



Geyserwise Max – Intelligent hot water cylinder and solar control



INSTRUCTION MANUAL

DELTA "T"

Before operating and installation carefully read all instructions.
Do not discard this manual.

INDEX

- Package Contents
- Uses, Characteristics and Technical
- Installation and wiring diagram
- Operation
- Error Codes

PACKAGE CONTENTS

- 1 x Main Control Unit
- 1 x Remote Control
- 1 x Temperature Probe With Thermal Fuse

Geysewise for Solar Industry – Instruction manual

- 1x Collector temperature probe
- 1x Water Leak Sensor
- 2 x Wall Plugs and Mounting Screws
- 1 x 5m Remote Connection Cable(Standard 5m Extensions up to 20m)
- 1 x Instruction Manual

Optionals available:

1. Solenoid valve for water leak detector main water shutdown.
2. Reference probe for anode indicator.

It is not recommended to install remote more than 20m from the main controller unit.

USES, CHARACTERISTICS AND TECHNICAL USES

Our intelligent controller is designed to manage your HOT WATER needs to your best advantage from both an energy and economical point of view. It uses professional techniques and the control system is managed by computer micro processor.

CHARACTERISTICS

1. Clear display of water temperature, time, day, heating mode, malfunction conditions.
2. Auto or manual heating.
3. Easy temperature setting to your requirements (30° C - 65° C) Factory default 55° C.
4. Four different temperature settings
5. Daily programmable timer, four time settings. Default settings to coincide with South African municipal load control programs.
6. Battery back up in event of power failure.
7. Multiple protection functions, dry heat, heat failure, earth leakage, Probe Failure, overheat, water leak.
8. Error conditions alert by error code E1 to E8.

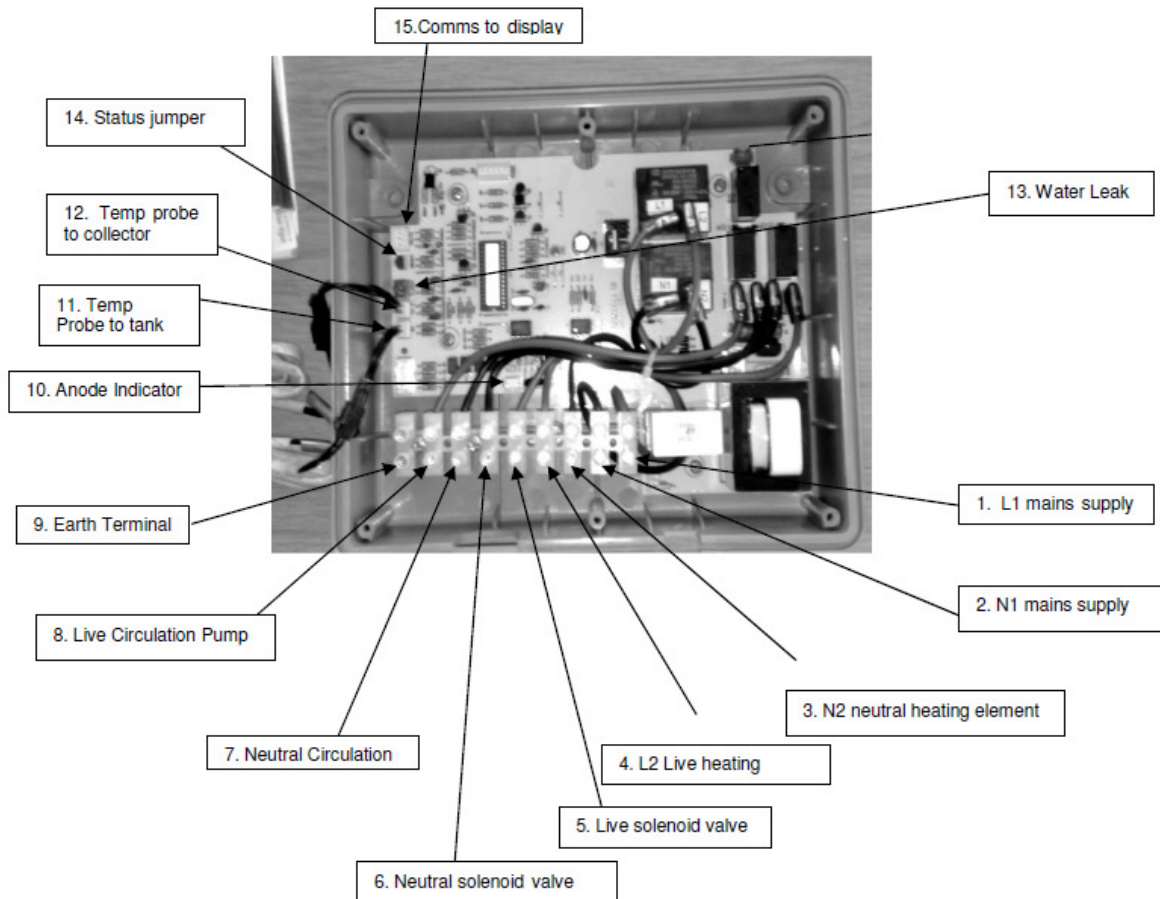
TECHNICAL PARAMETERS

1. Operating voltage 230VAC / 50HZ.
2. Main Relay contact rating 30AMP (Max 4KW).
3. Secondary relays pump and solenoid 5Amp.
4. Operating voltage range 160V – 250V AC.
5. Earth leakage protection at 25MA action time 0,1 second.
6. Temperature display range 0 - 99°C (“-5” when below -5°C “OE” when above 99°C).
7. Temperature setting range 30 - 65°C.
8. Maximum temperature 85°C.
9. Heat failure – when increase at rate 8°C / HR.
10. Thermal Cutout 104° C
11. Dry Heat detection – Empty Cylinder.
12. Temperature tolerance ± 2°C.
13. Temperature differential 1°C.

Geyserswise for Solar Industry – Instruction manual

14. Switching differential 6°C.
15. 2nd temperature probe for SOLAR COLLECTOR
16. Temperature probe failure detection Both collector and tank
17. Temperature probe range -30 to + 130° C
18. Isolate both L + N when in off state.
19. Collector antifreeze protection
20. Anode depletion indicator
21. Home alarm interface
22. GPRS interface.

INSTALLATION WIRING DIAGRAM



INSTALLATION NOTICE

Isolate Electrical supply before installation.
INSTALLATION BY SUITABLY QUALIFIED PERSONS ONLY.

Geysewise for Solar Industry – Instruction manual

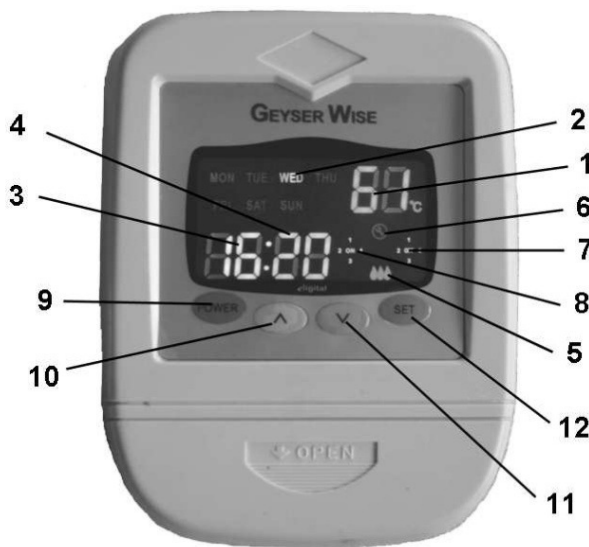
IMPORTANT!!!!!!! THE GROUNDING (EARTH) MUST BE CONTINUOUS.

Install in dry location.

If a 3 pin 16 Amp plug top are used heating element should not exceed 2.5 Kw

1. Remove thermostat. Push temperature probe with thermal cut out into thermostat pocket.
2. Insert Collector probe into appropriate place to measure temperature.
3. Connect L1+N1 (INCOMING SUPPLY) terminals 1&2
4. Connect L2+N2(heating element)Terminals 3&4. L2 to Thermal cutout in and from thermal cutout to heating element. Neutral to heating Element.
5. Connect L+N solenoid shutoff (WHEN INSTALLED) Terminals 5&6
6. Connect circulation pump L&N to terminals 7&8.
7. Connect all earth wires to terminal 9&10. Ensure all parts are properly earthed.
8. Plug Water Leak Detector into connector (13) place in drip tray or other suitable place.
9. Connect to N/O dry contact to Zone of home alarm system if required.
10. Plug anode indicator (Optional) into connector (10). One end to reference probe other end to tank. If not required switch slide switch at back of remote to off position indication light will be off.

OPERATION



Functions of components and operating buttons:

1. Temperature Display in °C – Error Code
2. Day of the Week
3. Hour
4. Minute
5. Heat Indication- Continuous Element On, Flashing Element Off.
6. Pump Run Indication .
7. Programmable Timer Off 1-4
8. Programmable Timer On 1-4
9. Power Button
10. Adjustment Up Button
11. Adjustment Down Button
12. Set Button - During set function, values will flash for 10 seconds. If no setting is made, the unit will revert to normal function.

SETTING WATER TEMPERATURE:

Press [**SET**] and release.

The temperature setting will flash on the device.

Use [**^**] and [**v**] buttons to adjust the temperature.

TEMP 1. 00h00 to 05h59

TEMP 2 06h00 to 11h59

TEMP 3 12h00 to 17h59

Geysewise for Solar Industry – Instruction manual

TEMP 4 18h00 to 23h59

Water temperature is set to a factory default of 55°C.

ADJUSTING THE DAY OF THE WEEK:

Press [**SET**] and release.

The day of the week will flash on the device.

Use [**▲**] and [**▼**] buttons to adjust the day of the week.

ADJUSTING THE HOUR:

Press [**SET**] and release.

The hour will flash on the device.

Use [**▲**] and [**▼**] buttons to adjust the hour.

ADJUSTING THE MINUTE:

Press [**SET**] and release.

The minute will flash on the device.

Use [**▲**] and [**▼**] buttons to adjust the minute.

SETTING THE TIMERS:

By factory default, the programmable timer is set as follow for Monday to Friday:

Timer 1 : 04h00 **ON** – 06h00 **OFF**

Timer 2 : 11h00 **ON** – 14h00 **OFF**

Timer 3 : 16h00 **ON** – 18h00 **OFF**

Timer 4 : 21h00 **ON** – 23h00 **OFF**

TO SET THE TIMER ON TIME FOR MONDAY TO FRIDAY, FOLLOW THE STEPS BELOW:

Press [**SET**] repeatedly until the hour (3), the Timer 1 (one) on the timer on indicator (8) and the Mon-Fri display (3) flashes simultaneously.

Use [**▲**] and [**▼**] buttons to adjust the hour.

Press [**SET**] and the minute will flash.

Use [**▲**] and [**▼**] buttons to adjust the minute.

TO SET THE TIMER OFF TIME FOR MONDAY TO FRIDAY, FOLLOW THE STEPS BELOW:

Press [**SET**] repeatedly until the hour (3), the Timer 1 (one) on the timer on indicator (7) and the Mon-Fri display (3) flashes simultaneously.

Use [**▲**] and [**▼**] buttons to adjust the hour.

Press [**SET**] and the minute will flash.

Use [**▲**] and [**▼**] buttons to adjust the minute.

Repeat the above steps for timer 2, 3 and 4.

To set the timers for Saturdays and Sundays, repeat the steps above.

If at any stage you would like to reset the timers back to the factory defaults, press and hold the [**POWER**] button for six seconds. On release, the timers will be reset to the factory default.

Geyserswise for Solar Industry – Instruction manual

POWER SAVE MODE:

To set the device to Power Save Mode, press and hold the [SET] button for six seconds. Only the temperature display (1) will be on.

To reset from Power Save Mode, press any button. The full display will come on.

SWITCHING THE UNIT ON/OFF:

To switch the unit off, press and hold the [POWER] and the [SET] buttons simultaneously. The words OFF will be displayed in Programmable Timer Off (7).

To switch the unit back on, repeat the above steps.

CHANGING THE HEATING INTERVAL / BYPASSING THE TIMER:

To bypass the timer settings and to heat at any interval, press and release the [POWER] button. Three water droplets (5) will illuminate on the display.

CHECK THE ENERGY USAGE OF HEATING ELEMENT IN HRS.

Press [^] and [v] together and release no of hrs will display up to value of 99.

To revert back to normal repeat above step

To reset to ZERO press and hold [^] and [v] 3 seconds.

Error codes		
Error code	Explanation	Possible cause
E1	Earth leakage	Faulty element
E2	Dry burn protection	Cylinder empty
E3	Sensor failure (water tank)	Faulty sensor / Open circuit
E4	Heat failure	Element failure Leaking hot water pipe Faulty valve Scale build up No power supply to element
E5	Over temperature protection	Faulty sensor Stray current
E6	Water leak	Leaking tank
E7	Communications failure	Check comms wire between control and display
E8	Probe failure (collector)	Faulty sensor