



Intelligent Hot Water Manager

SETTINGS GUIDE

www.easiwise.co.za

DISCLAIMER

Only suitably qualified personal should install an EASIWise unit. Do not attempt to install unless you have understanding and knowledge of working with hot water geysers and electricity and / or solar systems. Improper installation of EASIWise unit will void any warranty or guarantee and damage to any unit will be accessed prior to replacement if in the warranty period.

OPERATION: LCD UNIT / DISPLAY



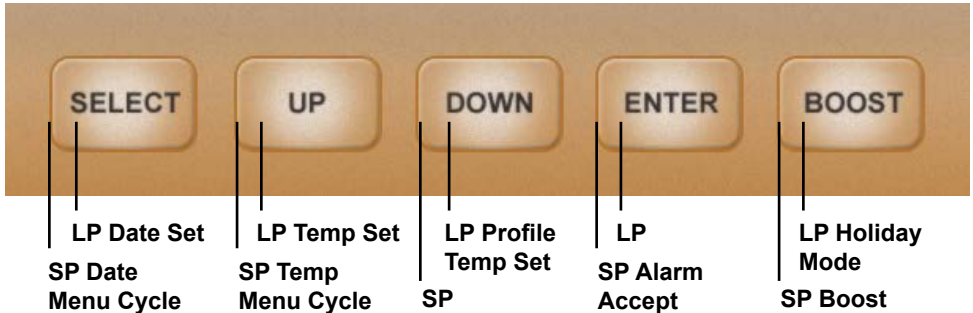
(*) HEAT	Element is ON
(*) POWER SAVE	When unit is In an OFF period of the timer profile
(*) LEAK	Water detected in the drip tray
(*) ELEMENT FAULT	Faulty Element
(*) BATTERY	Unit operating on battery.
(*) T-SENSOR	Geyser Temperature sensor faulty
E-LEAKAGE	Geyser element faulty
MAINS FAIL	If battery is installed
SET	Timer On / OFF / Temperature profile setting
Ver	Used to indicate LCD / GEYSER firmware version
BOOST	Boost temperature setting
GEYSER	Geyser temperature displayed (default)
SOLAR	Solar temperature displayed
Ex T 2	Extra solar temperature probe 2 (--)
Ex t 3	Extra solar temperature probe 3 (--)
DELTA	Delta / Hysteresis for geyser and solar
SET POINT	Target Temperature for geyser / Max temperature for solar
(*) M = pump motor	Indicates solar relay is ON driving motor connected to relay
TIME	Time being set or being displayed
(*) :	Time separation between HH:MM (hours and minutes)
DATE	Date being set or being displayed
(*) /	Date separation between DD/MM (day and month)
ON	Time ON (Used during setting of ON / OFF / Temp timer)
OFF	Time OFF (Used during setting of ON / OFF / Temp timer)
kW/H	Kilo watts used from last kWh reset

AMPS	Amps – real time current draw – only if element switched on
HOURS	Time ON from last kWh reset
FAULT	As per Fault table

LED DISPLAY COLOURS

LED Colour	STEADY ON	FLASHING
BLUE	POWER SAVE mode geyser OFF	BOOST Mode
RED	Heating geyser, program ON	BOOST Mode
GREEN	Geyser is in hysteresis, program ON	-

BUTTONS AND FUNCTIONS



SHORT AND LONG PRESS DEFINITIONS

Short Press A Short Press is when the button is pressed for less than 2 seconds and released. Throughout this manual this will be considered as a “press”.

Long Press A Long Press is when the button is pressed for longer than 2.5 seconds then released (called set mode). This will be activated when the LED turns from ON to OFF and back to ON while the button is being pressed. If the LED is flashing, then the LED turning ON would indicate a long press was registered. Throughout this manual this will be considered as a “long press”

RESETTING UNIT:

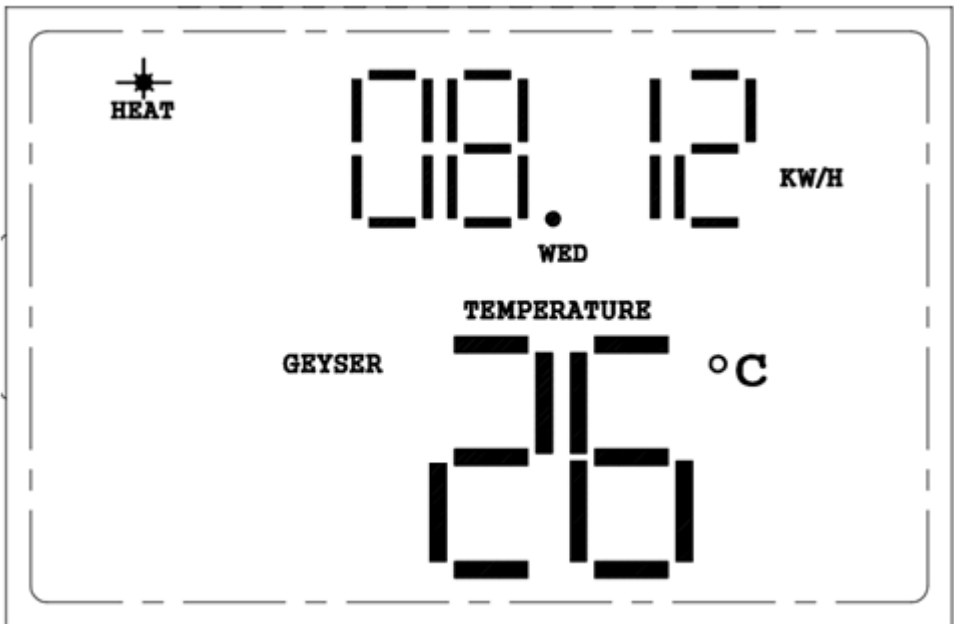
To reset the LCD unit and the Main Roof Unit, simultaneously (Long Press) push both the “SELECT” and the “BOOST” switches together. LCD backlight will turn off and then both unit’s will take up to 10 seconds to reset.

RESETTING KW/H AND HOURS:

To reset the KW/H and hours counter simultaneously (Long Press) push both the “SELECT” and the “UP” switches together. Counters will be reset to zero.

MENU CYCLE

- 1 short press** Display date or time depending on current display
- 2 short press** Display date or time
- 3 short press** Display KW/h
- 4 short press** Display AMPS if element switched ON
- 5 short press** Display BATTERY voltage if battery connected
- 6 short press** Display LCD / GEYSER firmware version



DATE AND TIME SETTING

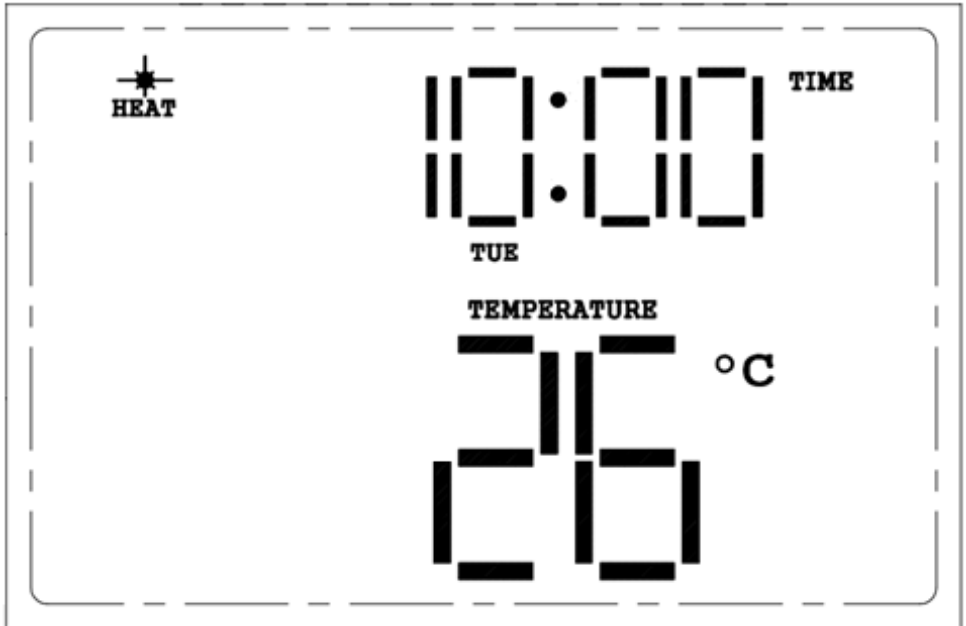
The date and time setting will be pre-set at the factory, but in the event that it needs to be reset follow the procedure below.

**** NB **** IT IS IMPORTANT TO SET THE DAY, MONTH and YEAR CORRECTLY as THE DAY OF THE WEEK IS AUTOMATICALLY CALCULATED BY THESE SETTINGS.

LONG PRESS THE SELECT BUTTON

ENTER to cycle to the Month
ENTER to cycle through to the Year
ENTER, to set the Time
ENTER to cycle through to the Minuets
ENTER
ENTER

UP and DOWN to set the Month
UP and DOWN to set the Year
UP and DOWN to set the Hour
UP and DOWN to set the Minuets
Date and Time is set.
Go to Home Screen



LCD UNIT HOME SCREEN SETTINGS

MAIN TEMPERATURE CYCLE MENU

To cycle through the temperature menu, give a short press on the “**UP**” button




Display the “GEYSER” temperature	Default
Display the “SOLAR” temperature	1 Press
Display the “EX T 2” temperature	2 Presses
Display the “GEYSER SETPOINT” temperature. The present temperature set with the Timer ON / OFF profile will be displayed. If this is during an OFF period, the temperature will be 00.	3 Presses
Display the “GEYSER DELTA” or hysteresis ie. Temperature difference between geyser switching off then back on. (Delta or hysteresis refers to the temperature difference between the geyser set point and the temperature at which the geyser will switch back on, once set point has been reached)	4 Presses
Display the “BOOST” temperature i.e. the geyser set point should the BOOST switch be pressed.	5 Presses
Display the “SOLAR SETPOINT” temperature i.e. the geyser temperature at which the differential solar pump would stop working. (Pumped systems ONLY)	6 Presses
Display the “SOLAR DELTA” temperature i.e. the temperature that the solar collector needs to be above the geyser temperature for the differential pump to operate.	7 Presses

MAIN TEMPERATURE SETTING

Long press UP	UP and DOWN to set BOOST temperature
ENTER to cycle to GEYSER DELTA	UP and DOWN to GEYSER DELTA temperature
ENTER to cycle to SOLAR SETPOINT	UP and DOWN to SOLAR SETPOINT temperature
ENTER to cycle to SOLAR DELTA	UP and DOWN to SOLAR DELTA temperature
ENTER	Go to Home Screen

SETTING THE TIMERS

Monday to Friday - Programs 1 – 4 (Note: not all timers need to be set)

Long press Down	ON will indicate and the HOURS will flash
Set the time you want the element ON	use UP and DOWN to set hour
ENTER to go to MINUTES	use UP and DOWN to set minutes
ENTER	Time set
	
Geyser Set point will display with °C	To set temperature, use UP and DOWN Note: Default is 55°C and maximum is 65°C
	


ENTER for program 2	<ul style="list-style-type: none"> ▶ Set ON time as in program 1 ON (default is 16:00) ▶ Set OFF time as in program 1 OFF (default is 18:00). ▶ Set Geyser Set point as in program 1 (default 55°C maximum 65°C).
ENTER for program 3	<ul style="list-style-type: none"> ▶ Set ON time as in program 1 ON (default are 00:00) ▶ Set OFF time as in program 1 OFF (default 55°C maximum 65°C).

ENTER for program 4	<ul style="list-style-type: none"> ▶ Set ON/OFF time as in program 1 ON (defaults are 00:00) ▶ Set Geyser Set point as in program 1 (default 55°C maximum 65°C).
Unused timer setting	▶ Set the ON / OFF times to 00:00

Saturday and Sunday (Programs 5 – 8)

ENTER for program 5	<ul style="list-style-type: none"> ▶ Set ON/OFF time as in program 1 (default 03:00 and 06:00) ▶ Set Geyser Set point as in program 1
ENTER for program 6	<ul style="list-style-type: none"> ▶ Set ON/OFF time as in program 1 (default 16:00 and 18:00) ▶ Set Geyser Set point as in program 1
ENTER for program 7	<ul style="list-style-type: none"> ▶ Set ON/OFF time as in program 1 (defaults are 00:00). ▶ Set Geyser Set point as in program 1
ENTER for program 8	<ul style="list-style-type: none"> ▶ Set ON/OFF time as in program 1 (defaults are 00:00) ▶ Set Geyser Set point as in program 1

FUNCTION SETTINGS

ALARM ACCEPT	In the event of a “LEAK” detected, which means water will gather in the drip tray, an alarm will sound, press ENTER to accept and silence the buzzer. There is no intervention by the controller for this condition – everything functions as per normal – IT IS UP TO THE USER TO TAKE THE NECESSARY REMEDIAL ACTION.
BOOST MODE - Bypass the Timer 	Press BOOST Element will heat the water for 1 hour and then revert to the normal programmed setting Press BOOST again at any time to cancel and the unit reverts back to normal programmed setting.
HOLIDAY MODE	Long press BOOST, HLDAY will display in the TIME/ DATE menu, in this mode only the geyser element will not function. Press BOOST to turn HLDAY OFF – normal TIME / DATE will be displayed and the unit will enter the BOOST mode for 1 hour.
POWER SAVE	When the program is at an OFF condition in the TIMER schedule and element OFF the POWER SAVE symbol will be displayed

DISABLING ALARM (BY REMOVING JUMPER)

In the event there are power failures then each time the unit restarts the water leak alarm will sound again and the user will have to acknowledge this by pressing the “ENTER” button.

It is possible for the user to remove the front LCD cover by firmly holding the top half of the unit in one hand and gently pulling it off while pushing in on the side of the unit with the other hand. The user can then remove the jumper



shown and named “BUZZER ENABLE”. Hold the tab between your thumb and finger and pull it upwards away from the PCB. The buzzer will no longer sound.

FAULT CODES

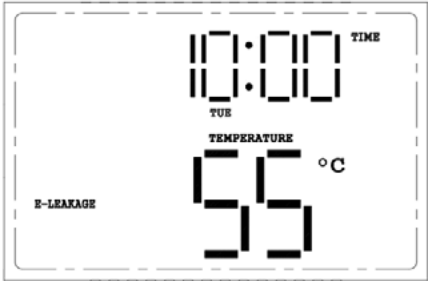
Displayed under FAULT on LCD

Fault Code	Problem
Fault 1 + E-LEAKAGE	Earth Leakage
Fault 2	Reserved for future use
Fault 3 + T-Sensor	Geyser temperature sensor fault
Fault 4	Geyser temperature < 4°C / Hr
Fault 5	Geyser temperature over 85°C
Fault 6 + LEAK	Water leak
Fault 7	Reserved for future use
Fault 8	Solar temperature sensor fault
Fault 9	Solar pump fault
Fault 0	Reserved for future use

Fault Description & Display

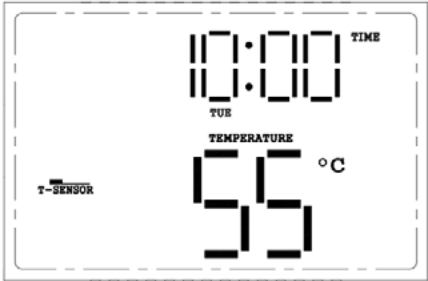
Meaning

E-Leakage (earth leakage)



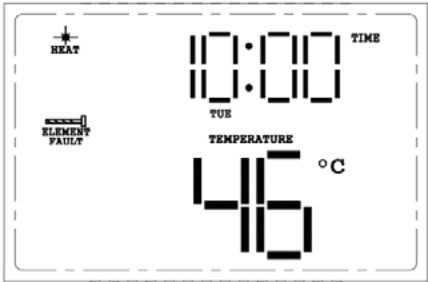
Earth leakage detected in element – element should be replaced by suitably qualified person.
Geyser controller will still attempt to control geyser normally but element may stop working at any point in time.

T-Sensor

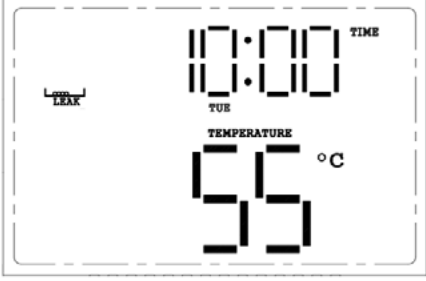
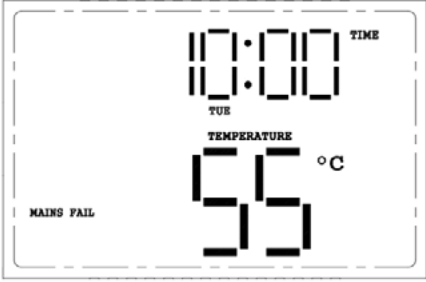
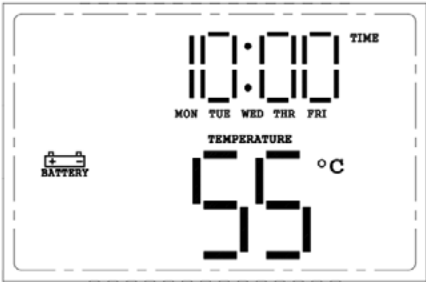


Geyser temperature sensor faulty – geyser will revert to ON and allow thermostat to control temperature. As thermostat has a higher setting this will lead to energy wastage so reason for faulty sensor should be investigated ASAP by suitably qualified person.

Element Fault



Element current < 3.5Amps when element is ON and should be investigated / possibly replaced by suitably qualified person.

Fault Description & Display	Meaning
<p>Leak (water):</p> 	<p>Water leak detected in drip tray An alarm will sound. Geyser will still function normally but this condition should be investigated ASAP by suitably qualified person</p> <p>Short press ENTER button to stop alarm</p>
<p>Mains Fail</p> 	<p>In the event of a Mains Fail the display will be OFF. If a battery is installed MAINS FAIL condition will be indicated on the LCD display</p>
<p>Battery</p> 	<p>Battery operation – will normally be displayed with “MAINS FAIL” message above if unit operating on battery – if Battery symbol is flashing then battery voltage is low and should be checked by suitably qualified person.</p>
<p>Fault 4</p>	<p>Element heating < 4°C / Hr. If this condition persists under normal geyser usage, then the element may possibly need replacing.</p>
<p>Fault 5</p>	<p>Tank over temperature (Geyser > 85°C) when heated by mains. Should be looked at by suitably qualified person.</p>
<p>Fault 9</p>	<p>Solar Pump fault. Check solar pump.</p>



EASiWise
Energy Automated System Intelligence

Intelligent Hot Water Manager

EASiWise Technologies (Pty) Limited (Reg No: 2011/107968/07)

WESTERN CAPE

Unit 13, River's Edge Business Park
Winelands Close, Stikland,
Bellville, Western Cape, 7530

Tel: +27 (0) 21 946 3424

Fax: +27 (0) 21 946 3989

Email: info@easiwise.co.za

GAUTENG

Unit 1, 27 Silverstone Crescent
Kyalami Business Park
Midrand, Gauteng, 1684

Tel: +27 (0)10 590 1162