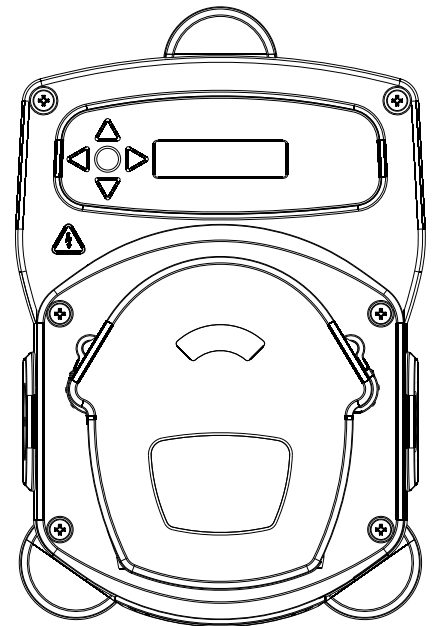
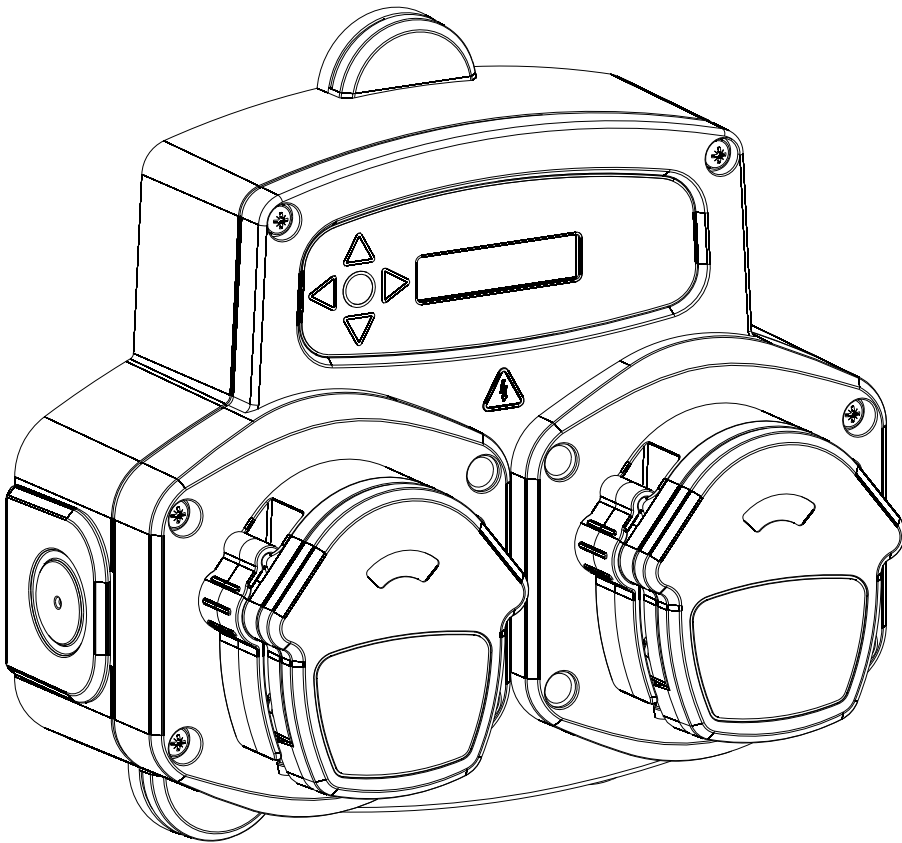


Dishwashing systems Bright Logic D2 & IP Dosing systems

(Full Instructions)



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The Bright-Logic D2 Dishwash Unit is an automatic dosing system designed for use with commercial, **TUNNEL AND CONVEYOR TYPE** dishwashing machines.

The Bright-Logic IP Dishwash Unit is an automatic dosing system designed for use with industrial, **TROLLEY/CRATE** dishwashing machines.

The unit can be selected to operate in one of the following modes:-

Cyclic Mode - Detergent initial charge options; Off, Power-up, Signalled with signal acceptance time. Cyclic detergent top-up charge. Cyclic rinse charge. Speed control. Cycle (initial charge only) and Run-time counters. Security access codes.

The pumps are initiated by supplying signals of between 12V and 240V AC or DC across the corresponding inputs of the A Rail and B Rail situated on the board. Signals must be present for the duration of the 1 second signal acceptance time before they are acknowledged.

Pumps can also be initiated by 'volt-free' switch connections (SW1 - 4 **IP units only**).

The pumps will cycle ON and OFF for the duration that a signal is present across the relevant inputs.

Conductivity Mode - Conductivity probe options; Auto, Signalled. Probe controlled detergent charge with 'scanlock' facility. Cyclic rinse charge. Speed control. Run-time counters. Security access codes.

The rinse pump is initiated by supplying a signal of between 12V and 240V AC or DC across the corresponding input of the A Rail and B Rail situated on the Powerboard. This signal must be present for the duration of the 1 second signal acceptance time before it is acknowledged.

Pumps can also be initiated by 'volt-free' switch connections (SW1 - 4 **IP units only**).

The rinse pump will cycle ON and OFF for the duration that a signal is present across the relevant inputs.

The probe incorporates an alarm delay that elapses during the operation of the detergent pump. If the pump is still operating after this duration, then a buzzer is sounded, a warning is displayed on the screen and the unit will ignore subsequent signals. The buzzer can be silenced by pressing the **PRIME** key (the unit will remain static). The unit is reset by pressing and holding the **PRIME** key for 2 seconds.

Two probes can be purchased, a simple conductivity probe or a more advance inductive probe with tank temperature display. Both these kits are to be supplied separately.

(If fitted to a single tank machine)

Timed/Signalled Mode - Detergent initial charge options; Off, Power-up, Signalled, Auto. Timed detergent top-up charge. Timed rinse charge. Speed control. Pulse settings. Cycle and Run-time counters. Security access codes.

The pumps are initiated by supplying signals of between 12V and 240V AC or DC across the corresponding Inputs of the A Rail and B Rail situated on the board. Signals must be present for the duration of the 1 second signal acceptance time before they are acknowledged.

Pumps can also be initiated by 'volt-free' switch connections (SW1 - 4 **IP units only**).

Auto initial charge option - offers the use of a single signal from the rinse solenoid to activate the initial charge, top up charge and rinse charge. With the inclusion of LK1 (see page 3), a single signal can be taken to input 3 of the Powerboard; the top up charge is initiated by the signal becoming 'high', the rinse charge is initiated by the signal becoming 'low' and the initial charge is initiated by the signal remaining 'high' for the duration of the programmed Initial charge signal acceptance time.

The Bright-Logic D2 utilises two single pumpheads. As standard, the left pumphead (pump 1, clockwise) is the detergent pump and the right pumphead (pump 2, clockwise) is the rinse pump.

The IPD1 utilises a single highflow pumphead for pump 1.

The IPD2 utilises a single highflow pumphead for pump 1. Pump 2 can utilise a single or highflow pumphead.

The option of a third pump is also available if required. This can utilise a single or highflow pumphead and can operate at any time.

Important Safety Instructions

Please read the following precautions carefully before using this equipment. This unit contains high voltage circuits that may expose you to the danger of electric shock.

Do not open the enclosure without **isolating the signal and supply sources**. Ensure that these sources have been isolated for at least 5 minutes before entering the enclosure.

Means for disconnection must be incorporated in accordance with the wiring rules.

Do not mount the unit to unstable, irregular or non-vertical surfaces.

Do not place heavy objects on top of the unit.

Do not attempt to place items (such as screwdrivers) into the moving parts of the Pumphead.

Do not power the unit outside of the values stated on the rating label.

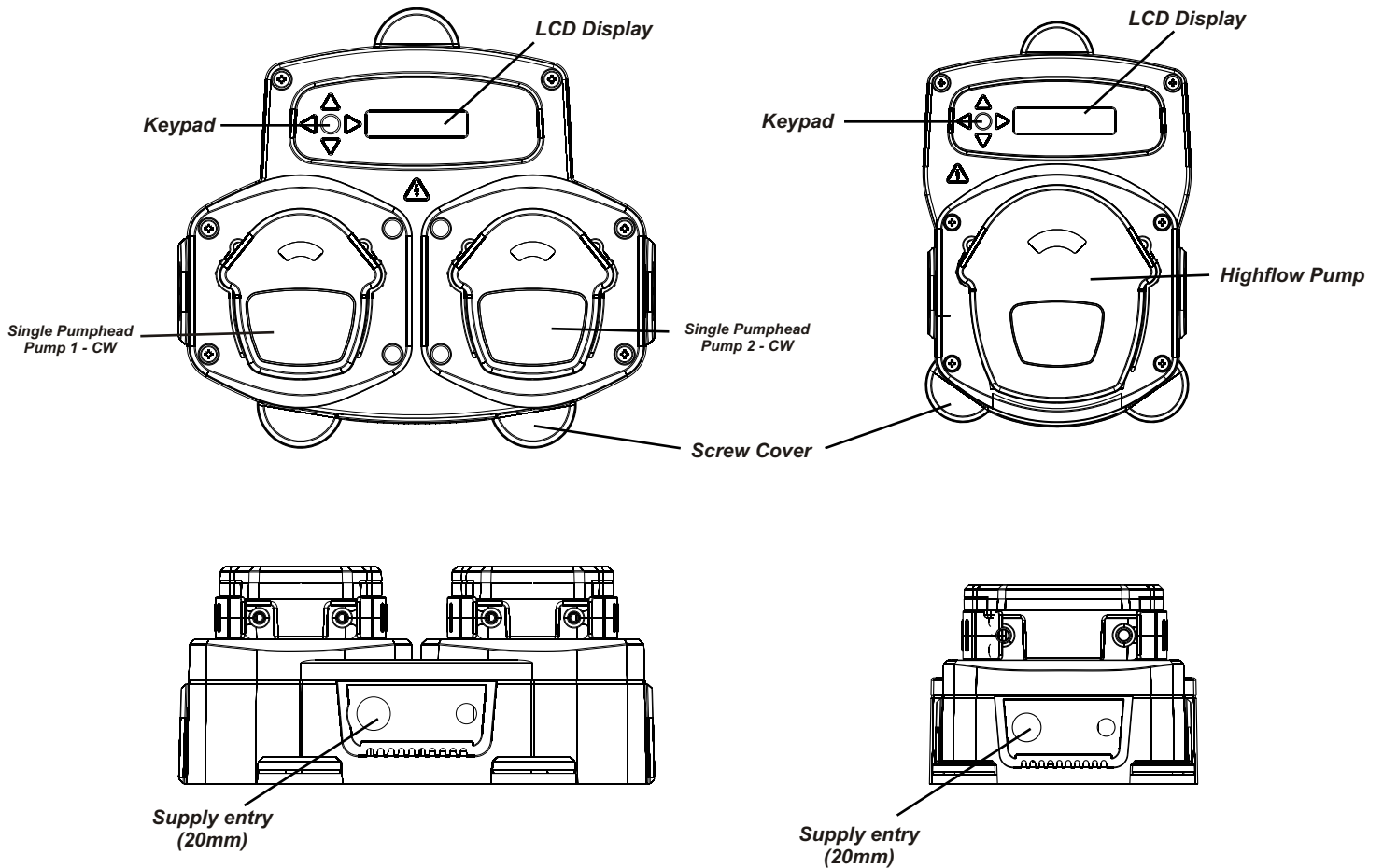
Do not use damaged or frayed cables.

Do not dismantle or modify this equipment.

Always ensure that care is taken when handling chemicals.

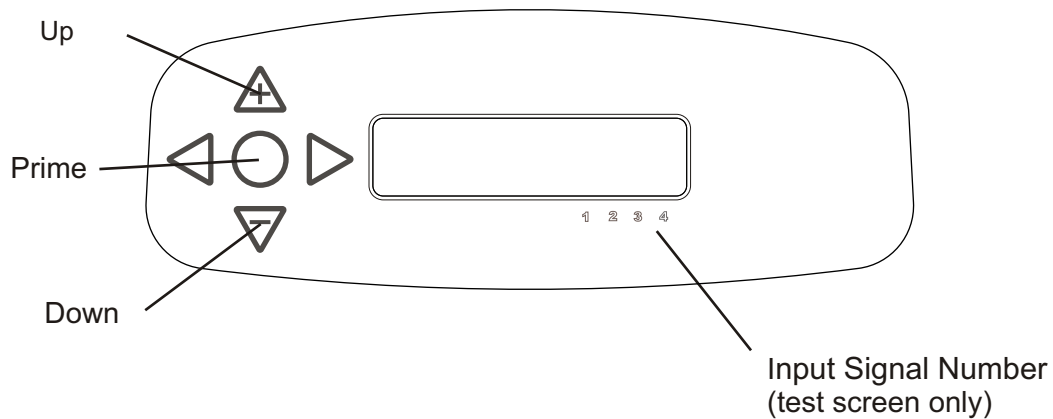
For US and Canada:

This unit must be installed in accordance with local codes, or in the absence of local codes, installed in accordance with the applicable requirements in the National Electrical Code, NFPA 70, Canadian Electrical Code (CEC), Part 1, CSA C22.1, and Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, NFPA 96.



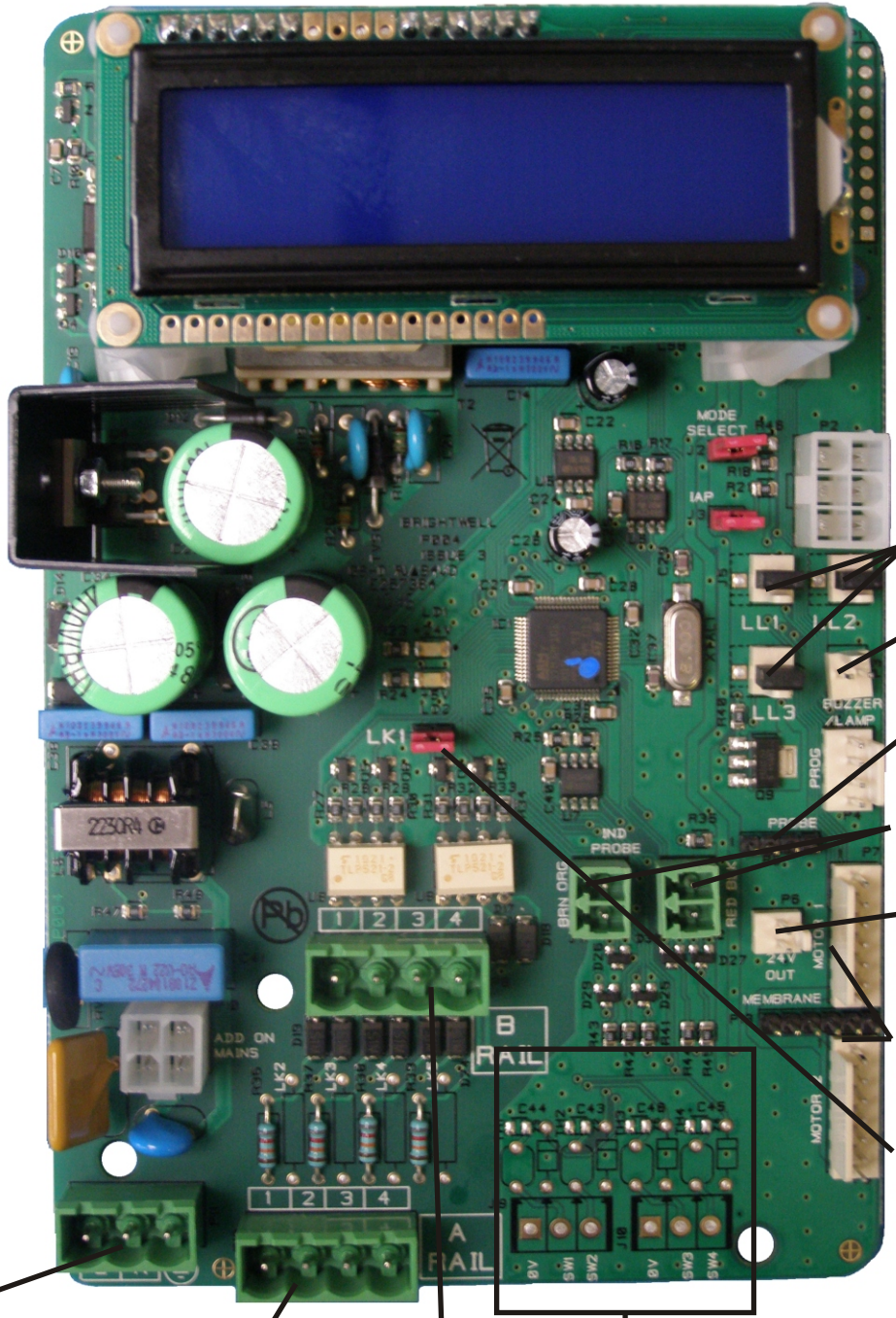
Note - Suitable cable glands and cable size should be used to ensure that the units IP rating is kept

UNIT LAYOUT - KEYPAD & SCREEN



UNIT LAYOUT - CONTROLLER BOARD

Used on:
D2
IP



Low Level Alarm Connections

Buzzer Output

Conductive Probe Connections

Inductive Probe Connection

24 V DC Output

Motor Connections

LK1
(Joins inputs 2 & 3)

Supply
100-240V AC

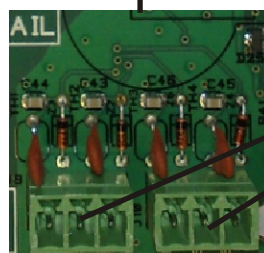
A Rail

B Rail

With IP Units only:
Volt-free contact switches

Sw1 & Sw2

Sw3 & Sw4



Fix the unit to a vertical wall using the screws provided. Note, some walls will require special fixings.

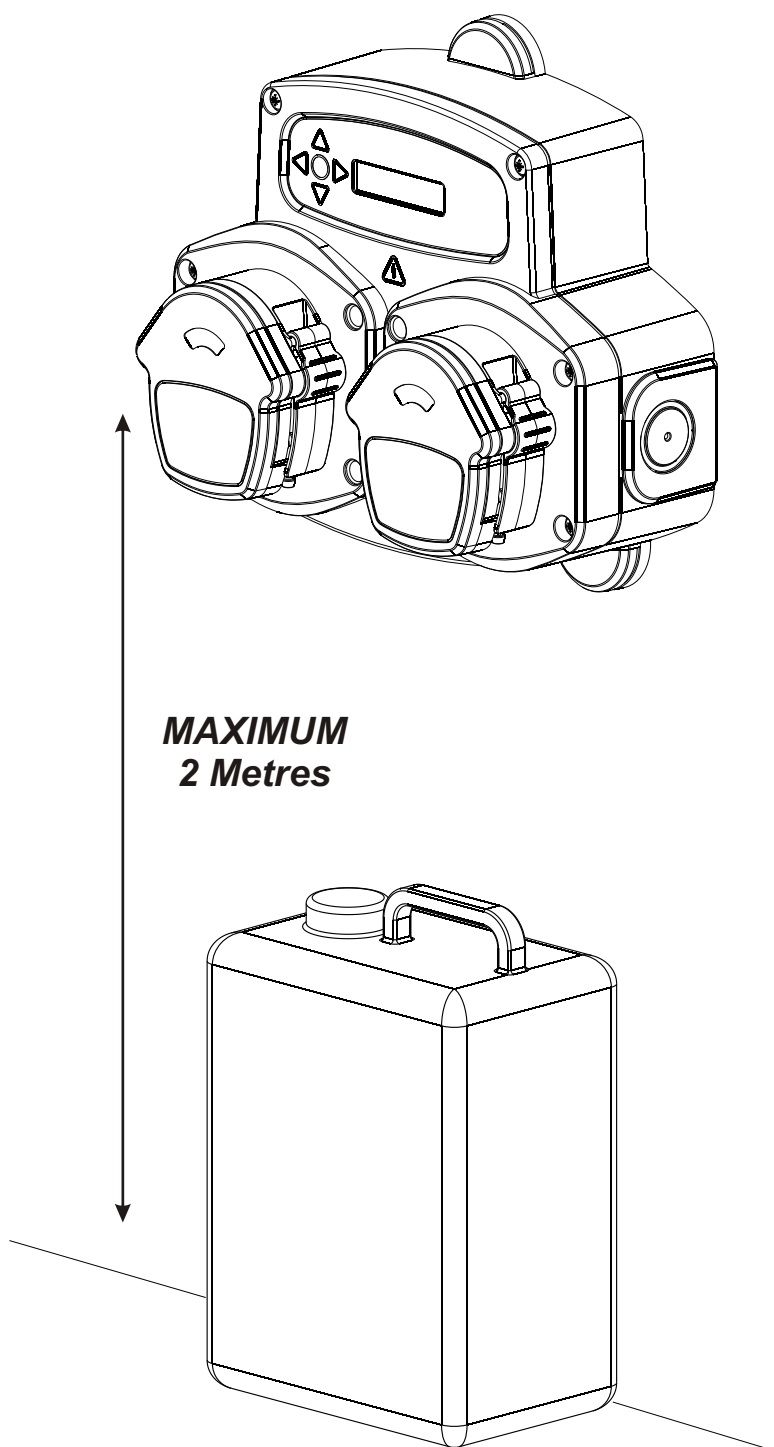
Ensure that the unit is level and positioned no more than 2 metres above the base of the product, which is to be dispensed.

Important Notes.

Maximum recommended suction and delivery tubes - 2 metres

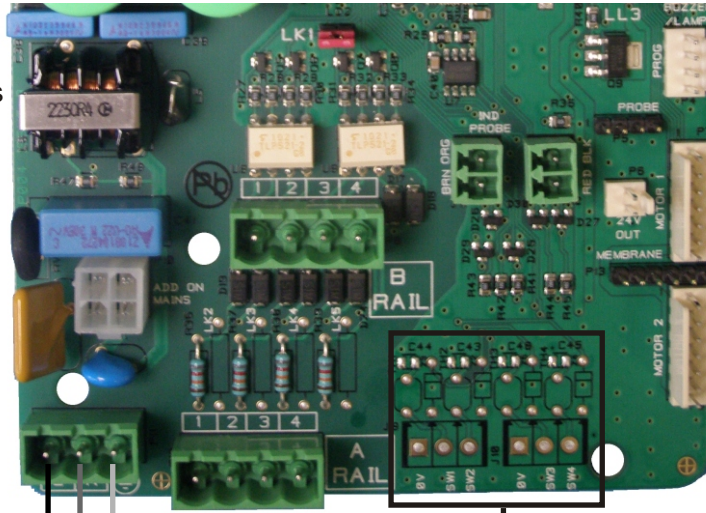
Minimum tube size - 6x9mm

IP Unit Minimum tube size - 10x16mm



LK1

Can be fitted/removed as required.
 When fitted, inputs 2 & 3 are joined to allow a single signal to initiate pumps 1 & 2. This can be connected to either input 2 or 3.
 When removed, a separate signal is required to input 2 (for pump 1) and input 3 (for pump 2).



100V - 240V AC 50/60Hz

Sourced from a point that is Isolated when the machine is off

Input Signals

Between 12 and 240V AC or DC

- Input 1** - Initial Charge
- Input 2** - Detergent Pump & Initiates Probe
- Input 3** - Rinse Pump
- Input 4** - Pump 3

B Rail

Negative connections

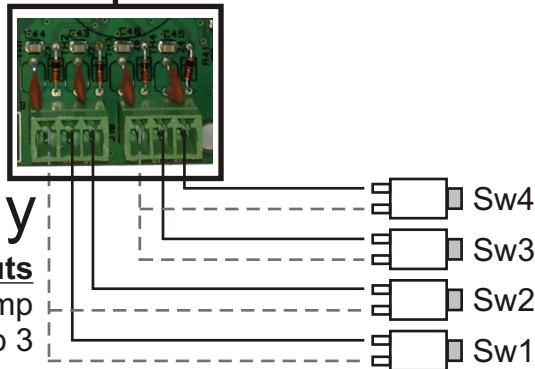
A Rail

Positive connections

IP units only

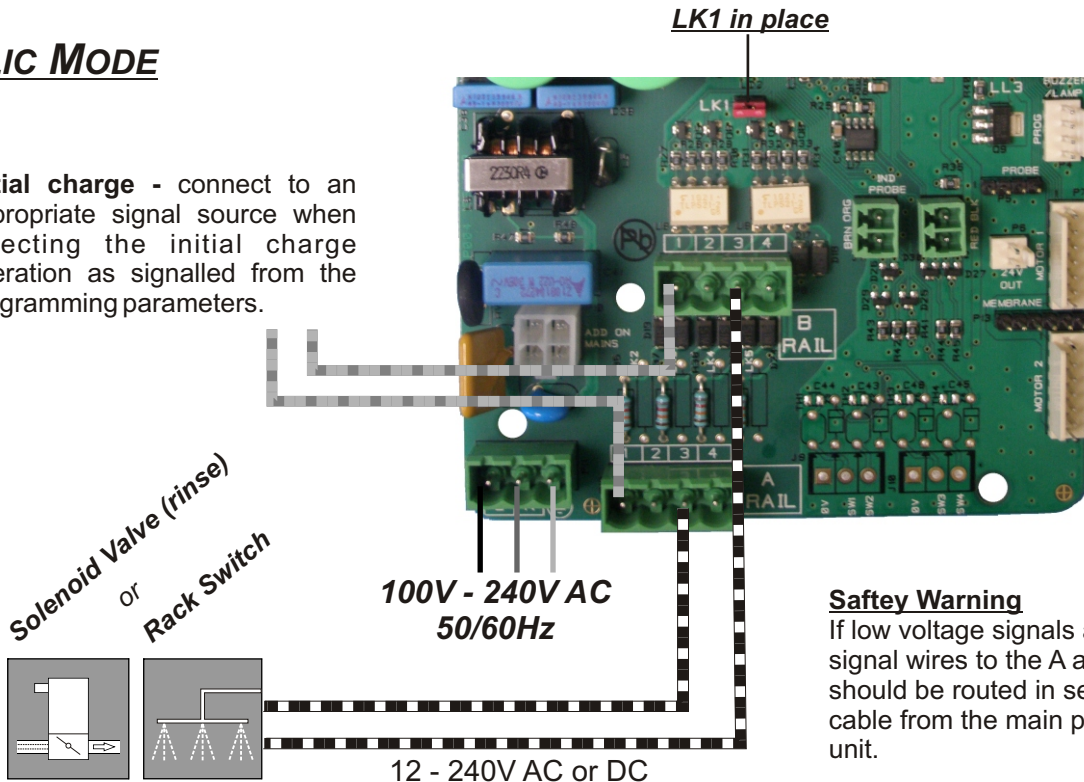
SW1 - SW4 - 'volt free' switch inputs

- Sw1- Initial charge
- Sw2- Detergent pump
- Sw3- Rinse pump
- Sw4- Pump 3



CYCLIC MODE

Initial charge - connect to an appropriate signal source when selecting the initial charge operation as signalled from the programming parameters.

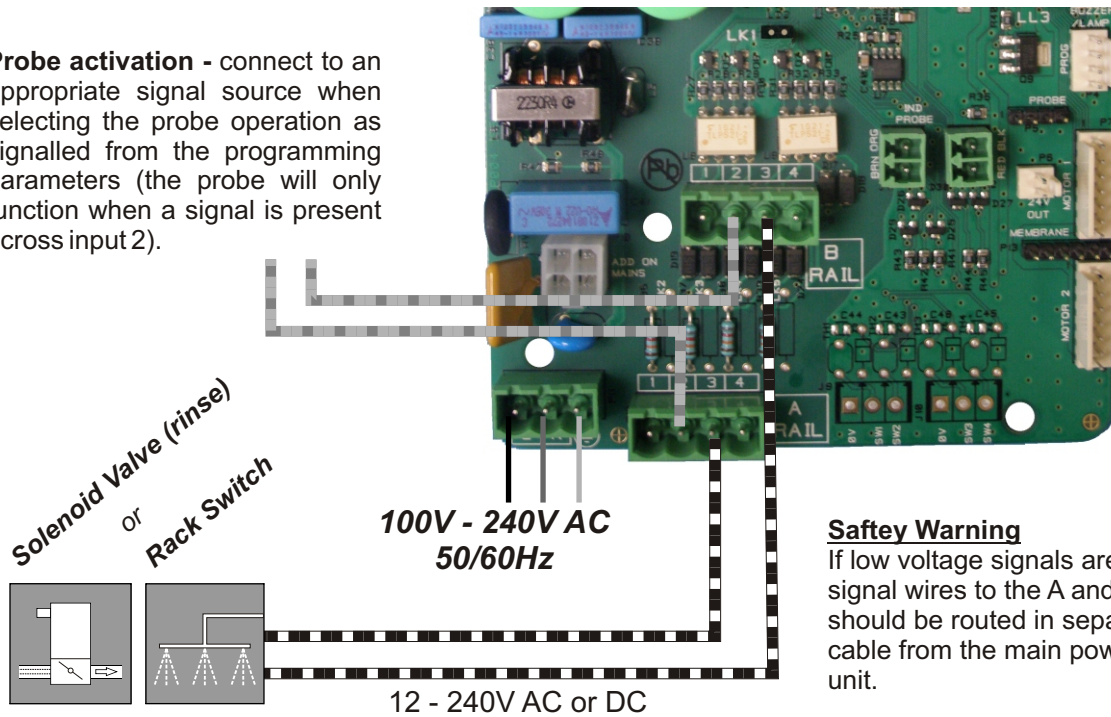


Safety Warning

If low voltage signals are used, signal wires to the A and B rails should be routed in separate cable from the main power to the unit.

CONDUCTIVITY MODE

Probe activation - connect to an appropriate signal source when selecting the probe operation as signalled from the programming parameters (the probe will only function when a signal is present across input 2).



Safety Warning

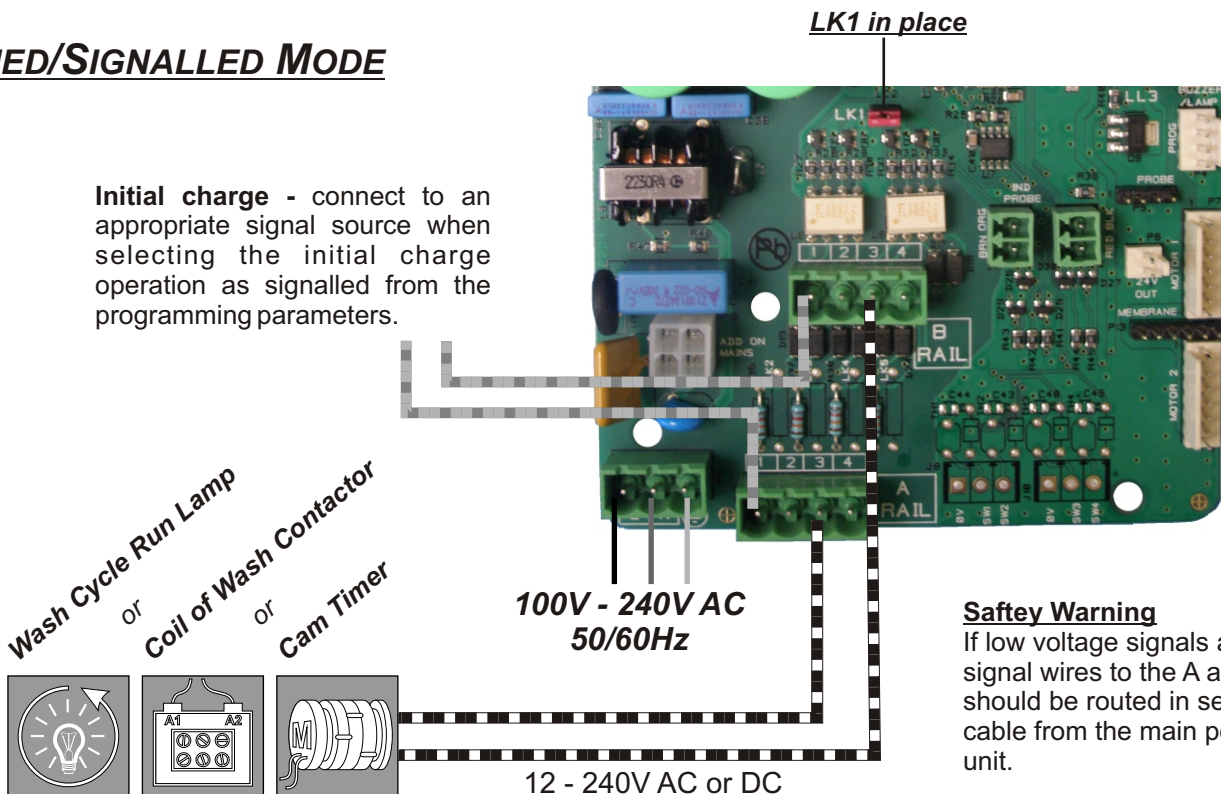
If low voltage signals are used, signal wires to the A and B rails should be routed in separate cable from the main power to the unit.

Recommended Wiring

Max Size = 1.5mm²
 Min Size = 0.5mm²
 Current = 0.5A

TIMED/SIGNALLED MODE

Initial charge - connect to an appropriate signal source when selecting the initial charge operation as signalled from the programming parameters.



Safety Warning

If low voltage signals are used, signal wires to the A and B rails should be routed in separate cable from the main power to the unit.

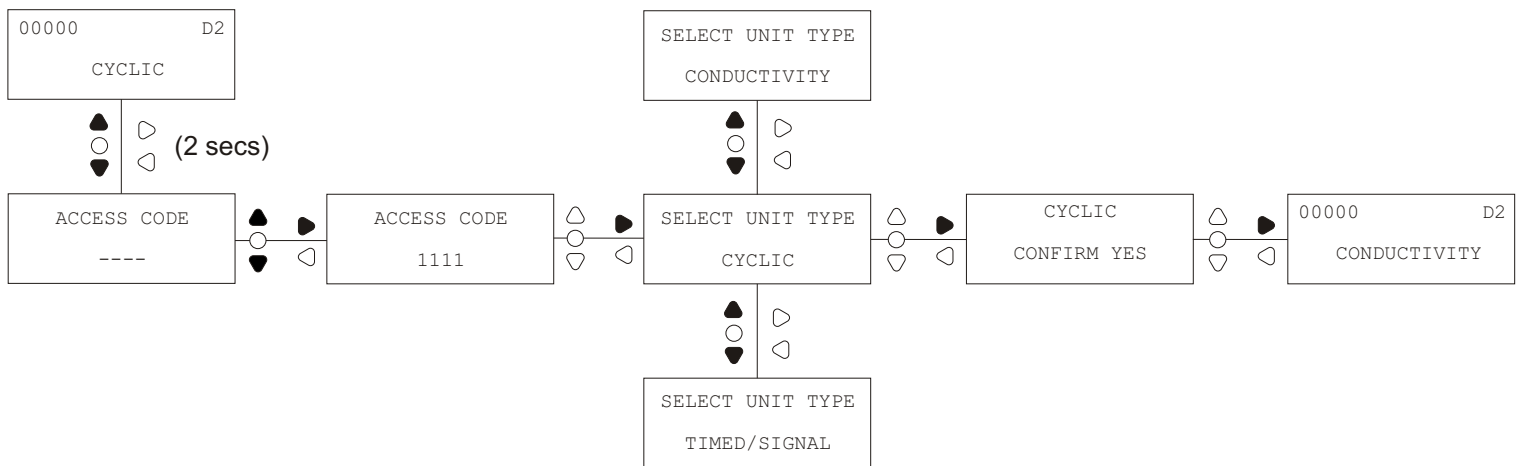
The D2 is sent out as a Cyclic unit. To change an existing unit press the **UP** and **DOWN** keys simultaneously for 2 seconds.

When prompted, enter the four digit access code using the **UP** and **DOWN** keys to select the number and **FWD/ACCEPT** key to move on.

Press the **UP** and **DOWN** keys to scroll between the three operating modes.

Press **FWD/ACCEPT** to select the displayed mode.

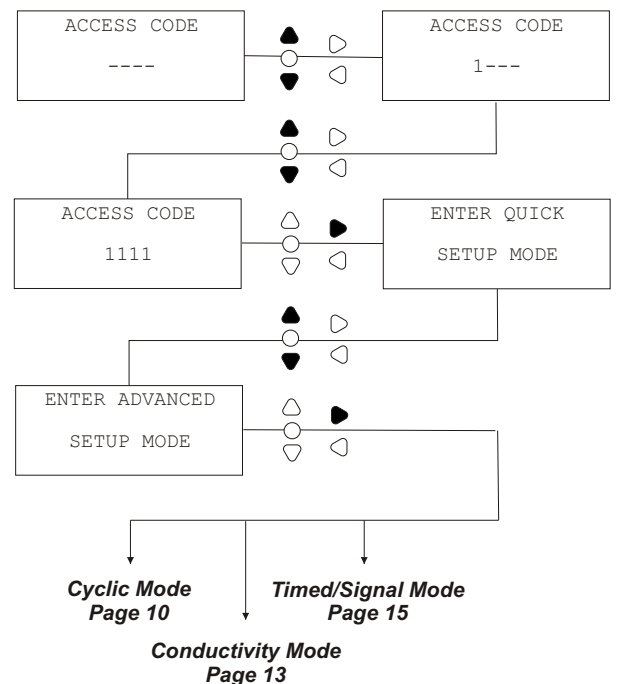
Press **FWD/ACCEPT** to confirm the selection or **BACK** to return to the previous screen.

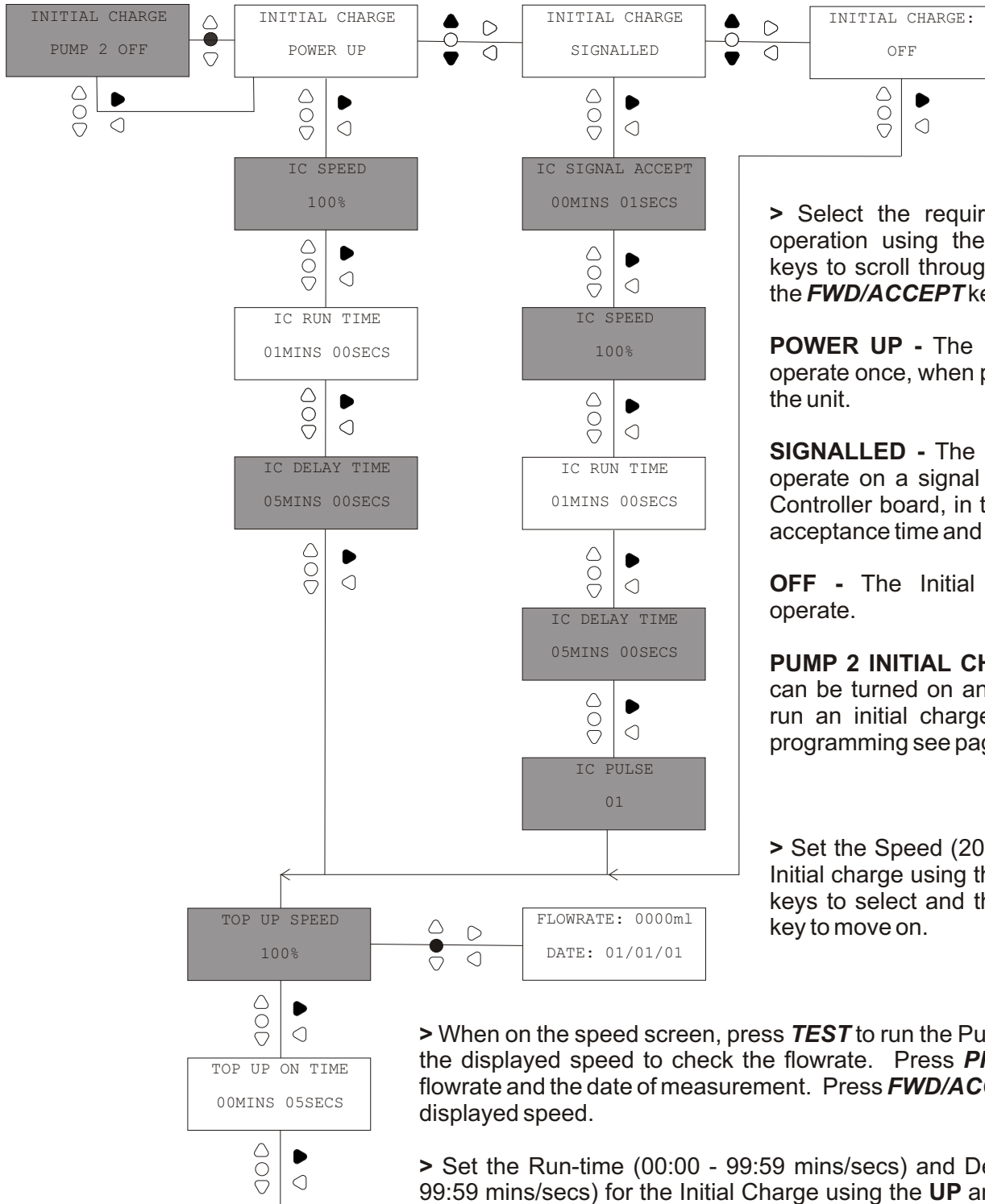


PROGRAMMING - ENTERING PROGRAM MODE

Press the **FWD/ACCEPT** button from the default screen. Enter the correct four digit Access Code using the **UP** and **DOWN** keys to select a number and the **FWD/ACCEPT** key to move on.

The unit will enter program mode when the correct Access Code has been entered. Refer to the relevant Section for programming parameter information.





> Select the required Initial Charge operation using the **UP** and **DOWN** keys to scroll through the options and the **FWD/ACCEPT** key to select.

POWER UP - The Initial Charge will operate once, when power is applied to the unit.

SIGNALLED - The Initial Charge will operate on a signal to Input 1 on the Controller board, in this mode a signal acceptance time and pulse can be set

OFF - The Initial Charge will not operate.

PUMP 2 INITIAL CHARGE - Pump 2 can be turned on and programmed to run an initial charge. (For details on programming see page 12.)

> Set the Speed (20% - 100%) for the Initial charge using the **UP** and **DOWN** keys to select and the **FWD/ACCEPT** key to move on.

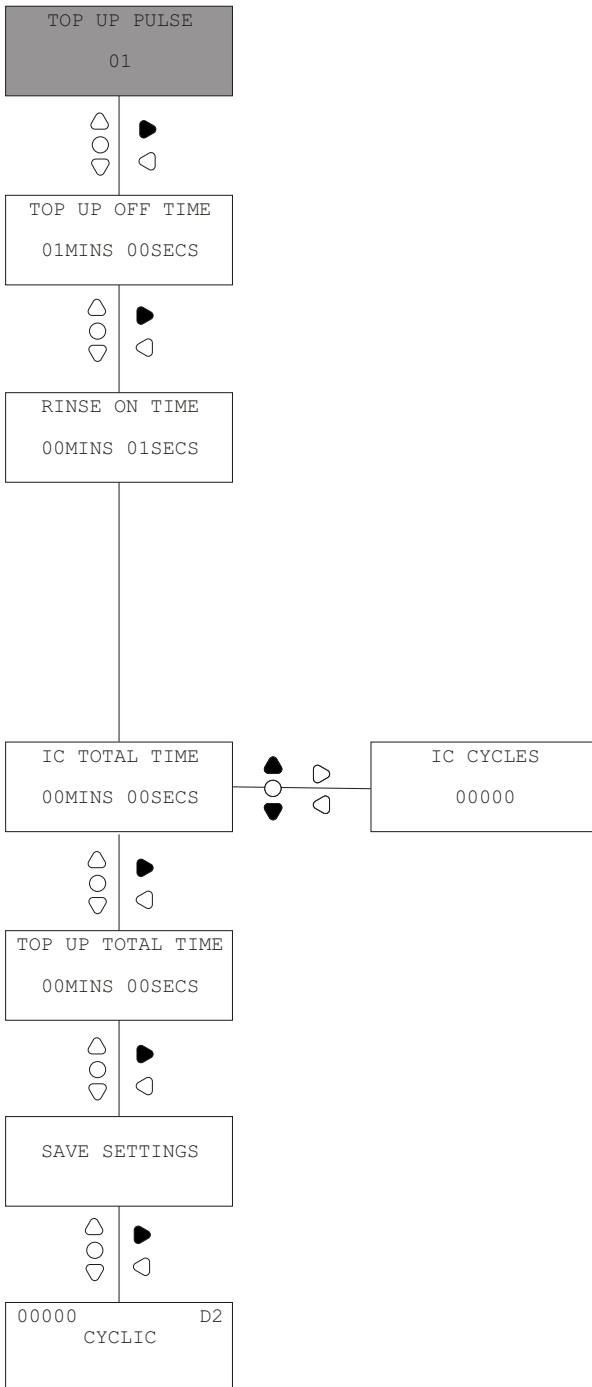
> When on the speed screen, press **TEST** to run the Pump for 1 minute at the displayed speed to check the flowrate. Press **PRIME** to enter the flowrate and the date of measurement. Press **FWD/ACCEPT** to select the displayed speed.

> Set the Run-time (00:00 - 99:59 mins/secs) and Delay time (00:00 - 99:59 mins/secs) for the Initial Charge using the **UP** and **DOWN** keys to select the required time and the **FWD/ACCEPT** key to move on.

> Set the Speed (20% - 100%) for the top up charge using the **UP** and **DOWN** keys to select and the **FWD/ACCEPT** key to move on.

> Set the On-time (00:00 - 99:59 mins/secs) for Pump 1 using the **UP** and **DOWN** keys to select and press the **FWD/ACCEPT** key to move on.

Shaded grey screens are not shown in quick set up mode. All screens are shown on advanced set up mode.



> Set the Pulse (ALL - 100) using the **UP** and **DOWN** keys. Press **FWD/ACCEPT** to select the displayed pulse.

> Set the Off-time (00:00 - 99:59 mins/secs) for the Top up using the **UP** and **DOWN** keys to select and press the **FWD/ACCEPT** key to move on.

Note:

To run as a Power and Run unit set the off time to zero.

> Repeat for programming parameters of Rinse pump.

> If connected, repeat for programming parameters of Pump 3 (Note: The programming parameters for Pump 3 will only be displayed when it is connected).

Note:

It is possible to program Pump 3 to operate proportional to Pump 1 or Pump 2.

*To do this, press the **UP** and **DOWN** keys simultaneously key from the Run-time screen. Select Pump 1 or Pump 2 using the **UP** and **DOWN** keys and press the **FWD/ACCEPT** key to move on.*

Pump 3 will operate at the programmed speed whenever Pump 1 or Pump 2 is operating.

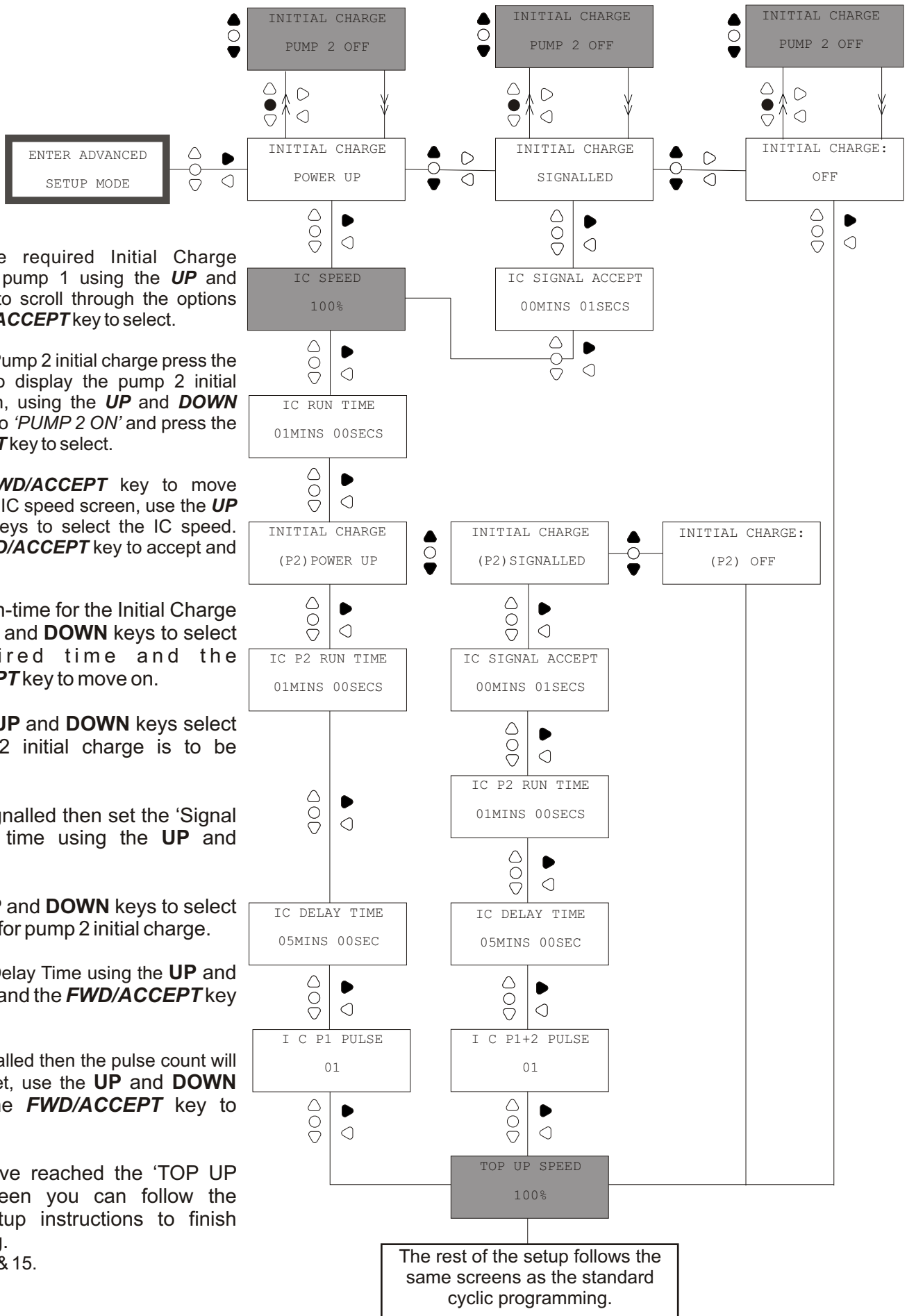
> After programming the parameters for each Pump, the Run-time counter for the Initial Charge will be displayed.

> On the Total Run-time screen for the Initial Charge, use the **UP** and **DOWN** keys to scroll between the Run-time and the Total Cycles (the Total Cycles screen is only available for the Initial Charge).

> Press the **UP** and **DOWN** keys simultaneously to reset the displayed counter back to zero (Note: The Total Run-time and Total Cycle counters of the relevant Pump will both revert to zero when either is reset).

> Press **FWD/ACCEPT** to display the Run-time information for the remaining Pumps

> After the Run-time information for all of the Pumps, the Save Settings screen will be displayed. Press **FWD/ACCEPT** on this screen to display the default screen and return to the units operating mode.



> Select the required Initial Charge operation for pump 1 using the **UP** and **DOWN** keys to scroll through the options and the **FWD/ACCEPT** key to select.

> To Activate Pump 2 initial charge press the **PRIME** key to display the pump 2 initial charge screen, using the **UP** and **DOWN** keys to scroll to 'PUMP 2 ON' and press the **FWD/ACCEPT** key to select.

Press the **FWD/ACCEPT** key to move forward to the IC speed screen, use the **UP** and **DOWN** keys to select the IC speed. Press the **FWD/ACCEPT** key to accept and move on.

> Set the Run-time for the Initial Charge using the **UP** and **DOWN** keys to select the required time and the **FWD/ACCEPT** key to move on.

> Using the **UP** and **DOWN** keys select how Pump 2 initial charge is to be activated.

> IF P2 is signalled then set the 'Signal Acceptance' time using the **UP** and **DOWN** keys.

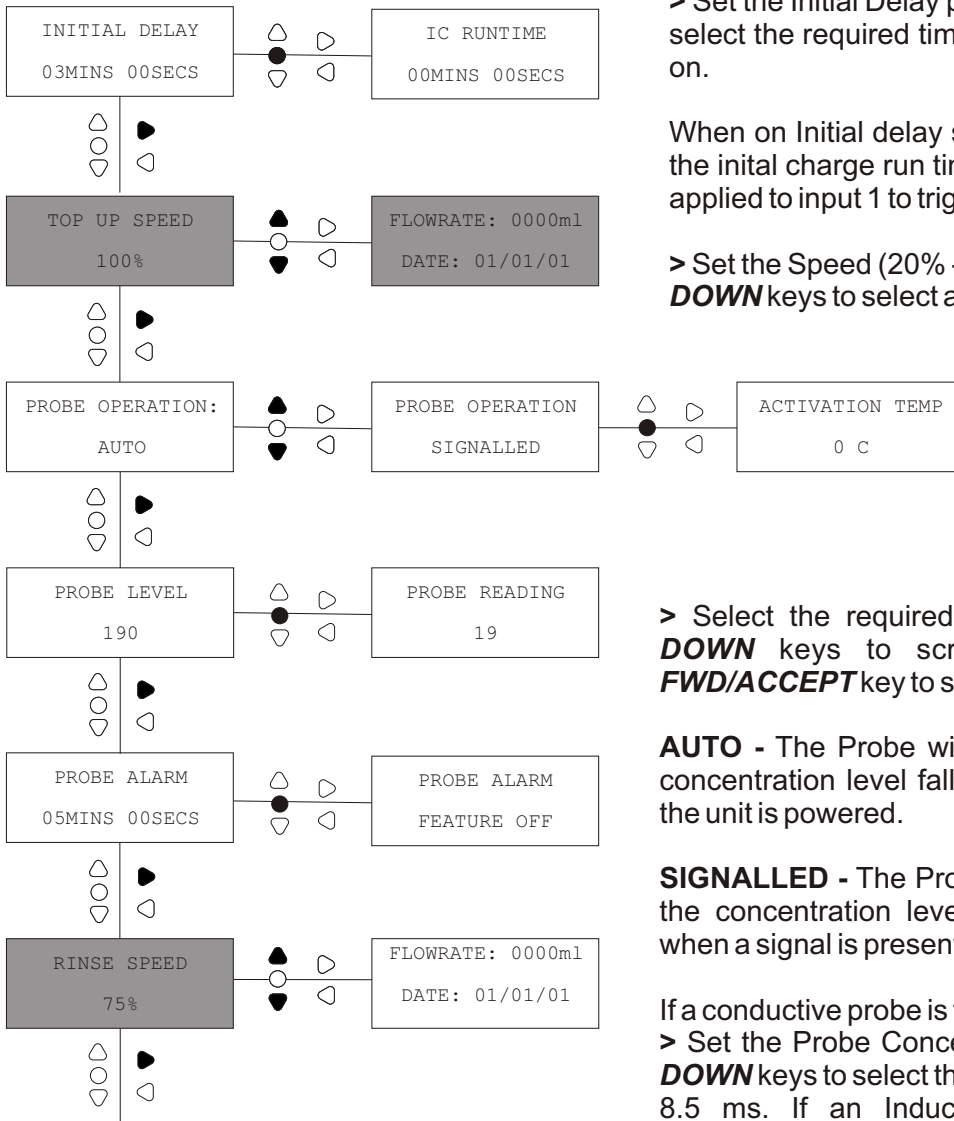
> Use the **UP** and **DOWN** keys to select the Run time for pump 2 initial charge.

> Set the IC Delay Time using the **UP** and **DOWN** keys and the **FWD/ACCEPT** key to move on.

> IF P2 is signalled then the pulse count will need to be set, use the **UP** and **DOWN** keys and the **FWD/ACCEPT** key to move on.

Now you have reached the 'TOP UP SPEED' screen you can follow the standard setup instructions to finish programming. See pages 14 & 15.

The rest of the setup follows the same screens as the standard cyclic programming.



> Set the Initial Delay period using the **UP** and **DOWN** keys to select the required time and the **FWD/ACCEPT** key to move on.

When on Initial delay screen, press **PRIME** button to enable the initial charge run time screen, this will allow a signal to be applied to input 1 to trigger an initial charge.

> Set the Speed (20% - 100%) for the Top up using the **UP** and **DOWN** keys to select and the **FWD/ACCEPT** key to move on.

> To use the temperature activation feature press the **PRIME** button to access the screen. Using the **UP** and **DOWN** keys enter the temperature that will activate the pumps.
(Inductive probe only)

> Select the required Probe operation using the **UP** and **DOWN** keys to scroll through the options and the **FWD/ACCEPT** key to select.

AUTO - The Probe will initiate the Top up to operate if the concentration level falls below the programmed value when the unit is powered.

SIGNALLED - The Probe will initiate the Top up to operate if the concentration level falls below the programmed value when a signal is present on Input 2.

If a conductive probe is fitted.

> Set the Probe Concentration (00 - 250) using the **UP** and **DOWN** keys to select the required level. Conducted range of 0-8.5 ms. If an Inductive probe is fitted set the probe concentration from 0.000 ms to 200 ms.

Scanlock - The **PRIME** key can be pressed on this screen to display the current probe reading. If the current probe reading is correct for the required concentration, then the **PRIME** key can be pressed and held for 2 seconds to store this value. This is how we recommend the conductive probe is set up. The inductive probe will also display the tank temperature

Press the **FWD/ACCEPT** key to move on.

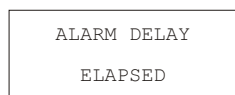
> Set the Alarm Delay (00:00 - 99:59 mins/secs) for the Probe using the **UP** and **DOWN** keys to select and press the **FWD/ACCEPT** key to move on.

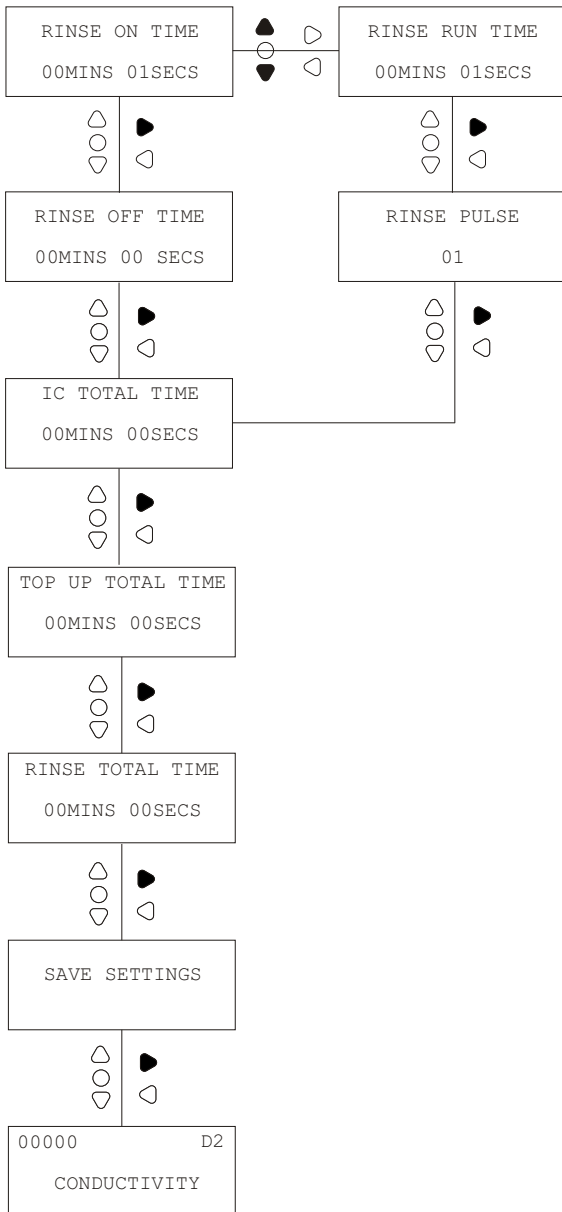
Pressing the **PRIME** button on the probe alarm screen disables the alarm.

> Set the Speed (20% - 100%) for Rinse using the **UP** and **DOWN** keys to select and the **FWD/ACCEPT** key to move on.

> When on the speed screen, press **TEST** to run the Pump for 1 minute at the displayed speed to check the flowrate. Press **PRIME** to enter the flowrate and the date of measurement. Press **FWD/ACCEPT** to select the displayed speed.

Shaded grey screens are not shown in quick set up mode. All screens are shown on





> Set the Run-time (00:00 - 99:59 mins/secs) for the Rinse using the **UP** and **DOWN** keys to select and press the **FWD/ACCEPT** key to move on.

If the rinse pump is needed to run as a runtime *press the **UP** and **DOWN** keys simultaneously from the on-time screen, to set a 'RINSE RUN TIME'.*

This mode will be used if a solenoid valve is used for pump 1 and the unit can then be fitted to a single tank machine.

> If connected, repeat for programming parameters of Pump 3 (Note: The programming parameters for Pump 3 will only be displayed when it is connected).

Note:

It is possible to program Pump 3 to operate proportional to Pump 1 or Pump 2.

*To do this, press the **UP** and **DOWN** keys simultaneously key from the Run-time screen. Select Pump 1 or Pump 2 using the **UP** and **DOWN** keys and press the **FWD/ACCEPT** key to move on.*

Pump 3 will operate at the programmed speed whenever Pump 1 or Pump 2 is operating.

> After programming the parameters for each Pump, the Run-time counter for the Top up will be displayed.

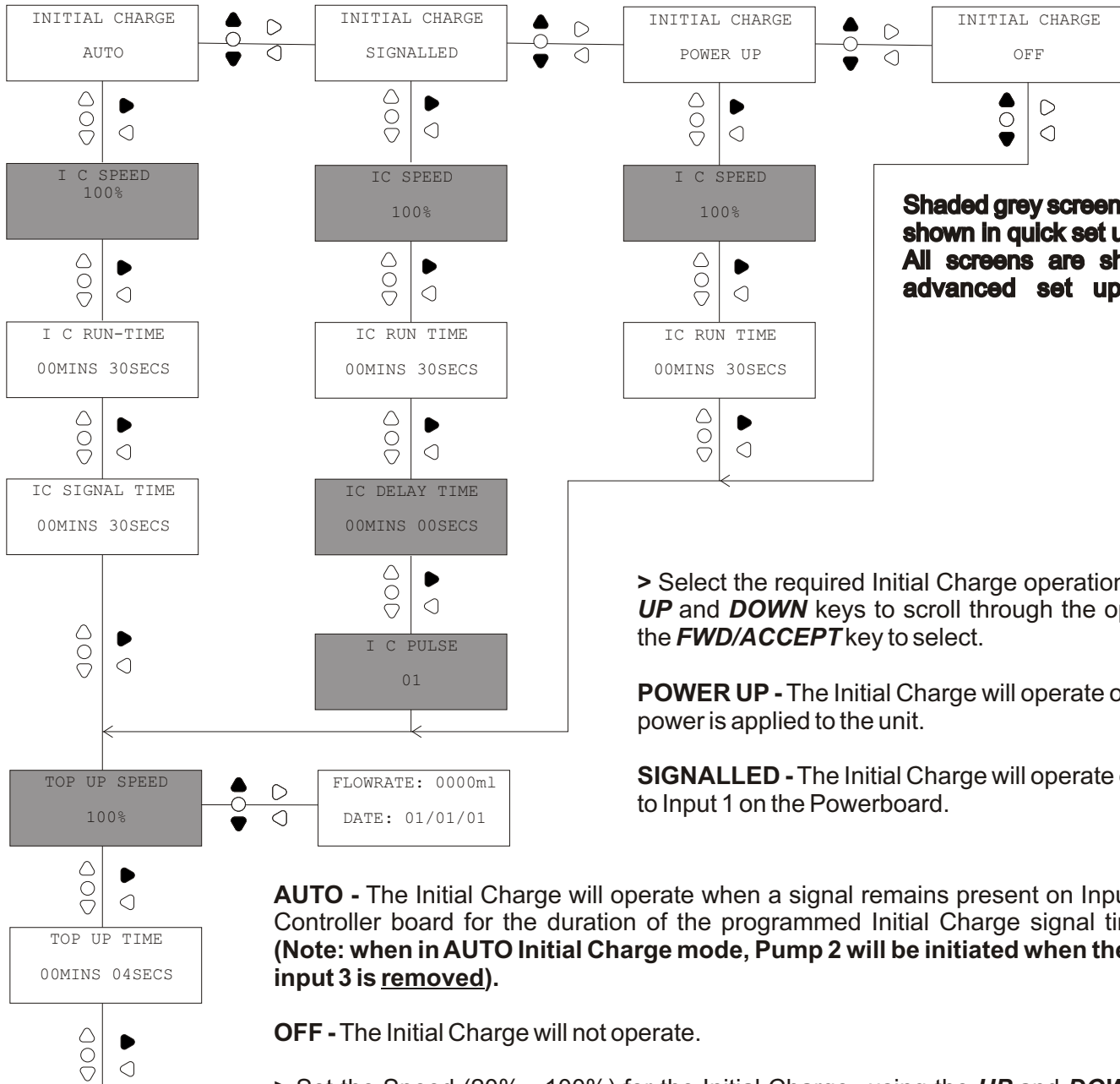
> Press the **UP** and **DOWN** keys simultaneously to reset the displayed counter back to zero.

> Press **FWD/ACCEPT** to display the Run-time information for the remaining Pumps.

> After the Total Run-time information for all of the Pumps, the Save Settings screen will be displayed. Press **FWD/ACCEPT**



Do not alter the length of cable to the probe. If the cable is altered it is not guaranteed the probe will function correctly.



Shaded grey screens are not shown in quick set up mode. All screens are shown on advanced set up mode.

> Select the required Initial Charge operation using the **UP** and **DOWN** keys to scroll through the options and the **FWD/ACCEPT** key to select.

POWER UP - The Initial Charge will operate once, when power is applied to the unit.

SIGNALLED - The Initial Charge will operate on a signal to Input 1 on the Powerboard.

AUTO - The Initial Charge will operate when a signal remains present on Input 3 on the Controller board for the duration of the programmed Initial Charge signal time Period (**Note: when in AUTO Initial Charge mode, Pump 2 will be initiated when the signal to input 3 is removed**).

OFF - The Initial Charge will not operate.

> Set the Speed (20% - 100%) for the Initial Charge using the **UP** and **DOWN** keys to select and the **FWD/ACCEPT** key to move on.

> When on the speed screen, press **PRIME** to run the Pump for 1 minute at the displayed speed to check the flowrate. Press **UP** and **DOWN simultaneously** to enter the flowrate and the date of measurement. Press **FWD/ACCEPT** to select the displayed speed.

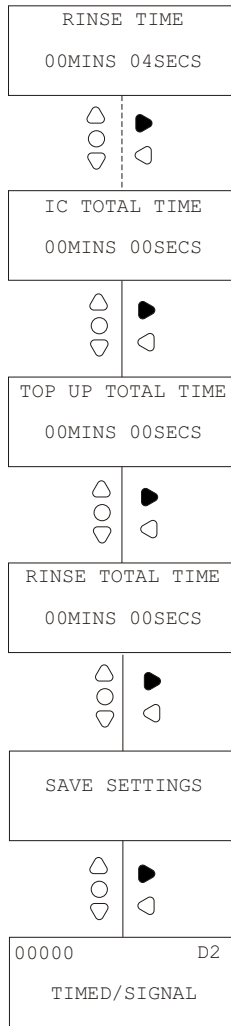
> Set the Run-time (00:00 - 99:59 mins/secs) and Delay time (00:00 - 99:59 mins/secs) for the Initial Charge using the **UP** and **DOWN** keys to select the required time and the **FWD/ACCEPT** key to move on.

> Set the Speed (20% - 100%) for the Top Up using the **UP** and **DOWN** keys to select and the **FWD/ACCEPT** key to move on.

> Set the Run-time (00:00 - 99:59 mins/secs) for the Top Up using the **UP** and **DOWN** keys to select and press the **FWD/ACCEPT** key to move on.

Press **PRIME** to run the pump for the set time to check the dosage.

> Set the Pulse (ALL - 100) using the **UP** and **DOWN** keys. Press **FWD/ACCEPT** to select the displayed pulse.



> Repeat for programming parameters of Rinse Pump

> If connected, repeat for programming parameters of Pump 3 (Note: The programming parameters for Pump 3 will only be displayed when it is connected).

Note:

It is possible to program Pump 3 to operate proportional to Pump 1 or Pump 2.

*To do this, press the **UP** and **DOWN** keys simultaneously key from the Run-time screen. Select Pump 1 or Pump 2 using the **UP** and **DOWN** keys and press the **FWD/ACCEPT** key to move on.*

Pump 3 will operate at the programmed speed whenever Pump 1 or Pump 2 is operating.

> After programming the parameters for each Pump, the Total Run-time counter for the Initial Charge will be displayed.

> On the Total Run-time screens, use the **UP** and **DOWN** keys to scroll between the Run-time and the Cycles for the displayed Pump.

> Press the **UP** and **DOWN** keys simultaneously to reset the displayed counter back to zero. (Note: The Run-time and Total Cycle counters of the relevant pump will both revert to zero when either is reset)

> Press **FWD/ACCEPT** to display the Run-time and Cycle information for the remaining Pumps.

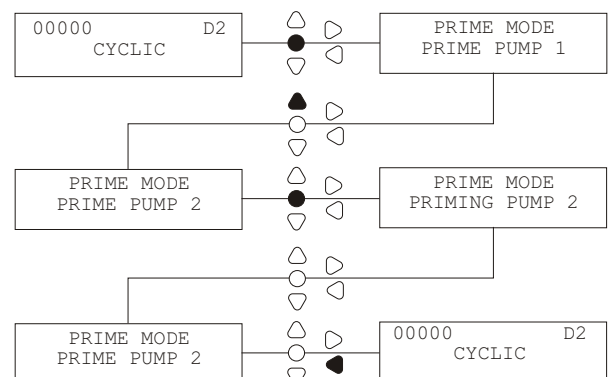
> After the Run-time and Cycle information for all of the Pumps, the Save Settings screen will be displayed. Press **FWD/ACCEPT** on this screen to display the default screen and return to the units operating mode.

PRIMING THE PUMPS

The Pumps are Primed from the Keypad. Press the **PRIME** key to display the Prime Mode screen.

From this screen, press and hold the **PRIME** key to prime pump 1. Press the **UP** or **DOWN** key to select pump 2 and hold the **PRIME** key to prime pump 2. The screen will display the pump number whilst it is Priming.

Press the **BACK** key to return to the default screen. (The unit will return to the default screen if a key is not pressed for 10 seconds)

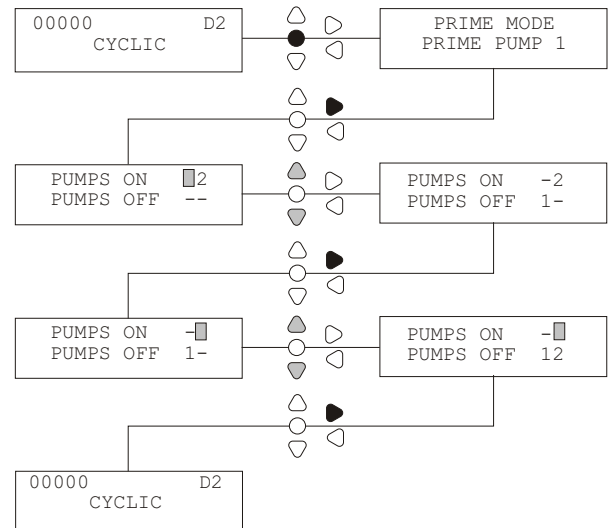


The Pumps can be stopped from the Keypad. Press the **PRIME** key to display the Prime Mode screen.

From this screen, press the **FWD/ACCEPT** key to enter Pump Stop Mode. The screen will display the Pumps as ON or OFF.

Press the **UP** or **DOWN** key to move pump 1 from On to Off. To move to Pump 2 press the **FWD/ACCEPT** key. Again press the **UP** or **DOWN** key to stop Pump 2. Press the **FWD/ACCEPT** key to return to the default screen. (The unit will return to the default screen if a key is not pressed for 10 seconds)

Any pumps that are OFF will be displayed, flashing, at the bottom of the default screen.

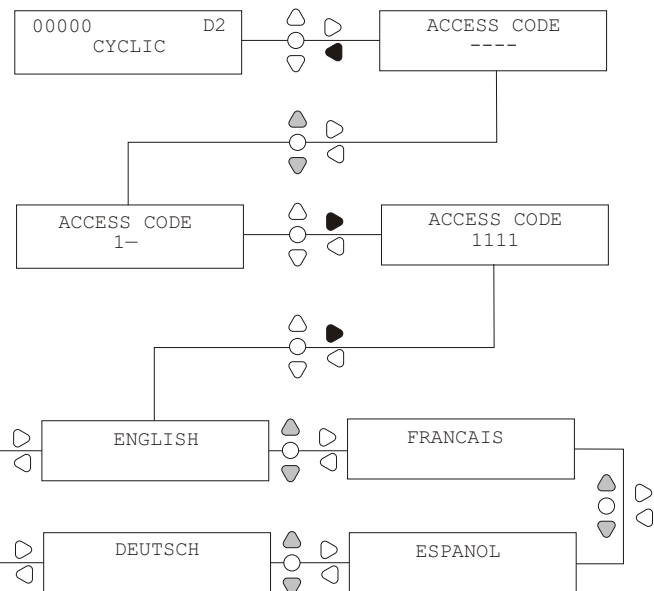


LANGUAGE SELECTION

It is possible to select the displayed language as English, French, German, Spanish, Dutch, Polish, Czech, Italian, American or Portuguese

From the default screen, press and hold the **BACK** key for 2 seconds. This will display the access code screen. Enter the correct four digit Access Code using the **UP** and **DOWN** keys to select a number and the **FWD/ACCEPT** key to move on.

Use the **UP** and **DOWN** keys to scroll through the language options. Press the **FWD/ACCEPT** key to select the displayed language.

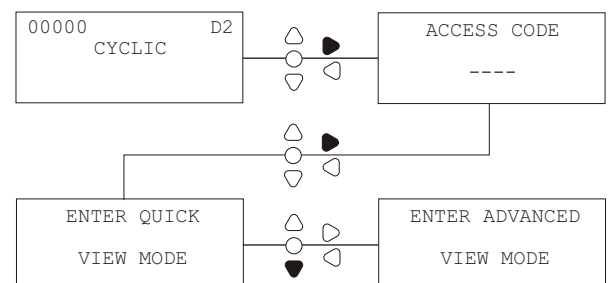


VIEW MODE

If you wish to view the Program Settings and Cycle Counters without editing them, this can be done through the VIEW MODE.

From the default screen, press the **FWD/ACCEPT** key, it will change to the ACCESS code screen, press **FWD/ACCEPT** key again to enter VIEW MODE.

Use the **FWD/ACCEPT** key to scroll through the Settings and Cycle Counters.



Note:

This feature can be disabled (see below).

DISABLE MODE (PUMP STOP, PRIME, VIEW)

When on the default screen press **FWD/ACCEPT** key to show the Access code screen, then press PRIME to show the ENABLE MODE PIN screen, Input the security access code as normal. The PUMP STOP - DISABLE screen will be shown.

To disable the PUMP STOP mode:

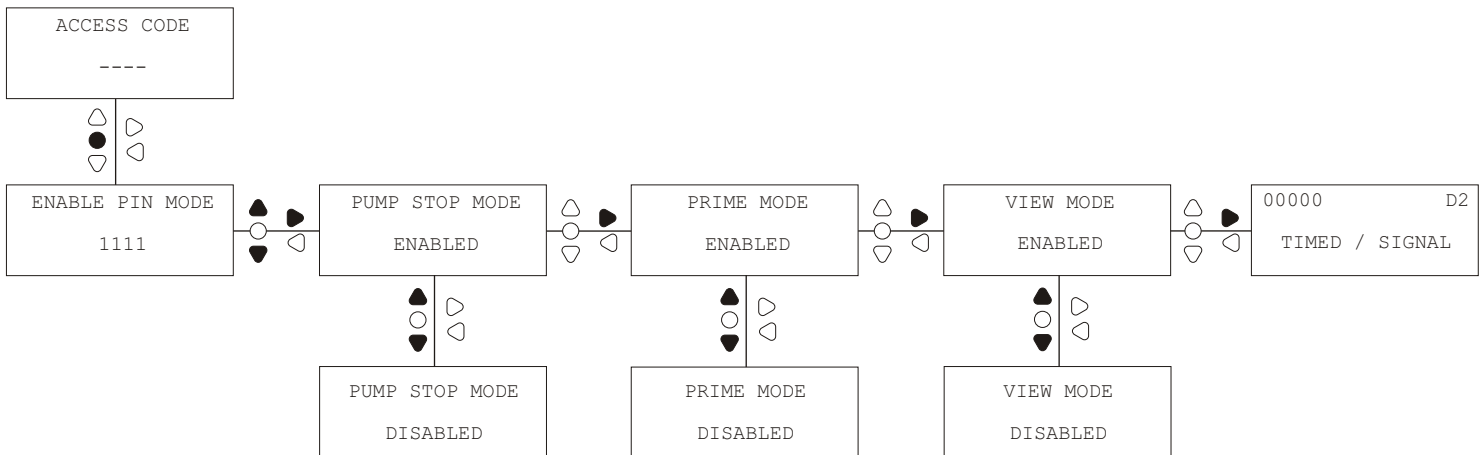
From the PUMP STOP - DISABLE screen, Use the **UP/DOWN** keys to ENABLE or DISABLE the pump stop mode. Press the **FWD/ACCEPT** key to confirm your selection and move on to the PRIME - DISABLE screen.

To disable the PRIME mode:

From the PRIME - DISABLE screen, Use the **UP/DOWN** keys to ENABLE or DISABLE the prime mode. Press the **FWD/ACCEPT** key to confirm your selection and move on to the VIEW MODE - DISABLE screen.

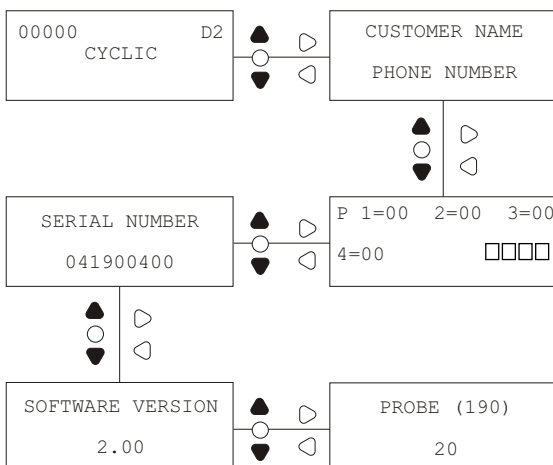
To disable the VIEW mode:

From the VIEW MODE - DISABLE screen, Use the **UP/DOWN** keys to ENABLE or DISABLE the view mode. Press the **FWD/ACCEPT** key to confirm your selection and move back to the TEST MODE screen.



DEFAULT DISPLAY SCREENS

ENGLISH



Unit information and the signal test screen can be viewed by pressing **UP** or **Down** from the default screen.

The unit will stay on the selected screen when power cycled.

Pulse test screen:

The screen will also show the unit receiving signals in “real time”, via the 4 cursors along the bottom of the screen, which will illuminate when any signal is present.

This saves the engineer from having to use a voltmeter to check each input.

Note:

Probe screen is only shown in Conductivity mode.

GLOSSARY

Signal Acceptance - Length of time that a signal must be present on an Input before it is acknowledged. 1 second, not adjustable.

Run-Time - Adjustable time period for which a pump will operate on acceptance of a trigger signal.

Speed - Adjustable rotation rate at which each pump will operate.

Pulse - Signal number that a pump is to operate on. Pulse counter returns to zero after the operation of the pump (Example: if pulse is set to '02' then the associated pump will operate on every second signal).

Cycle Counters - Provides a record of the number of cycles and length of time that has been completed by each pump.

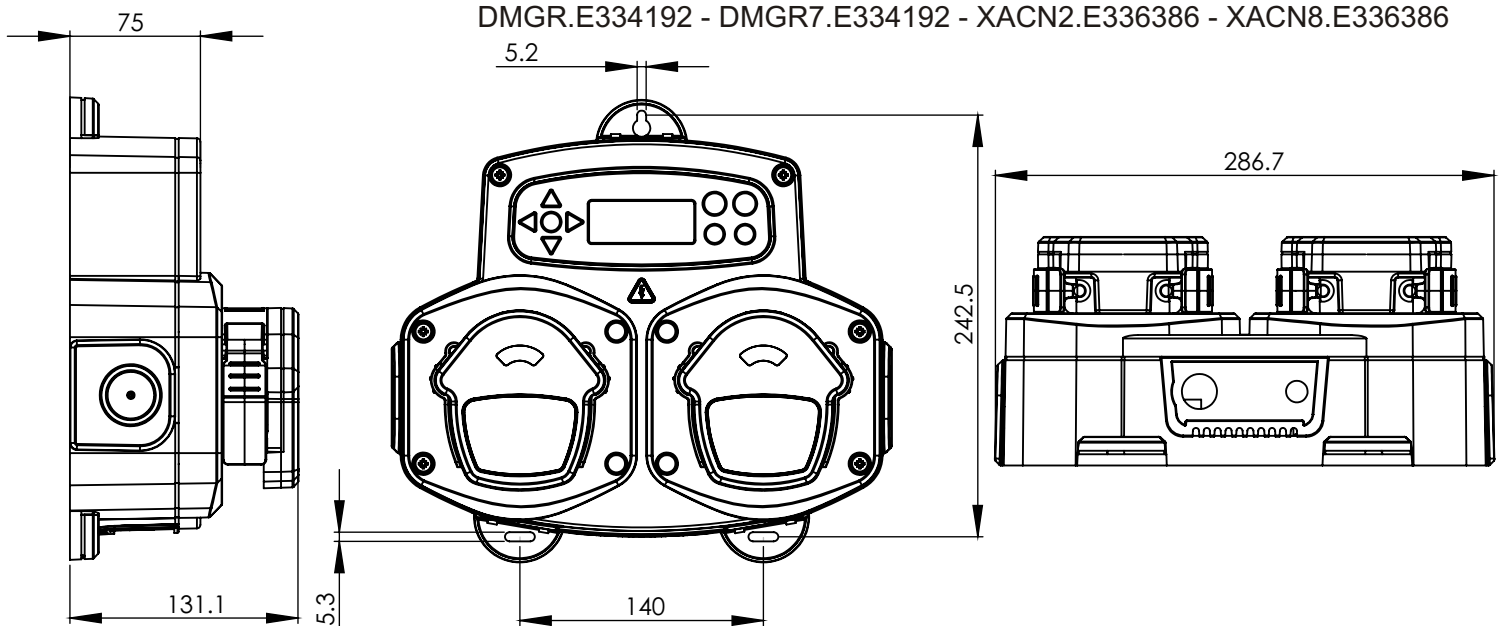
Prime - Run the pump to fill the suction and delivery tubes.

Pump Stop - Switch the pumps off in case of failure and prevent operation during maintenance.

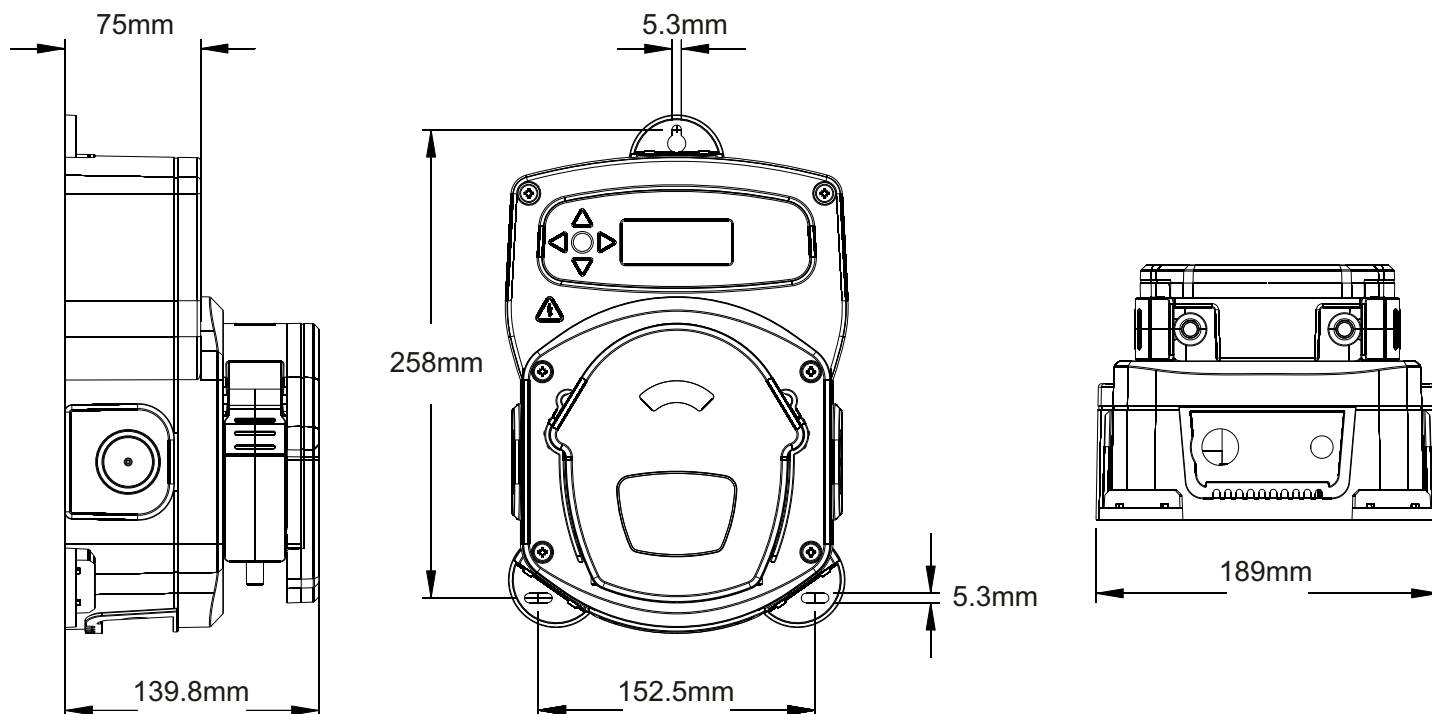
SPECIFICATION

D2 Unit

Power Supply	Voltage	100V to 240V AC
	Frequency	50 - 60Hz
	Current	@100V - 0.44A
		@240V 0.15A
	Power	40W
Fusing		Resettable 0.75A
Motor		Brushless - 24V DC, 600mA
Pump	Maximum 6.4mm Silicone - 350ml/min, 3mm Norprene - 35ml/min at 100%	
	Minimum 3mm Norprene - 3.5ml/min at 20% (Flowrate taken using water)	
Enclosure		GFPP -IP 44
Weight (approx.)		2.1kg
Approvals	EMC 89/336/EEC - EN61000-6-2:2005 & EN61000-6-3:2007	
	LVD 72/23/EEC - EN60335-1:2002+A2:2006	
	DMGR.E334192 - DMGR7.E334192 - XACN2.E336386 - XACN8.E336386	



Power Supply	Voltage	100V - 240V AC		
	Frequency	50 - 60Hz		
	Current	WP1 - 100V - 0.38A / 240V - 0.16A		
		WP2/H - 100V - 0.72A / 240V - 0.32A		
		WP3/HH - 100V - 1.08A / 240V - 0.48A		
Power	WP1 - 36W			
	WP2/H - 72W			
	WP3/HH - 108W			
Fusing	Resettable 0.75A			
Motor	Brushless - 24V DC, 600mA			
Pump	9.5mm 100% Silicone = 1000ml/min / 30% = 225ml/min (Flowrate taken using water at 100% speed)			
Enclosure	GFPP - IP 45			
Weight (approx.)	Logic	WP1 - 1.6kg	WP2/H - 2.8kg	WP3/HH - 4.0kg
Approvals	EMC 89/336/EEC - EN61000-6-2:2005 & EN61000-6-3:2007			
	LVD 72/23/EEC - EN60335-1:2002+A2:2006			
	DMGR.E334192 - DMGR7.E334192 - XACN2.E336386 - XACN8.E336386			



DECLARATION OF CONFORMITY

EU DECLARATION OF CONFORMITY

The EU Directives covered by this Declaration

2004/108/EEC Electromagnetic Compatibility Directive.
2006/65/EEC Low Voltage Equipment Directive.

The Products Covered by this Declaration

BrightLogic® L6 (generic to L1 to L5)

BrightLogic® D3 (generic to D1, D2, IPD2)

BrightLogic® L10 (generic to L7 to L9) = EN6100-6-4:2007 instead of EN6100-6-3:2007

BrightLogic® Low level alarm

BrightLogic® Controller

Basis on which Conformity is being Declared

The products identified complies with the requirement of the above EU Directives by meeting the following standards:

BS EN 6100-6-3:2007 Electromagnetic compatibility Generic emission standard

Radiated Disturbance EN55011:2009
Conducted Disturbance, ac port

-CISPR 16-2-3 & CISPR 16-2-1
-Class B

EN61000-3-2:2006 inc A2:2009
EN61000-3-3:1995

Mains Harmonics - Class A
Mains Voltage Flicker


BS EN 6100-6-2:2005 Electromagnetic compatibility Generic immunity standard

EN61000-4-2:2001
EN61000-4-3:2006
EN61000-4-4:2004
EN61000-4-5:2006
EN61000-4-6:2007
EN61000-4-11:2004

Electrostatic discharge
Radiated RF interference
Fast transients bursts
Surges
Conducted RF field
Voltage dips and interruptions

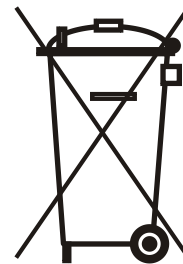
BS EN 60335-1:2002 + A11:04 + A1:04 + A12:06 + A2:06 + A13:08 & EN62233:2008 (EMF) Safety of household and similar electrical appliances

The products above comply with the essential requirements of the directives specified.

Signed:.......... Authority: *Director of Design* Date: *2/3/11*.....

The attention of the specifier, purchaser, installer, or user is drawn to special measures and limitations to use, which must be observed when the product is taken into service to maintain compliance with the above directives.

Brightwell Dispensers Ltd, Brightwell Industrial Estate,
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Email: sales@brightwell.co.uk, www.brightwell.co.uk



GB **Environment protection first !**
Your appliance contains valuable materials which can be recovered or recycled.

IRL Leave it at a local civic waste collection point.

F **Participons à la protection de L'environnement**
Votre appareil contient de nombreux matériaux valorisables ou recyclables.

Confiez celui-ci dans un point de collecte ou à défaut dans un centre service agréé pour que son traitement soit effectué.

D **Schützen Sie die Umwelt !**
Ihr Gerät enthält mehrere unterschiedliche, wiederverwertbare Wertstoffe.

A Bitte geben Sie Ihr Gerät zum Entsorgen nicht in den Hausmüll, sondern bringen Sie es zu einer speziellen Entsorgungsstelle für Elektrokleingeräte (Wertstoffhof).

E **ii Participe en la conservación del medio ambiente !!**
Su electrodoméstico contiene materiales recuperables y/o reciclables.

Entréguelo al final de su vida útil, en un Centro de Recogida Especifico o en uno de nuestros Servicios Oficiales Post Venta donde será tratado de forma adecuada.

I **Partecipiamo alla protezione dell'ambiente**
Il vostro apparecchio è composto da diversi materiali che possono essere riciclati.

Lasciatelo in un punto di raccolta o presso un Centro Assistenza Autorizzato.

NL **Wees vriendelijk voor het milieu !**
i Uw apparaat bevat materialen die geschikt zijn voor hergebruik.

Lever het in bij het milieustation in uw gemeente of bij onze technische dienst.

PL **Bierzmy czynny udział w ochronie środowiska !**
Twoje urządzenie jest zbudowane z materiałów, które mogą być poddane ponownemu przetwarzaniu lub recyklingowi.

W tym celu należy je dostarczyć do wyznaczonego punktu zbiórki.

CZ **Podílejme se na ochrane životního prostředí !**
Váš přístroj obsahuje čtné zhodnotitelné nebo recyklovatelné materiály.

Sveřte jej sbernému místu nebo, neexistuje-li, smluvnímu servisnímu středisku, kde a nim bude naloženo odpovídajícím způsobem.

Guarantee

All Brightwell dispensers are guaranteed for two years from date of purchase against defects in materials and faulty workmanship. Peristaltic tubing is not guaranteed.

Chemical compatibility

We are pleased to offer advice on chemical compatibility, however our guarantee does not cover problems caused by chemical incompatibility.

Safety first

Always follow the chemical manufacturer's Health and Safety Instructions when using chemicals.

Technical and design specifications

Specifications within this catalogue are subject to alteration without notice.

Head Office

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BS EN ISO 9000:2000
FM34956

