



Save energy. Improve lives.

# iLeaf<sup>2</sup> Eco Operating Instructions



## Instructions

### iLeaf<sup>2</sup> Eco 91-222



Compressor Running



Warning: Temperature is too warm (display flashing)



Service required/ in settings mode



Pump Running



Standby / Energy Saving Mode

PF

Probe Fault

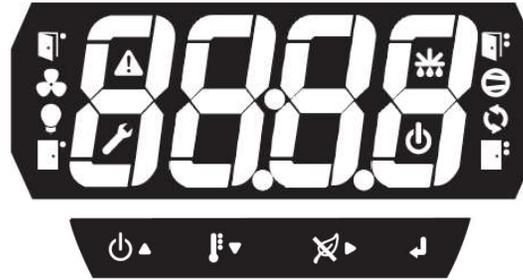
### Changing calibration value (probe match)

Power up unit pressing to set probe calibration LEAF r 1.0 CAL then release to display the cal value i.e. 285

Use and to change value, to exit and store the new value. NB The probe calibration value can be found on the probe

### Clean Mode

Press for 2 sec to place in standby for 2 hours the standby symbol will be display on the screen during this period with the words CLN



### Electrical

Input Voltage: 230V ac +/-10%  
Holding Current: 16A holding, 80A surge (resistive)  
Pump Current: 1A holding, 40A Surge  
Connections: Live, Neutral, Compressor Live, Pump Live

### Mechanical

Dimensions: H34 x W76 x D88 with cover (mm)  
Cut Out: W71 x H29 (mm)

### Environmental

Front IP65, Rear IP64 using rear cover  
Operating Temperature: 0° to 50°C  
Storage Temperature: -20° to 70°C  
Relative Humidity: 0% to 90% non-condensing

### Material

Parts: Polycarbonate body and lens, clips POM  
Gasket: Neoprene Rubber

### Design & Manufacture

Designed & Manufactured to ISO9001:2015 / 14001  
CE Compliant  
RoHS Compliant  
MTBF 5 years

### Probe Accuracy

Calibrated probe +/-0.2 Deg C @ 0 Deg C.

### Configuration of settings

Press for 3 sec to configure and release  
Set point: t-2.0 press / to adjust, to proceed.  
Hysteresis: h 1.5 press / to adjust, to proceed  
Clock: SELE Press to adjust the clock, to proceed, the digit that can be adjusted will flash, press and to adjust and to move to the next digit.  
Date of week: dAYS Press to adjust the days of week  
Date: dALE Press to adjust the date  
Year: YEAR Press to adjust the year  
Daylight Saving: LI LE Press to allow turn on or off the DLS

Preset PDD I Use and to select the default pre-set program from P1 to P5. Press to copy preset to the trading hours

Trading Hours: HOUR Press to adjust the trading hours. See separate note on changing this hours. To copy trading hours from Sunday to the other 6 days press and together COPY will be displayed. Press to confirm, done will be displayed. Errr will be displayed if any of the times have not been entered correctly.

Python Refresh: PYLEN Press to change the occurrence of the python refresh during non-trading period set to either OFF, 15, 30 or 60 minutes. press / to adjust

Out of hours max temp: SELE Press to adjust maximum bath temperature, in the non-trading period. Press / to adjust

Reset: r5t Press to reset the control to its default settings. done will be display when completed

The controller will automatically revert to displaying the current temperature after 30 seconds.

Any changes to settings that have been made will be lost.

## How iLeaf 2 ECO works

During trading hours, i-Leaf controls the cooler as a standard controller would normally do. User defined set-point temperature and hysteresis enables the cooler to function effectively in all environments. Managing the cooler precisely using advanced control electronics and a calibrated temperature probe, i-Leaf maintains the temperature of the product efficiently and accurately.

Out of trading hours, i-Leaf enters Energy Saving Mode or 'E<sub>n5</sub>' and maintains the temperature of the product at a maximum out of hours temperature, reducing significantly the amount of energy being used. Then, using advanced control algorithms, i-Leaf 'learns' when to lower the temperature of the product again ready for opening time. This means that by opening time the product is ready to be served. Additionally, during the non-trading hours, the unique python refresh function allows the coolant within the python to be regularly replenished, maintaining product quality.

THE SETTING OF THE TRADING HOURS IS ESSENTIAL AND MUST BE DONE WHEN THE COOLER IS FIRST INSTALLED.

Symbols



i-Leaf uses trading hours to optimise energy savings. During trading hours, the i-Leaf will ensure that the product is kept within the range of the set-point temperature and the hysteresis. Pre-programmed trading hours will already have been set depending on the preset selected (see presets), however, for i-Leaf controller to work effectively it may be necessary to program in the actual trading hours.

i-Leaf allows different trading hours to be set for each day of the week, and two trading hours period per day. For example, the trading hours on a Monday could be set between 8:00 – 12:00 and 14:30 – 22:00. If the establishment opens between 11:00 on a Tuesday but closes at 02:00 on a Wednesday morning (i.e. it is open until 2 am) it is necessary to program the i-Leaf as follows, set the trading hours to be between 11:00 – 24:00 on a Tuesday and 00:00 – 02:00 on a Wednesday. Programming i-Leaf like this will ensure uninterrupted power to the cooler between the hours of 11:00 on a Tuesday and 02:00 on a Wednesday. Do not program as opens at 11.00, and closing at 2.00 in the same day period as this will cause an error to occur.

Once programmed, i-Leaf will manage the temperature of the ice bath out of hours so that the product is brought back down to within the trading hour's temperature range, ready for opening time.

## Setting Opening and Closing Times:

When **HOU** is displayed on the control trading hours can be programmed according to day, starting with Sunday, note the name of the day precedes the trading times.

Press the  button to enter the 'Trading Hours Set' mode. This will display the day and will start with **SUN**. Press the  button again for the first trading period start time denoted by the  symbol flashing. To change this time, press  and  to adjust until the required time is shown.

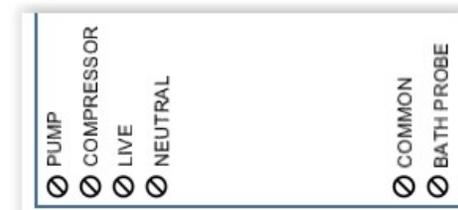
Press the  button to display the first trading period end time denoted by the  symbol flashing, adjust this value to the required end period and press the  button again to display the second trading period that day denoted by the  symbol flashing and adjust as required, finally press the  button again to display the second trading period end time denoted by the  symbol flashing Repeat this sequence for the remaining days or use the copy function, see configuration setting for details. In some cases not all opening and closing times will have values (for example, when an establishment is only open between 11:00 and 17:00 and does not open for any other periods of the day). Where this is the case, the second opening and closing times must be set to OFF. This should be done when changing the time by pressing the  button until **OFF** is displayed on the screen.

Opening and closing hours should be set in chronological order. The opening time must always be earlier than the closing time, otherwise the controller will display 'Err'.

Note: Trading hours can be programmed to the nearest 10 minutes.

## Connection details

WARNING: ISOLATE THE COOLER UNIT FROM ALL POWER SUPPLIES BEFORE CARRYING OUT INSTALLATION. REMOVE THE PLUG FROM THE WALL.



## Override

When the controller is in energy saving mode **E<sub>n5</sub>** is displayed, the product temperature is allowed to rise to the maximum out of hours temperature. An override function exists, should the product need to be maintained for example, if the establishment remains open out of normal trading hours. To turn the override function on, press the select  button, when the controller is in energy saving mode. The controller will now run to the end of the next trading period.

## Bath Refresh

When no trading hours are set for a particular day i-Leaf will perform a full compressor cycle during the day to ensure temperature are not elevated to uncontrollable levels.

## Presets

Preset 1: 11.00 to 23:00 (7 Days a week)

Preset 2: 00:00 to 02:00 and 11:00 to 24:00 (7 Days a week)

Preset 3: 00:00 to 01:00 and 10:00 to 24:00 (7 Days a week)

Press 4: Sunday 00:00 to 02:00 and 11:00 to 23:00

Monday to Thursday 11:00 to 23:00

Friday 11:00 to 24:00

Saturday 00:00 to 02:00 and 11:00 to 24:00

Preset 5: 00.00 to 24:00 (7 Days a week) does not turn off. (Default)