

# Quantura Warewash Dosing System

## Safety Notes

### IMPORTANT:

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.



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



**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.



**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.



**Never** insert fingers into mechanisms without turning the power supply off first.



**Do not** dismantle or modify this equipment.



**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 pump head.



**Always** ensure that care is taken when handling chemicals.



**Do not** discard of the manual, this must be retained.

This unit must be installed by suitably qualified personnel in accordance with local regulations, or in the absence of local regulations, 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.

## Before Installation

Ensure you have checked all parts required are present and inspect for any damage before installation. In the unlikely event your items are faulty, **DO NOT** install faulty or damaged parts as this unsafe and will void any warranty. Please return to your distributor in the original delivery condition including any packaging. This unit is **ONLY** to be installed by a suitably qualified person complying with local regulations.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Quantura 200, 200s

Peristaltic tubing x 2

Tube Stiffener x 2

Rinse Injector x1

Tank Injector x 1

Polyethylene Tubing 3000mm x 2

Fixings Pack: Screws x 4 Wall plugs x4

Full User Manual available from the website [www.brightwell.co.uk](http://www.brightwell.co.uk)



## Installation

### Mounting and connection

**Step 1:** Using the wall plugs and screws specified for this unit, fix the mounting bracket to the wall. There is an embedded spirit level to aid with this part of the installation.

**Step 2:** Mount the unit to the wall by hooking it onto the wall bracket. **Please note:** If you are connecting a **third** pump refer to the additional manual supplied with the unit before securing both units to the wall.

**IMPORTANT NOTE:** The main unit **MUST** have a security fixing retaining it to the wall before the unit lid is closed.

**Step 3:** Ensure there is no power to the unit or it is in standby mode. Remove front cover by turning thumb screws anti-clockwise and pulling the front cover towards you as shown.

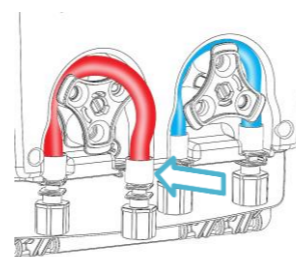
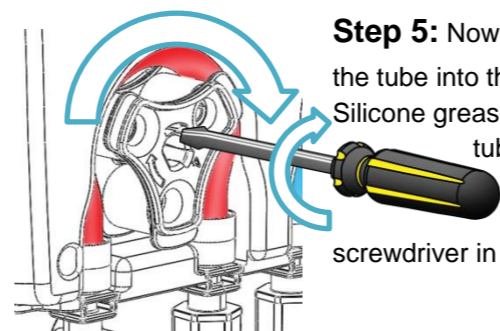
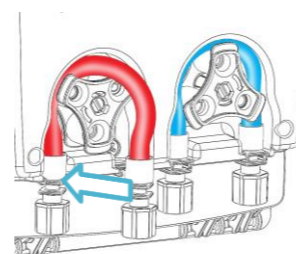
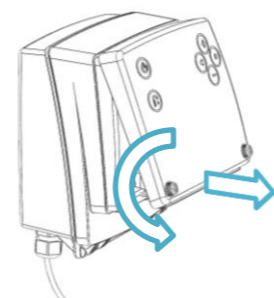
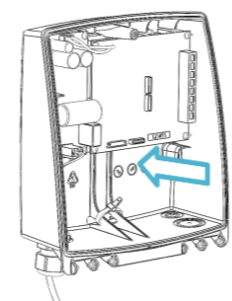
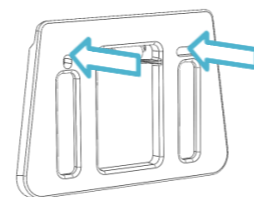
**Step 4:** Insert one end of the tube ensuring that it is slotted into the body of the enclosure as shown.

**PLEASE NOTE:** For the variants **Q200S** and **Q300S** pump 1 is replaced with a **solenoid** valve. This is intended to have a permanent connection to the water supply.

**Step 5:** Now by manually rotating the pump head, feed the tube into the unit as shown. **TIP** use some HT5 Silicone grease on the outer of the tube to help ease the tube in and prevent any snagging. There is also a flat head screw driver slot on the end of the spindle. Turn this with a screwdriver in a clockwise direction to assist installation.

**Step 6:** Now insert the other end of the tube ensuring that it is slotted into the body of the enclosure as shown (Repeat steps 1-4 for the other pump head).

**IMPORTANT INFORMATION:** Brightwell Dispensers Ltd (manufacturer) accepts no responsibility and/or damages caused to either the product or premises if the installation process is not complied with in full.



## Wiring Configurations

### Mains Power Supply

Connect White and Black cores of the two core cable to a maximum 240V AC source that is constantly energised when dishwasher is switched on e.g. the live (1 amp fused) and neutral of the dishwasher's on/off switch.

### Probe Mode

**Probe Trigger Signal:** Connect Red and Black cores of the multi core cable to 24 – 240V AC/DC to wash pump or dedicated detergent signal. Common can be connected with the main neutral.

**Rinse Trigger Signal:** Connect White and Yellow cores of the multi core cable to 24 – 240V AC/DC to rinse valve or dedicated rinse signal. Common can be connected with the main neutral.

### Probeless Door Mode

**Detergent Trigger Signal:** Connect Red and Black cores of the multi core cable to 24 – 240V AC/DC to wash pump or dedicated detergent signal. Common can be connected with the main neutral.

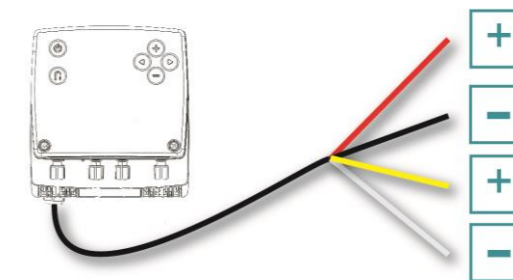
**Rinse Trigger Signal:** Connect White and Yellow cores of the multi core cable to 24 – 240V AC/DC to rinse valve or dedicated rinse signal. Common can be connected with the main neutral.

### Probeless Tunnel Mode

**Detergent Trigger Signal:** Connect Red and Black cores of the multi core cable to 24 – 240V AC/DC to wash pump or dedicated detergent signal. Common can be connected with the main neutral.

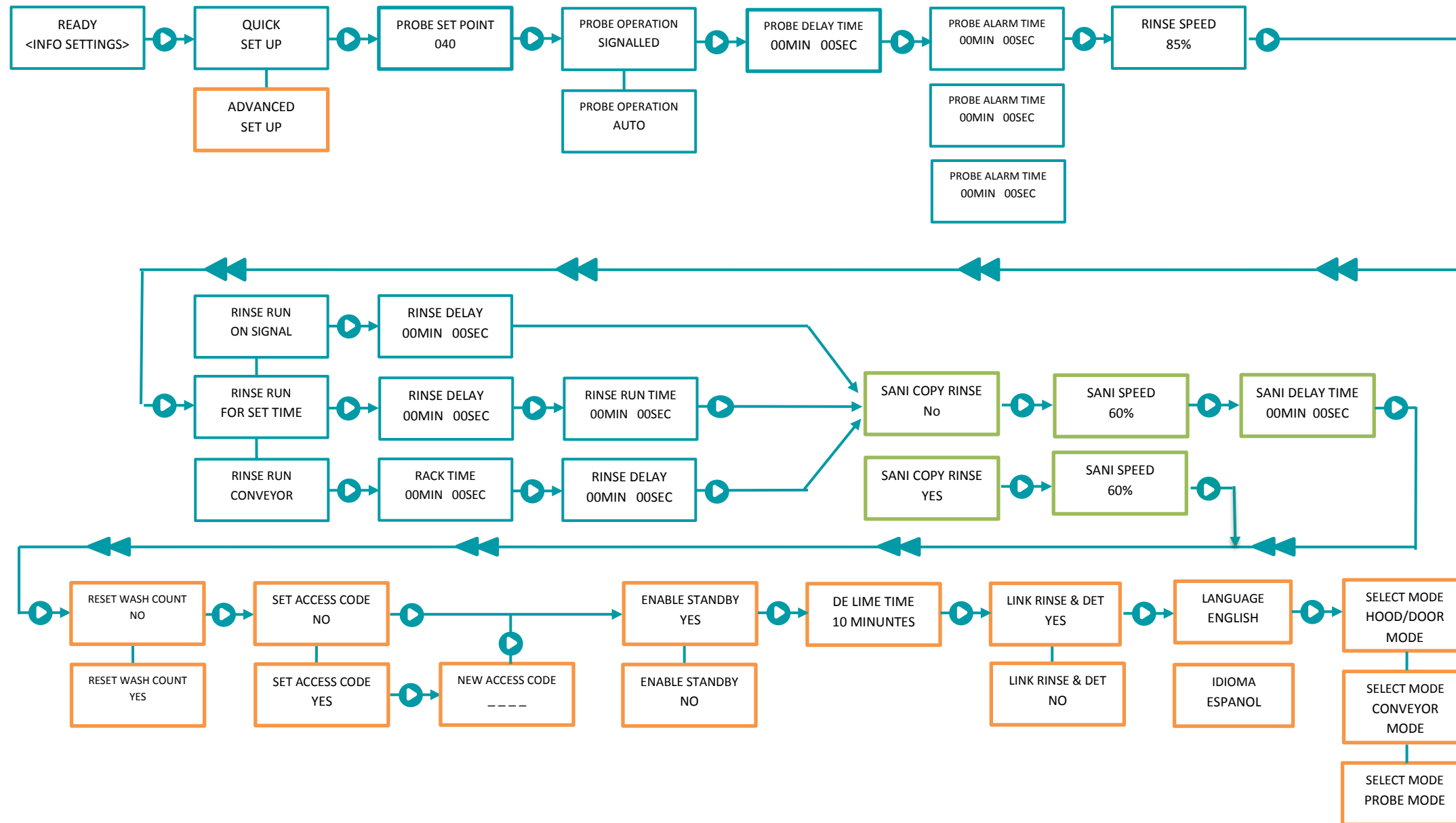
**Rinse Trigger Signal:** Connect White and Yellow cores of the multi core cable to 24 – 240V AC/DC to rinse valve or dedicated rinse signal. Common can be connected with the main neutral.

Refer to full manual for further information, available to download at [www.brightwell.co.uk](http://www.brightwell.co.uk)



## Probe Mode

BLUE - SCREENS VISIBLE IN QUICK SET UP MODE  
 BLUE & ORANGE – SCREENS VISIBLE IN ADVANCED SET UP MODE  
 GREEN – SCREENS ONLY VISIBLE WHEN A 3<sup>RD</sup> PUMP IS CONNECTED



## Programming

It is recommended to use ADVANCED SET UP when first installing the Quantura dosing pump. Quick set up can be used to make small adjustments as and when necessary.

**Step 1:** Probe set point. Choose the set level at which the dosing pump will work to. When the value measured by the probe is less than this value the pump will dose until the level is met.

**Step 2:** Probe operation: **SIGNALLED** the pump will only activate if a dosing signal is present on the DET input and the concentration level is lower than PROBE SET POINT. **AUTO** the pump will dose as soon as the concentration drops below the PROBE SET POINT without the need for a signal.

**Step 3:** Probe delay. This is an initial delay that will only activate on power up of the unit. This feature is used to prevent the probe dosing before the machine has filled the wash tank.

**Step 4:** Probe alarm time. This feature is used to stop the pump dosing if it has been running for longer than the time set. This will prevent the pump overdosing in the case that the chemical has run out or the machines tank is not filling.

**Step 5:** Rinse options:  
**RINSE FOR SET TIME** allows the rinse pump to be programmed for a set period of time which will activate when a signal is received on the rinse input.

**RINSE ON SIGNAL** allows the rinse pump to run for the duration a signal is present on the rinse input.

**RINSE CONVEYOR** includes a RACK TIME screen which is used to calculate the wash count. The rinse operation is to operate for the duration a signal is present on the rinse input.

**Step 6:** Sani copy rinse. By selecting Yes, the sanitiser will run proportional to the rinse pump with selectable sanitizer speed. By selecting NO, the sanitiser needs to have its own run time and delay time programmed and the pump will be initiated by a signal to the sanitiser input.

### Key Notes:

**Enable Standby** – By selecting YES the standby feature will be active from the home screen and will put the unit into a standby state where no pumps will operate until the unit is put back into normal state.

By selecting NO the standby button will become redundant.

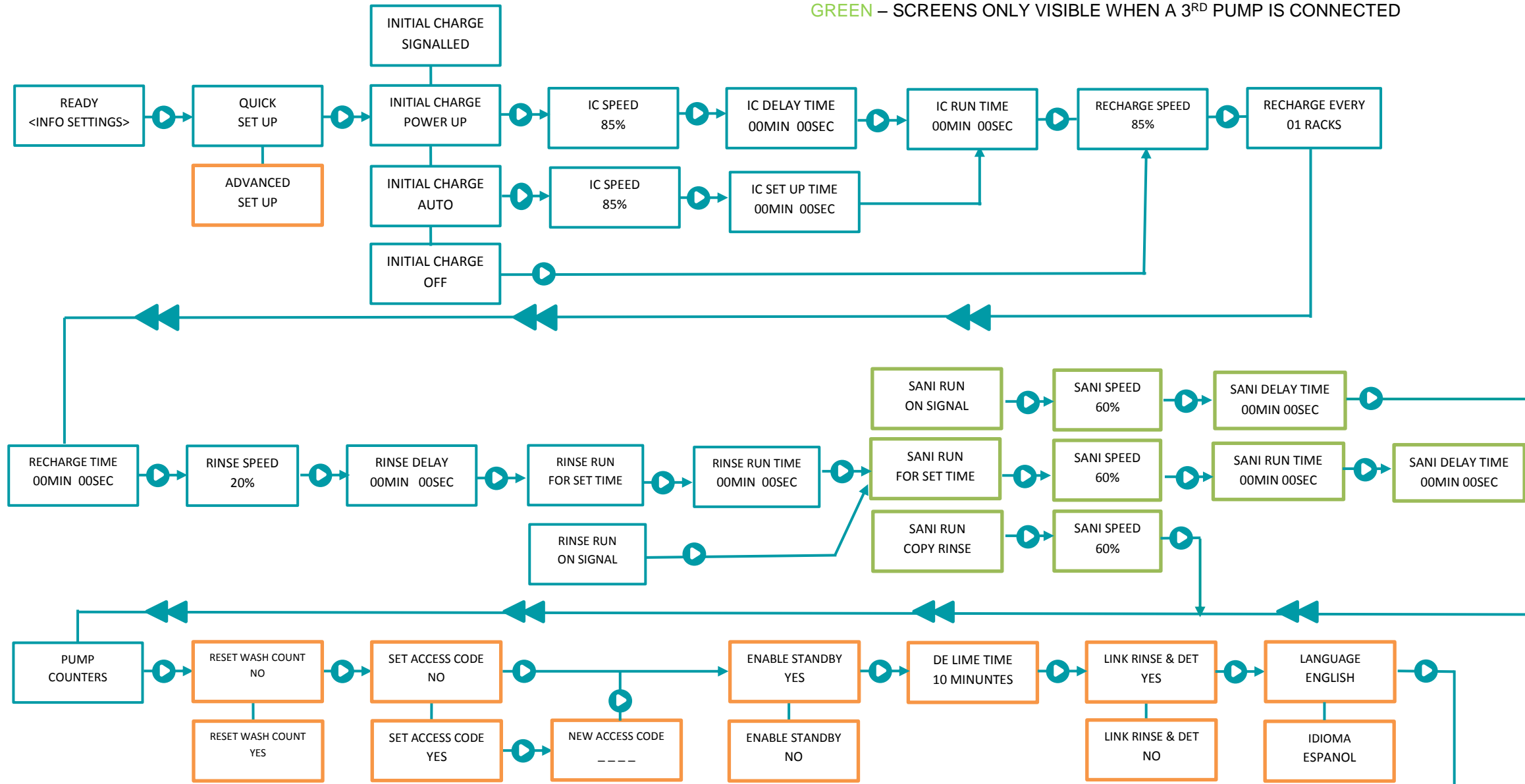
**DE LIME TIME** – De lime allows the pump to go into a sleep mode for the period of time programmed (OFF or 1 – 99minutes). After the time expires the unit will return to a normal working state. To activate de lime function, HOLD down the standby button for 3 seconds when the unit is on the home screen.

**Link Rinse & Det:** When YES is selected only 1 signal will need to be connected to the host machine to trigger both Detergent and Rinse top ups. When NO is selected a separate Rinse signal will need to be connected to the rinse input from the host machine and a Separate Detergent signal will need to be connected to the Detergent input from the host machine.

**Probe Alarm Reset** – **Manual** the Standby button needs to be pressed to reset the alarm when activated. **Auto** the unit will automatically reset itself if it detects an increase in concentration in the wash tank.

## Probeless Door Mode

BLUE - SCREENS VISIBLE IN QUICK SET UP MODE  
 BLUE & ORANGE – SCREENS VISIBLE IN ADVANCED SET UP MODE  
 GREEN – SCREENS ONLY VISIBLE WHEN A 3<sup>RD</sup> PUMP IS CONNECTED



## Programming

It is recommended to use ADVANCED SET UP when first installing the Quantura dosing pump. Quick set up can be used to make small adjustments as and when necessary.

**Step 1: Initial charge:** This is the dose of Detergent that will occur when the machine fills from empty.  
**Power Up:** Initial charge will take place when mains power is applied to the unit. Standby will not initiate the initial charge.

**Signalled:** A signal to the Initial charge input is required to activate the initial charge.

**OFF:** No initial charge will occur.

**Auto:** Offers the use of a single signal to activate the initial charge, top up charge and rinse charge. A single signal from the rinse solenoid can be taken to the rinse input of the Controller board; the top up & rinse charges are initiated by the signal becoming 'high'. The initial charge is initiated by the signal remaining 'high' for the duration of the programmed Initial charge 'Set Up Time'.

**Step 2: Recharge Every.** This is a pulse count for detergent pump. Set to 01 the detergent pump will operate on every signal received. Set to 02 the detergent will operate every other signal that is received.

**Step 3: Recharge Run time.** Programmable time in which the pump will run when a signal is received on the detergent input.

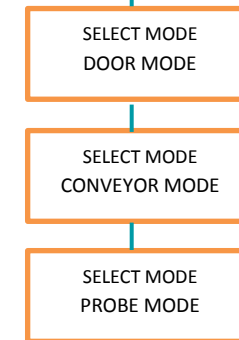
**Step 4: Rinse Delay.** Rinse delay allows the rinse pump to be delayed for a programmable amount of time from the point where the rinse signal is received to the rinse input. The pump will operate once the delay time has expired.

**Step 5: Rinse options:**

**RINSE FOR SET TIME** allows the rinse pump to be programmed for a set period of time which will activate when a signal is received on the rinse input.

**RINSE ON SIGNAL** allows the rinse pump to run for the duration a signal is present on the rinse input.

**Step 6: Sani copy rinse.** By selecting Yes, the sanitiser will run proportional to the rinse pump with selectable sanitizer speed. By selecting NO, the sanitiser needs to have its own run time and delay time programmed and the pump will be initiated by a signal to the sanitiser input.



### Key Notes:

**Enable Standby** – By selecting YES the standby feature will be active from the home screen and will put the unit into a standby state where no pumps will operate until the unit is put back into normal state.

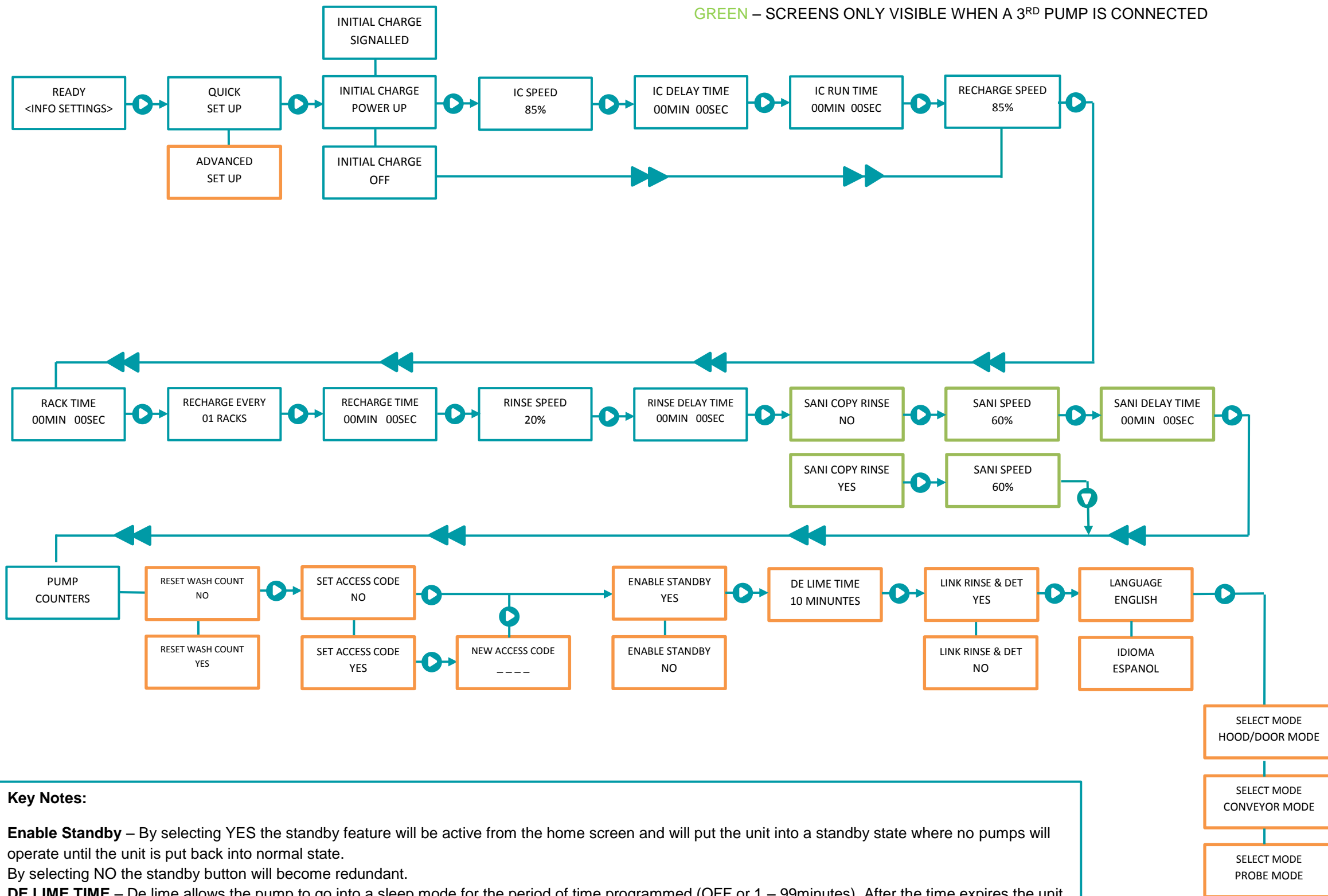
By selecting NO the standby button will become redundant.

**DE LIME TIME** – De lime allows the pump to go into a sleep mode for the period of time programmed (OFF or 1 – 99minutes). After the time expires the unit will return to a normal working state. To activate de lime function, HOLD down the standby button for 3 seconds when the unit is on the home screen.

**Link Rinse & Det:** When YES is selected only 1 signal will need to be connected to the host machine to trigger both Detergent and Rinse top ups. When NO is selected a separate Rinse signal will need to be connected to the rinse input from the host machine and a Separate Detergent signal will need to be connected to the Detergent input from the host machine.

## Probeless Conveyor

BLUE - SCREENS VISIBLE IN QUICK SET UP MODE  
 BLUE & ORANGE – SCREENS VISIBLE IN ADVANCED SET UP MODE  
 GREEN – SCREENS ONLY VISIBLE WHEN A 3<sup>RD</sup> PUMP IS CONNECTED



**Key Notes:**

**Enable Standby** – By selecting YES the standby feature will be active from the home screen and will put the unit into a standby state where no pumps will operate until the unit is put back into normal state. By selecting NO the standby button will become redundant.

**DE LIME TIME** – De lime allows the pump to go into a sleep mode for the period of time programmed (OFF or 1 – 99minutes). After the time expires the unit will return to a normal working state. To activate de lime function, HOLD down the standby button for 3 seconds when the unit is on the home screen.

**Link Rinse & Det:** When YES is selected only 1 signal will need to be connected to the host machine to trigger both Detergent and Rinse top ups. When NO is selected a separate Rinse signal will need to be connected to the rinse input from the host machine and a Separate Detergent signal will need to be connected to the Detergent input from the host machine.

## Programming

It is recommended to use ADVANCED SET UP when first installing the Quantura dosing pump. Quick set up can be used to make small adjustments as and when necessary.

**Step 1: Initial charge:** This is the dose of Detergent that will occur when the machine fills from empty.  
**Power Up:** Initial charge will take place when mains power is applied to the unit. Standby will not initiate the initial charge.

**Signalled:** A signal to the Initial charge input is required to activate the initial charge.

**OFF:** No initial charge will occur.

**Step 2: Rack time.** Programmable time which should be taken from the time it takes for 1 rack to pass through the machine. *This time is used in conjunction with Step 4 to calculate the wash count.*

**Step 3: Recharge Every.** Allows the unit to run on every top up signal received when set to 01, every other signal when set to 02. Programmable to 01 – 99.

**Step 4: Recharge Run time.** Programmable time in which the pump will run when a signal is received on the detergent input.

**Step 5: Rinse Delay.** Rinse delay allows the rinse pump to be delayed for a programmable amount of time from the point where the rinse signal is received to the rinse input. The pump will operate once the delay time has expired.

**Step 6: Rinse operation.** The rinse will operate when a signal from the host machine is sent to the rinse input. The pump will run for the duration the signal is high.

**Step 7: Sani copy rinse.** By selecting Yes, the sanitiser will run proportional to the rinse pump with selectable sanitizer speed. By selecting NO, the sanitiser needs to have its own run time and delay time programmed and the pump will be initiated by a signal to the sanitiser input.