Quick Set-Up Guide Epic Control Panel



To be used in conjunction with Epic Operating Manual supplied with each panel

Epic Panel wiring example

Picture below shows wiring using a 1ph borehole motor

Borehole Motor

-	Terminal 1	Neutral	blue or grey wire	wire above is blue
-	Terminal 2	Live	brown wire	wire above is brown
-	Terminal 3	Capacitor	black wire	wire above is black
-		Earth	yellow/green to terminal on right hand side of the board	

Incoming Supply

Grey/blue feeds into bottom left and out of the top left with blue wire which feeds to (N) on terminal board Brown wire feeds into bottom right and out of the top right with brown wire which feeds into (L) on terminal board Yellow/Green wire feeds to the earth terminal on the board (next to the brown wire)



Incoming Supply

Borehole Motor

Epic Panel for 1ph motors with Capacitor installed



If the Capacitor to be installed is particularly large, it is possible to position this upside down (or diagonally) but make sure that live terminals do not come into contact with the terminal board.

Images show where the Capacitor terminals are and how they are connected.





Epic Panel Wiring

Epic-1 wiring (1ph)



Epic-1 wiring (3ph)



<u>Note</u>

R-S-T also known as L1, L2, L3

It is recommended to check the phase rotation

Instructions on set-up and first turn on of Epic Panel

Wire pump/motor as per examples on pages 2-4. Once wired, follow instructions below.

- 1. Turn panel ON
- Change language to <u>English</u> by scrolling using up/down buttons △▽ when preferred language is found press centre □ square button to accept
- 3. Auto Tuning should commence immediately, this will take approx. 7-10 seconds
- 4. Once settings have been Auto Tuned, confirm Yes/No settings
- 5. The Epic panel is now set up for operation

If you need to redo Auto Tune, then follow instructions below.

- 1. Turn panel OFF and open door
- 2. Flip DIPSWITCH 2 up (see image right)
- 3. Turn panel ON
- Screen should show SETTINGS PARAMETERS (OK)
- 5. Press Square button to confirm
- 6. Press \bigtriangledown triangle button and scroll to <u>M04</u>

<u>PUMP 1</u>

- 7. Press Square button to confirm
- 8. Press \bigtriangledown triangle button and scroll to AUTO TUNING
- 9. Press Square button to confirm
- 10. Press \bigtriangledown triangle button and scroll to ON
- 11. Press 🗌 square button to confirm
- 12. Pump/motor should Auto Tune for about 7-10 seconds
- 13. Once Auto Tune is completed turn panel OFF and open door
- 14. Flip DIPSWITCH 2 down and close door
- 15. Turn panel ON
- 16. Press <u>Auto</u> to put panel into Automatic mode and pump should start when necessary



To make any changes to the program(s), depending on how you wish the panel to operate, see instructions on page 6 and also examples of installations on page 11.

Additional changes to parameters, if required

As default the Epic panel is set for <u>POTABLE</u> water and <u>EMPTY</u>; if you need to change to <u>WASTE</u> water or to <u>FILL</u>, follow instructions below.

- 1. Turn panel OFF and open door
- 2. Flip DIPSWITCH 2 up
- 3. Turn panel ON
- 4. Screen should show SETTINGS PARAMETERS (OK)
- 5. Press Square button to confirm
- 6. Press \bigtriangledown triangle button and scroll to <u>M06 PROGRAM</u>
- 7. Press Square button to confirm
- 8. Press \bigtriangledown triangle button and scroll to OPERATION
- 9. Press Square button to confirm
- 10. Press ✓ triangle button and scroll to EMPTY and then change to FILL if required
- 11. Press 🗌 square button to confirm
- 12. Scroll up/down arrows until you find EXIT and press 🗌 to confirm
- 13. Repeat stages 8 to 12 to change Type from Potable to Waste operation
- 14. Once changes are completed turn panel OFF and open door
- 15. Flip DIPSWITCH 2 down and close door
- 16. Turn panel ON
- 17. Press <u>Auto</u> to put panel into Automatic mode and pump should start when necessary

Examples of **Wiring/Installations Examples** can be seen on **pages 7-10**

Example diagrams of **Typical Installations** can be seen on **page 11**

Notes can be written on page 12

Typical <u>Irrigation Set-Up</u> for float/pressure switch in Epic 1 panel

- In this example, standard settings of POTABLE and EMPTY would be selected
- A single float switch or pressure switch is used, this is connected into G3 with G1 and G2 linked out and G4 left open (as per diagram right and picture below)
- If you wish to connect an <u>external irrigation controller</u> to work with a single float/pressure switch, please follow instructions below
 - Connect single wire into G3 and connect the other wire into an external relay for the controller (relay to be supplied by others)



- Or if there is only a relay, and no float/pressure switch, then connect both wires into G3 and to the relay



Diagram shows wiring of **FLOAT SWITCHES** in EPIC-2 panel



Image left shows wiring of **FLOAT SWITCHES** in EPIC-2 panel

M06 PROGRAM settings (typical)

Operation Empty ** Type Potable

** If filling a tank or pressure vessel, change setting to "Fill"

This is also the same set-up if using a **PRESSURE SWITCH**





Image above and left shows set-up as described below

G1	Float switch, minimum level	(Stop)
G2	Float switch	(P1, Start)
G3	Float switch	(P2, Assist)
G4	Float switch, maximum level	(Alarm) wire not shown

Float switch wires = black/brown (left/right in terminals)

ONE Float Switch Operation (below):

wire float into G3, G1 & G2 linked out and G4 empty



Image left shows Epic-1 panel with 4 float switches

Diagram shows wiring of **PROBES** in EPIC-2 panel



NOTE: EPIC-1 panel

Terminal 1 is not used, only Terminals 2-3-C with G1 linked or with float switch installed, see diagrams below.



Operation with <u>PRESSURE TRANSDUCER (4-20mA)</u>, surface/submersible pump(s)



Epic-1 panel

Epic-2 panel

4÷20 1 2 3 C H201 H202 G1

G2

G3 G4 K1 K2

P1-P2 start/stop

4÷20 mA

M07 SENSOR (sensor/transducer 4-20mA)

IMPORTANT NOTE: ensure Epic panel is switched OFF before connecting the sensor

Set PARAMETERS

Change MT/BAR to BAR (for surface pump operation)

Scroll through settings until EXIT

Set FULL SCALE

Change FULL SCALE to the pressure rating of the transducer, i.e. 16.0 BAR

Scroll through settings until EXIT

Set MINIMUM LEVEL

Not relevant when operating in BAR for surface pump(s)

Set MAXIMUM LEVEL

Not relevant when operating in BAR for surface pump(s)

Set PUMP 1 START

Change P1 START to the pressure required for pump start, e.g. 10.0 Bar

Scroll through settings until EXIT

Set PUMP 1 STOP

Change P1 STOP to the pressure required for pump stop, e.g. 5.0 Bar

Scroll through settings until EXIT



4-20	Input for 4-20mA sensor/transducer	Т	Pressure transducer
2/3/C	Input for level probe		Float switch for clean water
H	Input for water in oil chamber/water leakage	•	Float switch for waste water
ĸ	Input for motor klaxon		Level probe
Pr	Pressure switch		4-20mA piezoresistive sensor
P1	Pump		

Notes	
	15 P a g e