BRIGHTWELL

Brightlogic 2
Full Installation Guide
Installation and Setup

Brightwell.co.uk

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SAFETY INFORMATION

Section **A**

OPERATION

The Brightlogic Laundry Units, are automatic dosing systems design for use with commercial washing machines. The units are intended for indoor, fixed installation only. The means of disconnection must be incorporated in the fixed wiring, with an air gap of at least 3mm in each pole.

The pumps are initiated by applying signals of between 90V and 240V AC or DC across the corresponding inputs of the A and B rails on the input board.

Note: signals of between 12V and 240V AC or DC can be accepted by removing resistor packs RP1 to RP4 see page 9 or 11.

Features include:
User programmable signal acceptance time (see page 22)
Data management
Auto Formula select modes
3 flush valve outputs, which operate with user assignable pumps (see page 23)
User programmable flush valve times (see page 25)
Each pump can be assigned a single input, multiple inputs or all inputs (see page 27)
Each pump has user selectable:
- Speed/Flowrate (see pages 25 and 26)
- Delay Time (see page 30)
- Run Time/Chemical Dosage (see page 30)
The unit has four operating modes: -
Standard
Relay
Levels
Hot & Cold Mode

Standard Mode
Used with standard host machine.
The relevant pump will operate when a signal is present for the duration of the signal acceptance time and is equal to the programmed pulse setting.
The pump will then remain static for the period of the delay time, before operating at the programmed speed, for the programmed run time or chemical dosage.
The pump will not operate again until the unit has reset. The unit can be selected to reset after the operation of the final pump (eg. pump 4 of a 4 pump unit) or on a signal to input 10.

Relay Mode
Used with a computer controlled host machine.
The pumps will operate for the duration that a signal is present across the corresponding inputs. Input 1 operates pump 1, input 2 /pump 2, etc. The data management, flush valve and machine interrupt features will remain.

Levels Mode
Used with a standard host machine. The relevant pump will operate when a signal is present for the duration of the signal acceptance time and is equal to the programmed pulse setting. The pump will then remain static for the period of the delay time, before operating at the programmed speed, for the programmed run time or chemical dosage. The pumps have three individual levels in which dosing can take place in each wash program and activated by the corresponding inputs. Input 1 operates pump 1, input 2/pump 2, etc.

Hot Cold Mode
Based on the functionality of STANDARD MODE with the exception of only 9 programmable inputs. Input 2 & 3 combine as 1 programmable input to service a Hot and Cold solenoid connection from the wash extractor. Input 11 remains as the dedicated auto formula select input.

SAFETY PRECAUTIONS

Important Safety Instructions
Please read the following precautions carefully before using this equipment.

This unit contains high voltage components which, may expose you to the risk 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.

Do not allow the appliance to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.

Do not allow children being supervised to play with the appliance.

Do not use appliance if the supply cord is damaged. This must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Always ensure that care is taken when handling chemicals.

UNIT LAYOUT

Section **B**

UNIT LAYOUT - EXTERNAL

LCD Display

Keypad

Double Pumphead
Pump 1 - Rear CW
Pump 2 - Front CCW

Screw Cover

LCD Display

Highflow Pump

Supply entry (20mm)

Low Level Alarm entry

Formula Select (13mm)

Supply entry (20mm)

Low Level Alarm entry

Formula Select (13mm)
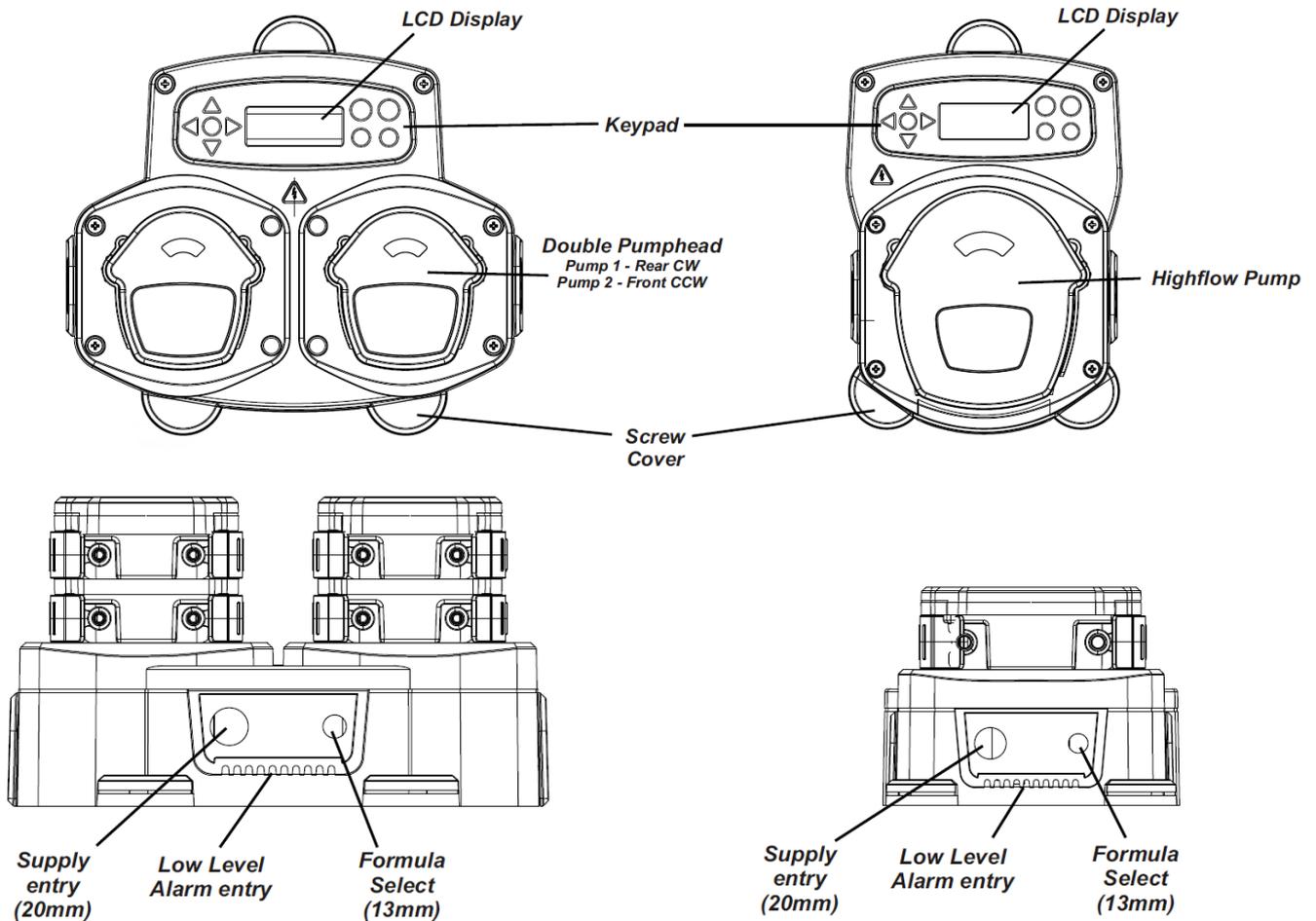
Note: Suitable cable glands and cable size should be used to ensure that the units IP rating is kept.

UNIT LAYOUT - KEYPAD AND SCREEN

Total Wash Programs

Unit Type

Current Program (Formula) Number

Pump Stop

Prime

Up

Back

Program

Down

Forward/Accept

Customer Name

Signal Indication

Test

See/Jump

```
00000   L10      01

      BRIGHTWELL

      1 2 3 4 5 6 7 8 9 10
```

UNIT LAYOUT - MICROBOARD

L1-10
L1-10/H

LCD Display

Wireless USB Module

24V Output

RS232 COMMS

Pump Add on connection RS485

Supply Indicator Lamp (5v&24v)

Safety Stop Connectors (x3)

Safety Stop Jumpers

Alarm Output Connector

Motor Connectors

LK3 & LK4

Formula Select

Keypad Connector

Isolation Switches (Inputs 1-10)

B Rail (Negvative) (Inputs 1-10)

Mains Out

COMMON

B RAIL

B RAIL

COMMON ISOLATED

COMMON

B RAIL

LN

A RAIL

Power Supply 100-240v (AC)

A Rail (Positive) (Inputs 1-10)

Auto Formula Select (AFS)

Flush Valve Connectors (x3)

UNIT LAYOUT - MOUNTING

Fix the unit to a vertical wall using the screws provided.

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 - 8x11mm

Screw pitch/Drilling diagram - on next page

Ø *6mm*

+ │ *x 3 per Enclosure*

Installation minimum clearance
distances are:
Side: 60 mm (2.4 in.)
Bottom: 350 mm (13.8 in.)
Rear: 0 mm (0 in.)

350 mm
13.8 in.

60 mm
2.4 in.

60 mm
2.4 in.

350 mm
13.8 in.

**MAXIMUM
2 Metres**
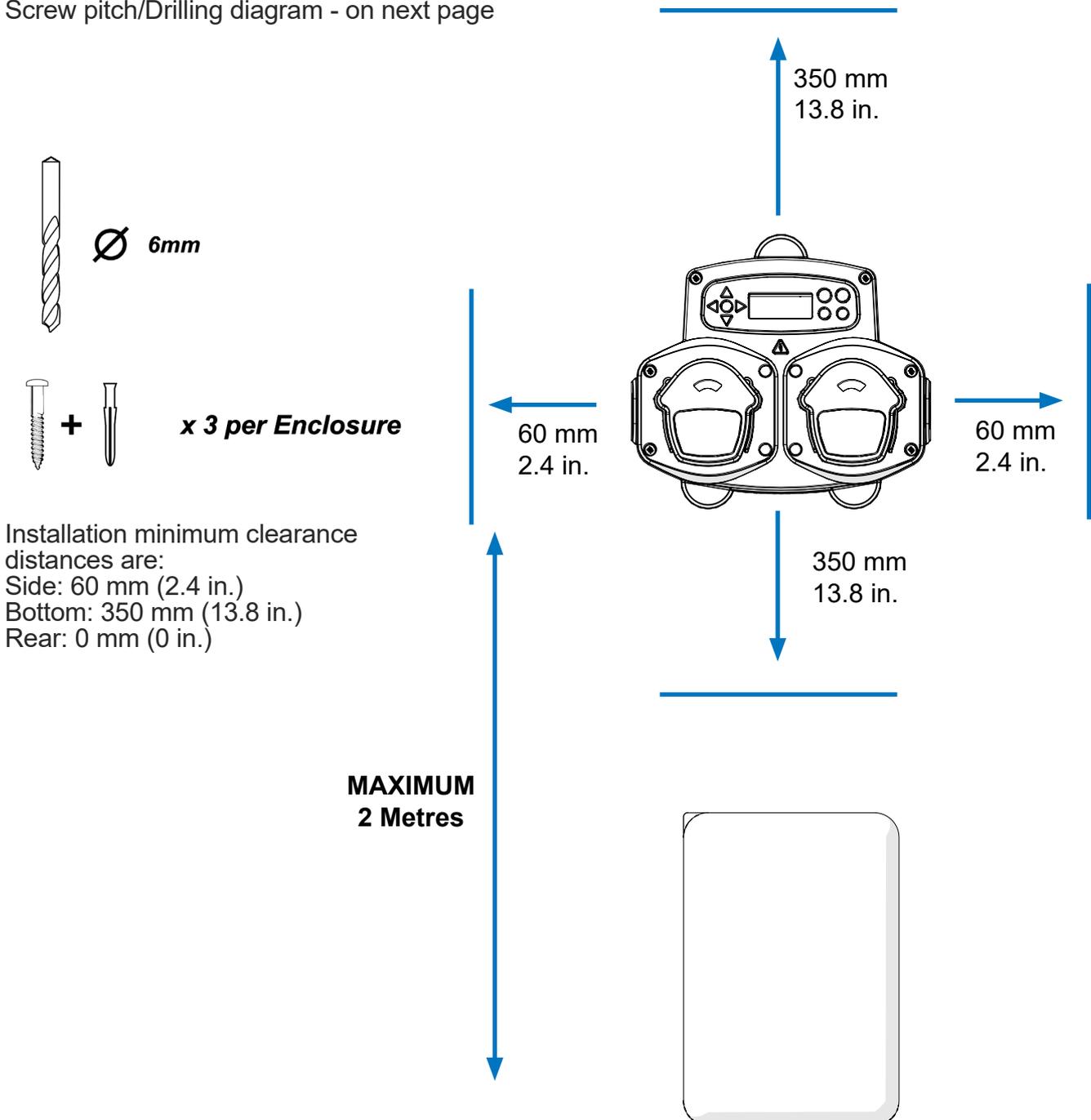
UNIT LAYOUT - MOUNTING

Drill mounting holes to the following pitch.

Standard Pump head Unit

70mm

242mm

165mm

140mm   140mm   140mm

Highflow Pump head Unit

76mm

258mm

205mm

152mm   99mm   175mm
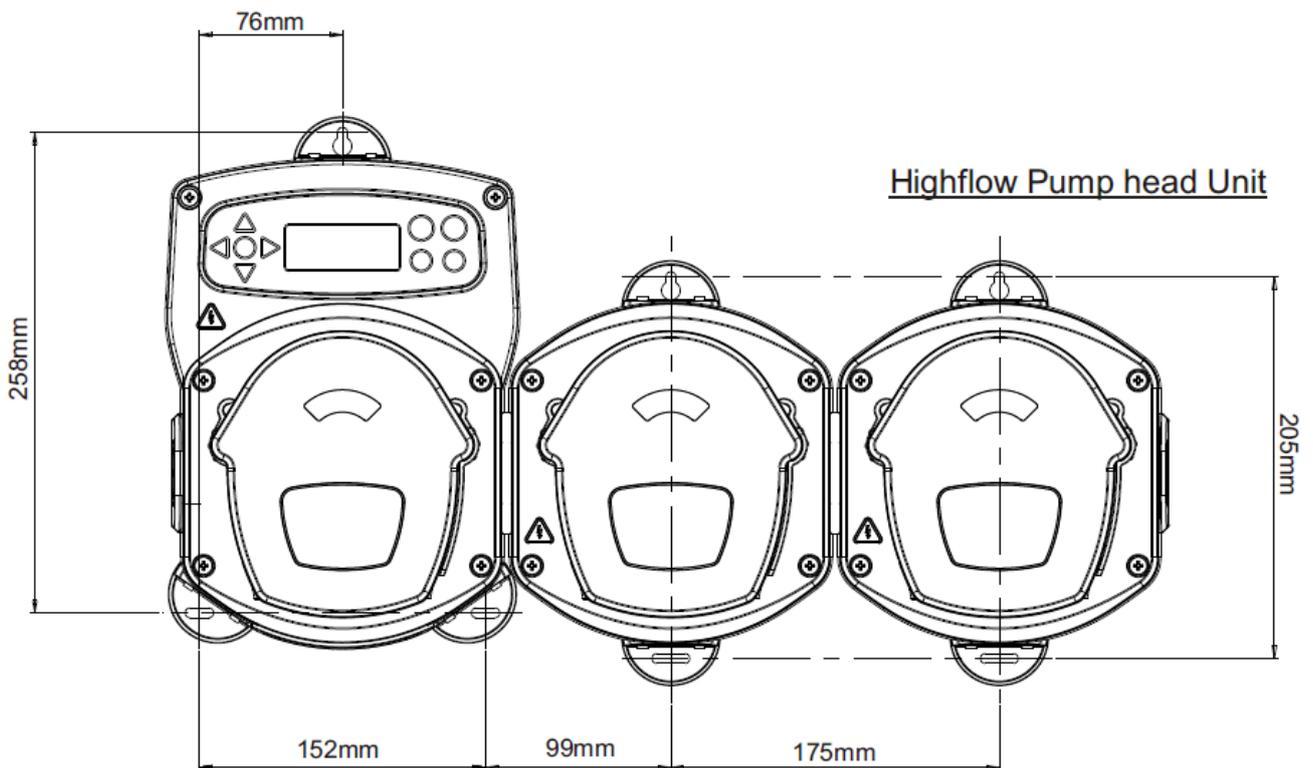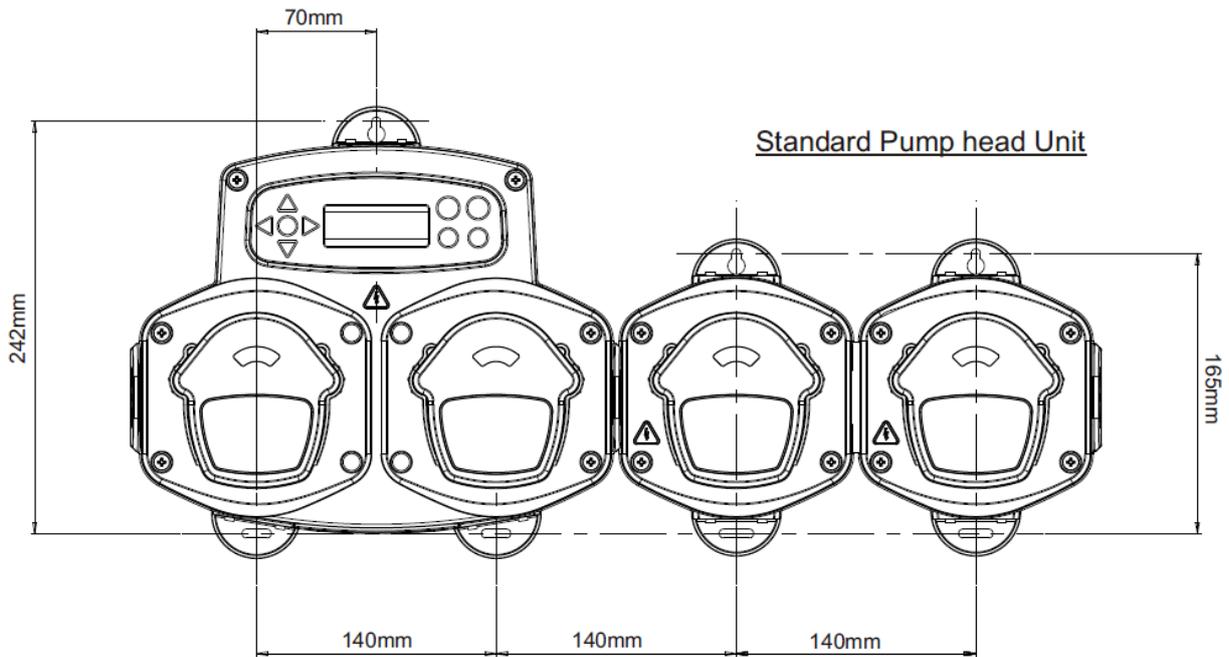
INSTALLATION

Section **C**

INSTALLATION - WIRING 1

In most cases, the interface board or solenoids in the host machine will have a common (i.e their negative terminals are all linked by a common wire).
The switches S1 & S2 can be left switched to common (up position), and the single(common) wire taken to the B rail.

RP1, RP2, RP3 & RP4
Remove to allow signals below
90 volts AC or DC (min 12V)

S1 & S2
Switch to common signals
on the B-rail

COMMON   COMMON ISOLATED   COMMON

B RAIL   B RAIL

B RAIL   *AFS*

LN   A RAIL   *AFS*

LN ⏚
Power Supply
100-240v(AC) 50/60Hz
Sourced from a point which
is isolated when the host
machine is off

Signal Inputs 90v-240v AC or DC

B Rail (Negative)	A Rail (Positive)
With the switches in an upright position, a common (neutral/negative) input signal can be taken to the B Rail.	The positive (live) signal from each input must be taken to the relevant connection on the A Rail.

Example

—— **INPUT 1 - Pre-Wash**

—— **INPUT 2 - Main Wash**

—— **INPUT 3 - Rinse**

—— **COMMON**

Recommmended Wiring
Max Size = 1.5mm²
Max Size = 0.5mm²
Current = 0.5A

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.
Suitable grade wire must be used.
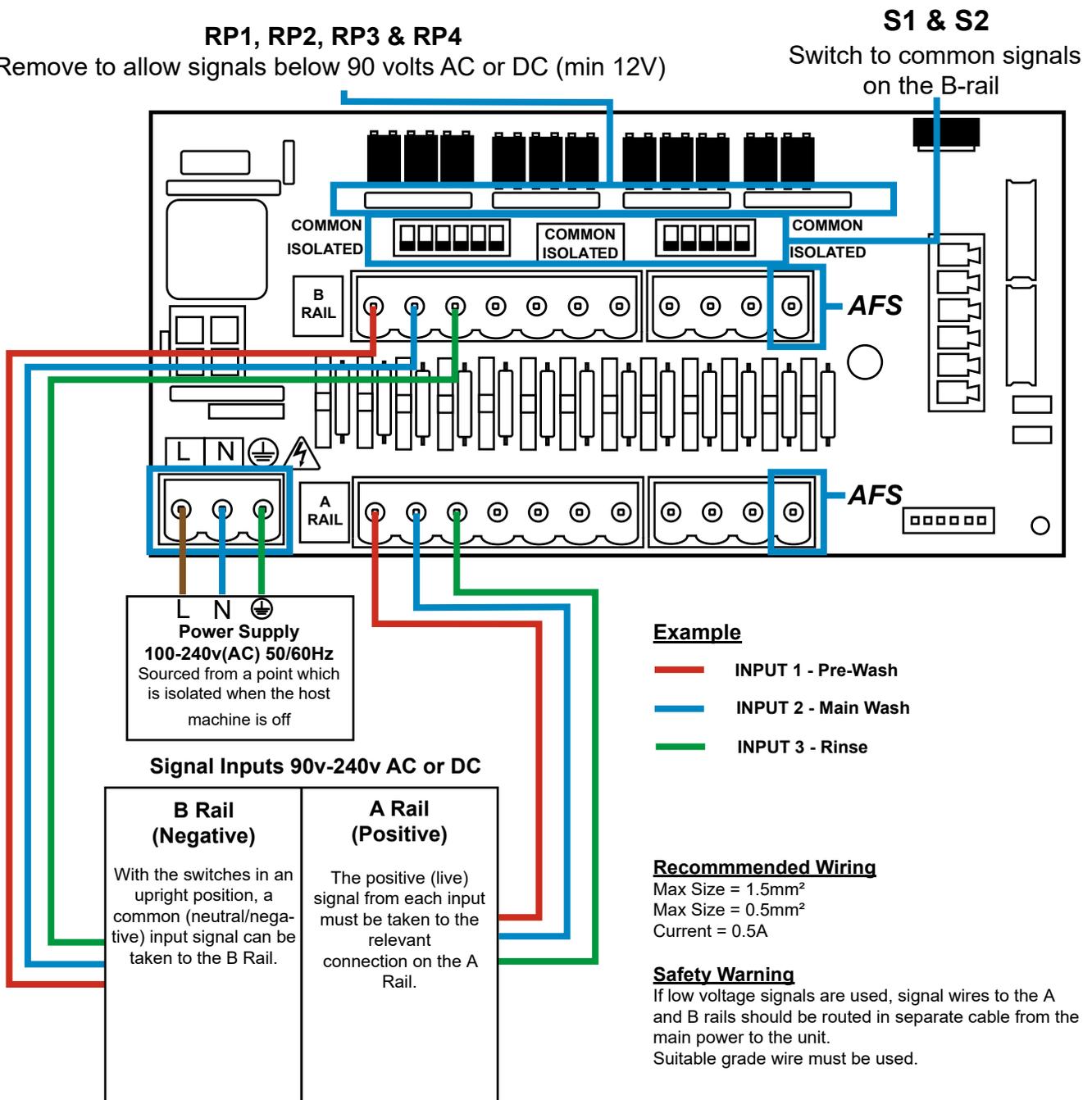
INSTALLATION - WIRING 2

In some cases, the interface board or solenoids in the hose machine are **not** common. **For example:** The softener solenoid on some machines is not linked via a common wire to the other solenoids.

If this is the case, the signal must be isolated from the common B rail on the Board. This is done by Switching the appropriate switch (S1 & S2 to isolated, ie. Downward position). If in doubt switch the appropriate switch for each incoming signal source.

FAILURE TO SWITCH THE APPROPRIATE SWITCH WOULD RESULT IN UNIT FAILURE.

DO NOT ATTEMPT TO SWITCH THE SWITCHES WHEN THE POWER IS ON.

RP1, RP2, RP3 & RP4
Remove to allow signals below 90 volts AC or DC (min 12V)

S1 & S2
Switch to common signals on the B-rail

COMMON
ISOLATED

COMMON
ISOLATED

COMMON
ISOLATED

B RAIL

AFS

L N ⏚ ⚡

A RAIL

AFS

L N ⏚
Power Supply
100-240v(AC) 50/60Hz
Sourced from a point which is isolated when the host machine is off

Signal Inputs 90v-240v AC or DC

B Rail (Negative)	A Rail (Positive)
With the switches in an upright position, a common (neutral/negative) input signal can be taken to the B Rail.	The positive (live) signal from each input must be taken to the relevant connection on the A Rail.

Example

— **INPUT 1 - Pre-Wash**

— **INPUT 2 - Main Wash**

— **INPUT 3 - Rinse**

Recommmended Wiring
Max Size = 1.5mm²
Max Size = 0.5mm²
Current = 0.5A

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.
Suitable grade wire must be used.

FORMULA SELECT - SAFETY PRECAUTIONS
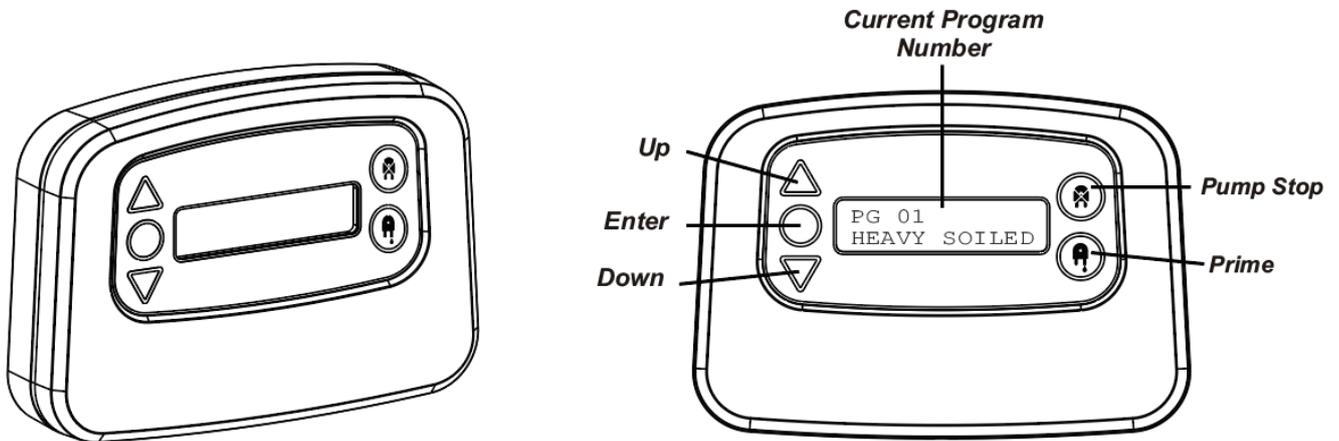
Important Safety Instructions

Please read the following precautions carefully before using this equipment.

Do not attempt to fit the module without first isolating the signal and supply sources from the host unit.
Do not use damaged or frayed cables.
Do not dismantle or modify this equipment.

FORMULA SELECT - LAYOUT

FORMULA SELECT - INSTRUCTIONS

The BrightLogic laundry Formula Select module (optional) allows remote selection of up to 20 different wash programs, program names can be displayed by uploading via the computer program.

The Formula Select module can also be used to prime and stop the pumps.
The desired program must be selected, using the UP and DOWN keys on the module and pressing enter, before beginning the wash cycle.

Resetting options
There are four options available to reset the formula select:
Reset Formula to Program 01 - (default setting)
Reset Formula to Program 00 - (blank program)
Reset Formula to Program 02 - (set to any program number)
Reset Formula to Previous program - (resets to the previous program)

The unit can be manually reset by pressing the up and down keys together for 1 second.

Without a Formula Select module
If there is no formula select installed then the programs can still be selected from the unit itself.
From the default screen press the **PROGRAM** button to toggle the correct program.

FORMULA SELECT - INSTALLATION

Fit the module to a suitable surface, in an accessible area, using the self-adhesive Velcro provided.
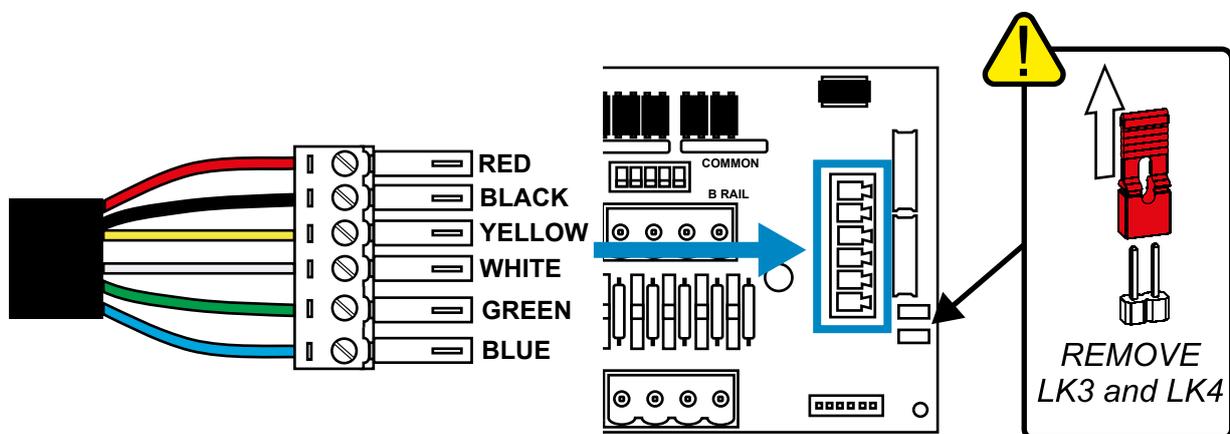Before fitting, please ensure that the power to the unit has been isolated.

Open the lid of the main enclosure.
Pass the cable through the gland situated on the bottom of the unit and run it to the vicinity of the Formula Select connection socket on the board (bottom right).

Note:
Screened cable should be used.

Fit the green connector with the coloured wire in the order shown above. Plug the connector into the correct socket and tighten the gland to grip the cable.
REMOVE links LK3 & LK4

PROGRAMMING

Section **D**

PROGRAMMING - FROM A LAPTOP

All of the programming procedures in this booklet, can be performed on a computer before installation using the Brightlogic computer software.

In this way, directories of parameters for common installations and all unit types can be created and saved.

Data (such as program parameters, chemical names flowrates, run times and cycles times) can be read from the unit and used to generate Excel spreadsheet, to which the users own comments can be added.

These spreadsheets can be used to perform simple monitoring, testing and diagnosis of the system.
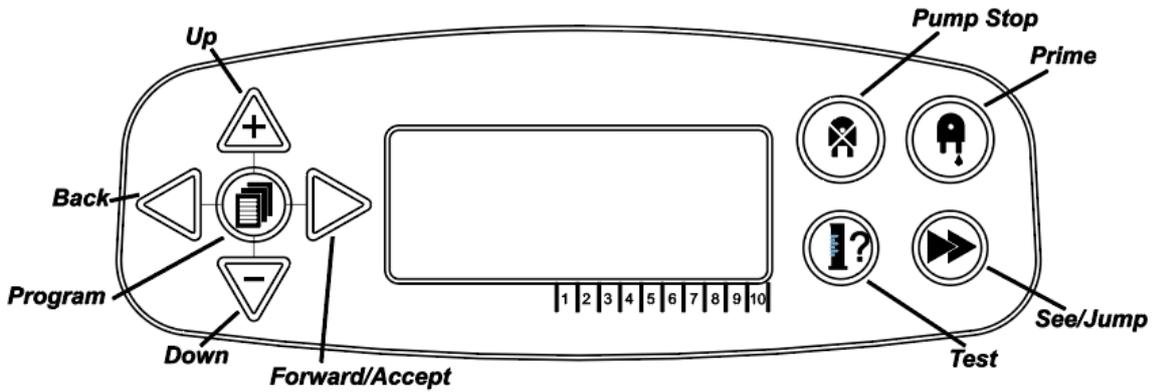
The Brightlogic computer software is available for use will all Brightlogic Laundry Systems.

For full instruction on the user of the computer software, see the separate instruction booklet (B988).

The Brightlogic computer software is available for download from our website (www.brightwell.co.uk).
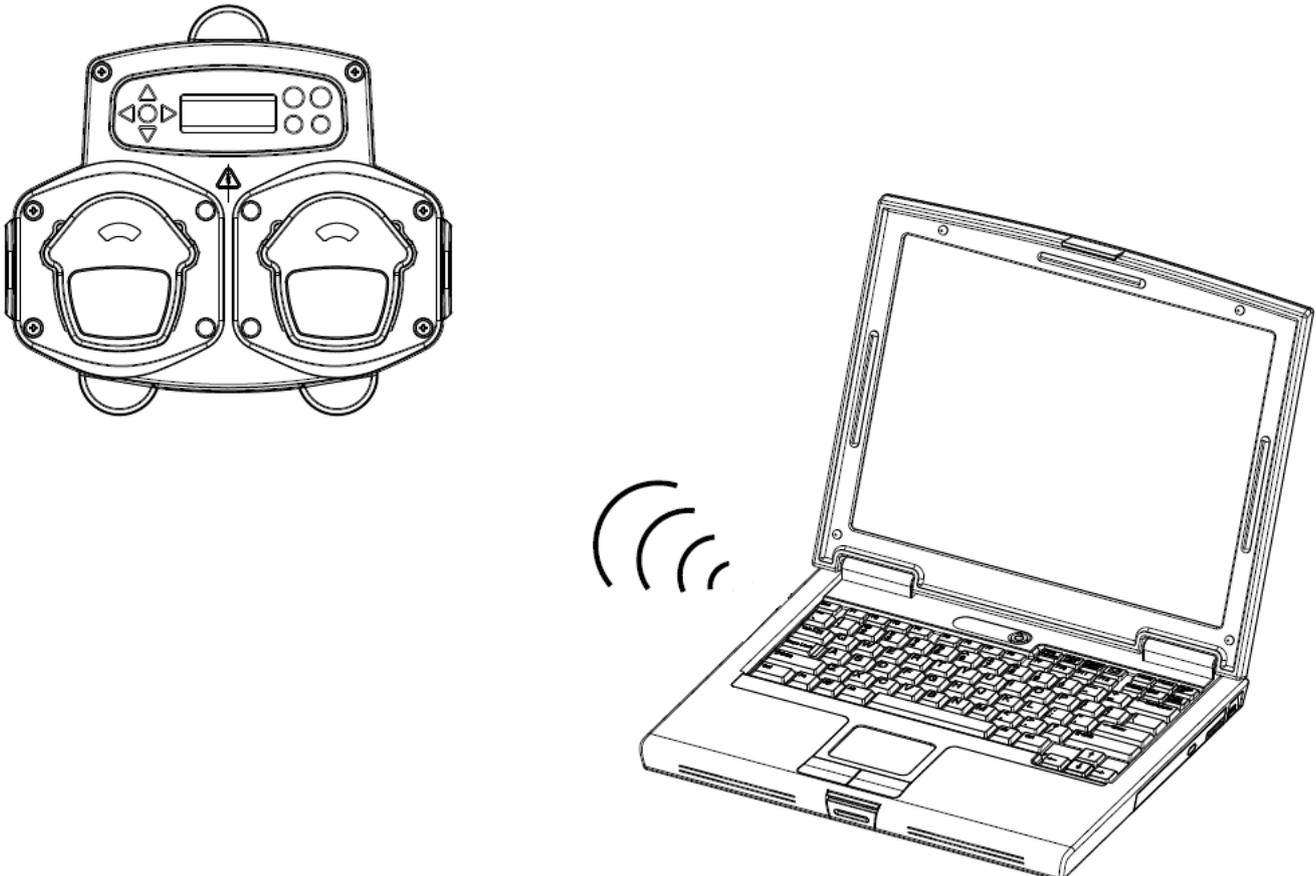
PROGRAMMING - CONTROLS

PROGRAMMING - KEY TO INSTRUCTIONS

Throughout the instructions:

If a button or buttons are shown in **BLUE** then they must be pressed to progress to the next stage. (If two buttons are shown, they must be pressed together)

If buttons are shown in **GREY**, they are used individually to achieve the desired result. (ie. Either/or)

| SIGNAL ACCEPTANCE TIME |
| 00 SECONDS |

| MAN 1: ------------------ |
| MAN 2: ------------------ |
| MAN 3: ------------------ |
| OFF P: ------------------- |

| FLUSH VALVE TIME |
| 00 MINS 00 SECS |
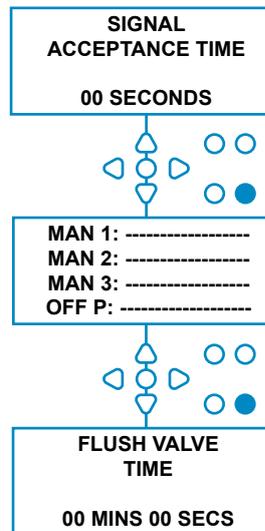
Throughout the instructions, there are several screens which are highlighted **BOLD.**

From any point within the program, the user can transition to the next **BOLD** screen via the **SEE/JUMP** button.

LANGUAGE SELECTION

French, German, Spanish, Dutch, Czech, Polish, American, Italian or Portuguese.
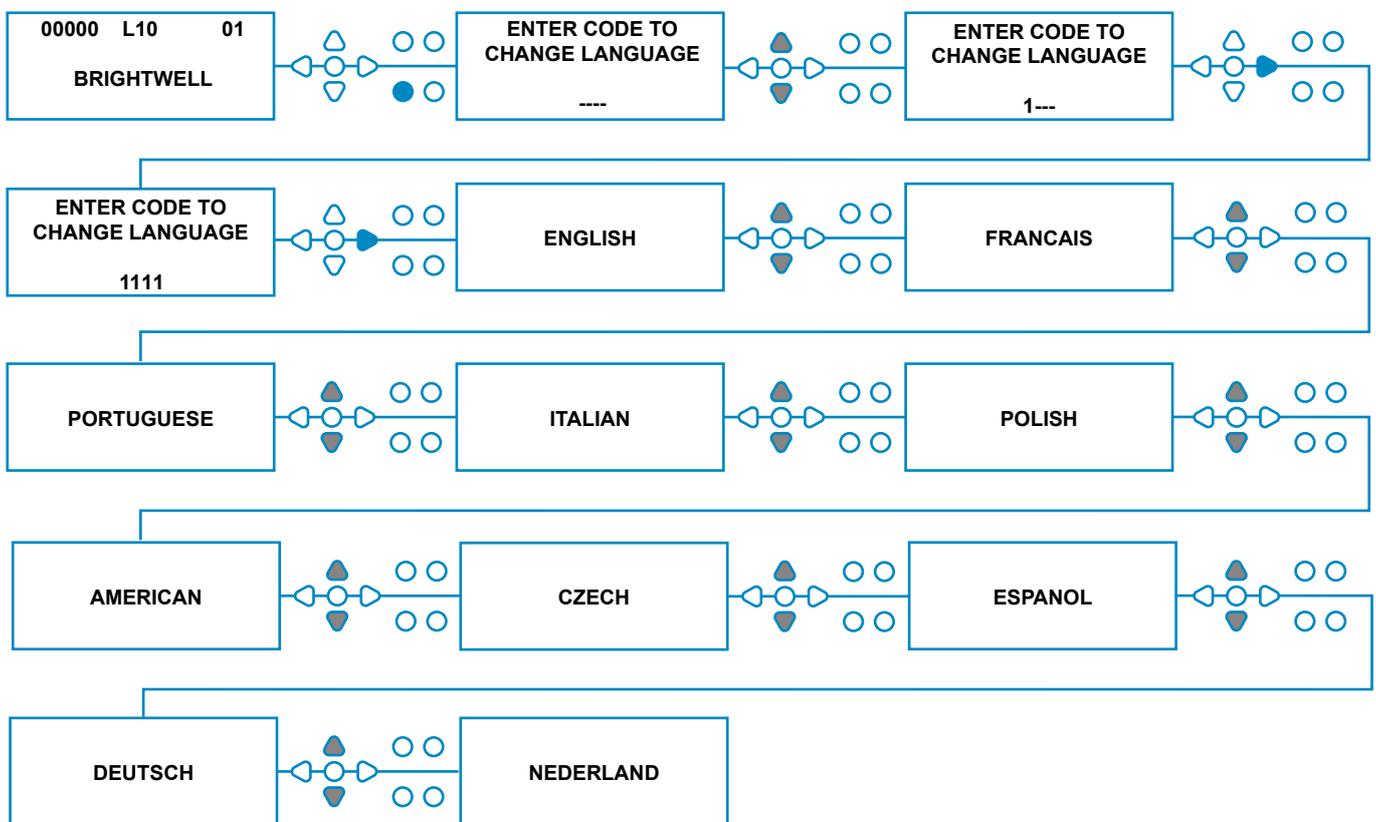
From the default screen, press and hold the **TEST** key for 2 seconds. The access code screen will then be displayed. Enter the correct four-digit access code using the **UP** and **DOWN** keys to select a number and the **FWD/ACCEPT** key to move (see page 23).

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

00000 L10 01 BRIGHTWELL	ENTER CODE TO CHANGE LANGUAGE ----	ENTER CODE TO CHANGE LANGUAGE 1---
ENTER CODE TO CHANGE LANGUAGE 1111	ENGLISH	FRANCAIS
PORTUGUESE	ITALIAN	POLISH
AMERICAN	CZECH	ESPANOL
DEUTSCH	NEDERLAND	

ENTERING PROGRAM MODE

From the default screen, press the **FWD/ACCEPT** key.

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/confirm.

The unit will then give the option of editing the:

Settings (see below)
Or
Wireless USB Settings (see page 41)
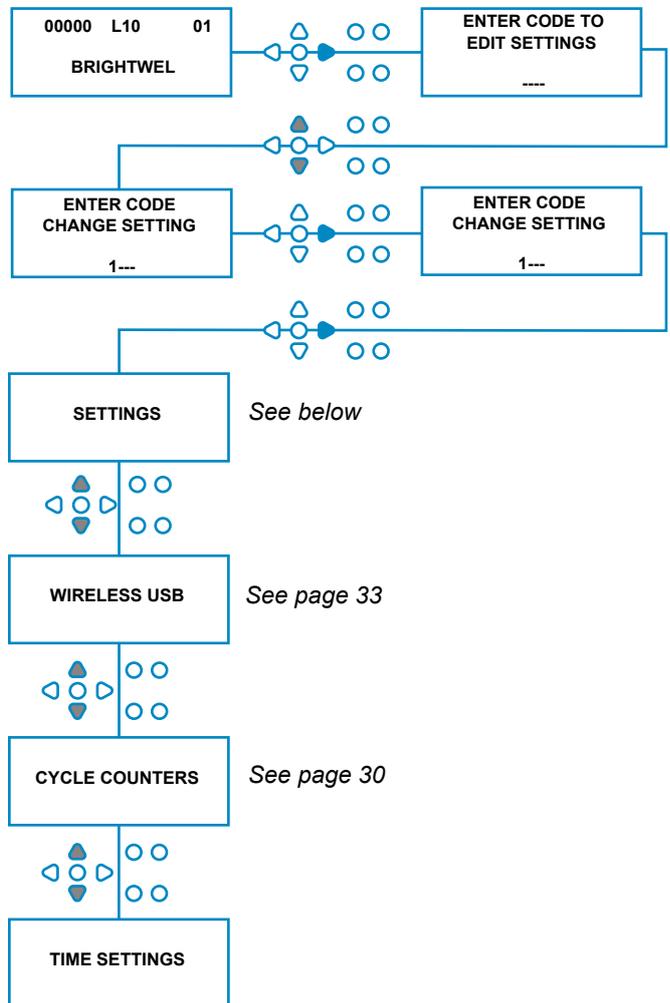OR
Cycle Counters (see page 37)
Or
Date and Time Settings

Press **UP** and **DOWN** to select the required option, and **FWD/ACCEPT** to accept your choice and move on the next screen.

Note:
While in **PROGRAMMING MODE** the unit will not run and will not accept input signals from the host machine.

00000   L10   01
BRIGHTWEL

ENTER CODE TO EDIT SETTINGS

ENTER CODE CHANGE SETTING
1---

ENTER CODE CHANGE SETTING
1---

| SETTINGS | *See below*
| :---: |

| WIRELESS USB | *See page 33*
| :---: |

| CYCLE COUNTERS | *See page 30*
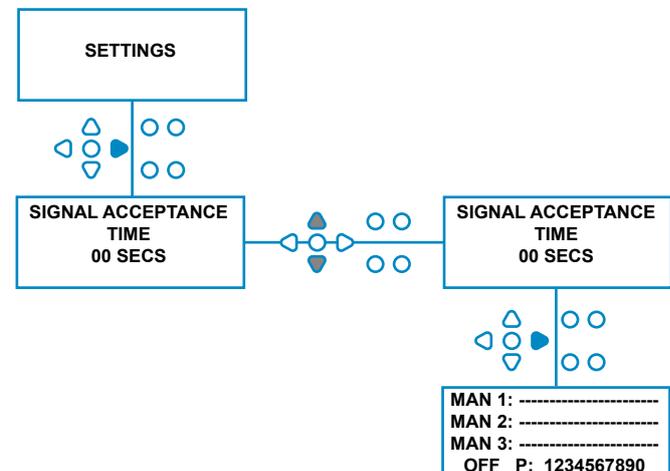| :---: |

TIME SETTINGS

SIGNAL ACCEPTANCE TIME

From the **SETTINGS** screen, press the **FWD/AC-CEPT** key to move to the **SIGNAL ACCEPTANCE** screen.

Usually set to 1 second, the signal acceptance time is the time that a signal has to remain across an input, before it is acknowledged. Once set, this time will apply to all inputs and all programs.

Setting:
Set the Signal Acceptance Time (00 - 99 Secs) using the **UP** and **DOWN** keys. Press **FWD/ACCEPT** to accept your choice and move on to the **ASSIGNING MANIFOLD** screen.

SETTINGS

SIGNAL ACCEPTANCE TIME 00 SECS

SIGNAL ACCEPTANCE TIME 00 SECS

MAN 1: -----------------------
MAN 2: -----------------------
MAN 3: -----------------------
OFF   P: 1234567890

⚠ **Important**   All settings shown in this instruction manual are for illustration/example only.
The settings, which you use must be derived from your own knowledge and experience, combined with experimentation and the requirements of the installation.

ASSIGNING MANIFOLDS

Once the SIGNAL ACCEPTANCE TIME has been
set, press the **FWD/ACCEPT** key to move to the
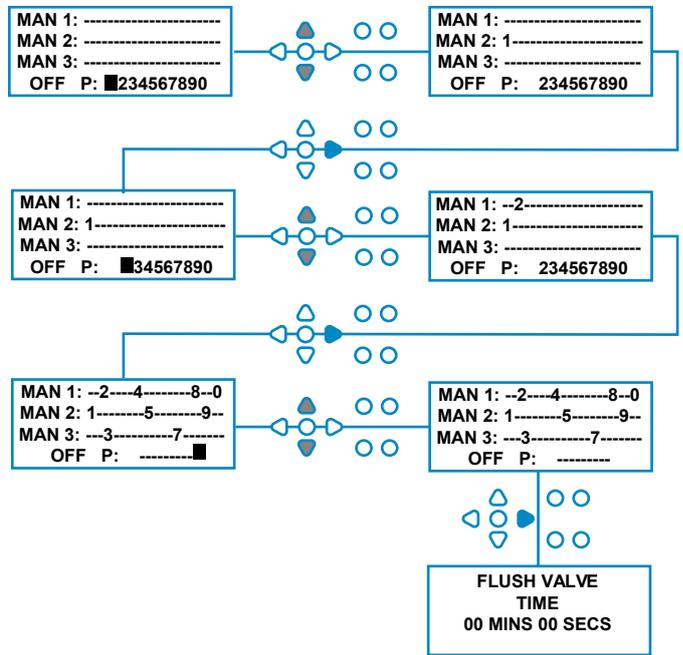ASSIGNING MANIFOLD screen.

The BrightLogic   software allows the user to have
a maximum of three manifolds (flush valves). By
assigning each pump to a specific manifold, the
flush valve of that manifold will open when the
pump runs.

Use the **UP** and **DOWN** keys to set each pumps
cursor to the line of the required manifold.   Press
FWD/ACCEPT to confirm and move on to the next
pump.

Once all of the pumps have been assigned to the
correct manifolds (or OFF), press the
FWD/ACCEPT key to move onto the **FLUSH
VALVE TIME** screen.

Note:
 If all the pumps are set to OFF, the display will
move to the   PUMP SPEED screen.

```
MAN 1: ----------------------            MAN 1: ----------------------
MAN 2: ----------------------            MAN 2: 1---------------------
MAN 3: ----------------------            MAN 3: ----------------------
   OFF   P: ■234567890                      OFF   P:   234567890
```

```
MAN 1: ----------------------            MAN 1: --2-------------------
MAN 2: 1---------------------            MAN 2: 1---------------------
MAN 3: ----------------------            MAN 3: ----------------------
   OFF  P:   ■34567890                      OFF   P:   234567890
```

```
MAN 1: --2----4---------8--0             MAN 1: --2----4---------8--0
MAN 2: 1--------5---------9--            MAN 2: 1--------5---------9--
MAN 3: ---3----------7--------           MAN 3: ---3----------7--------
   OFF  P:   ---------■                     OFF   P:   ---------
```

```
FLUSH VALVE
TIME
00 MINS 00 SECS
```

FLUSH VALVE MODE

The flush valve has two operational modes:

DURING & AFTER:
The flush valve will open 1 second before the
pump starts to run, the valve will stay open while
the pump is running. Once the pump has stopped,
the flush valve will remain open for the duration of
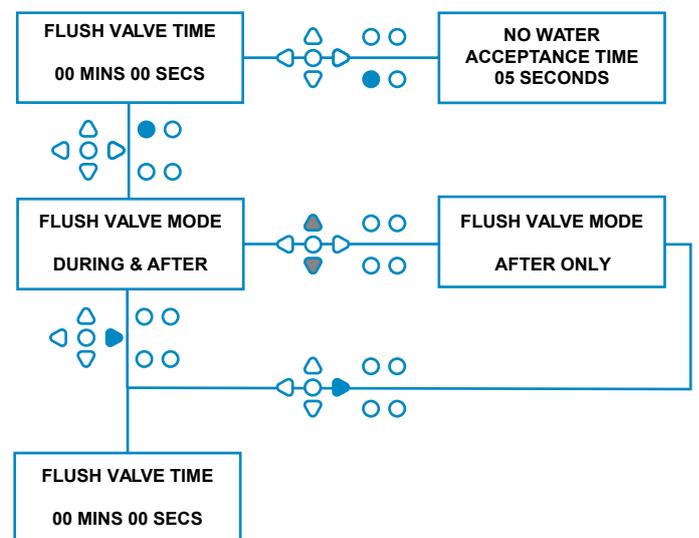the programmed time (see page 25).

AFTER ONLY:
The flush valve will only open once the pump has
stopped. The valve will then remain open for the
duration of the programmed time (see page 25).

Setting:
From the **FLUSH VALVE TIME** screen, press the
PRIME key to access the **FLUSH VALVE MODE**
screen.

Use the **UP** and **DOWN** keys to toggle between
the two options. Once the   desired   option is
displayed, press **FWD/ACCEPT** to confirm your se-
lection and move back to the **FLUSH VALVE TIME**
screen

```
FLUSH VALVE TIME                NO WATER
                                ACCEPTANCE TIME
00 MINS 00 SECS                 05 SECONDS
```

```
FLUSH VALVE MODE                FLUSH VALVE MODE

DURING & AFTER                  AFTER ONLY
```

```
FLUSH VALVE TIME

00 MINS 00 SECS
```

FLUSH VALVE SAFETY STOP - OPTIONAL

There are two possible safety stop switches for the manifold system. As they work differently, they have different settings within the programming.

It is very important that you ensure the correct option is selected!

The device connections for the Safety Stop input are on the main board, and are activated by the removal of link LK5 - LK7 (see page 10).

Setting:
From the **FLUSH VALVE TIME** screen, press the **PUMP STOP** button to access the **SAFETY STOP MODE** screen.

Use the **UP** and **DOWN** buttons to toggle between the two options. Once the desired option is displayed, press **FWD/ACCEPT** to confirm your selection and move back to the **FLUSH VALVE TIME** screen.
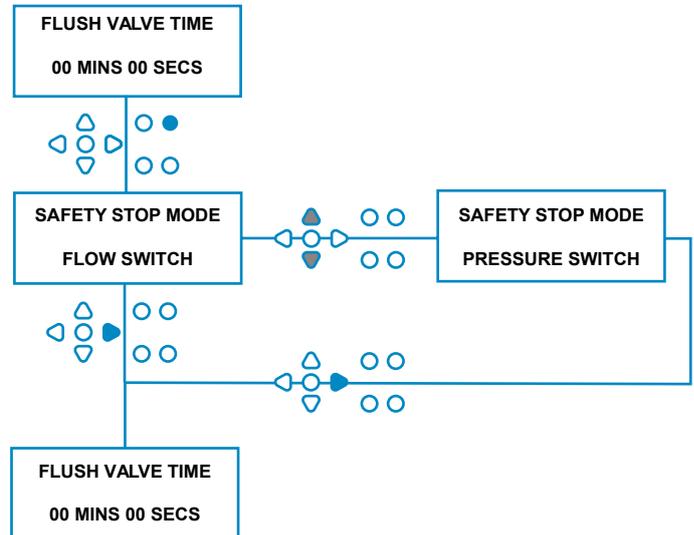
FLOW SWITCH:
If there is no water present in the manifold system and the flush valve is activated. Then the screen will display **NO WATER PRESENT** & the buzzer output will sound (if connected). Once the switch has been activated, the Brightlogic unit will not function again, until the water has been restored and the **PROGRAM** button has been pressed for 1 second.

PRESSURE SWITCH:
If there is no water present in the manifold system, the screen will display **NO WATER PRESENT** & the buzzer output will sound (if connected).Once the switch has been activated, the Brightlogic unit will not function again, until the water has been restored.

The switch will activate regardless of the position of the solenoid.

To overcome problems such air bubbles or other equipment connected to the water supply, both of the switches feature a 1 second signal acceptance time.

The buzzer can be snoozed for a 30 minute period, by pressing the **PROGRAM** button.
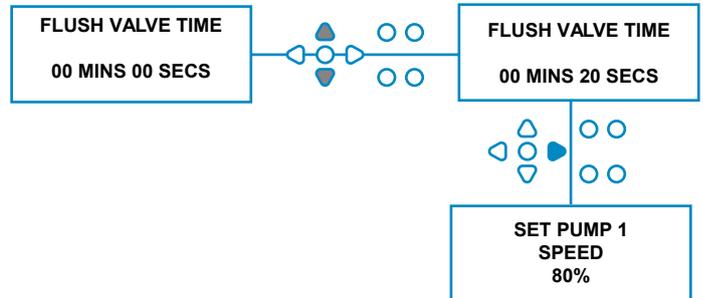
FLUSH VALVE TIME

The Flush Valve Time, is the time for which the flush valve will open, after the assigned pump has run.

Set the flush valve time (00 - 99 Mins) using the **UP** and **DOWN** keys.
Press **FWD/ACCEPT** to select the displayed time and move to the **PUMP SPEED** screen.

Note:
Once set, this time will apply to ALL Flush Valves.

```
┌─────────────────────┐          ┌─────────────────────┐
│  FLUSH VALVE TIME   │          │  FLUSH VALVE TIME   │
│                     │          │                     │
│   00 MINS 00 SECS   │          │   00 MINS 20 SECS   │
└─────────────────────┘          └─────────────────────┘
                                            │
                                 ┌─────────────────────┐
                                 │      SET PUMP 1     │
                                 │        SPEED        │
                                 │         80%         │
                                 └─────────────────────┘
```

PUMP RUN SPEED

From the **FLUSH VALVE TIME** screen (or the **ASSIGNING MANIFOLD** screen if flush valves are not needed), press the **FWD/ACCEPT** key to move to the **PUMP SPEED/FLOWRATE** screen.

The Brightlogic software allows the user to program each pump with a Flowrate (see page 26) and/or Pump Speed.

PUMP SPEED:
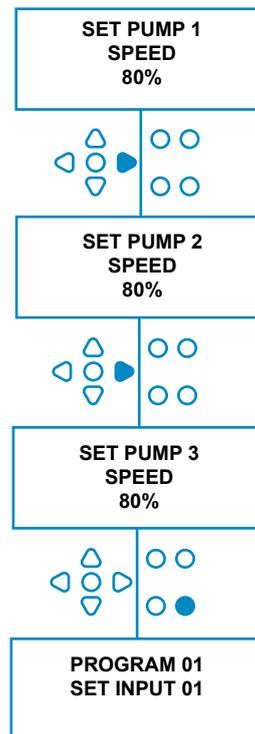The user can set the speed of each individual pump (30%-100% of full speed, in 5% increments).
This can be used ot reduce the strain on the pumps when they are used with thicker products.

Setting:
Use the **UP** and **DOWN** keys to select the desired speed for the selected pump.
Press the **FWD/ACCEPT** key to confirm your selection and move on to the next pump.

Once all of the pump speeds/flowrates have been set, press the **SEE/JUMP** key to move onto the **PROGRAM SETTINGS** screen.

```
┌─────────────────────┐
│      SET PUMP 1     │
│        SPEED        │
│         80%         │
└─────────────────────┘
          │
┌─────────────────────┐
│      SET PUMP 2     │
│        SPEED        │
│         80%         │
└─────────────────────┘
          │
┌─────────────────────┐
│      SET PUMP 3     │
│        SPEED        │
│         80%         │
└─────────────────────┘
          │
┌─────────────────────┐
│     PROGRAM 01      │
│    SET INPUT 01     │
└─────────────────────┘
```

FLOWRATE

From the **FLUSH VALVE TIME** screen (or the **ASSIGNING MANIFOLD** screen if flush valves are not needed), press the **FWD / ACCEPT** key to move to the **PUMP SPEED/FLOWRATE** screen.

The BrightLogic software allows the user to program each pump with a Flowrate and/or a Pump Speed (see page 25 & Page 26).

FLOWRATE:
This is useful as it enables the user to program the unit with a specific dosage instead of a run time. In turn, the unit will be able to supply accurate information on the volume of product dispensed by the unit, as well as cycles performed.

If a flow rate is being set, the pump speed will normally be left at its default setting (80%), unless the pump is being used with a thick product. In this case the pump speed can be reduced in order to ease the strain on the pump.

Setting: While at the **PUMP SPEED** screen, press the **TEST** key. This will run the pump for 1 minute. During this time, the flowrate of the pump (volume dispensed in 1 min) can be measured.

Press the PRIME key to display the **SET FLOWRATE** screen.

Use the **UP, DOWN** and **FWD/ACCEPT** key to input the flowrate that you have just measured, and the date. Press **FWD/ACCEPT** key to confirm and move on to the next pump.

Once all of the pump speeds/flowrates have been set, press the **SEE/JUMP** key to move onto the **PROGRAM SETTINGS** screen.

Note:
If the flowrate is re-calibrated at a later date, the unit will automatically re-calculate and adjust the pump run time, so the correct dosage is dispensed over all 20 programs.
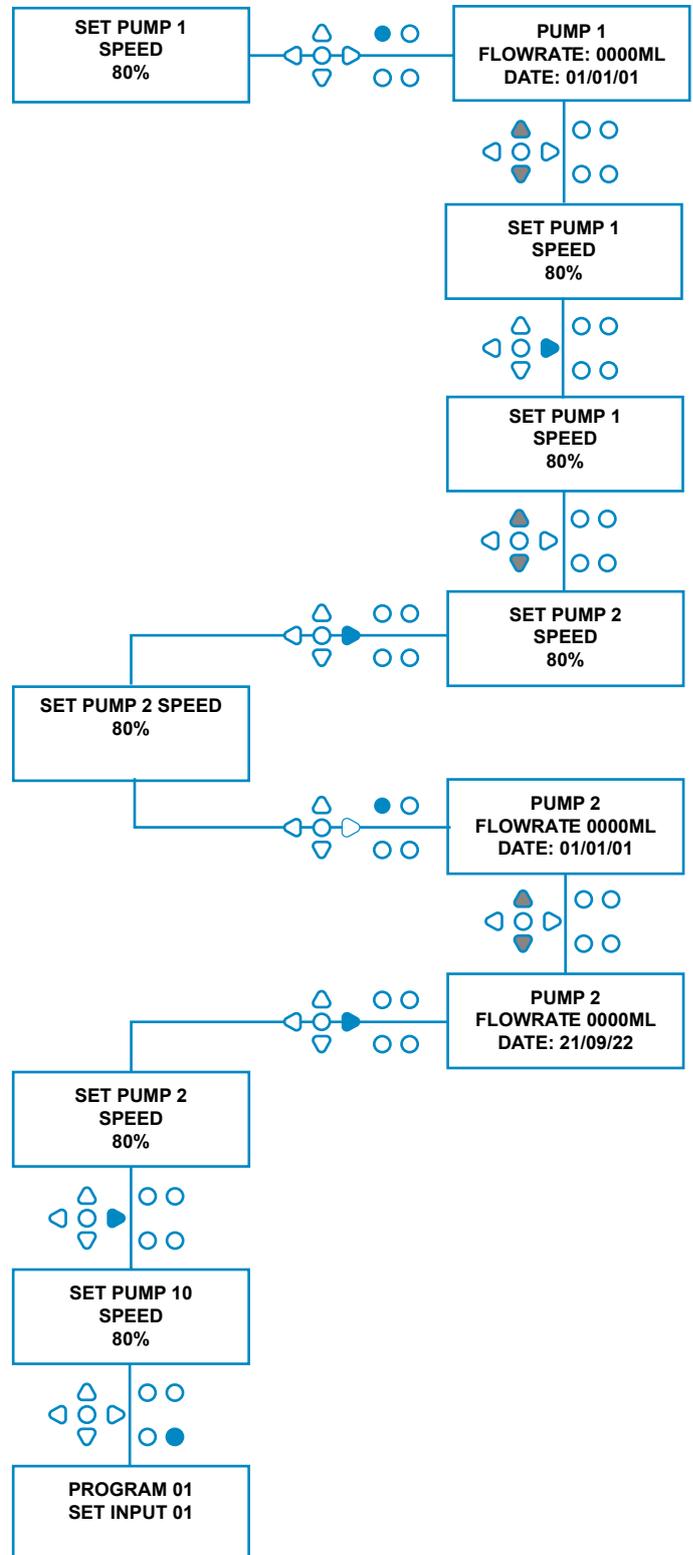
SELECTING INPUT

From the **PUMP SPEED/FLOWRATE** screen, press the **FWD/ACCEPT** key to move to the **INPUT SELECTION** screen.

From this screen the user can select which inputs they wish to assign to which pump.

BrightLogic units have a maximum of 10 inputs.

The inputs are situated on the A & B rails of the board. Each input can be assigned to an individual pump, multiple pumps or all pumps.

Example:
If the unit has been installed with signals from the host machine to inputs 01-04 on the powerboard, you will need to assign pumps to inputs 01-04.

Setting:
Using the **UP** and **DOWN** keys, select the first input which has a signal wired to it. Press the **FWD/ACCEPT** key to move to the **PULSE COUNT** screen for the selected input.
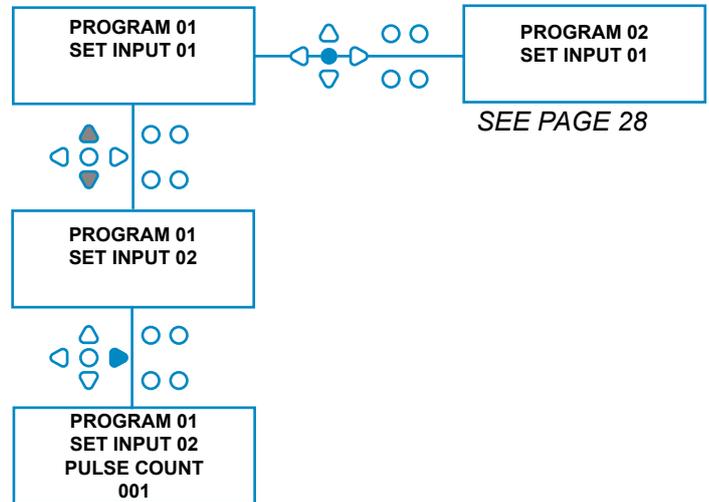
Example:
In this example we want to program the unit to run pump 4 for 30seconds, when a signal is received on input 2.

Alternatively:
If needed, the **INPUT SELECTION** screen can also be used to access the pump settings for additional programs (formulas).BrightLogic units can have a maximum of 20 programs (see page 27).

Use the **PROGRAM** key to increment the program number at the top of the screen. The settings of this program can then be specified.

*For Levels mode - There are 3 level triggers per pump, per input

PROGRAM 01 SET INPUT 01		PROGRAM 02 SET INPUT 01

PROGRAM 01 SET INPUT 02

PROGRAM 01 SET INPUT 02 PULSE COUNT 001

PULSE COUNT

From the **INPUT SELECTION** screen, press the **FWD/ACCEPT** key to move to the **PULSE COUNT** screen.

The **PULSE COUNT** setting allows the user to select the number of signal pulses required by the displayed input, before the pump will run.

This is useful when (for example) a solenoid gives more than one signal during a cycle. In this case, if the unit were to run on every input signal, it would run several times during the wash cycle. The unit can therefore be set to run on the first of the signals, the fourth, or any number up to 99, in order to avoid this multi-triggering.

Note:
In most circumstances the pulse count will be set to 01.

The unit can also be set to run on ALL pulses. When set to ALL, the pump will run on every signal to the displayed input.

In order to check the pulses being received by each input during a wash cycle, the BrightLogic unit provides a pulse test facility (see page 43). This must however be used before any of the pumps have been "enabled", with all of the pulse counts set to "ALL" (default).
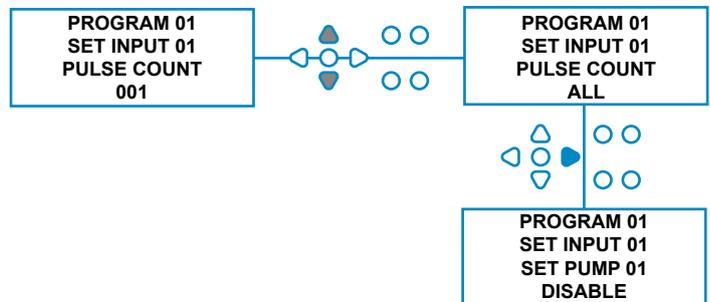
Example:
If the pulse count is set to 01, the pump will run when the first signal is received. All further signals to the displayed input will be ignored until the unit has re-set (see page 31).

Setting:
Use the **UP** and **DOWN** keys to select the required pulse count for the displayed input. Press the **FWD/ACCEPT** key to confirm the selection and move to the first of the **PUMP SETUP** screens.

Caution:
If the pulse count of a pump is set to all, multi triggering may occur with some laundry machines.

PROGRAM 01
SET INPUT 01
PULSE COUNT
001

PROGRAM 01
SET INPUT 01
PULSE COUNT
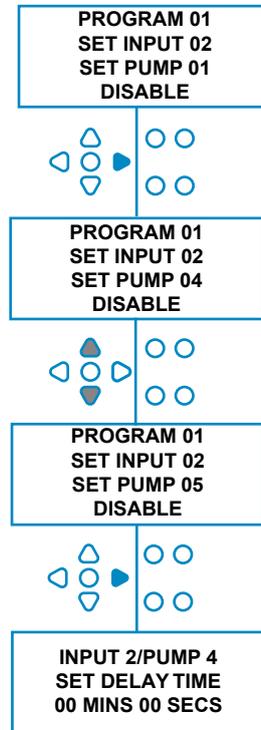ALL

PROGRAM 01
SET INPUT 01
SET PUMP 01
DISABLE

ENABLING PUMPS

By default, all of the pumps will initially be set to "**DISABLE**" on all of the inputs.

Use the **FWD/ACCEPT** and **BACK** keys to select the pump that you wish to run when a signal is received on the selected input.

Use the **UP** and **DOWN** keys to change the condition of the selected pump from "**DISABLE**" to "**ENABLE**".

Use the **FWD/ACCEPT** key to confirm your selection and move to the **PUMP DELAY TIME** screen for the pump you have just enabled.

```
PROGRAM 01
SET INPUT 02
SET PUMP 01
DISABLE
```

```
PROGRAM 01
SET INPUT 02
SET PUMP 04
DISABLE
```

```
PROGRAM 01
SET INPUT 02
SET PUMP 05
DISABLE
```

```
INPUT 2/PUMP 4
SET DELAY TIME
00 MINS 00 SECS
```

PUMP DELAY TIME

The BrightLogic software, allows the user to program a time delay between the unit receiving a signal from the host machine, and the appropriate pump activated.
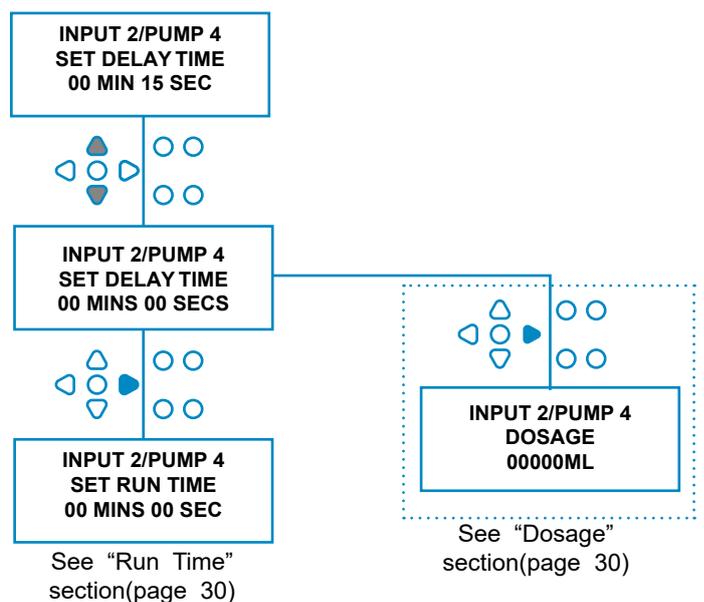
This would be used to reduce the chance of neat products (such as Hypochlorite bleach) being introduced over dry clothing, as this may cause the clothes to be damaged.

Setting:
Use the **UP** and **DOWN** keys to alter the delay time selection. Use the **FWD/ACCEPT** key to confirm your selection and move on to the **RUN TIME/ DOSAGE** screen.

Note:
If a flow rate has been set for the selected pump, the next screen will be the **DOSAGE** screen (see page 30).If no flowrate has been set, the next screen will be the RUN TIME screen (see page 30).

```
INPUT 2/PUMP 4
SET DELAY TIME
00 MIN 15 SEC
```

```
INPUT 2/PUMP 4
SET DELAY TIME
00 MINS 00 SECS
```

```
INPUT 2/PUMP 4
DOSAGE
00000ML
```

See "Dosage" section(page 30)

```
INPUT 2/PUMP 4
SET RUN TIME
00 MINS 00 SEC
```

See "Run Time" section(page 30)

DOSAGE

If a flow rate has been set for the pump, the unit will automatically ask for a dosage to be selected.

The dosage is the volume of product (in ml or fl/oz), which you wish to be dispensed into the host machine, during a single cycle.
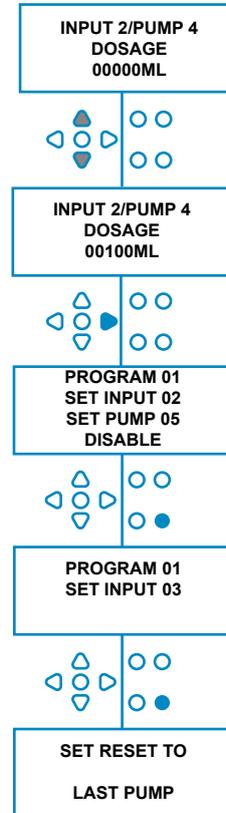
Setting:
Use the **UP** and **DOWN** keys to select the desired dosage (ml or fl/oz).Use the **FWD/ACCEPT** key to confirm your selection and move to the **PUMP ENABLE** screen for the next pump (see page 29).

Once all the pumps have been set for the selected input, press the **SEE/JUMP** key to move onto the next input (see page 27).

If all of the inputs have been programmed, press the **SEE/JUMP** key again to move onto the **RESET PROGRAM OPTIONS** screen.

Note:
Units will be in fl/oz if American language is selected.

```
┌─────────────────────┐
│    INPUT 2/PUMP 4    │
│       DOSAGE         │
│      00000ML         │
└─────────────────────┘

┌─────────────────────┐
│    INPUT 2/PUMP 4    │
│       DOSAGE         │
│      00100ML         │
└─────────────────────┘

┌─────────────────────┐
│     PROGRAM 01       │
│    SET INPUT 02      │
│    SET PUMP 05       │
│      DISABLE         │
└─────────────────────┘

┌─────────────────────┐
│     PROGRAM 01       │
│    SET INPUT 03      │
└─────────────────────┘

┌─────────────────────┐
│    SET RESET TO      │
│                      │
│    LAST PUMP         │
└─────────────────────┘
```

RUN TIME

If no flow rate has been set, the unit will require a run time to be selected.
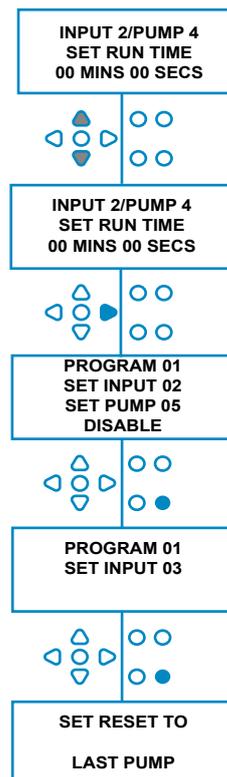
The run time is the time for which the selected pump will need to run, in order to dispense the volume of product for a single cycle.

Setting:
Use the **UP** and **DOWN** keys to alter the amount of time the selected pump will run for. Use the **FWD/ACCEPT** key to confirm your selection and move to the **PUMP ENABLE** screen for the next pump (see page 29).

Once all the pumps have been set for the selected input, press the **SEE/JUMP** key to move onto the next input (see page 27).

If all of the inputs have been programmed, press the **SEE/JUMP** key again to move onto the **RESET OPTIONS** screen.

```
┌─────────────────────┐
│    INPUT 2/PUMP 4    │
│    SET RUN TIME      │
│  00 MINS 00 SECS     │
└─────────────────────┘

┌─────────────────────┐
│    INPUT 2/PUMP 4    │
│    SET RUN TIME      │
│  00 MINS 00 SECS     │
└─────────────────────┘

┌─────────────────────┐
│     PROGRAM 01       │
│    SET INPUT 02      │
│    SET PUMP 05       │
│      DISABLE         │
└─────────────────────┘

┌─────────────────────┐
│     PROGRAM 01       │
│    SET INPUT 03      │
└─────────────────────┘

┌─────────────────────┐
│    SET RESET TO      │
│                      │
│    LAST PUMP         │
└─────────────────────┘
```

Alternatively:

Press the **TEST** button and the pump will run.

Once the required volume of product has been dispensed, press and hold the **TEST** button for 2 seconds.

The unit will automatically record the time taken.

RESET CONDITION

The BrightLogic Laundry unit, will allow the user to set the condition under which the unit will reset. This condition defaults to **LAST PUMP**, but has three possibilities:

LAST PUMP
The unit will re-set after the last pump (usually the fabric softener) finished.

FEATURE OFF
This feature would usually be used on tunnel machines, with the **PULSE COUNT** set to "**ALL**". In this mode, the Formula Select can be used to change the program at any time a pump is not running.

INPUT 10
If fabric softener is not being used, the signal from the softener solenoid can be taken to input 10.The unit will then reset after it has received a signal to input 10 on the A & B rails, even though no softener is being dispensed.

Cycle timeout
The system has a 1 hour automatic reset which activates after a program has been selected but no trigger received within 1 hour. This menu allows the 1 hour time to be adjusted in increments of 5 minutes from 5 - 995 minutes.

Setting:
Use the **UP** and **DOWN** keys to select the required reset condition. Use the **FWD/ACCEPT** key to confirm your selection

SET RESET TO
LAST PUMP

CYCLE TIMEOUT
60 MIN

SET RESET TO
FEATURE OFF

SET RESET TO
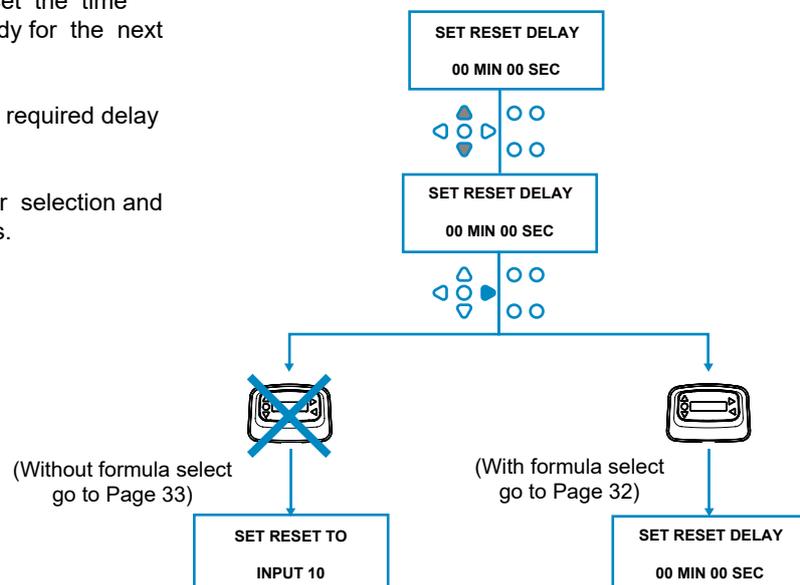INPUT 10

SET RESET DELAY
00 MIN 00 SEC
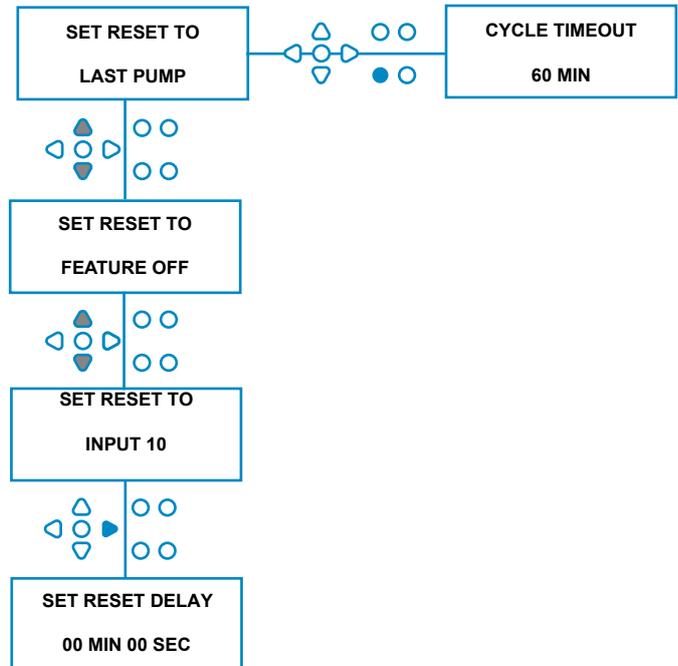
RESET DELAY

The **RESET DELAY**, allows the user to set the time that the unit will wait, before it resets, ready for the next wash.

Use the **UP** and **DOWN** keys to select the required delay time.

Use the **FWD/ACCEPT** key to confirm your selection and move on to the **FORMULA SELECT** screens.

SET RESET DELAY
00 MIN 00 SEC

SET RESET DELAY
00 MIN 00 SEC

(Without formula select
go to Page 33)

(With formula select
go to Page 32)

SET RESET TO
INPUT 10

SET RESET DELAY
00 MIN 00 SEC

RESETTING PROGRAM OPTIONS

The BrightLogic Laundry unit, with a formula select module installed will allow the user to set the condition under which the program will reset.
If there is a reset delay set the program will reset after this period.
This condition defaults to PROGRAM 01, but has four possibilities:

PROGRAM 01
The program will reset to program 01. (default)

PROGRAM 00
The program will reset to program to 00. This is a blank program with no settings.

ANY PROGRAM
 The program can be reset to any program which has settings saved to it.

PREVIOUS PROGRAM
The program will reset to the program it has just washed with.(Eg. If program 8 was used then it will reset to program 8)

Setting:
Use the **UP** and **DOWN** keys to select the required reset condition. Use the **FWD/ACCEPT** key to confirm your selection and move on to the SUMMARY screen.
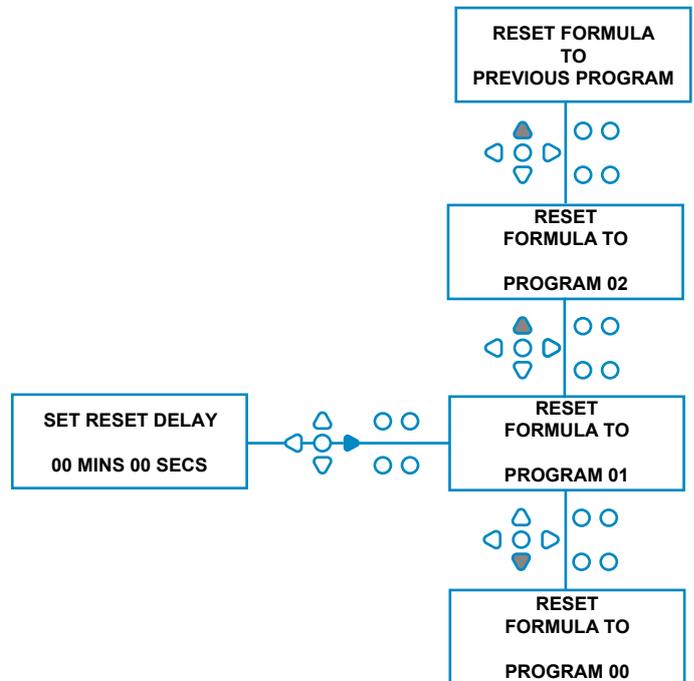
AUTO FORMULA SELECT

For use with computer controlled (intelligent) host machines only, the Auto Formula Select mode allows automatic selection of programs (formulas) without the need for a Formula Select module. There are two modes to choose from a Binary mode or a Timed mode.

Setting:
Use the **UP** and **DOWN** keys to select between **BINARY** and **TIMED** modes. Press **FWD/ACCEPT** key to confirm your selection.

BINARY MODE

To Activate:
The **AUTO FORMULA SELECT MODE** will activate automatically when the first signal to the unit (after it has reset) is to input 6.
After receiving the signal to input 6, the host machine then has the set up time to signal the unit with the desired program number.
This is done by signalling the inputs 1-5, and works on a binary basis:
Input 1 = Binary **1**
Input 2 = Binary **2**
Input 3 = Binary **4**
Input 4 = Binary **8**
Input 5 = Binary **16**
(All signals must be present for the duration of the signal acceptance time. See page 22)

Example:
If program number 10 is needed, the host machine must signal inputs 2 and 4 within the set up time of signalling input 6.Input 2 = Binary 2Input 4 = Binary 82 + 8 = 10, so program 10 will be selected.

After the set up time has ended, the unit will display the selected program number in the top right corner of the screen. The inputs can then be signalled, and the pumps will run as normal, in the selected program.

Setting:
Use the **UP** and **DOWN** keys to alter the amount of time the set up of signals require. Press **FWD/ACCEPT** key to confirm your selection and move to the **SUMMARY** screen.

Note:
If a unit receives a combination of signals which is in excess of the maximum number of programs (e.g. input 4 + input 5 = 8 + 16 = 24) an error message will be shown on screen (see opposite) and the unit will default to program 01.
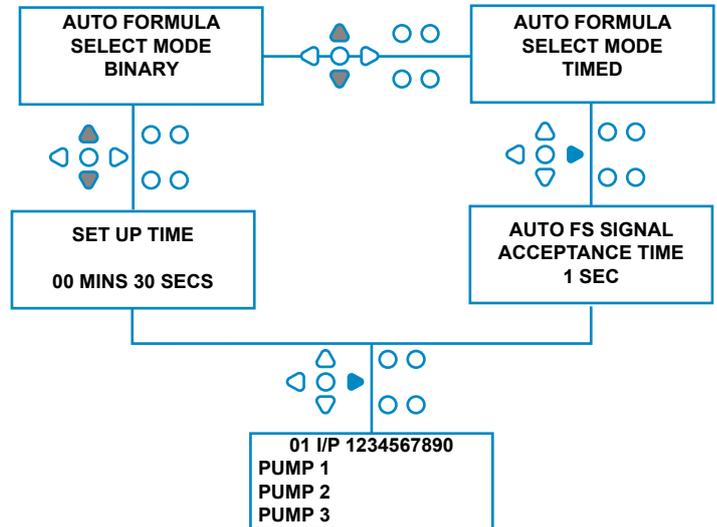
Note: Software version 3.0 onwards

A signal received to **AFS INPUT** will first reset the system if the previous program was not completed. The same signal will then be used:

Timed Mode: to select the program number based on the duration of the signal

Binary Mode: to initiate the set up time

TIMED MODE

TIMED MODE

To Activate:
After receiving the signal to input 6, the next signal to input 6 will then be timed to determine what program number is required. So if the signal is present for 5 seconds then it will select program 5. The acceptance time can be altered .
E.G (With a multiplier of 1)
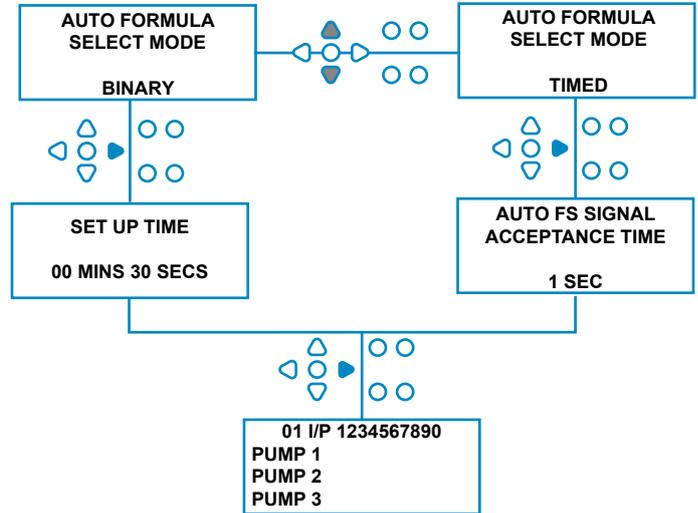1 second input = Program 1
2 seconds input = Program 2

(With a multiplier of 2)
2 second input = Program 1
4 second input = Program 2

After the signal is removed, the unit will display the selected program number in the top right corner of the screen. The inputs can then be signalled, and the pumps will run as normal, in the selected program.

Setting:
Use the **UP** and **DOWN** keys to alter the acceptance time. Press **FWD/ACCEPT** key to confirm your selection and move to the **SUMMARY** screen.

```
┌─────────────────────┐                    ┌─────────────────────┐
│   AUTO FORMULA      │                    │   AUTO FORMULA      │
│   SELECT MODE       │                    │   SELECT MODE       │
│                     │                    │                     │
│      BINARY         │                    │      TIMED          │
└─────────────────────┘                    └─────────────────────┘

┌─────────────────────┐                    ┌─────────────────────┐
│    SET UP TIME      │                    │   AUTO FS SIGNAL    │
│                     │                    │  ACCEPTANCE TIME    │
│  00 MINS 30 SECS    │                    │                     │
│                     │                    │      1 SEC          │
└─────────────────────┘                    └─────────────────────┘

              ┌─────────────────────┐
              │ 01 I/P 1234567890   │
              │ PUMP 1              │
              │ PUMP 2              │
              │ PUMP 3              │
              └─────────────────────┘
```

SUMMARY SCREEN

The summary screen allows you to view which inputs have been assigned to which pumps.(Remember an input can be assigned to more than one pump, and a pump can be made to run on more than one input)

The screen will display the current program number in the top left corner of the screen, the inputs 1-10 along the top and the pumps down the left.
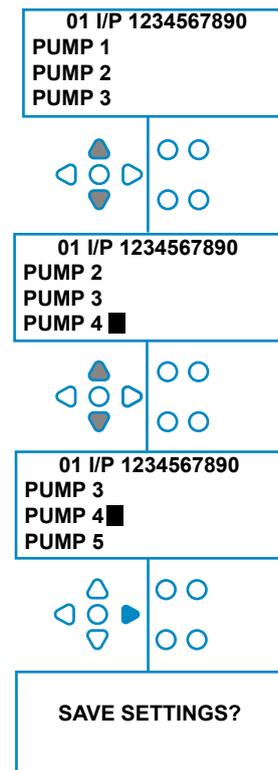
Use the **UP** and **DOWN** keys to scroll through the **SUMMARY** screen. Cursors will indicate which inputs are assigned to which pumps.
Use the **PROGRAM** key to view the summary screen of other programs (formulas) you may have entered.

If the settings are correct, press the **FWD/ACCEPT** key to move to the **SAVE SETTINGS** screen.

Alternatively:
If the settings are not correct, use the **BACK** key to re-trace your steps and amend any settings you wish to change. Or press the **SEE/JUMP** key to return to the **SETTINGS** screen (see page 22).
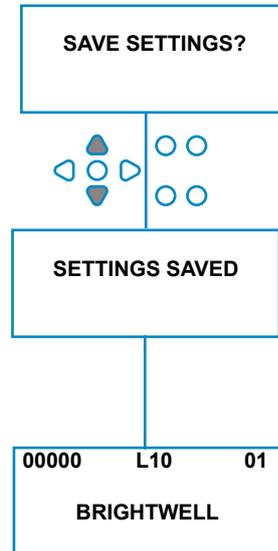
```
┌─────────────────────┐
│ 01 I/P 1234567890   │
│ PUMP 1              │
│ PUMP 2              │
│ PUMP 3              │
└─────────────────────┘

┌─────────────────────┐
│ 01 I/P 1234567890   │
│ PUMP 2              │
│ PUMP 3              │
│ PUMP 4 ■            │
└─────────────────────┘

┌─────────────────────┐
│ 01 I/P 1234567890   │
│ PUMP 3              │
│ PUMP 4 ■            │
│ PUMP 5              │
└─────────────────────┘

┌─────────────────────┐
│   SAVE SETTINGS?    │
└─────────────────────┘
```

SAVE SETTINGS/EXIT PROGRAM MODE

At the **SAVE SETTINGS** screen, press the
FWD/ACCEPT key to confirm and save all of your pro-
grams.

The **SETTINGS SAVED** message will now appear for
a few seconds while the unit overwrites the previous
settings.

The unit will then revert to its operational mode, and
display the default screen.

Note:
If the unit is left in any part of the **PROGRAM MODE**,
with no keys pressed for 30 mins, it will automatically
save the changes and revert to operational mode.

```
┌─────────────────────┐
│                     │
│   SAVE SETTINGS?    │
│                     │
└─────────────────────┘

┌─────────────────────┐
│                     │
│   SETTINGS SAVED    │
│                     │
└─────────────────────┘

┌─────────────────────┐
│ 00000     L10    01 │
│                     │
│     BRIGHTWELL      │
└─────────────────────┘
```

CREATING ADDITIONAL PROGRAMS

Enter the program as described on page 22.

From the **INPUT SELECTION** screen, Press the
PROGRAM key to increment the program number. En-
ter the parameters for additional programs in the same
manor as before (see page 22 to 28).

Note:
With the new Brightlogic software, it is no longer neces-
sary to assign programs in sequential order.

Example:
If the wash room personnel only use two programs on
the host machine, Program 5 - Heavy Soil and Program
9 - Delicates. The Brightlogic unit can be set up with
only two programs, Program 5 for heavy soil and Pro-
gram 9 for delicates.

```
┌─────────────────┐                    ┌─────────────────┐
│  PROGRAM 01     │                    │  PROGRAM 02     │
│  SET INPUT 01   │                    │  SET INPUT 01   │
└─────────────────┘                    └─────────────────┘
```
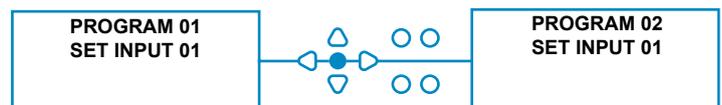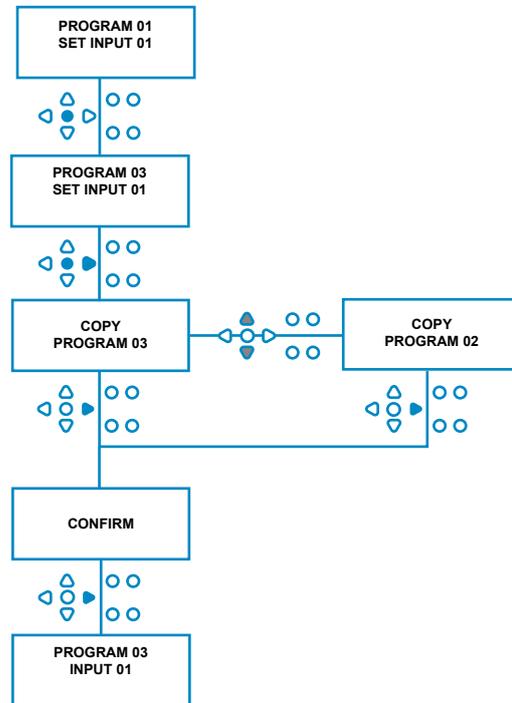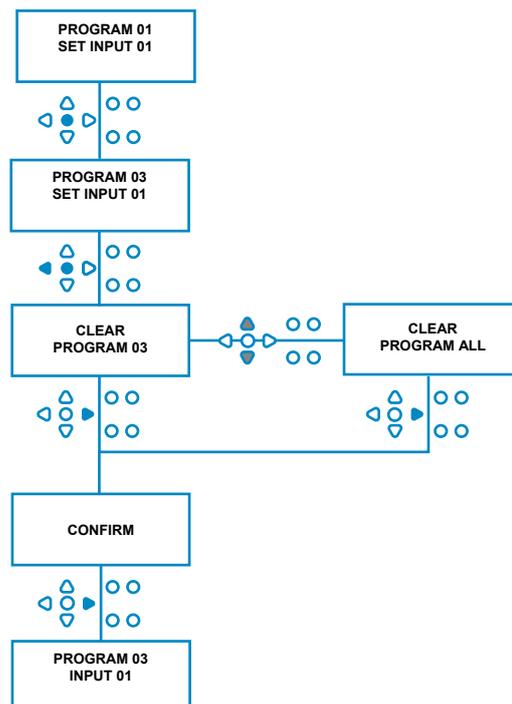
COPYING AN EXISTING PROGRAM

At the **SAVE SETTINGS** screen, press the **FWD/ACCEPT** key to confirm and save all of your programs.

The **SETTINGS SAVED** message will now appear for a few seconds while the unit overwrites the previous settings.

The unit will then revert to its operational mode, and display the default screen.

Note:
If the unit is left in any part of the **PROGRAM MODE**, with no keys pressed for 30 mins, it will automatically save the changes and revert to operational mode.

```
           ┌─────────────────────┐
           │     PROGRAM 01      │
           │    SET INPUT 01     │
           └─────────────────────┘

           ┌─────────────────────┐
           │     PROGRAM 03      │
           │    SET INPUT 01     │
           └─────────────────────┘

           ┌─────────────────────┐        ┌─────────────────────┐
           │       COPY          │        │       COPY          │
           │    PROGRAM 03       │────────│    PROGRAM 02       │
           └─────────────────────┘        └─────────────────────┘

           ┌─────────────────────┐
           │      CONFIRM        │
           └─────────────────────┘

           ┌─────────────────────┐
           │     PROGRAM 03      │
           │      INPUT 01       │
           └─────────────────────┘
```

DELETING AN EXISTING PROGRAM

Enter the program as described on page 20.

From the **INPUT SELECTION** screen, Press the **PROGRAM** key to increment the program number. Enter the parameters for additional programs in the same manor as before (see page 20 to 26).

Note:
With the new Brightlogic software, it is no longer necessary to assign programs in chronological order.

Example:
If the wash room personnel only use two programs on the host machine, Program 5 - Heavy Soil and Program 9 - Delicates. The Brightlogic unit can be set up with only two programs, Program 5 for heavy soil and Program 9 for delicates.

```
           ┌─────────────────────┐
           │     PROGRAM 01      │
           │    SET INPUT 01     │
           └─────────────────────┘

           ┌─────────────────────┐
           │     PROGRAM 03      │
           │    SET INPUT 01     │
           └─────────────────────┘

           ┌─────────────────────┐        ┌─────────────────────┐
           │      CLEAR          │        │      CLEAR          │
           │    PROGRAM 03       │────────│    PROGRAM ALL      │
           └─────────────────────┘        └─────────────────────┘

           ┌─────────────────────┐
           │      CONFIRM        │
           └─────────────────────┘

           ┌─────────────────────┐
           │     PROGRAM 03      │
           │      INPUT 01       │
           └─────────────────────┘
```

CYCLE & RUN TIME COUNTERS

The **CYCLE COUNTERS** mode allows the user to view the run time and cycles information for each pump. The total number of cycles performed by the unit can also be viewed.

At each screen, the **UP** and **DOWN** keys can be used to toggle between the **RUN TIME** and **CYCLES** counters.

All of the counters can be individually reset to "zero" by holding down the **UP** and **DOWN** keys together.

Note:
By resetting the "Total Cycles" counter, all other counters will be reset.

Accessing:
Access the **CYCLE COUNTERS** mode as described on (page 37).

From the **CYCLE COUNTERS** screen, press the **FWD/ACCEPT** key once to view the **TOTAL CYCLES** screen.

TOTAL CYCLES- (run by a specific program)The display will default to program 01, however other programs can be selected by pressing the **PROGRAM** key. Press the **FWD/ACCEPT** key again to view the **TOTAL RUN TIME/CYCLES** screen.

TOTAL RUN TIME/CYCLES- (run by each pump)
Use the **FWD/ACCEPT** key to cycle through all of the pumps. Once all pumps have been viewed, press the **FWD/ACCEPT** key again to view the RUN TIME/CYCLES screen.

RUN TIME/CYCLES- (per program)
The display will default to the program that was selected at the total cycles screen. Other programs can be selected by pressing the **PROGRAM** key.
Press the **FWD/ACCEPT** key to cycle through the pumps. Once all of the pumps have been viewed, press the **FWD/ACCEPT** key to return the unit to service.

Counter Maximums:
Cycles = 50,000
Run-time = 49,000Hrs 59Mins
Chemical Dosage = 50,000 litres= 50,000 fl/oz

Note:
If a Flowrate has been set instead of a Pump Speed, the unit will display **TOTAL FLOW QUANTITY** instead of **RUN TIME**
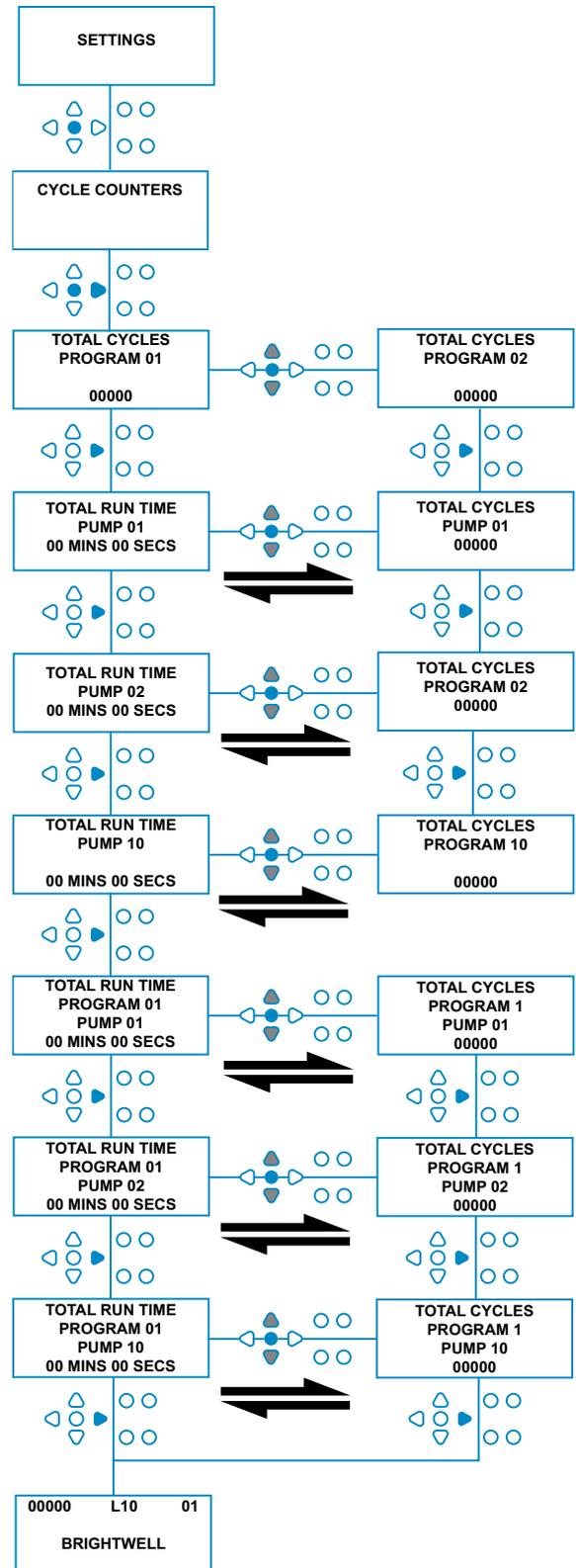
ACCESSING RELAY MODE

The Brightlogic unit will default to its "Standard" operational mode.

However, if the host machine is "Intelligent" (ie. computer controlled), it may be preferable to use the **RELAY** mode.

(Descriptions of both of the unit's operational modes can be found on page 6)

To access the RELAY mode:
From the default screen (see opposite) hold down the **TEST** key, then press the **SEE/JUMP** keys for 2 seconds.

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 (as shown on page 22).

Use the **UP** and **DOWN** keys to toggle between the two operational modes.
Once the required operational mode is displayed, press the **FWD/ACCEPT** key to confirm your selection.

The selected mode will be displayed on screen briefly, while the unit changes mode.

The unit will then revert to the default screen for the selected mode (see opposite).
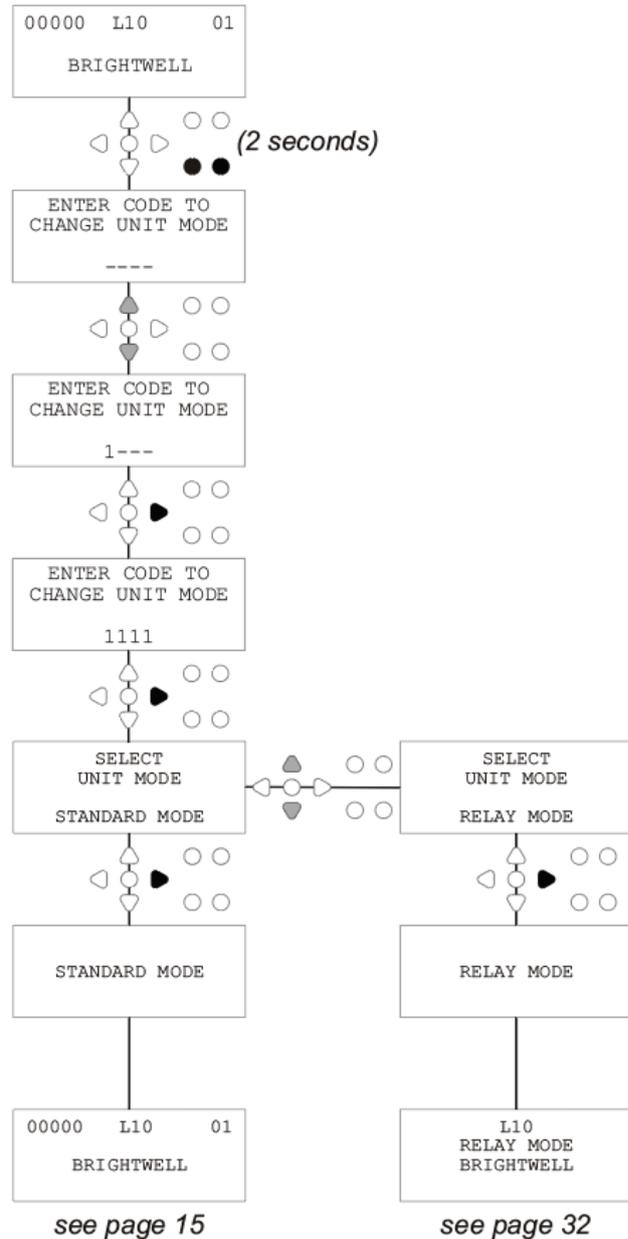
RELAY MODE

Access the program mode by entering the four-digit security code (see page 22).

Assign the pumps to the required manifolds (see page 23). Press the **FWD/ACCEPT** key to confirm and move to the next screen.

Set the Flush Valve Mode and Flush Time - if required (see pages 23-25).
Press the **FWD/ACCEPT** key to confirm and move to the next screen.

The Brightlogic software allows the user to program each pumo with a flowrate instead of a pump speed.
This is so the counters will display a **TOTAL DOSAGE** *rather than a* **TOTAL RUN TIME***.*

Flowrate:
Measure and set both the flowrate for the displayed pump, and the date (see page 26).
Press the **FWD/ACCEPT** key to confirm and move onto the **TOTAL RUN TIME** screen for that pump.

Pump speed:
Set the speed required for the displayed pump (see page 25). Press the **FWD/ACCEPT** key to confirm and move onto the **RUN TIME** screen for that pump.

As the **TOTAL RUN TIME** screen, press the **UP** and **DOWN** keys to toggle between the **TOTAL RUN TIME** (or **CHEMICAL DOSAGE** if a flow rate has been set), and **TOTAL CYCLES**. These counters can be "zeroed" by simultaneously holding down the **UP** and **DOWN** keys.

Press the FWD/ACCEPT key to confirm and move on to the settings for the next pump.

Set the speeds for the remaining pumps in the same way as above.
When all of the pumps have been programmed, the **SAVE SETTINGS**? Prompt will appear.
Press the **FWD/ACCEPT** key to confirm the settings and return the unit to service.

Alternatively:
If the settings are not as you want, use the **BACK** key to retrace your steps and amend any settings you wish to change.
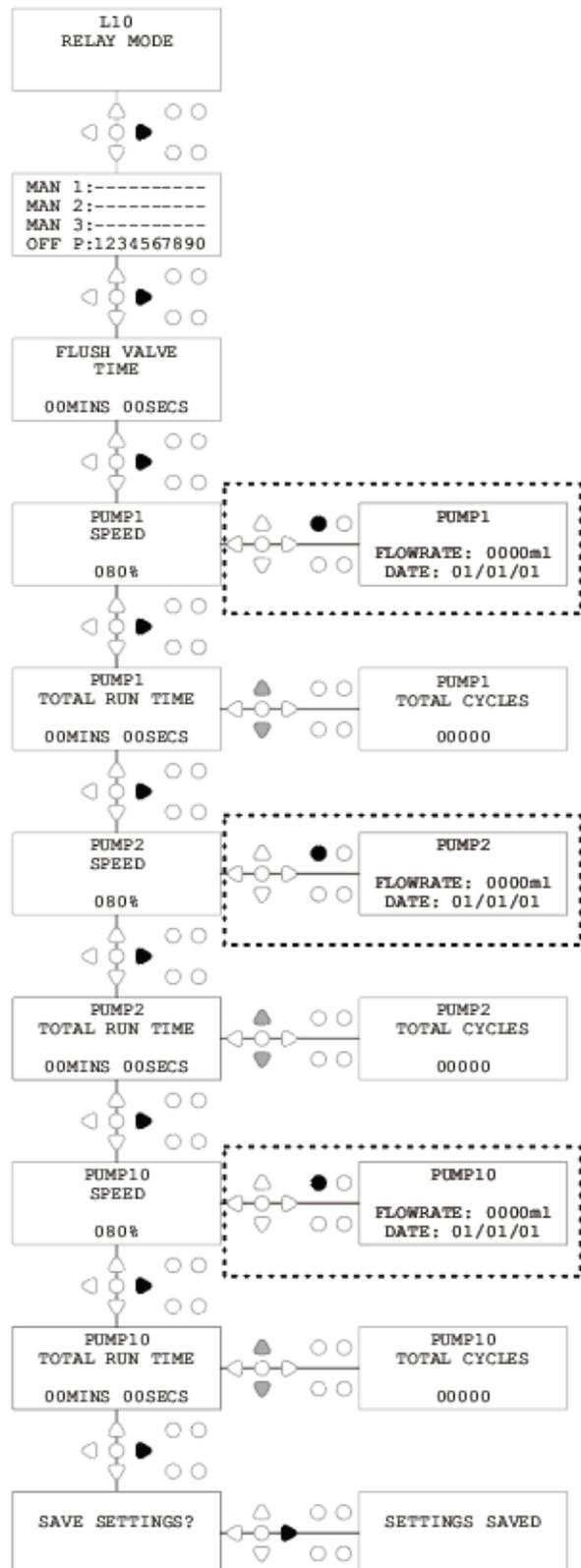
ACCESSING LEVELS MODE

The BrightLogic unit will default to its "Standard" operational mode.

(Descriptions of both of the unit's operational modes can be found on page 6)

To access the LEVELS mode:
From the default screen (see opposite) hold down the **TEST** key, then press the **SEE/JUMP** keys for 2 seconds.

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 (as shown on page 22).

Use the UP and DOWN keys to toggle between the two operational modes.
Once the required operation mode is displayed, press the FWD/ACCEPT key to confirm your selection.

The selected mode will be displayed on the screen briefly, while the unit changes mode.

The unit will then revert to the default screen for the selected mode (see opposite).

For programming LEVELS MODE please go to PAGE 22
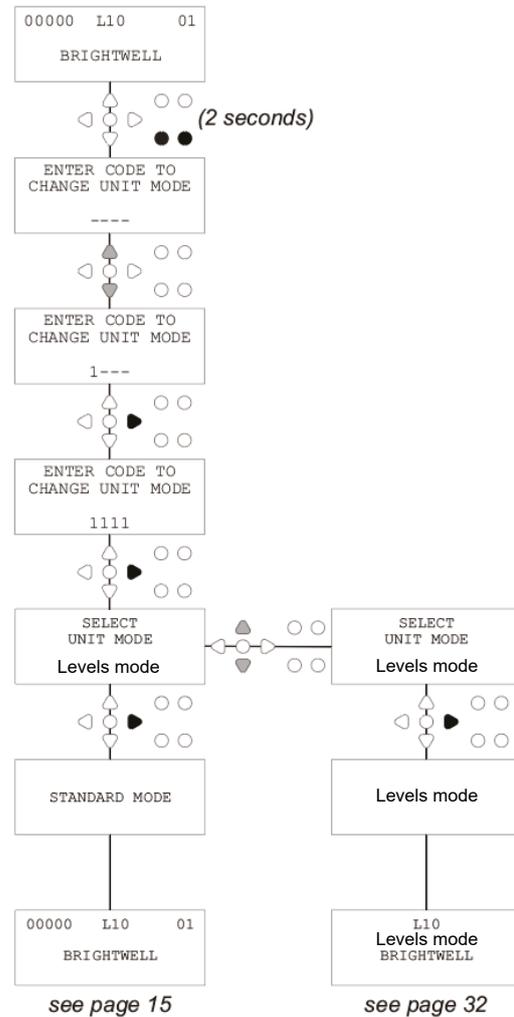
WIRELESS USB SETTINGS

From the default screen, press the **FWD/ACCEPT** key.

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/confirm.

Press **UP** and **DOWN** to select the "Wireless USB settings" option, and press **FWD/ACCEPT** to accept and move on the next screen.

Press **UP** and **DOWN** to select your desired RF channel and then press **FWD/ACCEPT** to accept and return to the default screen.

NOTE: *If there is more than one unit in close proximity all the units will need to be set to different RF channels. This will prevent settings being written to the wrong unit.*

If a Bluetooth device is attached to the RS232 output on the PCB the Bluetooth channel select menu will appear after the RF channel.

For further information on Wireless USB settings and installation see instruction manual B989.
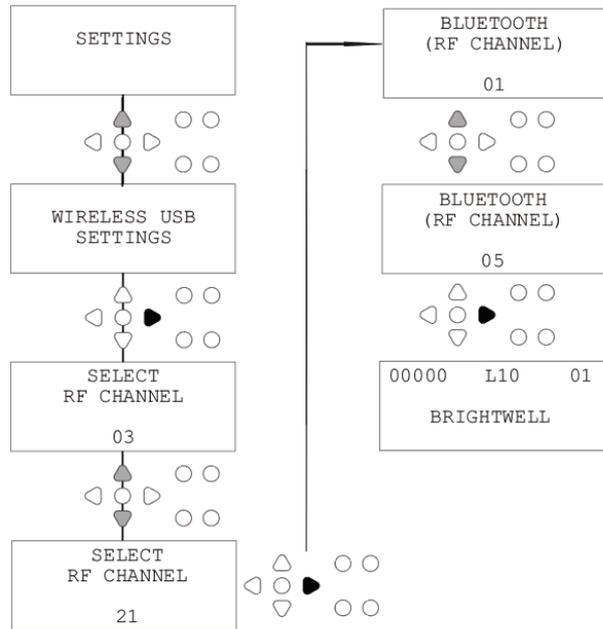
FROM THE UNIT

To prime the pumps from the Keypad, press the **PRIME** key to display the Prime Mode screen.

Use the **UP** and **DOWN** keys to select the pump that you wish to prime.

Press and hold the **PROGRAM** key to prime the selected pump. Use the **UP** and **DOWN** keys to select the next pump that you wish to prime, and repeat as above.

Once all of the pumps have been primed, press the **PRIME** key to return the unit to service.
(The unit will return to service automatically if no keys are pressed for 10 seconds)

Alternatively:
If the pumps are connected to a manifold then the **FLUSH VALVE PRIME** may be enabled.
At the **PRIME** screen, press the **TEST** key once, the "**FV PRIME ENABLED**" text will appear on screen and the allocated flush valve will prime with the pump.
(Alternatively, press and hold the **TEST** key for 2 seconds to prime all flush valves independently of the pumps)

Note:
This feature can be disabled from the TEST MODE (see page 44).
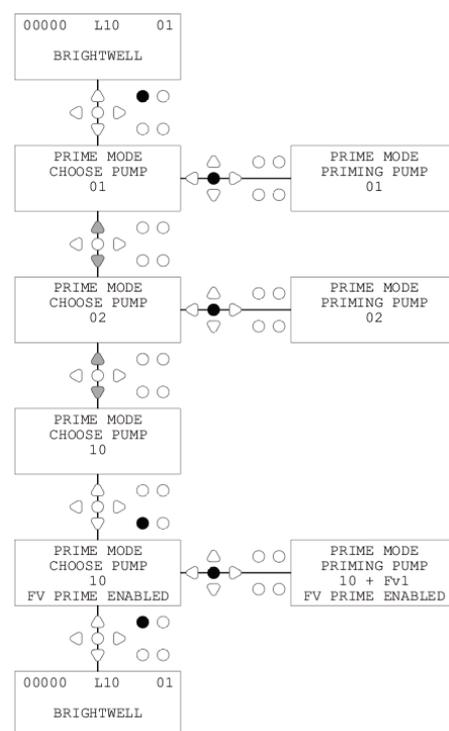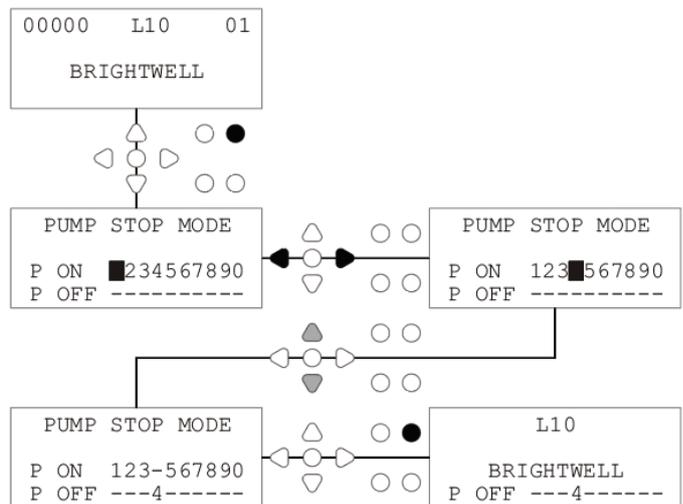
STOPPING THE PUMPS

All pumps can be individually stopped from the keypad.
Press the **PUMP STOP** key to display the **PUMP STOP MODE** screen.

Use the **FORWARD/ACCEPT** and **BACK** keys to highlight the pump that needs to be turned off/on.
Use the **UP/DOWN** keys to change the position of the pumps cursor to the "**ON**" or "**OFF**" rail.

Press the **PUMP STOP** key to return to the default screen.
(The unit will return to service automatically if no keys are pressed for 10 seconds)
Any pumps that are **OFF** will be displayed, flashing, at the bottom of the default screen.

Note:
This feature can be disabled from the **TEST MODE** (see page 44).

```
00000    L10      01

      BRIGHTWELL
```

```
PUMP STOP MODE

P ON  ■234567890
P OFF ----------
```

```
PUMP STOP MODE

P ON   123■567890
P OFF ----------
```

```
PUMP STOP MODE

P ON   123-567890
P OFF ---4------
```

```
         L10

       BRIGHTWELL
P OFF ---4------
```

VIEW MODE

All pumps can be individually stopped from the keypad.
Press the **PUMP STOP** key to display the **PUMP STOP MODE** screen.

Use the **FORWARD/ACCEPT** and **BACK** keys to highlight the pump that needs to be turned off/on.
Use the **UP/DOWN** keys to change the position of the pumps cursor to the "**ON**" or "**OFF**" rail.

Press the **PUMP STOP** key to return to the default screen.
(The unit will return to service automatically if no keys are pressed for 10 seconds)
Any pumps that are **OFF** will be displayed, flashing, at the bottom of the default screen.

Note:
This feature can be disabled from the **TEST MODE** (see page 44).

```
00000    L10      01

      BRIGHTWELL
```

```
    SETTINGS
```

```
  CYCLE COUNTERS
```
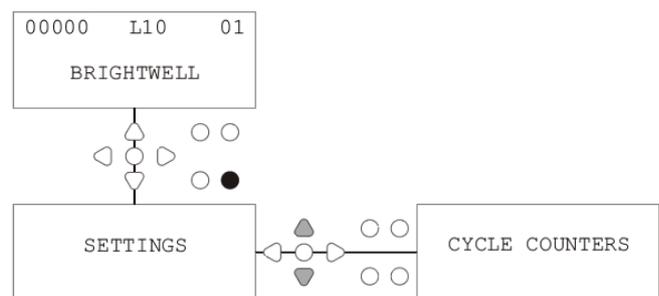
PULSE TEST

In order to check that all of the required inputs are receiving signals (and to test for inputs which are receiving multiple signals), The BrightLogic software provides a **PULSE TEST** screen.
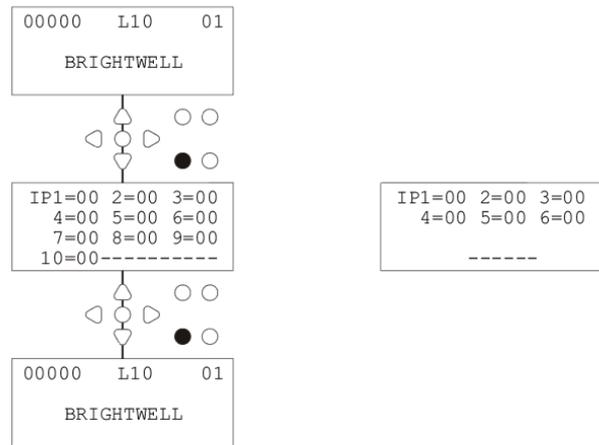
To Access:
From the default screen, press the **TEST** key.

The screen will display a numerical counter for each of the inputs, which will show the number of signals which have been accepted on each input (i.e Signals, which exceed the signal acceptance time), up to the selected pulse count.
i.e. If the pulse count is set to 01, the first signal will be displayed, all others will be ignored until the unit has reset. If the pulse count is set to "**ALL**", every signal will be counted.

All of the counters will reset when the unit does (see page 37).

The screen will also show the unit receiving signals in "real time", via the 10 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.

To return to the default screen, press the **TEST** key again.

```
00000    L10      01

    BRIGHTWELL
```

```
IP1=00  2=00  3=00
  4=00  5=00  6=00
  7=00  8=00  9=00
 10=00----------
```

```
IP1=00  2=00  3=00
  4=00  5=00  6=00

     ------
```

```
00000    L10      01

    BRIGHTWELL
```

SOFTWARE/SERIAL NUMBER

In order to view the unique serial number of the unit, along with the BrightLogic software version number and RF channel:
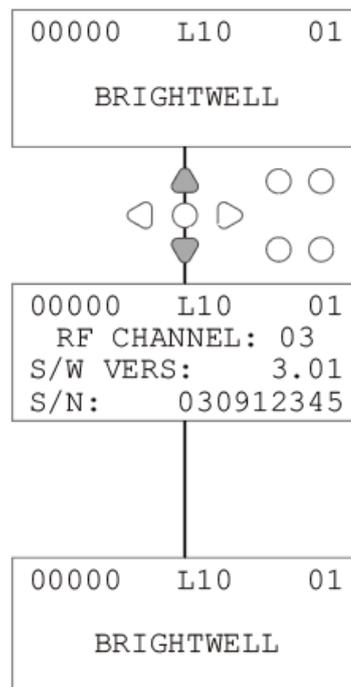
From the default screen, press either the UP or DOWN key.

The display will change to show the : -

RF Channel (selected channel)

S/W VERS: (software version number)

S/N: (Units unique serial number)

The unit will return to the default screen after 5 seconds.

```
00000    L10      01


    BRIGHTWELL
```

```
00000    L10      01
  RF CHANNEL: 03
S/W  VERS:     3.01
S/N:      030912345
```

```
00000    L10      01


    BRIGHTWELL
```

TEST MODE - (INCL. DISABLING PUMP STOP & PRIME)

To access the **TEST MODE**, first de-power the unit.
Then, while holding down the **TEST** key, power the unit
back up.
When the unit has initiated, it will be in **TEST MODE**.

To check the keypad is functioning correctly:

Press each button in turn, and its function will appear on
the display, indicating that the key is working.
Each key will function as normal, if held down for two
seconds.

To check the unit is functioning as desired:

Press and hold the **TEST** key for 2 seconds, and the
PULSE COUNT/SIGNAL screen will be displayed. The
inputs can then be triggered, and will display if a signal is
present. If a signal is present for more than one second,
the pump will run for 2 seconds and the pulse counter will
increment by one.

To disable the **PUMP STOP** mode:

When in **TEST MODE**, hold down the **FWD/ACCEPT** key
for 2 seconds.
Input the security access code as normal.
The **PUMP STOP - DISABLE** screen will be shown.

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.

To exit the **TEST MODE**, de-power the unit, then power it
back up as normal.
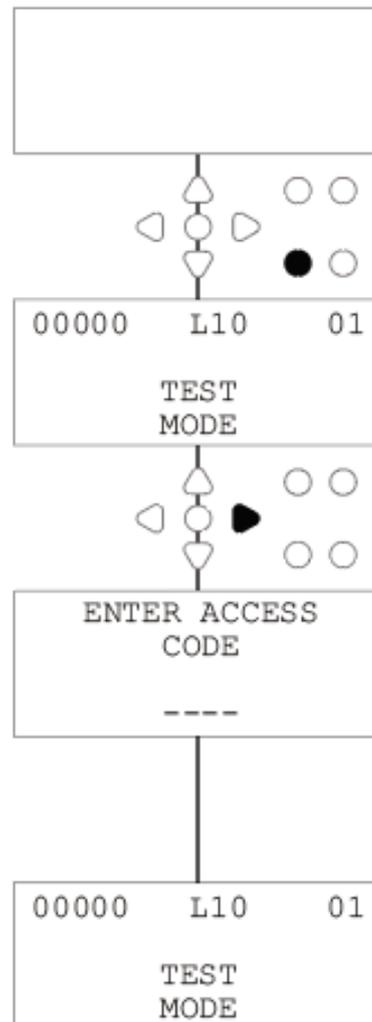
GLOSSARY

Signal Acceptance - Length of time that a signal must be present on an input before it is acknowledged.

Flush Valve - 24V DC output to control a Flush Solenoid (maximum 36W). This output is active throughout the operation of any pump.

Delay Time - Adjustable time period between a signal being acknowledged and a pump beginning its operation.

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

Flowrate - The speed at which product is dispensed from a pump. Specified in ml/min.

Run-Time - Adjustable time period for which a pump will operate.

Dosage - The volume of product which is required to be dosed into a wash cycle be each pump.

Pulse - Signal number that a pump is to operate on. Pulse counter returns to zero when the unit resets.

Reset Delay - Adjustable time period at the end of the wash cycle before the dispenser resets. The Reset Delay begins after the operation of the final pump (ie: Pump 8, on an 8-Pump unit).

Relay - Operational mode allowing the Pumps to run as if they were directly driven from the input signals.

Safety Stop - Water sensor input to detect the presence of water within a Manifold.

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

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

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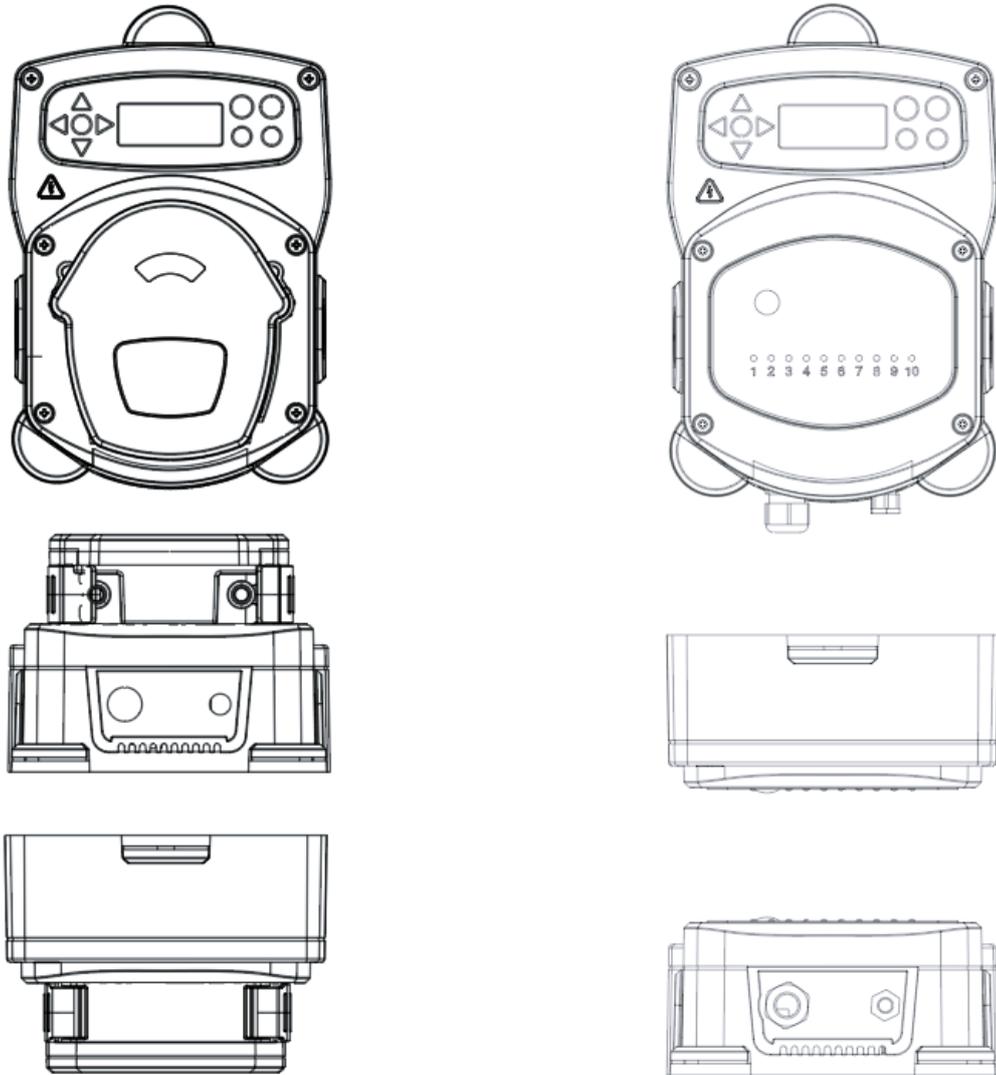
SPECIFICATION - L UNIT

Power Supply	Voltage						100V to 240V AC
	Frequency						50 - 60Hz
	Current	Logic		@240V L2 - 0.14A L4 - 0.16A L6 - 0.27A			
						L8 - 0.38A L10 - 0.50A	

Power							
SUPPLY	MODEL	MAX	SUPPLY	MODEL	MAX	SUPPLY	MODEL	MAX
WL2	2 PUMP	31.2W	WH1	1 PUMP HF	31.2W	WHD1	1 PUMP MEM	31.2W
WL4	4 PUMP	31.2W	WH2	2 PUMP HF	51.2W	WHD2	2 PUMP MEM	51.2W
WL6	6 PUMP	51.2W	WH4	4 PUMP HF	91.2W	WHD4	4 PUMP MEM	91.2W
WL8	8 PUMP	71.2W	WH6	6 PUMP HF	111.2W	WHD6	6 PUMP MEM	111.2W
WL10	10 PUMP	91.2W	WH8	8 PUMP HF	131.2W	WHD8	8 PUMP MEM	131.2W

Output	Flush Valve	24V DC, 1.25A (30W) MAX.
	Buzzer/Lamp	24V DC, 500mA (10W) MAX.
Fusing		Resettable 0.55A
Motor		Brushless - 24V DC, 600mA
Pump		6.4mm Silicone - 100% = 350ml/min / 30% = 102ml/min
		(Flowrate taken using water)
Enclosure		GFPP - IP44
Weight (approx.)	Logic	L2 - 2.1Kg L4 - 2.3kg L6 - 3.4kg
		L8 - 4.5kg L10 - 5.6kg

● IEC 60335-1:2010+A2:2016 ● IEC 60335-1:2010+A2:2016 ● EN 62311:2008 ● EN 61000-3-2:2019 ● EN 61000-3-3:2013+A1:2019

● EN 61000-6-1:2019 ● EN 61000-6-3:2007+A1:2011 ● ETSI EN 301 489-1 V2.2.3 ● ETSI EN 301 489-17 V3.2.4
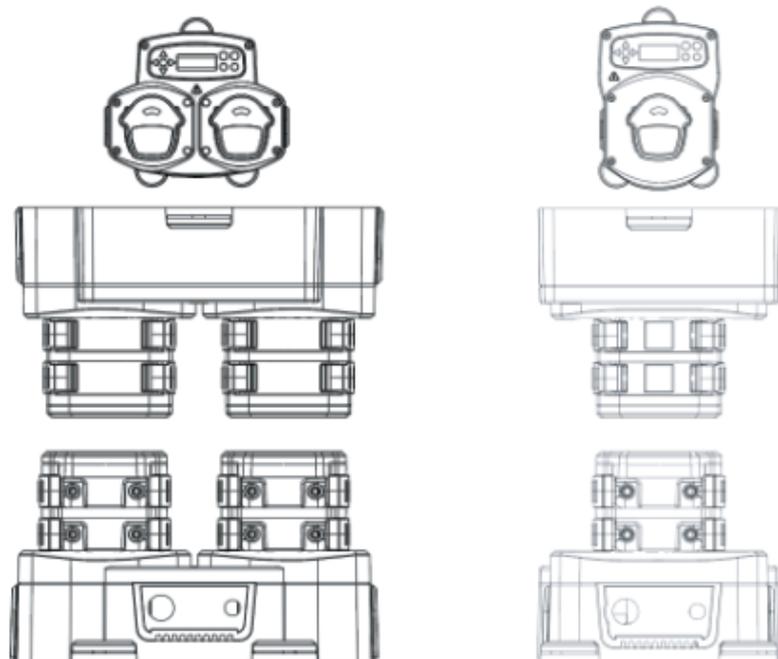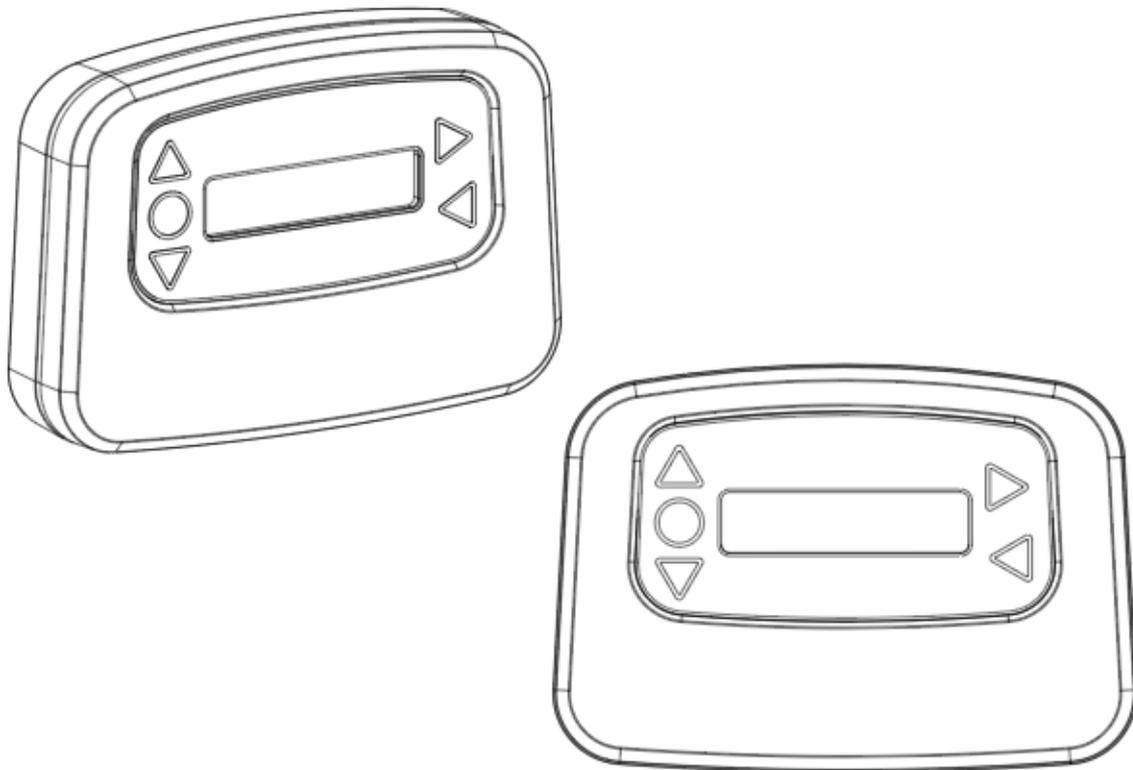
SPECIFICATION - L/H UNIT

SPECIFICATION - FORMULA SELECT

Power Supply	Voltage	24V DC (supplied by unit)
Display		16 x 2 LCD display
Enclosure		GFPP
Weight (approx.)		Module - 0.3kg (including cable)
Cable		6 Core > Length = 10 Metres

SPECIFICATION

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

IRL Leave it at a local civic waste collection point.

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

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

Schützen Sie die Umwelt !
D 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).

ii Participe en la conservación del medio ambiente !!
E 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 Of iciales Post Venta donde será tratado de forma adecuada.

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

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

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

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

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

W tym celu należy je dostarczyć do wyznaczonego punktu zbiórki.

Podilejme se na ochrane životniho prostředi !
CZ Váš přístroj obsahuje četné zhodnotitelné nebo recyklovatelné materiály.

Sveřte jej sbernému mistu nebo, neexistuje-li, smluvnimu servisnimu středisku, kde a nim bude naloženo odpovidajicim způsobem.

NOTES

Guarantee

All Brightwell dispensers are guaranteed for two years
from the 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 manufacturers Health and
Saftey instructions when using chemicals.

Technical and Design specifications

Specifications within this catalogue are subject to
alteration without notice.