



GEYSER

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I ntelligent Control
S Ave
E lectricity

INTELLIGENT HOT WATER CYLINDER
CONTROL

INSTRUCTION MANUAL

Thank you for purchasing our controller

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

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PACKAGE CONTENTS

- 1 x Main Control Unit
- 1 x Remote Control
- 1 x Temperature Probe
- 2 x Cable Glands
- 2 x Wall Plugs and Mounting Screws
- 1 x 5m Remote Connection Cable
- 1 x T105 Adaptor
- 1 x Instruction Manual

Standard 5m extension cables available as optional.

It is not recommended to install remote more than 10m 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 - 75°C) Factory default 55°C.
4. Daily programmable timer, four time settings. Default settings to coincide with South African municipal load.
5. Control programs.
6. Battery back up in event of power failure.
7. Multiple protection functions, dry heat, heat failure, earth leakage and overheat.
8. Error conditions alert by error code E1 to E5.

TECHNICAL PARAMETERS

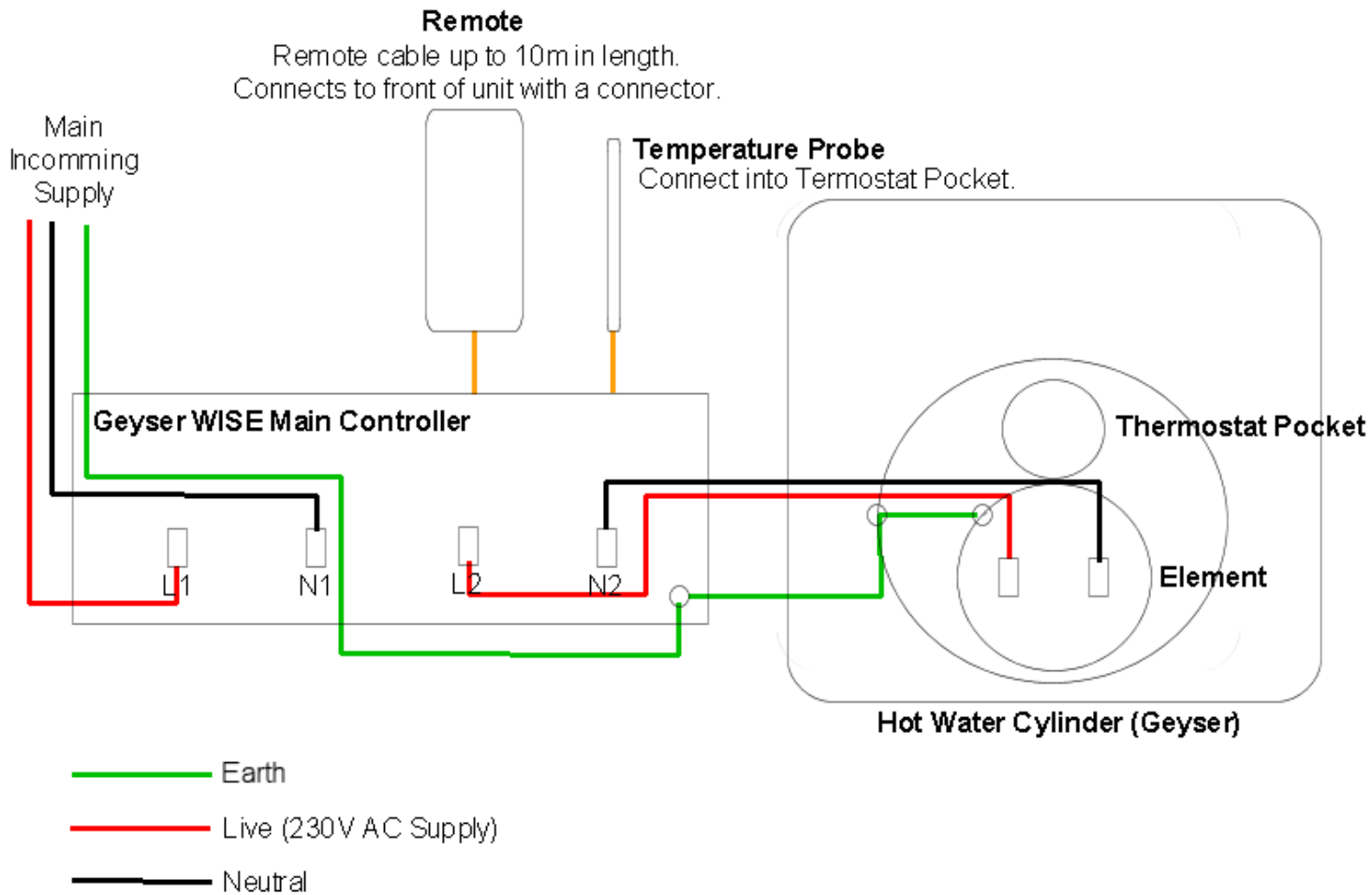
1. Operating voltage 230VAC / 50HZ.
2. Relay contact rating 20AMP (Max 4KW).
3. Operating voltage range 160V – 250V AC.
4. Earth leakage protection at 25MA action time $\leq 0,1$ second.
5. Temperature display range 0 - 99°C (“-5” when below -5°C “OE” when above 99°C).
6. Temperature setting range 30 - 75°C.
7. Maximum temperature 85°C.
8. Heat failure – when increase at rate ≤ 8 °C / HR.
9. Dry Heat detection – Empty Cylinder.
10. Temperature tolerance ± 2 °C.
11. Temperature differential 1°C.
12. Switching differential 6°C.
13. Isolate both L + N when in off state.

WIRING CONNECTIONS ON REMOTE : 5M COMMS CABLE

1. Open bottom lid by sliding downwards.
2. Connect comms cable to strip connection plug in sequence as indicated. From left to right.

Green	Grey	Red	Yellow	Blue	White	Brown	Purple	Black
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INSTALLATION WIRING DIAGRAM



INSTALLATION NOTICE

Isolate Electrical supply before installation.

INSTALLATION BY SUITABLY QUALIFIED PERSONS ONLY.

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

Install in dry location.

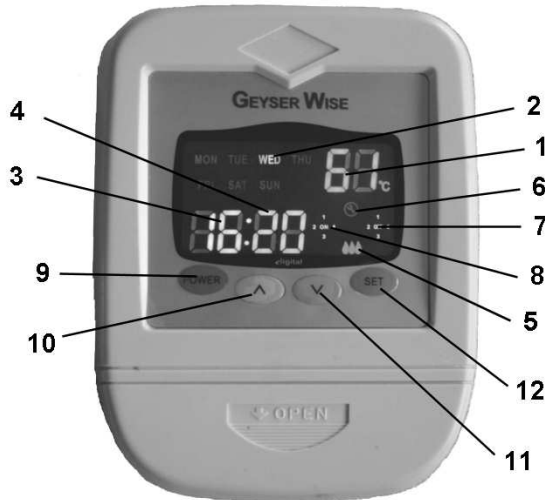
If a 3 pin 16 Amp plug top are used heating element should not exceed 2.5 Kw

Special adapter included for use with T105 type thermostats.

Remove thermostat. Push temperature probe into thermostat pocket.

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. Error Indication – With compared code E1 – E5 in Temperature Display (1).
7. Programmable Timer Off
8. Programmable Timer On
9. Power Button
10. Adjust Ment 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 [**▼**] buttons to adjust the temperature.

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.

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.

To revert back to the original timer setting, repeat the above steps and the three droplets (5) will disappear.

ERROR CODES

ERROR CODE	EXPLANATION	POSSIBLE CAUSE
E1	Earth Leakage	Faulty Element
E2	Dry Burn Protection	Cylinder Empty
E3	Sensor Failure	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
During any error condition, isolate the supply at the distribution board. Investigate and effect repairs or call a service agent. Repair and restore power.		

In areas where the unit is interfaced with municipal load control programs, these programs will have priority over any timer settings. During load control, the letters **LC** will flash in the temperature window (1) on the device.

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