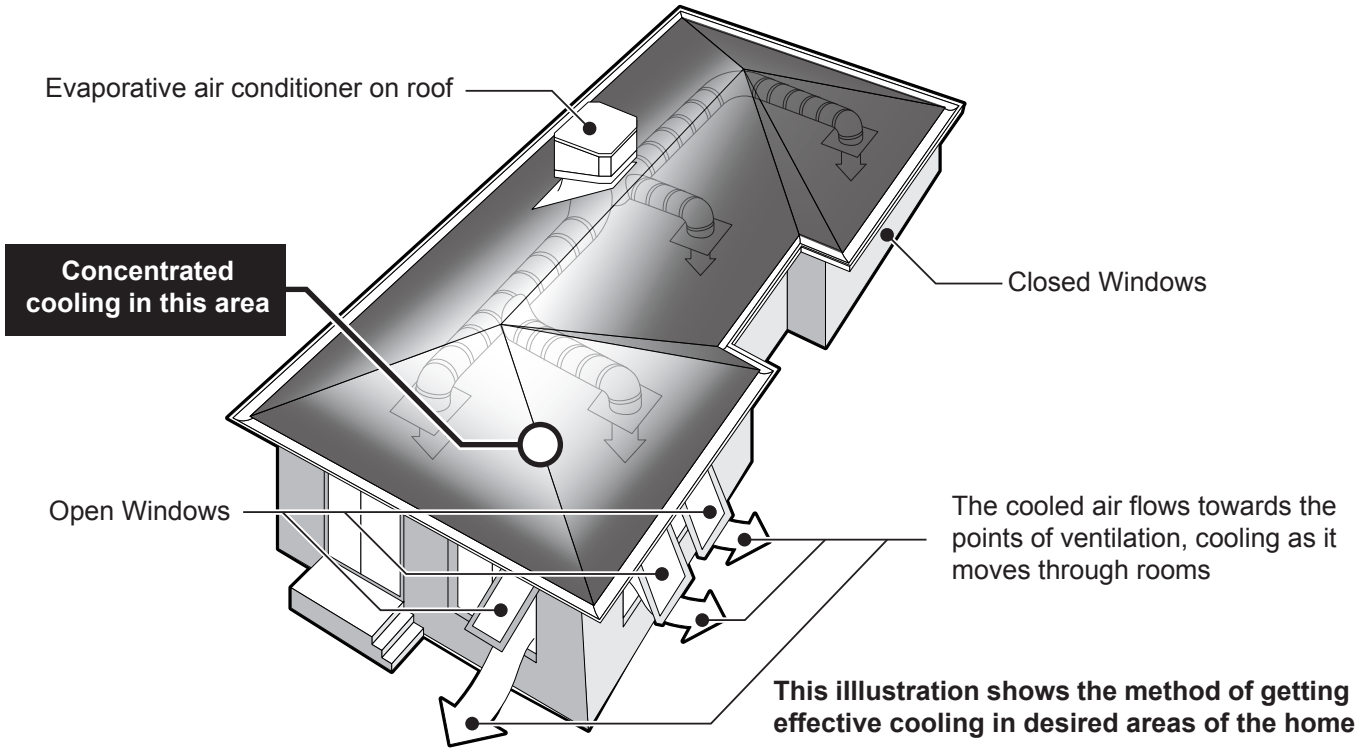
Model		Number of average size windows & doors *(suggestive only)*	Highest Fan Setting	Lowest Fan Setting
Low Profile	Classic			
KL16	KC17	Two sliding windows or Five hinged windows	1.5 m²	0.9 m²
KL22	-	One door and a hinged window	1.9 m²	1.1 m²
KL25	KC21	Three sliding windows or one door & two hinged windows	2.3 m²	1.4 m²
-	KC27	Four sliding windows or one door and four hinged windows	2.8 m²	1.7 m²
KL28	-	Five sliding windows or one door and five hinged windows	3.1 m²	1.9 m²
-	KC32	Six sliding windows or one door and six hinged windows	3.4 m²	2.1 m²



Average ventilation area provided by various openings when fully opened.

NOTE **You can also choose to have these openings only halfway open, however note that the opening will only provide half the amount of ventilation shown above and additional ventilation openings would be required.**

To cool your whole house, you need windows and / or doors open throughout the house. If you wish to concentrate your cooling to a select area, simply concentrate all the required ventilation in the targeted area (see below).



This illlustration shows the method of getting effective cooling in desired areas of the home

NOTE **On hot, windy days, ensure that the windows and /or doors open for ventilation are on the sheltered side of the house.**

START UP

When the cooling is first turned ON, there will normally be a delay before the cool air is delivered from the duct outlets. The delay will vary depending on the model of cooler, but this doesn't mean the cooler is not operating. Most models have pre-programmed function times, to allow time to fill the Cooler's tank with water and/or Pre-wet the filter pads. The entire process can take up to 8 minutes before cool air is expected from the duct outlets.

New Cooling pads can give off a mild odour while they are settling in. This is quite normal, it will dissipate quickly as the new pad is constantly flushed during use.

SHUT DOWN

On Kaden KC & KL Series units, there is also a delay in emptying the water from the Cooler's tank for a period after the unit has turned OFF at the end of use. Kaden KC & KL Series models have an additional pre-programmed tank wash cycle (flush). This washes the tank with clean water at the end of use and this will occur approx 1 hour after the unit has been turned off.

ON HUMID DAYS

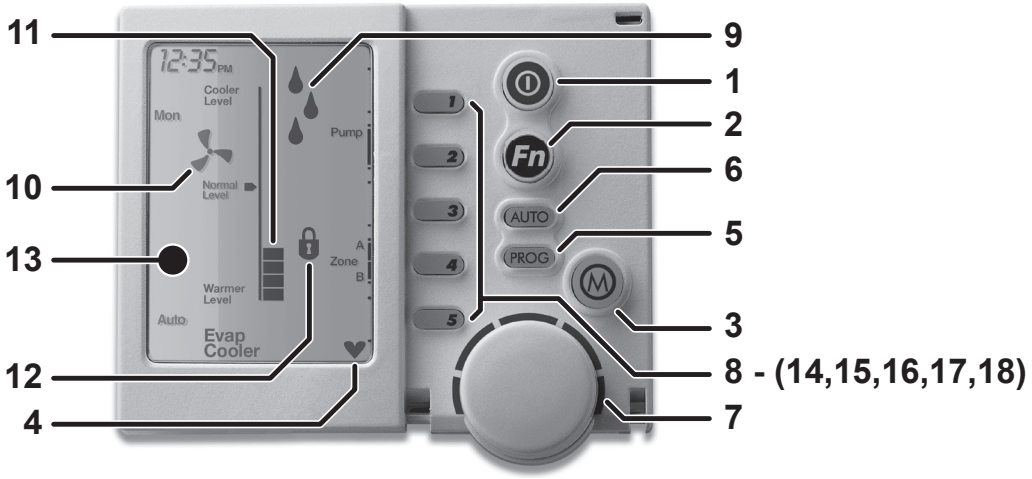
On days of high humidity your evaporative cooler works best with the fan on high and perhaps the pump switch turned off. If moisture is building up on tiled or hard surface areas, ensure that airflow from the outlets is directed across the ceiling rather than down towards the floor. Also ensure that you have enough windows and/or doors open.

CEILING VENT(S) LOCATION

Vents should be set up so the air is directed across the ceiling. However they should not be restrictive and the vents should also be directed to disperse air evenly around the room depending on the location of the vent.

KADEN NETWORKER WALL CONTROL

The Kaden Networker wall control operates the complete cooling system, communicating key information and sensing the temperature. It is an important part of the unit and the following text will explain its operation.



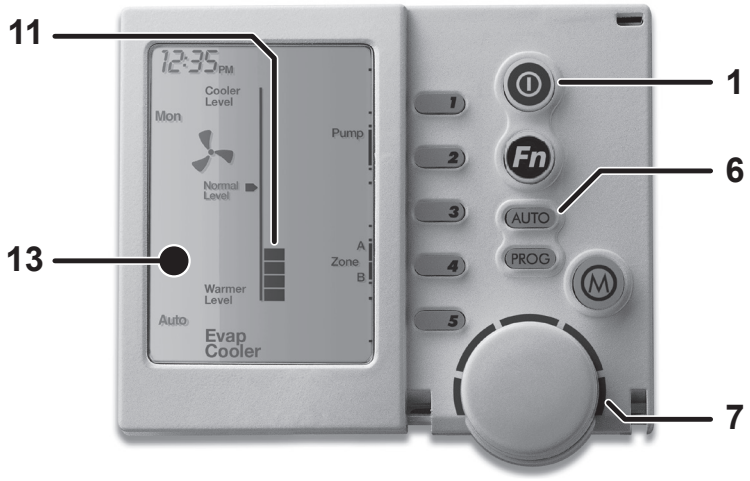
1. **On/Off Button**
   This is the button to turn the Networker ON or OFF.
2. **Function (Fn) Button**
   The function button, when used in conjunction with keys 1 & 2 allows the user to perform specialised functions such as message repeating & Networker locking.
3. **Mode (M) Button**
   This button is used to set/change the controller PIN.
4. **Heartbeat Symbol**
   A flashing heart icon in the bottom right hand corner indicates that the room temperature is being sensed from this Networker.
5. **Program (PROG) Button**
   This button is used to set the Networkers automatic program.
6. **Auto (AUTO) Button**
   This button allows the user to switch between the Auto Program and the Manual Operation.
7. **Rotary Dial**
   This Dial is used to change the Cooler settings.
8. **Variable Keys**
   The keys numbered 1 to 5 (14 to18) vary their function depending on the program or mode displayed. They will only have a function if text appears on the screen beside the key & a black rectangular box. (Keys used for zoning function may also display an arrow)
9. **Water Droplets Symbol**
   The two alternating water droplets indicate that the cooler pump is turned on.
10. **Fan Symbol**
    When the fan is flashing it indicates the unit is in pre-wet mode. When the fan is rotating it indicates the fan is turned on.
11. **Thermometer / Fan Speed Bar**
    In auto mode the thermometer indicates the set comfort level. In manual mode the thermometer indicates the set fan speed.
12. **Padlock Symbol**
    The padlock symbol indicates the child proof lock has been set. For more information refer to the section Locking the Networker.
13. **Digital Display (LCD screen)**
    Provides you with information about the system. The display shows the current time via a Digital Clock in the top left corner, the Day of the Week on the left-hand side, and the type of Appliance selected at the bottom. The display will also show scrolling messages across the top of the screen. The messages usually relate to a certain action such as cooler Pre-Wet which shows - *"Pre-Wetting cooler pads - Please Wait!"*

AUTOMATIC PRE-WET

When the Cooler is turned ON, with both the fan and the pump in either Auto or Manual mode, the Cooler will start a Pre-Wet automatically. The Pre-Wet stage ensures the pads are thoroughly wet before the fan starts. This prevents warm air being initially blown into your home and contributes to the effective operation and performance of the Cooler. The Pre-Wet time will vary depending on how long the Cooler has been OFF, and whether it needs to fill the tank prior to operation. During the Pre-Wet the message “Pre-Wetting cooler pads - Please Wait!” will scroll across the top of the display.

AUTOMATIC OPERATION

In Auto mode the Networker automatically turns the pump ON or OFF as required and varies the fan speed to maintain your selected “comfort level.”



To run the unit in Auto mode, just follow these easy steps:

1. Turn the Networker on using the ON/OFF button (1).
2. Press the Auto button (6) until “Auto” appears on the screen.
3. Rotate the Rotary dial (7) to set the comfort level you desire (up to have a cooler comfort level and down to have a warmer comfort level) the set comfort level (11) is displayed on the LCD screen (13).

NOTE

It will take approximately 8 minutes for the Cooler to complete the pre-wet before the fan will turn on. The next time you return to “Auto” these steps will not be necessary because the Kaden Networker remembers your previous settings.

Benefits of using Kaden coolers in Auto mode in preference to Manual mode

- Power and water consumption varies in relation to the chosen comfort level. This comfort level cannot be as easily maintained in Manual mode.
- In Auto Mode the unit operates only when it is required.
- Enables a set comfort level to be maintained automatically as the outside / inside temperature conditions change.
- It allows you to pre-set the cooler to turn ON early and not let the house build up heat.
- The outlet airflow noise is kept to a minimum, as the fan speed is only as fast as required to maintain the set comfort level. This slower speed also results in more efficient saturation of the Cooler filter pads, and a cooler outlet air temperature.

MANUAL OPERATION

Manual operation enables you to control the fan, its speed, and the pump manually.

To run the Cooler in Manual mode, just follow these steps:

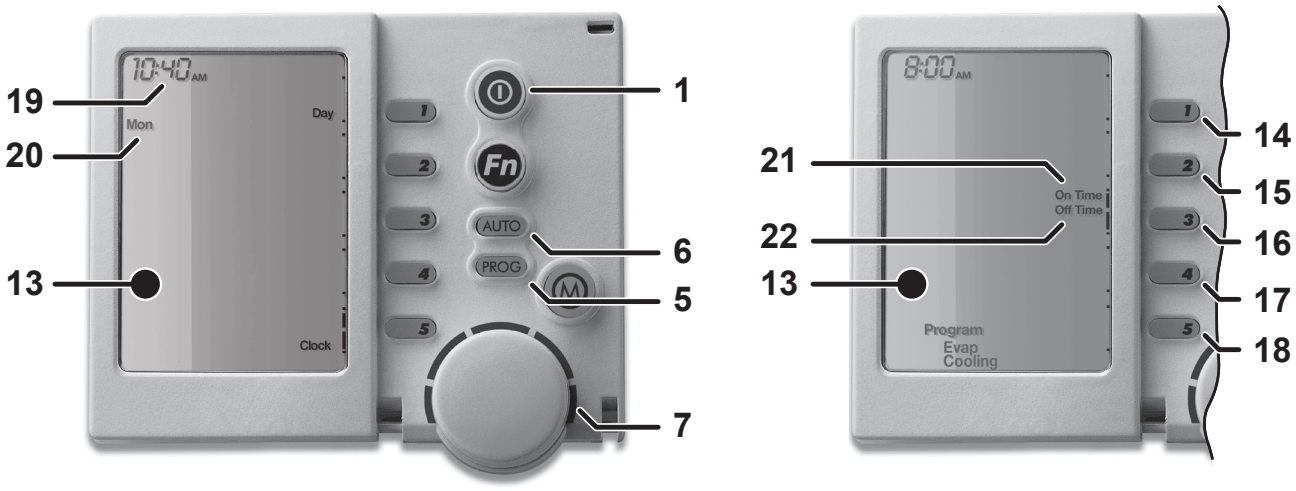
1. Turn the Networker on using the ON/OFF button (1).
2. Press the Auto button (6) until "MANUAL" appears on the screen.
3. Press Key 1 (14) to turn the fan on *(if the fan symbol (10) is not already on the screen)*.
4. Press Key 2 (15) to turn the pump on *(if the water droplet symbols (9) are not on the screen)*.
5. Rotate the Rotary dial (7) to set the fan speed level you desire. (up to increase the fan speed and down to decrease the fan speed.) the set fan speed (11) is displayed on the LCD screen (13). The message *"Pre-Wetting cooler pads – Please Wait!"* will scroll across the display. It will take approximately 8 minutes for the unit to complete the pre-wet before the fan will turn on.

NOTE **On days of high humidity the fan may be operated without the pump. To turn the pump OFF press Key 2 (15) and the water droplets (9) will disappear. The next time you return to Manual these steps will not be necessary because the Networker remembers your previous settings.**

USING THE TIMER

When the Cooler is operating, you can pre-set a time for the Timer to turn the Cooler OFF. Also, when the Cooler is turned OFF, you can select a time for the Timer to turn it ON automatically. So if you are out for the day you can set the Cooler to come on and cool the house before you return. Before using the timer function you need to firstly set the time and day.

CAUTION **If the pump is going to be used, adequate ventilation (openings) need to be provided to prevent condensation build up.**



SETTING THE TIME & DAY

1. Ensure the Networker is turned OFF using the ON/OFF button (1).
2. Press Key 5 (18 - Clock) and the screen will display the message *“Clock setting mode”*, and then the Digital Clock (19) will flash.
3. Use the Rotary Dial (7) to select the right time.
4. Press Key 1 (14 -Day) until the correct day appears e.g. Mon (20).
5. Press Key 5 (18 - Clock) again to save the changes.

SETTING THE COOLER TO TURN ITSELF ON

1. Press the PROG button (5) and the display will flash ON TIME and the word PROGRAM.
2. Use the Rotary Dial (7) to set the ON TIME (i.e. the time you want the Cooler to come ON).
3. You can change the settings the cooler will run at here.
   When in Manual mode, use the Rotary Dial (7) to adjust the fan speed and press Key 2 (15) to turn the pump ON or OFF. When in Auto mode, use the Rotary Dial (7) to adjust the comfort level.
4. Press Key 3 (16 - On Time / Off Time) to activate the Timer.
5. Press the PROG button (5) to exit and save your setting.

The LCD screen (13) displayed On Time (21) to show that an On timer is set. To cancel the Timer press Key 3 (16).

SETTING THE COOLER TO TURN ITSELF OFF

1. Ensure the cooler is turned ON.
2. Press the PROG button (5) and the display will flash OFF TIME and the word PROGRAM.
3. Use the Rotary Dial (7) to set the OFF TIME (i.e. the time you want the Cooler to turn OFF).
4. Press Key 3 (16 - On Time / Off Time) to activate the Timer.
5. Press the PROG (5) button to exit and save your setting.

The LCD screen (13) displayed Off Time (22) to show that an Off timer is set. To cancel the Timer press Key 3 (16).

CHECKING YOUR TIMER SETTINGS

Once Timer settings are made you can review or cancel them in a number of methods:

The LCD screen (13) displays On Time (21) and or Off Time (22) to show that these timers have been pre-set.

If you want to check what you’ve done

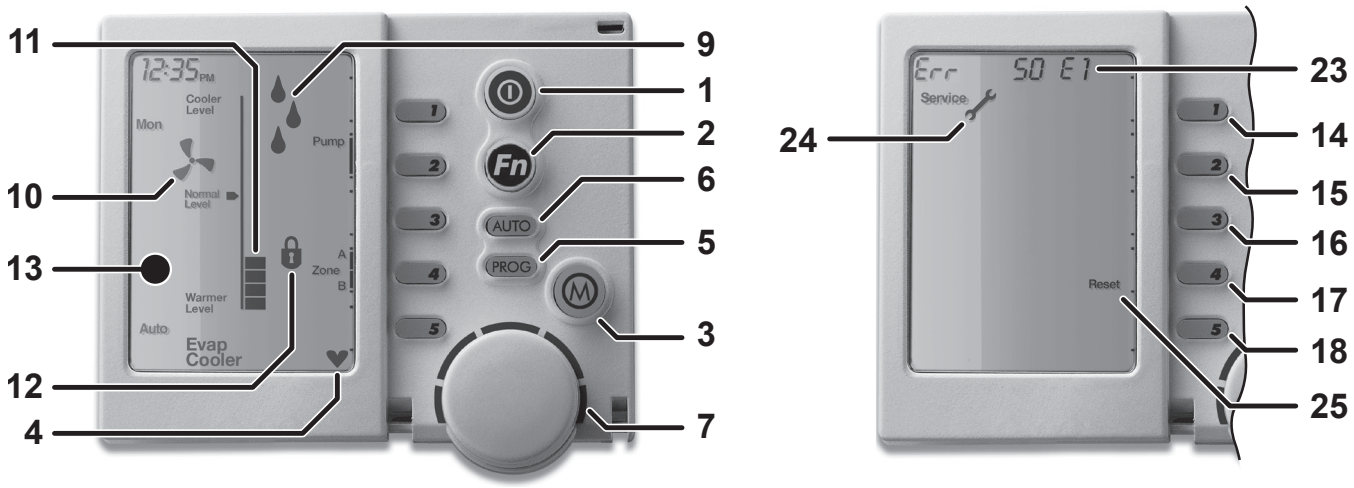
Press the PROG button (5) and the pre-set time will flash. You can now make adjustments to your settings if required.

If you change your mind and want to cancel the function

Press the Key 3 (16 - On Time / Off Time) and this will cancel the function.

To exit this setting program

Press either the ON/OFF button (1) or the PROG button (5). The Networker remembers the last setting and the next time you select the Timer it will go to that same setting.



CODED MESSAGES

While the Networker is operating your system, it is also monitoring and controlling every aspect of the system's performance. If anything unusual occurs, the Networker will display an error message.

- A message (23) stating *"Cooler Fault - E01 Code #?? For assistance call for service"* will scroll across the top of the screen. Note that the message will vary depending on the problem.
- Whenever such a message appears, it is a good idea to write it down before doing anything else. This code contains information that will enable the service provider to deal quickly and easily with anything that requires their attention. In this instance contact ***1300 4KADEN (1300 452 336)*** and pass on the message, the model and the type of appliance.

MESSAGE REPEATING

Push the FUNCTION button (2) then Key 1 (14) immediately after to repeat a message.

NOTE **If no message repeats it means either the button combination was incorrect or the event has passed. Typical messages displayed advise of some appliance operations such as - "Pre-Wetting cooler pads - Please Wait!".**

SERVICE NOTIFICATION MESSAGE

When the operating hours logged for an appliance exceeds the predetermined period, the Networker wall control will display a service notification message.

- A message (23) stating *"Fan run hours indicate it is time for a service call"* will scroll across the top of the screen. Note that the message will vary depending on the problem.
- The Spanner Icon (24) will flash once every second on the Networker wall control display.

You may book a service call or clear the spanner icon notification by pressing Key 4 (17) on the Master Controller.

RESETTING

If something has interrupted the units operation, the word Reset (25) may appear beside Key 4 (17) while a message is scrolling. Press Key 4 (17) to re-start the Cooler.

If the Cooler does not resume normal operation, or the error message re-appears, please contact ***1300 4KADEN (1300 452 336)***.

If the Cooler is still operating but the Networker is showing an error message try pushing the Reset Key 4 (17) to clear the fault. If the fault persists contact ***1300 4KADEN (1300 452 336)***.

If the Cooler is not operating and any other error message appears, contact ***1300 4KADEN (1300 452 336)***.

LOCKING THE NETWORKER

To prevent any unwanted alterations being made to the coolers settings, the Networker can be locked via a 4- digit PIN code.

Setting the PIN

1. Press the FUNCTION button (2), followed immediately by Key 2 (15).
   The screen will then display *"Enter Your PIN number to lock the system"*.

   DO NOT ENTER NUMBERS AT THIS STAGE AND CONTINUE TO THE NEXT STEP.
2. Push the MODE button (3).
   The screen will now display *"User PIN reset – Enter master PIN"*.

   DO NOT ENTER NUMBERS AT THIS STAGE AND CONTINUE TO THE NEXT STEP.
3. Push the MODE button (3).
   The screen will now display the message "*User PIN number 1 alteration - Enter current PIN"*.
   - If this is the first time for setting the PIN, the current PIN will be "**1111**".
   - If the PIN has been previously altered then enter your current PIN.

   The screen will then display the message, *"Enter the new PIN"*.
4. Enter your new 4-digit PIN number using a combination of Keys 1 to 5 (14 to 18).
   The screen will now display, *"Repeat the entry of the new PIN"*.
   Providing that you re-enter the new PIN correctly, the screen will now display *"Valid PIN – PIN altered"*.
5. If an incorrect number is entered press the AUTO key (6) to clear all digits, then re-enter your user PIN.
6. To exit this area at any time, just push the ON/OFF key (1).

To lock the Networker

1. Press the FUNCTION button (2), followed immediately by Key 2 (15).
   The screen will then display *"Enter Your PIN number to lock the system"*.
2. Enter your current user PIN to lock the Networker.
   The screen will now display *"System locked out!"*
3. If an incorrect number is entered press the AUTO key (6) to clear all digits, then re-enter your user PIN.

NOTE

If an invalid PIN is entered, the message *"Invalid PIN entered - Try again"* will scroll across the screen. The user has three attempts at entering a valid PIN. On the third failed attempt the message *"Invalid PIN entered!"* will be displayed. At this point the Networker will abort the PIN entry screen, and return to its original state. You will then need to repeat the process.

A flashing Padlock icon (12) indicates that the Networker is locked.

To unlock the Networker

1. Press the FUNCTION button (2), followed immediately by Key 2 (15).
   The screen will then display *"Enter Your PIN number to unlock the system"*.
2. Enter your current user PIN to lock the Networker.
   The screen will now display *"System unlocked!"*
3. If an incorrect number is entered press the AUTO key (6) to clear all digits, then re-enter your user PIN.

NOTE

If an invalid PIN is entered, the message *"Invalid PIN entered - Try again"* will scroll across the screen. The user has three attempts at entering a valid PIN. On the third failed attempt the message *"Invalid PIN entered!"* will be displayed. At this point the Networker will abort the PIN entry screen, and return to its original state. You will then need to repeat the process.

BATTERIES

The Networker requires no batteries. If the Networker has no screen, check your 240 volt power supply (at the Cooler) or check the thermostat cable.

MANUAL WALL CONTROLLER

OPERATING YOUR MANUAL WALL CONTROL

The Manual Wall Control requires you to manually control Pump (and Pre-Wet cycle) operations, fan operation and the fan speed. On days of high humidity for ventilation the fan may be operated without operating the pump.

To run the Cooler

1. Push the ON/OFF button (1) to turn the controller ON, the Power indicator (2) will illuminate.
2. Slide the COOL switch (3) to the ON position. This will operate the pump.

IMPORTANT **After sliding the COOL switch (3) ON allow 5–10 minutes to Pre-Wet the filter pads before sliding the FAN switch (4) ON. Doing this will provide for the maximum cooling immediately when the fan is switched ON.**

4. Slide the FAN switch (4) to the ON position.
5. Rotate the FAN SPEED dial (5) to set the desired airflow level.

To turn OFF

1. Push the ON/OFF button (1) to turn the controller OFF, the Power indicator (2) will go out.

To run the Fan for ventilation

1. If already cooling, slide the COOL switch (3) to the OFF position, this will turn off the pump and use the fan for ventilation only.

OR

1. When OFF, push the ON/OFF button (1) to turn the controller ON, the Power indicator (2) will illuminate.
2. Slide the Fan switch (4) to the ON position.
3. Rotate the Fan Speed dial (5) to set the desired airflow level.

CARE & MAINTENANCE

CUSTOMER CARE PROGRAM

Service and maintenance in accordance with the Service Maintenance Schedule on page 17 is essential in ensuring the prolonged useful life of your cooler, and help ensure it operates at optimum efficiency. Seasonal Maintenance is required only if you have a cooler fitted with a bleed system (i.e. no drain valve). Coolers fitted with a drain valve do not require Seasonal Maintenance. More frequent routine maintenance may be necessary where the cooler is installed in harsh environments, or in non-residential applications.

NOTE

Service maintenance is not covered under warranty and is a chargeable service. All coolers must have safe and reasonable access and be installed in compliance with the installation instructions supplied with the unit. Some installations may require two service personnel to attend, in accordance with Health & Safety requirements.

SAVE A SERVICE CALL

Service calls can often be avoided! If you feel your cooler is not operating property, please check these possible causes first:

General Troubleshooting

- Check the water supply to the unit is turned ON.
- Ensure the pump is operating and visually check the pads for even water distribution.
- Check that the number of doors and windows open is sufficient within the targeted cooling area. Too many or not enough doors and windows opened in the targeted area could result in inadequate ventilation. This could result in poor cooling performance.
- Check that the fan operates and air is coming out from the duct outlet.
- Check that the filter pads are not damaged and/or the material hasn't deteriorated.
- If external weather conditions are excessively humid, the cooler may not perform at its optimal cooling level.

If the fan will not start.

- Check if the power is ON.
- Check if the Wall Control is turned ON, and set the comfort level that requires the Cooler fan to operate.
- Check that the fan is not in Time Delay Mode caused by: pre-programmed times for the motorised drain to open, the Cooler's tank to fill with water, or a pre-wet of the filter pads.

NOTE

The usual time delay can be up to 8 Minutes.

- Check the fuse in the meter box.

The unit will not turn on

- Check the circuit breaker has not been tripped - if so reset it. Reset the Cooler at the power supply.

The unit is blowing warm air

- Check the water supply tap is turned on at the unit. Check the pump has been selected on the wall control

The wall control display is blank

- Check there is power to the power point with another appliance. Check the circuit breaker has not been tripped - if so reset it.

The unit is not cooling very well

- Check the water supply tap is turned on at the Cooler
- Check the pump has been selected on the wall control.
- Check sufficient door and/or windows have been opened. Refer to exhaust requirements covered in "Before Operating Your Evaporative Cooler" on page 6.

There is no air coming out of some vents

- It is highly probable that it is an installation issue. Please contact your installer in the first instance.

There is moisture on my tiles

- Check the vents are directing air flow across the ceiling and not towards the floor. If it is humid turn the pump off.
- Check sufficient door and/or windows have been opened. Refer to exhaust requirements covered in "Before Operating Your Evaporative Cooler" on page 6.

INSTALLATION RECORD

Installer Details

Installers Name: _____

Company Name: _____

Address: _____

_____

_____

Telephone: _____

Mobile Phone: _____

Certificate of Compliance / Certification Number: _____

Authorised Persons - Licence Number: _____

Installers Signature: _____

Installation Date: _____

System Details

Model Number : _____

Serial Number: _____

SERVICE MAINTENANCE SCHEDULE

Your ducted evaporative cooler should be serviced at two-year intervals after the date of installation by a qualified licensed technician in accordance with the Schedule below. Failure to do so during the product warranty period may void your warranty. This periodic service and maintenance will prolong the useful life of the unit, and help keep it running safely and at optimum efficiency.

Date of Installation	/ /	**Installed By:**				
Service Year	**2**	**4**	**6**	**8**	**10**	**12**
Service Date	/ /	/ /	/ /	/ /	/ /	/ /
Service Company / Technician						
ELECTRICAL						
Wiring						
Fan Motor						
Fan Motor Capacitor						
Printed circuit boards						
Water Pump						
Inlet Solenoid						
Damper Motor (if applic)						
WATER DISTRIBUTION						
Pump and associated fittings						
Water distribution pipework						
Water management system (If applic)						
Drain Valve						
Water Supply Line						
Bleed rate setting (If applic)						
Water reservoir						
Cooling pads						
MAJOR COMPONENTS						
Fan						
Cabinet						
CONTROLS						
Wall control						
GENERAL OPERATION						
Pad saturation						
Water level						
Water fill						
Water drain						
Winter Seal (if applic)						
General Installation-related and 3rd Party Components (not Kaden products) *						
Airflow thru system						
Consumables**						
Fan Capacitor						
Fan Collet						
Snorkel						
Hoses						
O-rings						
Pads (after fifth year)						
Water level sensor						

* Installation and other field-supplied components are not covered by Kaden Product Warranty. These include, but are not limited to, control wiring, ducting, diffuser, controls/thermostats, pipework and fabricated or added components and water and electrical connections to the appliance. These should be inspected as they can affect the performance, reliability and safety of the cooler.

** Units contain consumable items that may require periodic replacement and are not covered by Kaden product warranty (e.g. filter pads, capacitors, hoses, O-rings)

ACTION CODES					
Inspected - Working Correctly - No Action Required	**Adjusted Part**	**Cleaned Part**	**Replaced Part**	**Repaired Part**	**Referred to Installer**
✓	**A**	**C**	**R**	**RP**	**RI**

FAQ

Q. ***How often should the cooler be serviced?***

A. It is recommend that the cooler is serviced every 2 years at a minimum to ensure it operates at peak efficiency.

IMPORTANT **Please Note: Due to environmental conditions the cooler may need to be serviced every year.**

Q. ***What is done in a service?***

A. Our comprehensive service plan designed to maintain your cooler includes.

- Check filter pad material for holes or deterioration. The pads will deteriorate over time and lose their water absorption ability. Replace pads as required.
- Clean the tank and internal surfaces.
- Clean the filter pads and flush water.
- With the filter pads in position, switch ON the power supply isolating switch and operate the unit.
- Ensure the pump is operating, and visually check the pads externally for even water distribution.
- Ensure the water inlet is operating correctly.
- Ensure the water system is operating to the minimum and maximum water levels.
- Check that the water supply pressure is sufficient to fill the tank within the allotted time.
- Check the fan operates, and varies speed between the minimum and maximum setting on the Wall Control.
- Check and lubricate all moving parts.
- On Kaden KC & KL Series models, ensure the motorised drain is opening and closing correctly.

IMPORTANT **Please note that to maintain your warranty, the above servicing needs to be conducted by an authorised person trained in the service of Kaden Coolers.**

Q. ***I own a Kaden KC or KL Series or cooler - Why does the unit dump water periodically during operation?***

A. Kaden KC & KL Series coolers use the "Running Refresh" method for tank water quality control. This "Running Refresh" ensures that the salt or sediments accumulating in the cooler do not exceed an acceptable level by periodically flushing the tank while the cooler is operating.

Q. ***The air smells a little different. Why?***

A. New Cooling pads can give off a mild odour while they are settling in. This is quite normal, it will dissipate quickly as the new pad is constantly flushed during use. It may also be indicating that the unit requires a service.

Q. ***How much water does my evaporative cooler use?***

A. The amount of water an evaporative cooler uses is dependant on the evaporation rate of the coolers pads.

The more water the cooler can evaporate for a given condition and airflow, the more cooling potential the cooler has.

The evaporation rate varies depending on the current weather conditions, the size of the cooler, the speed of the coolers fan or the velocity of the air through the pads, and the condition and type of the filter pad material.

In addition to the cooler evaporating water, water is also displaced to maintain the water quality within the cooler so that the coolers pads and other components do not deteriorate prematurely.

Q. ***How much water does the tank of my cooler hold?***

Model		Tank Capacity (litres)
Kaden Classic (KC) Series	KC17, KC21, KC27, KC32	15
Kaden Low Profile (KL) Series	KL16, KL22, KL25, KL28	12

Q. ***Can I run the system when I am not home?***

A. Evaporative cooling relies on doors and/or windows being open so you can run it when you are not home, provided you have the required ventilation openings.

Q. ***How many doors and windows should I have open?***

A. Refer to the section on openings required. The table gives a guide to the amount of opening area required for each model, and also gives suggestions on how to provide this.

Q. ***Why is there condensation and moisture on my tiles?***

A. Make sure the vents are directed across the room and not towards the floor. Make sure sufficient doors and windows are open. Refer to the section on openings required. If it is a humid day turn the pump off.

Q. ***There is no air coming out of some of the vents***

A. It is highly probable that this is an installation issue. Please contact your installer in the first instance.

Q. ***What does duct cleaning entail?***

A. Like any other part of your home dirt, dust and other foreign particles can accumulate and breed in the ductwork and on system diffusers.

- Remove dust from your cooling system
- Kill any potential dust mites living & breeding throughout your cooling system
- Remove odours from your cooling system
- Helps improve indoor air quality
- Allergy sufferers may benefit from clean ducts
- Clean the Cooler fan and assembly
- Clean the Supply air diffusers

Q. ***Can I run heating through the same ductwork as my evaporative cooler?***

A. No, the differing technology between ducted heating and evaporative cooling doesn't allow the units to share the same ductwork. Also, evaporative cooling requires larger ductwork for airflow.

Q. ***How far should my cooler be away from sanitary vents?***

A. The unit should be at least a 5 metre radius away from a sanitary outlet.

Q. ***How cool is cool?***

A. The degree of cooling available from any type of air conditioning, is dependent on the outside weather conditions. Your Evaporative Cooler works best on hot, dry days. After all, that's when you require the most relief.

Q. ***Should the unit have its own circuit in the meter box?***

A. Yes, we recommend the power socket is wired back to the meter box on a dedicated power circuit.

Q. ***Should water be coming out of my evaporative cooler during operation?***

A. Kaden KC & KL Series models will complete a flush service approximately every 20 cycles of the pumps operation. This means you will see the unit dump the water out of the overflow pipe.

WARRANTY

KADEN EVAPORATIVE COOLER ("UNIT") WARRANTY

Manufactured by Rinnai Australia Pty. Ltd. 100 Atlantic Drive, Keysborough, Vic 3173.

1. DEFINITIONS

The terms listed below shall have the following meanings:

1.1 Authorised Service Representative" means an independent service contractor authorised by Rinnai or Rinnai service personnel.

1.2 "Rinnai" means Rinnai Australia Pty. Ltd. ABN 74 005 138 764 and any related company.

1.3 Certificate(s) of Compliance" means certificate(s) issued by licensed personnel including plumbers, refrigeration mechanics, electricians or other relevant trades people to certify that any prescribed works comply with applicable regulatory requirements.

1.4 Certificate(s) of Occupancy" means certificate(s) issued by the local council which certifies that a home can be occupied.

1.5 "Installation Site" means the site at which the Product is originally installed.

1.6 "Normal Business Hours" means 8:30am to 5:00pm week days excluding public holidays.

1.7 "Operating Instructions" means the user manual or other documentation which provides detailed instructions on the proper operation and maintenance of the Product.

1.8 "Other Applications" means any Product used for non-Residential and Light Commercial Applications. Other Applications may include but are not limited to factory, IT/Server room, telephone exchange, processing area (e.g. bakery, kitchen, warehouse, swimming pool, agricultural facilities such as a nursery) and any Product which has been installed, for whatever purpose as a retrofit component to an existing system.

1.9 "Purchaser" means the end user of the Product, the person named as owner in the Warranty certificate, the holder of the Proof of Purchase or the holder of a property transfer document where the Product is included as part of the chattels.

1.10 "Product" means the equipment purchased by the Purchaser and described in Section 2 of this document.

1.11 "Proof of Purchase" means a Tax Invoice or Receipt in respect of the Product. In the case of new constructions, a Certificate of Occupancy or a Certificate of Compliance that details the date of installation or commissioning will suffice.

1.12 "Qualified Installer" means the qualified installation contractor who is responsible for performing the installation work in the manner prescribed by local and statutory regulations, including compliance with any relevant Australian Standards, and to Rinnai specification.

1.13 "Residential & Light Commercial Applications" means any Product for use in both residential and light commercial applications. For example, homes, offices, hotels, apartments, nursing homes, hospitals, health care premises, shopping centres, retail stores where the Product is solely used for purpose of human comfort under standard operating conditions.

1.14 Kaden ® is a registered trademark of Reece Australia Pty Ltd.

2. TERMS OF WARRANTY

2.1 Subject to the Terms of Warranty set out in this document, effective from the date of purchase by the Purchaser, the Product is warranted to be free from defects in materials and factory workmanship for the period set out in the table below:

<table>
<tr><td rowspan="3">Residential
& Light
Commercial</td><td>Kaden ® Product Group</td><td>Parts</td><td>Labour</td></tr>
<tr><td>Evaporative Coolers & Ducted Gas Heaters</td><td>5 Years
2 Years Extended Option</td><td>5 Years
2 Years Extended Option</td></tr>
<tr><td>Ducted Gas Heaters - Heat Exchangers & Burners
Evaporative Coolers - Structural components only</td><td>10 Years</td><td>N/A</td></tr>
<tr><td>Other Applications</td><td>All Product Groups</td><td>1 Year</td><td>1 Year</td></tr>
<tr><td>Extended
Warranty
Option</td><td colspan="3">The extended warranty has terms and conditions, including the requirement for regular servicing of the product in accordance with the owner's manual. To be eligible for the extended two year warranty option you must:
• Register your Kaden product online at www.metalflex.com.au/kaden within the first 12 months of the product being installed, and
• In the fourth year, the service must be performed by Rinnai or its appointed nominee.</td></tr>
</table>

Rinnai will determine in its sole discretion, which classification the Product fits into and the corresponding Warranty that shall apply.

2.2 An Authorised Service Representative will repair or replace, at its option, the Product or any part of the Product that its examination shows to be defective. The repair or replacement shall be performed during Normal Business Hours by an Authorised Service Representative. Repair by persons other than an Authorised Service Representative may void the Warranty.

2.3 The Warranty of the Product requires that, in addition to all other conditions, the Purchaser conducts regular and/or preventative maintenance as may be specified by Rinnai (e.g. Operating Instructions) and required by the level of usage and the usage environment, including the use of correct and uncontaminated refrigerants and lubricants.

3. CONDITIONS OF WARRANTY

3.1 The Purchaser may only obtain the benefit of the Warranty if the Purchaser:

a) maintains and services the Product in accordance with the instructions set out in the service section of the relevant Service or Owner's Manual; b) complies with clause 7 below (titled "Purchaser's Responsibilities");

b) notifies Rinnai within 30 days of a defect developing, that a claim is being made under this Warranty; and

c) provides, in support of the claim made under this Warranty, a Proof of Purchase.

3.2 This document represents the only Warranty given by Rinnai and no other person or organisation is authorised by Rinnai to offer any alternative.

4. EXCLUSIONS

4.1 This Warranty does NOT cover:

a) damage, problems or failure resulting from improper operation and/or inadequate maintenance by the Purchaser (refer Purchaser's Responsibilities section below);

b) damage, problems or failure resulting from improper or faulty installation. The Product must be installed by a Qualified Installer in accordance with applicable regulations. Where applicable, Certificate(s) of Compliance must be obtained by the purchaser from Qualified Installer and present it to the Authorised Service Representative;

c) damage, problems or failure caused by factors external to the Product including, but not limited to, faulty or poor external electrical wiring, incorrect or faulty power supply, voltage fluctuations, over voltage transients or electromagnetic interference,inadequate or faulty gas, drainage services, or water services, including water pressure, and non potable water;

d) damage, problems or failure caused by acts of God, fire, wind, lightning, flood, storm, vandalism, earthquake, war, civil insurrection, misuse, abuse, negligence, accident, pests, animals, pets, vermin, insects, spiders or entry of foreign objects or matter into the Product such as dirt, debris, soot or moisture;

e) damage, problems or failure caused by weather including, but not limited to, hail, salt or other corrosive substances;

f) Product which has been installed in a portable or mobile building, structure or application including, but not limited to, a caravan or boat;

g) Product which is being re-installed at a location other than the original site;

h) any consumable item supplied with the Product including, but not limited to, an air filter, battery, fan belt, igniter or cooler pad;

i) installation of third-party components that may be attached to the Product. These include, but are not limited to, control wiring, ducting, return air filter(s) grille, register, diffuser, zone motors, controls/ thermostats, pipe work and fabricated or added components. These items remain solely the responsibility of the Qualified Installer;

j) installations where electrics/electronics may be subjected to moisture/chemicals (e.g. swimming pools or nurseries);

k) any repair, which is needed as a result of an accident, misuse, abuse or negligence;

l) Product that is utilised in an environment (indoor and outdoor) outside its specified operating range; and

m) fair wear and tear to the Product.

5. LIMITATIONS

5.1 Product fitness for purpose and overall system design, sizing and application are not the responsibility of Rinnai. This includes but is not limited to the heat load calculations, airflow and system balancing.

5.2 This Warranty does not apply to any Product installed at an Installation Site which is outside Australia.

5.3 Except where inconsistent with the purchaser's statutory rights and the rights given by this Warranty, all of the warranties and all liabilities of Rinnai for any direct, special, indirect or consequential loss or damage, any damage or expense for personal injury or any loss or destruction of property arising directly or indirectly from the use or inability to use the Product or any of its parts and servicing the Product, are expressly excluded.

6. TRAVEL, TRANSPORT & ACCESS COSTS

6.1 The Purchaser must pay freight charges, in-transit insurance expenses and travelling costs for repairs/replacements under this Warranty, that are required to be performed 100km or more from the nearest Rinnai branch or Authorised Service Representative.

6.2 Subject to clause 6.3, Rinnai will pay freight charges, in-transit insurance expenses and travelling costs for repairs/replacements that are required to be performed less than 100km from the nearest Rinnai branch or Authorised Service Representative. In this circumstance:

a) Rinnai will arrange for such repairs/replacements and make any payment directly to the third party to provide the freight, in-transit insurance or travel services; or

b) if Rinnai considers appropriate, it will authorise the Purchaser in writing to pay for the relevant freight charges, in-transit insurance expenses or travelling costs and then, upon provision by the Purchaser to Rinnai of a tax invoice showing those costs have been incurred, reimburse the Purchaser for such costs which are within the terms of the authorisation. If the Purchaser pays for the relevant freight charges, in-transit insurance expenses or travelling costs without written authorisation from Rinnai, Rinnai will not reimburse the Purchaser for such costs.

6.3 The Purchaser must pay all costs and expenses in respect of:

a) making the Product accessible for service. For example, restricted access or working at heights, or the labour cost for an additional person due to OHS requirements;

b) providing a safe working environment for installation, service, maintenance or repair of the product;

c) any surcharge applicable in respect of supplying replacement parts outside Normal Business Hours; and

d) any other costs and expenses in relation to claiming the Warranty that is not covered by clause 6.2.

7. PURCHASER'S RESPONSIBILITIES

7.1 The Purchaser must operate and maintain the Product in accordance with the Operating Instructions and service maintenance schedule, including conducting an appropriate number of services to the unit during the Warranty period, based on usage and the usage environment including but not limited to;

a) regularly cleaning the air filter(s) and replacing them where necessary;

b) replacing expired batteries or other consumables as required;

c) ensuring that the condensate drain is kept clean and clear of obstructions;

d) ensuring that outdoor units have unrestricted airflow and adequate clearances;

e) ensuring that additional corrosion protection is applied to the Product if it is installed in a corrosive environment, for example,close to the sea.

8. STATUTORY RIGHTS

8.1 The benefits given by this Warranty are in addition to other rights and remedies of the consumer under a law in relation to the goods or services to which the Warranty relates.

8.2 Australian purchasers have their benefit of statutory rights and nothing in these terms of Warranty has the effect of excluding,restricting or modifying those rights. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and 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.

9. REGISTRATION / SERVICE

To register your product please visit **www.metalflex.com.au/kaden**

To book a service call please call **1300 4KADEN** (**1300 452 336**)

NOTE

The PURCHASER WILL BE CHARGED for work done or a service call if:-

- the problem is not covered by these Terms of Warranty;
- there is nothing wrong with the product (e.g. instructing Purchaser on the operation of the Product and/or controls)
- the Purchaser is unable to provide Proof of Purchase validating that the Product is within the Warranty period.

We recommend that you read the operating instructions, and in particular the troubleshooting section of the Operating Instructions, before you make a Warranty service call.

kaden

B063651 Rev. A