

BRIGHTWELL



MULTIPLEX CONFIGURATION TOOL

INDUSTRIAL LAUNDRY DOSING SYSTEM



INSTALLATION - SETUP

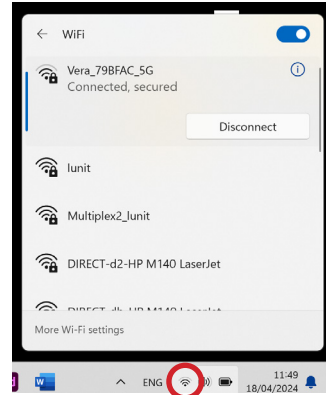
CONTENTS

CONNECTING TO THE UNIT WEB SERVER	3
OVERVIEW	4
CHANNELS TAB SETTINGS AND OPTIONS	5
EDITING OR CREATING A NEW PRODUCT	6
EDITING OR ADDING A NEW CHANNEL	11
WASHERS	14
EDITING OR ADDING A NEW WASHER	15
FORMULAS	21
EDITING OR ADDING A NEW FORMULA	22
RUNNING A CALIBRATION WITH THE CONFIGURATION TOOL	25
RUNNING A CLEANING FLUSH	27
REAL TIME VIEW	27
ADVANCED SETTINGS	29

CONNECTING TO THE UNIT WEB SERVER

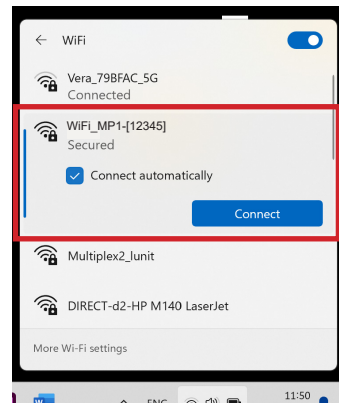
STEP 1

Each Multiplex unit enables direct connection through its web server. This connection is established via your computer's **Wifi network**. After powering on the unit, please allow 3-5 minutes for it to boot up and generate the server. To view available networks, simply click on the Wifi icon located in your toolbar.



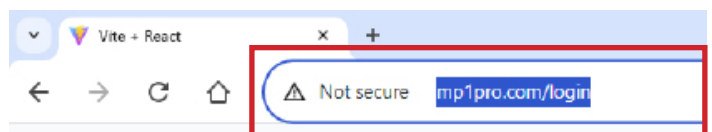
STEP 2

Locate the network named according to Wifi, make of Multiplex and serial, for example: "Wifi_MP1-[123456]" from the list, then click on 'Connect'. You will be prompted to enter the network password for your unit. (This password would have been set up during the ordering process)



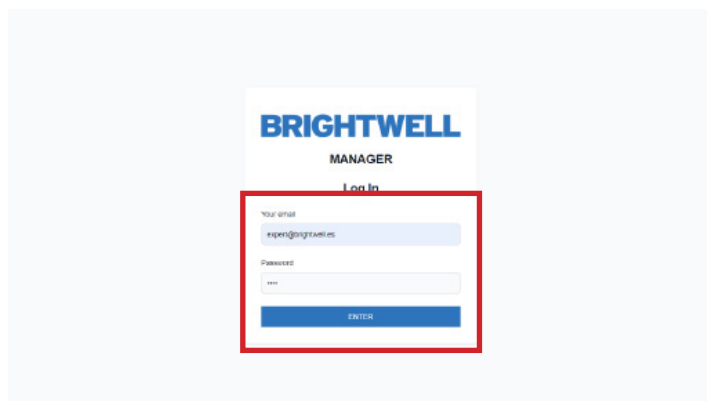
STEP 3

Open your chosen web browser and enter the following address: www.mp1pro.com
*Please note - It can take up to two minutes to connect



STEP 4

Once the login page for the unit has displayed enter the information into the boxes provided. Once complete press the 'Enter' button to log into the unit. (This information was setup during the ordering process)



OVERVIEW

BRIGHTWELL

Manager **3**

Channels Add New

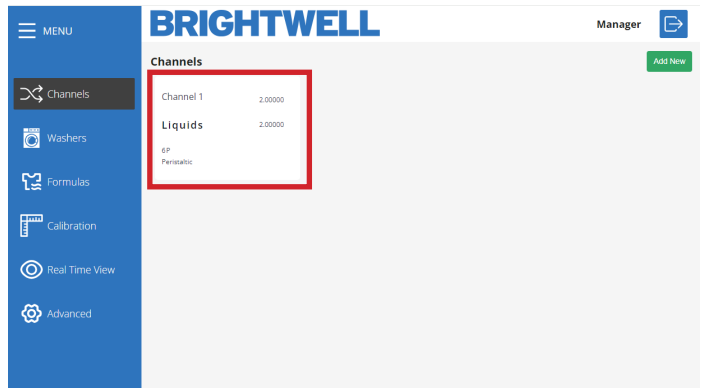
Channel 1	2.00000
Liquids	2.00000
6P Peristaltic	

- 1** Number 1 highlights the expandable menu containing general settings for the configuration tool including;
 - Channels
 - Washers
 - Formulas
 - Calibration
 - Real time view
 - Advanced
- 2** Number 2 is the side navigation bar displaying all menus allowing you to customise your Multiplex unit
- 3** Number 3 is how you disconnect from the unit.

CHANNELS TAB SETTINGS AND OPTIONS

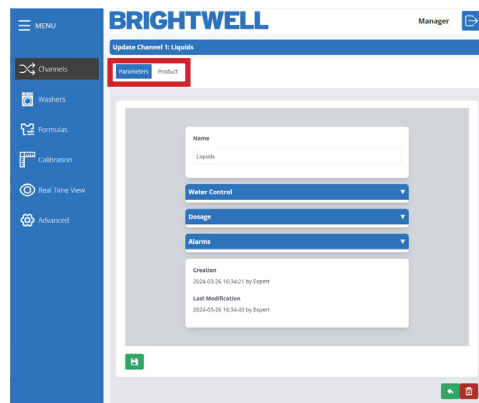
STEP 1

The first menu is 'Channels' which allows you to edit an existing channel or create a completely new one. If you select a channel you will be presented with the current configuration settings.



STEP 2

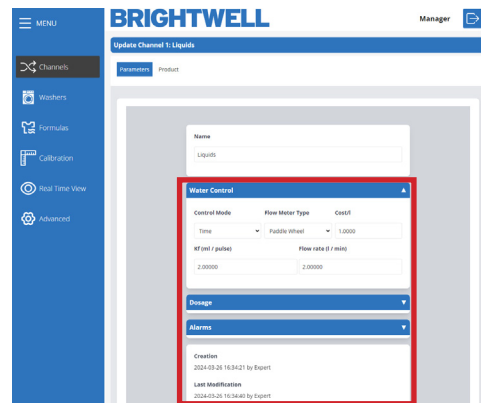
These settings are divided into the two tabs **Parameters** and **Product** at the top.



STEP 3

Use the expandable sections in the **Parameters** section to navigate through the editable settings and configure as required. These are expanded in the later section

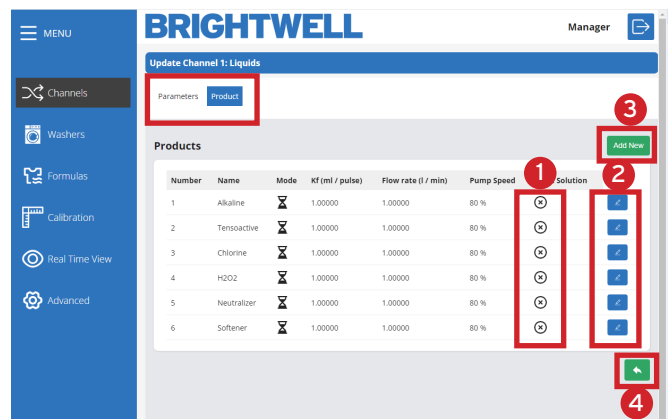
- Editing or Creating a New Channel (P9)



STEP 4

If you open the **Product** tab to move across to this section. From here you can access the following menus:

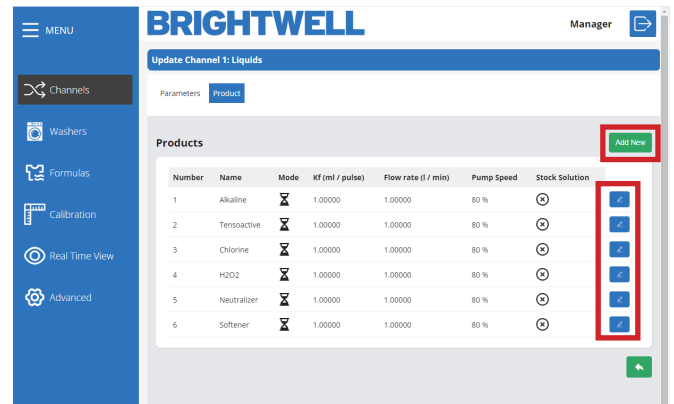
- 1 Delete the chemical
- 2 Edit the chemical details
- 3 Add a new chemical
- 4 Exit the Product menu



EDITING OR CREATING A NEW PRODUCT

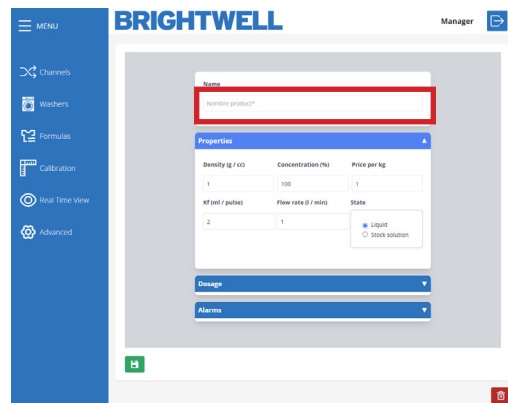
STEP 1

To edit an existing product press the **Edit** icon on the right hand side of the list. Alternatively, to add a new product to your system press the **Add New** button.



STEP 2

Use the first box to set the name for the chemical you can identify it clearly.

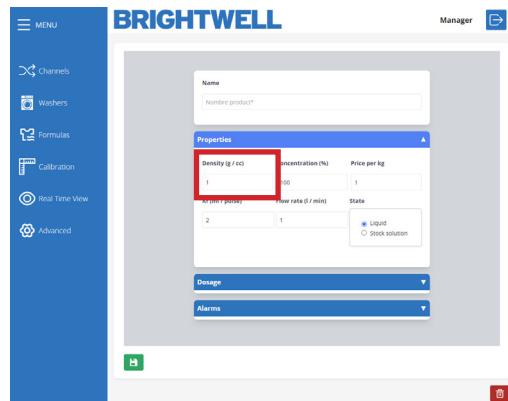


STEP 3

The next box allows you to set the **Density** of the product. Please refer to the chemical manufacturers values for this.

We recommend that this value is precise and based on the chemical datasheet. As this directly effects the dosage of the chemical

X value density / 1kg of laundry

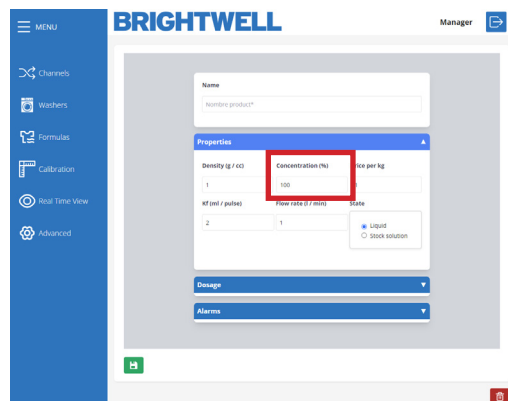


STEP 4

Next set your **Product Concentration** percentage if this is diluted.

If you are using products in pre-dilution and want the 'grams of pure product' you should set this field percentage to the direct dilution of the product. For example;

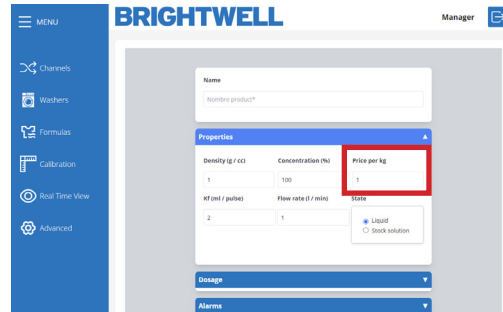
1000 litres you use 100kg of product your % = 1000/100 = 10%



EDITING OR CREATING A NEW PRODUCT

STEP 5

Below you can set the **Price per KG** of the product for cost reporting.



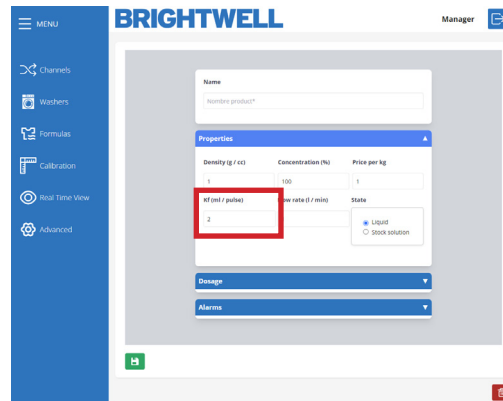
STEP 6

If your product has a Kf value please use the highlighted box to set as required.

(Please note - These values are generated automatically by running a calibration on the unit. For Multiplex 1 and Multiplex 1 pro this is done through the web server tool later in this guide: - Running a Calibration (P25)

If you are using Multiplex 2 or 2 pro this is disabled on the web tool. Please refer to the Built in Screen userguide for how to complete a calibration)

*We DO NOT advise setting the values manually



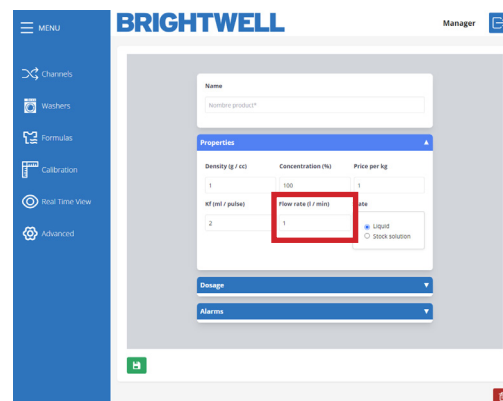
STEP 7

You can now set up the Flow Rate value for the chemical here.

(Please note - These values are generated automatically by running a calibration on the unit. For Multiplex 1 and Multiplex 1 pro this is done through the web server tool later in this guide: - Running a Calibration (P25)

If you are using Multiplex 2 or 2 pro this is disabled on the web tool. Please refer to the Built in Screen userguide for how to complete a calibration)

*We DO NOT advise setting the values manually

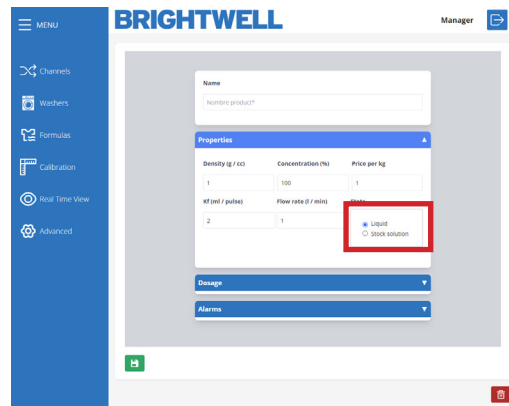


EDITING OR CREATING A NEW PRODUCT

STEP 8

You can now adjust the **State** of the product using the drop down. You can select between;

- Liquid
- Solid Solution

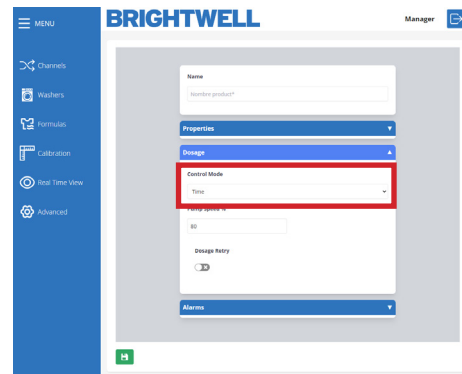


STEP 9

Under the Dosage menu you can choose between the **Control Mode**;

- Time
- Flow Meter

We recommend using a flow meter for all setups to maximise the full functionality of your multiplex unit.

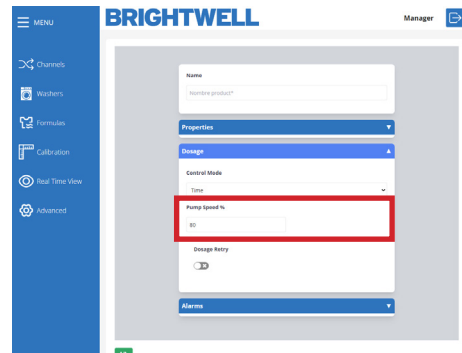


STEP 10

Below you can now adjust the **Pump Speed** for this chemical.

We recommend a speed of;

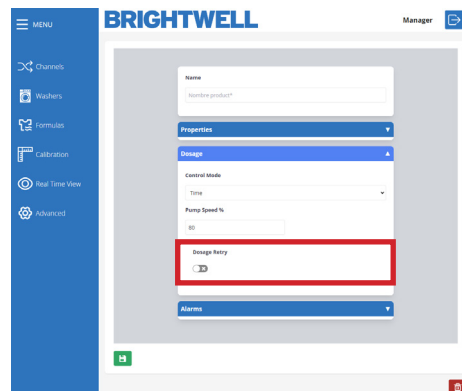
- 80% - 100% for high volume delivery
- 30% - 80% for low volume delivery
- **DO NOT** use below 30% speed for delivery



STEP 11

The final setting in the dosage column allows you to enable or disable the **Dosage Retry**.

This will enable the system to retry dosing the product if the correct number of pulses are not met in the expected delivery time. These values are set automatically when the unit is calibrated.



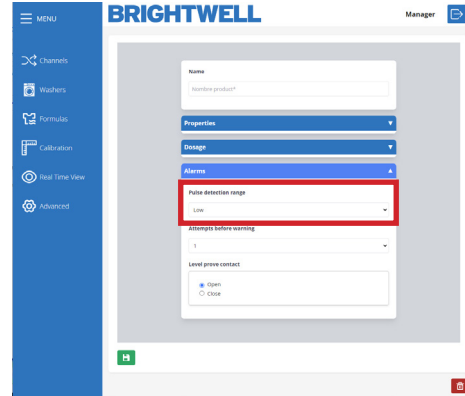
EDITING OR CREATING A NEW PRODUCT

STEP 12

At the bottom of the screen you can see the **Alarms settings**. The first box allows you to setup the **Pulse Detection Range**. You can select between;

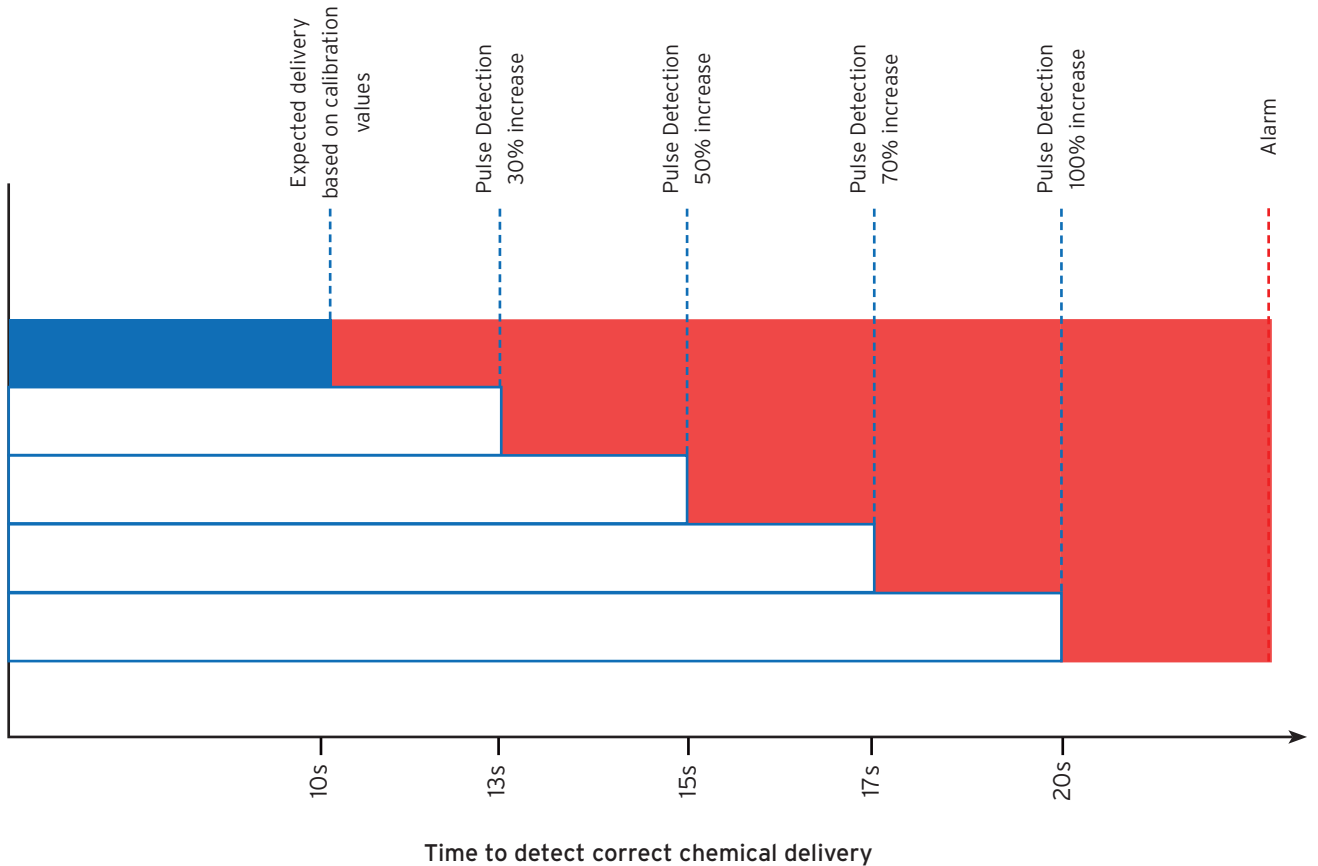
- Low (30%)
- Medium (50%)
- High (70%)
- Maximum (100%)

This is the additional time that can be added for the flow meter to detect the correct volume of chemical. A more detailed explanation is found here: [Pulse Detection Range](#).



PULSE DETECTION RANGE

When dosing chemical it may be required to increase the detection range to allow for fluctuations in flow for the product. This may be needed when there is potentially gassing products causing gas to expand in the pipe, or very viscous products that can become more difficult to pump if left setidary. Below is a graph explaining the functionality.



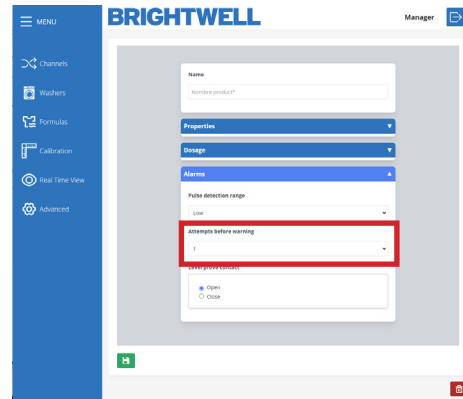
Please note - we advise setting this to as close to the expected delivery time as possible for accurate results and early warning of any potential hardware failures that may arise. Setting this to the maximum level by default will potentially hide maintenance issues that could be resolved before failure of the part.

EDITING OR CREATING A NEW PRODUCT

STEP 13

Below this you can set the number of retries before an alarm is raised.

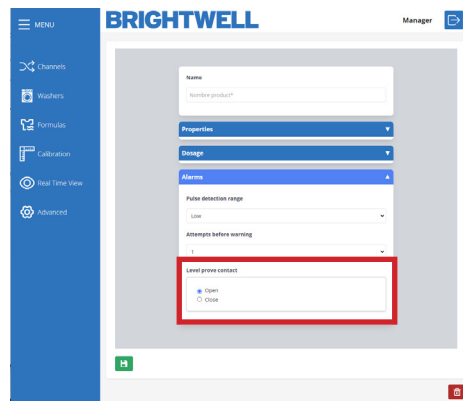
The feature is only available with a flow meter installed. This stops consecutive audio alarms from sounding on the unit to reduce noise pollution in the laundry.



STEP 14

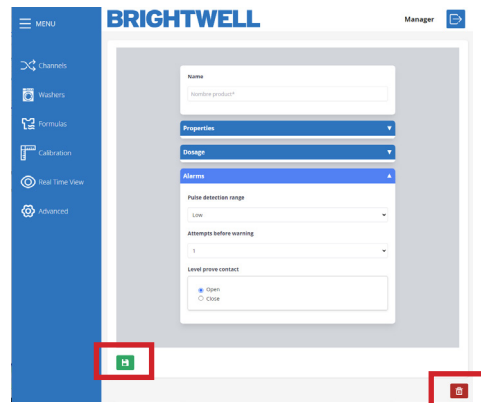
Finally, you can adjust the **Level Probe Contact** to:
- Normally Open
- Normally Closed

Please note - The standard Brightwell products are Normally Closed



STEP 15

Pressing the **Save** icon located in the bottom left will save the details and complete the setup. Alternatively, the **Delete** icon will remove the chemical.



EDITING OR ADDING A NEW CHANNEL

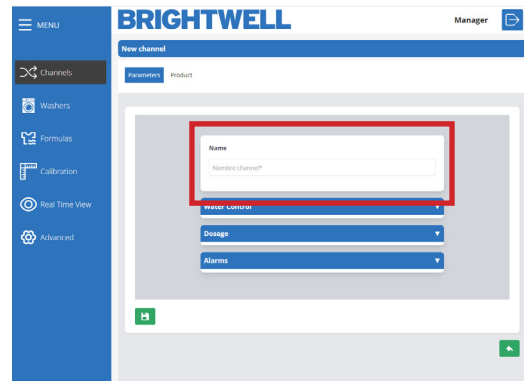
STEP 1

To edit an existing channel press the icon in the channels list. Alternatively, to add an additional channel to your Multiplex setup press the **Add New** button in the top right of the screen.



STEP 2

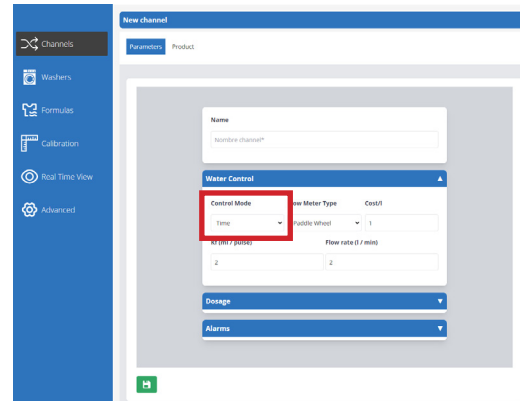
Initially you can set the name for your new channel.



STEP 3

The final setting in this menu is the **Control Mode**. Where you can select between Time or Flow meter.

*We recommend using a flow meter for your Multiplex as it guarantees accurate chemical delivery to your machines. This option is to allow for temporary use of the unit while you await repairs.

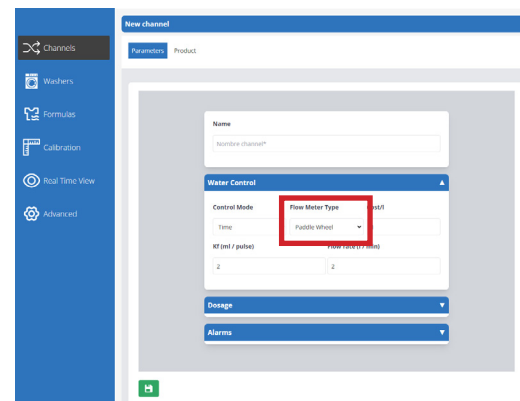


STEP 4

Select the correct **Flow Meter Type** using the drop down;

- Paddles
- Oval-Gear
- Thermal

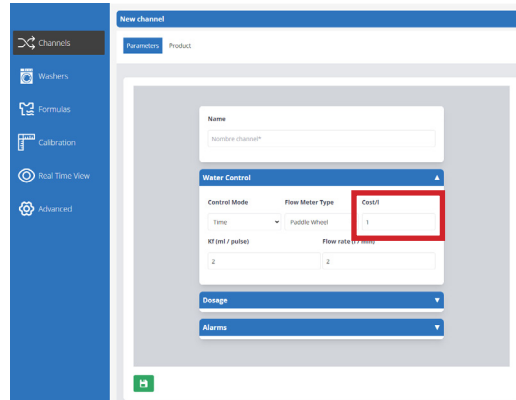
Please note: Do not change this unless you have replaced the flow meter provided from your supplier.



EDITING OR ADDING A NEW CHANNEL

STEP 5

Next is the **Cost** value for the water of this channel, this is used for cost reporting.



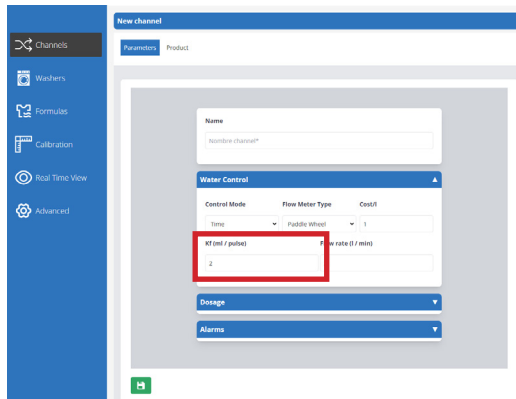
STEP 6

If your product has a **Kf** value please use the highlighted box to set as required.

(Please note - These values are generated automatically by running a calibration on the unit. For Multiplex 1 and Multiplex 1 pro this is done through the web server tool later in this guide: - Running a Calibration (P25)

If you are using Multiplex 2 or 2 pro this is disabled on the web tool. Please refer to the Built in Screen userguide for how to complete a calibration)

*We **DO NOT** advise setting the values manually



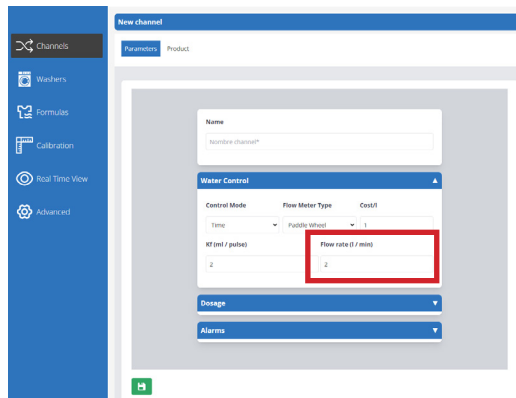
STEP 7

You can now set up the **Flow Rate** value for the chemical here.

(Please note - These values are generated automatically by running a calibration on the unit. For Multiplex 1 and Multiplex 1 pro this is done through the web server tool later in this guide: - Running a Calibration (P25)

If you are using Multiplex 2 or 2 pro this is disabled on the web tool. Please refer to the Built in Screen userguide for how to complete a calibration)

*We **DO NOT** advise setting the values manually



EDITING OR ADDING A NEW CHANNEL

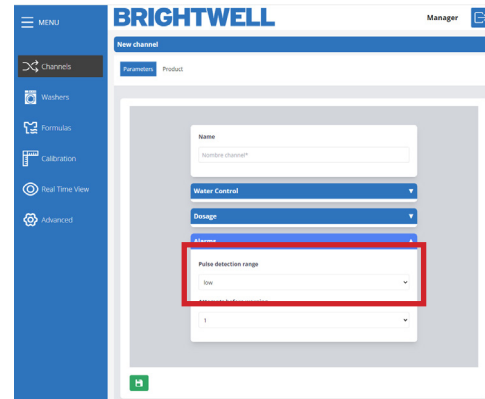
STEP 8

At the bottom of the screen you can see the Alarms settings. The first box allows you to setup the **Pulse Detection Range**. You can select between;

- Low (30%)
- Medium (50%)
- High (70%)
- Maximum (100%)

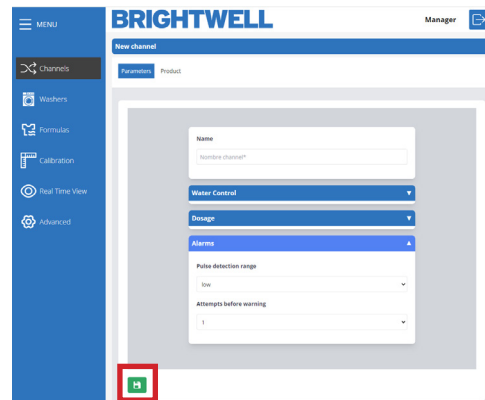
This is the additional time that can be added for the flow meter to detect the correct volume of chemical. A more detailed explanation is found earlier here:

Pulse Detection Range (P10)



STEP 9

To save your new channel and its settings press the **Save** icon located at the bottom left of the screen.



WASHERS

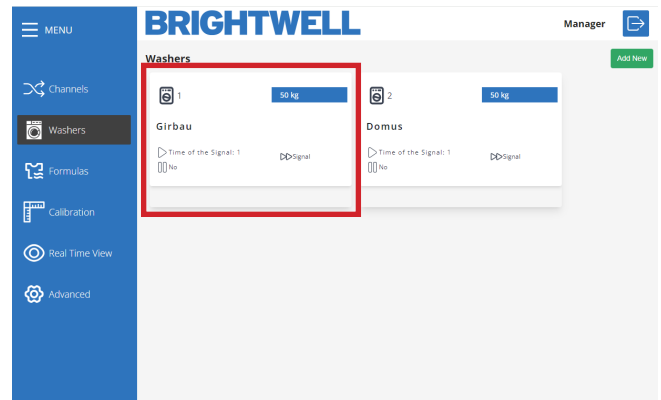
The screenshot shows the BRIGHTWELL Manager interface. On the left is a blue sidebar menu with the following items: MENU, Channels, Washers (highlighted), Formulas, Calibration, Real Time View, and Advanced. The main content area is titled 'Washers' and features a red circle with the number '1' above it. Below this title are two cards representing washer units: 'Girbau' and 'Domus'. Each card shows a 50 kg capacity, a play button icon, 'Time of the Signal: 1', and a 'No' status. To the right of the main area is a 'Manager' section with an 'Add New' button, which is highlighted with a red box and a red circle with the number '2'.

- 1 Number 1 are the current washers setup on the system giving you basic information on the machine details. You can click on any of these to open up the configuration and setup.
- 2 Number 2 is the side navigation bar displaying all menus allowing you to customise your Multiplex unit.

EDITING OR ADDING A NEW WASHER

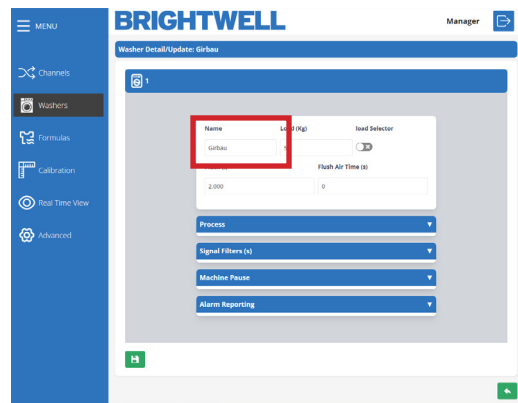
STEP 1

To edit an existing washer click on the icon on the main Washers tab.



STEP 2

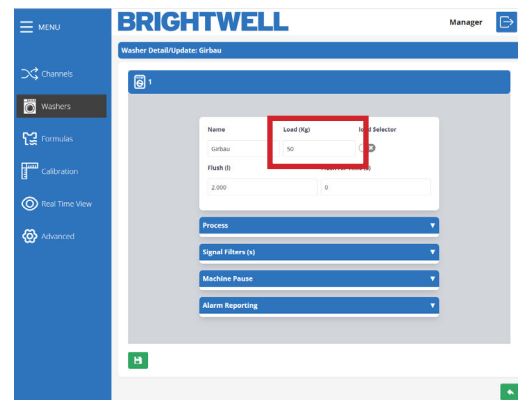
The first section allows you to set the custom name for the washer.



STEP 3

Next you are able to set the **Total Load in Kg** for the Washer Extractor.

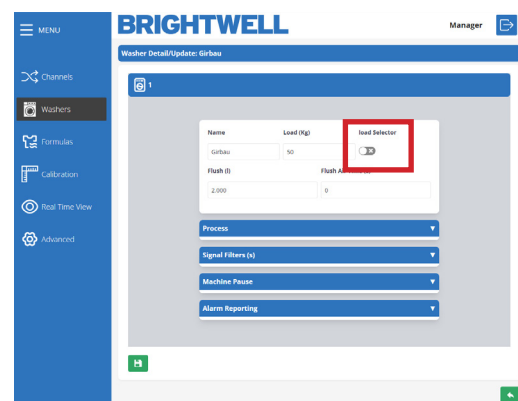
This field is essential in calculating the total volume to be dosed to the load.



STEP 4

You can now enable or disable the **Load Selection** for this washer.

This setting requires a formula select, so please contact Brightwell to discuss this setting and equipment if required.

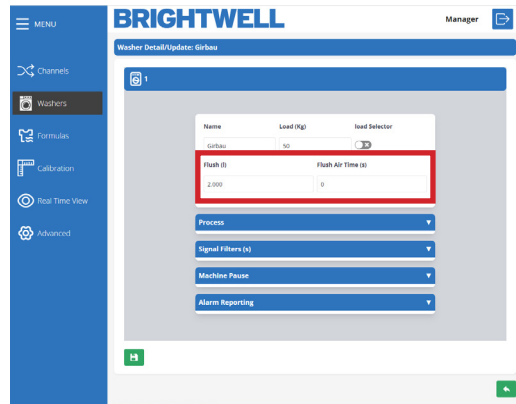


EDITING OR ADDING A NEW WASHER

STEP 5

The next box allows you to set the **Water Flush (Fl. oz)** quantity required. Alternatively, if you are using air flush you can use the **Air Time (S)** box below this instead.

This value needs to be precise for correct delivery of chemical. Please run a visual check of the water required to completely inject the chemical into the machine, as this varies based on distance from the distributor.

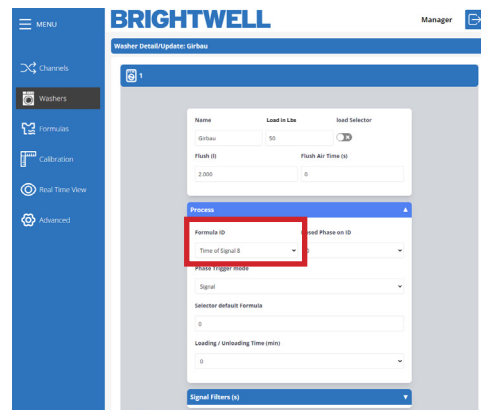


STEP 6

In the Dosing Process column you can first set the Formula ID section. This can be;

- Selector
- Time of signal 8
- Time of signal 1+8
- Binary
- Free

Please refer to the next section for a more detailed explanation.



SIGNAL TIME 8

This selects the program based on 5 second intervals of the Signal 8 going high. This settings is advised for units with a lower number of formulas (1-20). Please refer to the table below for timings.

Formula	Signal 8 Time on	Formula	Signal 8 Time on	Formula	Signal 8 Time on	Formula	Signal 8 Time on
1	5 s	5	25 s	9	45 s	13	65 s
2	10 s	6	30 s	10	50 s	14	70 s
3	15 s	7	35 s	11	55 s	15	75 s
4	20 s	8	40 s	12	60 s	16...	80 s...

EDITING OR ADDING A NEW WASHER

SIGNAL TIME 1+8

This selects the program based on the duration of signals 1 and 8 going high simultaneously. This setting is advised for units that have a larger volume of formulas to select (20+) The below table explains the timing and selection details.

Formula	Signal 1 Tme on	Signal 8 Time on	Formula	Signal 1 Tme on	Signal 8 Time on	Formula	Signal 1 Tme on	Signal 8 Time on	Formula	Signal 1 Tme on	Signal 8 Time on
1	5 s	5 s	11	10 s	5 s	21	15 s	5 s	31	20 s	5 s
2	5 s	10 s	12	10 s	10 s	22	15 s	10 s	32	20 s	10 s
3	5 s	15 s	13	10 s	15 s	23	15 s	15 s	33	20 s	15 s
4	5 s	20 s	14	10 s	20 s	24	15 s	20 s	34	20 s	20 s
5	5 s	25 s	15	10 s	25 s	25	15 s	25 s	35	20 s	25 s
6	5 s	30 s	16	10 s	30 s	26	15 s	30 s	36	20 s	30 s
7	5 s	35 s	17	10 s	35 s	27	15 s	35 s	37	20 s	35 s
8	5 s	40 s	18	10 s	40 s	28	15 s	40 s	38	20 s	40 s
9	5 s	45 s	19	10 s	45 s	29	15 s	45 s	39	20 s	45 s
10	5 s	50 s	20	10 s	50 s	30	15 s	50 s	40	20 s	50 s

BINARY

For this mode the unit will select a program based on the below signal combinations.

Formula	8	7	6	5	4	3	2	1
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Formula	8	7	6	5	4	3	2	1
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

Formula	8	7	6	5	4	3	2	1
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

FREE MODE

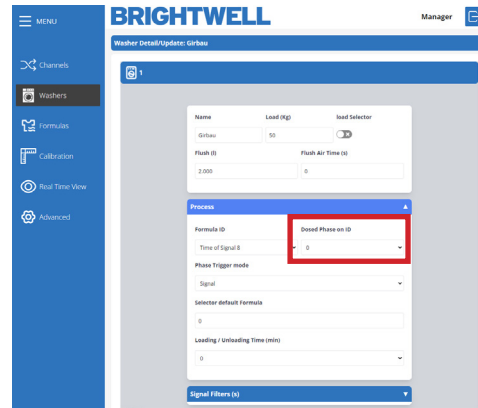
Free mode allows the users to build a custom list of formula selection based on incoming signals. These are **ONLY** defined via the web portal or web server, they cannot be defined on the On Screen setup.

EDITING OR ADDING A NEW WASHER

STEP 7

After this you can select the **Dosed Phase ID** number using the drop down here.

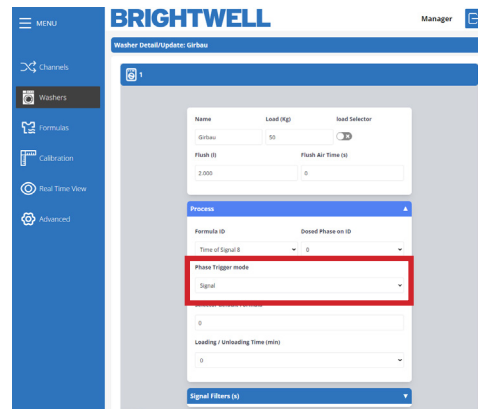
This option allows you to set what phase the washer extractor will enter after a signal is received and program started. It can be used to skip the initial phase 0 and go straight to 1 to begin dosing chemical immediately or skip multiple phases if you are only washing a particular type of laundry items.



STEP 8

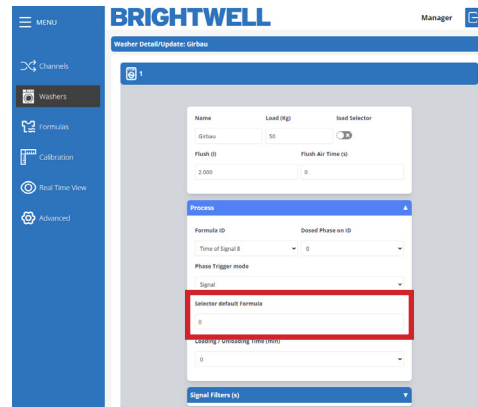
You can now choose between a **Signal** or **Sequential Phase Trigger Mode**.

Signal mode mode defines that the machine itself will send a signal to identify what phase it is entering. Sequential mode sets it so that it will move sequentially through the phases one by one in a logical order.



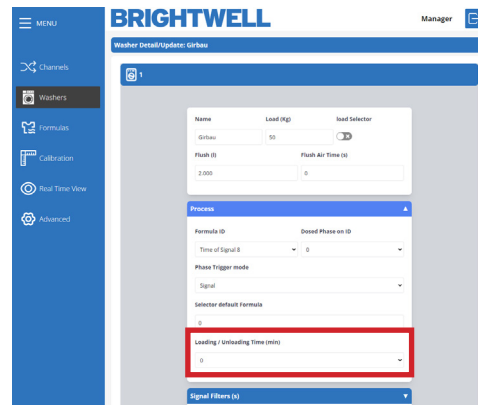
STEP 9

If you have **Selector** chosen you will also have the option to set the **Selector Default Formula**. Which will default back to after a successful cycle.



STEP 10

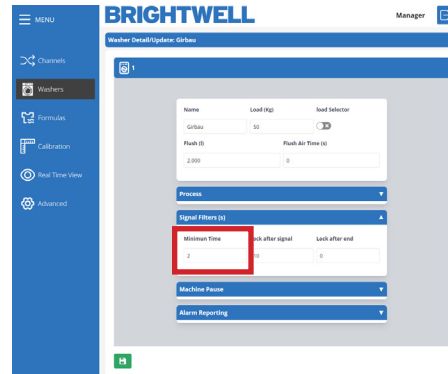
Finally you can adjust the time required to load or unload the machine (for non tunnel setups).



EDITING OR ADDING A NEW WASHER

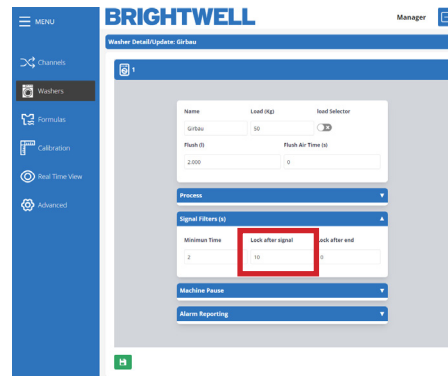
STEP 11

In the **Signal Filters** column the first box allows you to adjust the **Minimum Time** for an accepted signal. This stops ghost signals from triggering the washer.



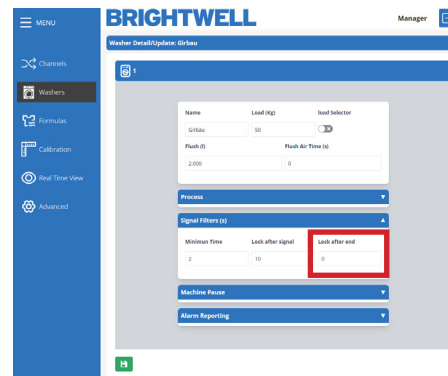
STEP 12

Next you can adjust the time it takes for the washer extractor to **Lock after a Successful Signal** has been sent.



STEP 13

The final box in the **Signal Filters** column allows you to set the **Lock After End** time for the washer.



STEP 14

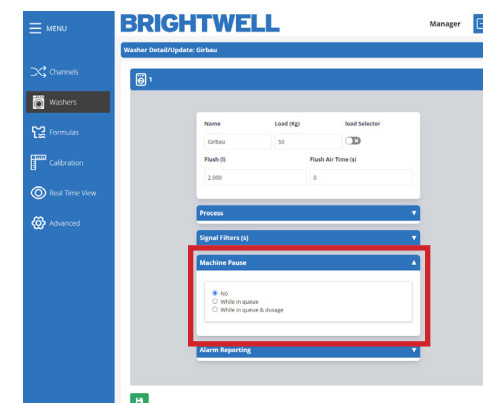
The last column is the **W.E Pause (Washer Extractor Pause)** section.

The first box allows you to adjust the Activation between;

- No (Deactivated)
- While in queue
- While in queue and dosage

The washer pause functionality allows for 'queuing' of machines when they request chemical delivery while the unit is busy.

When a machine is 'waiting' its timer is paused so that the wash can complete a full cycle correctly. The above options allow you to adjust when the 'pause timer' begins again.

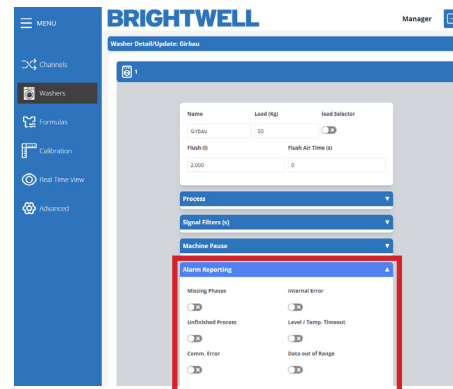


EDITING OR ADDING A NEW WASHER

STEP 15

The final section allows you to toggle what alarms are enabled on your washer;

- Missing Phases
- Internal Error
- Unfinished Process
- Level / Temp. Timeout
- Communication Errors
- Data Out Of Range



FORMULAS

BRIGHTWELL Manager

Formulas

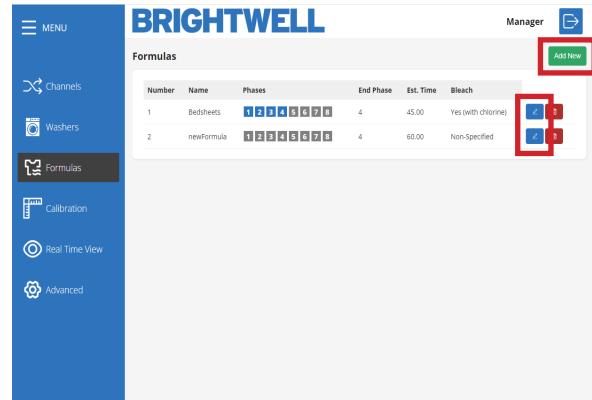
Number	Name	Phases	End Phase	Est. Time	Bleach
1	Bedsheets	1 2 3 4 5 6 7 8	4	45.00	Yes (with chlorine)
2	newFormula	1 2 3 4 5 6 7 8	4	60.00	Non-Specified

- 1 Number 1 is the Add New button to create a new formula
- 2 Number 2 displays the phases that have configuration data setup within the formula.
- 3 Number 3 Is the Edit button, allowing you to edit the configuration of an existing formula.
- 4 Number 4 is the Delete button, allowing you to remove a formula.

EDITING OR ADDING A NEW FORMULA

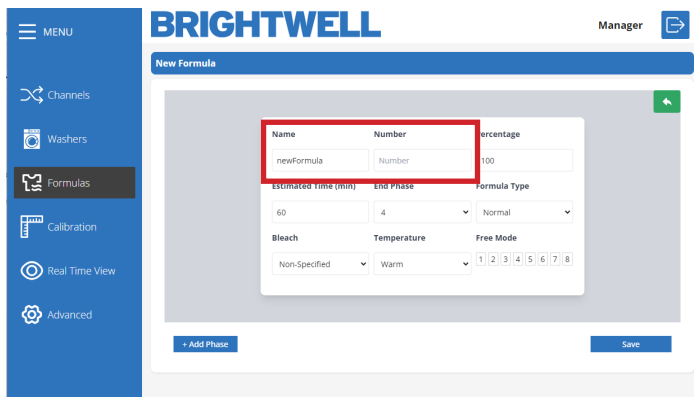
STEP 1

To edit an existing formula on your system press the **Edit** button located on the right hand side. Alternatively, press the **Add New** icon in the top right to create a new formula.



STEP 2

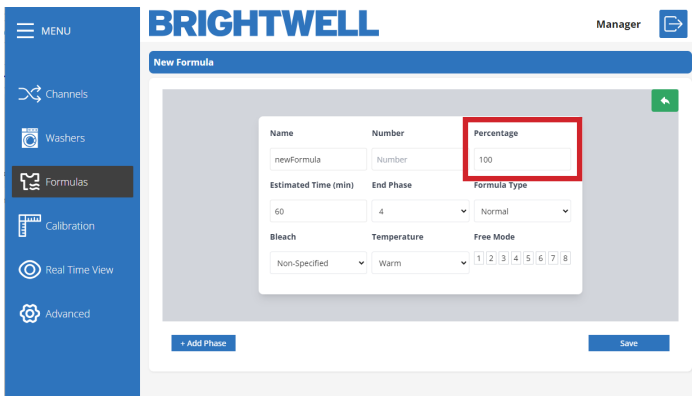
The first two boxes allow you to edit the **Name** of the formula and the assigned **Program Number**.



STEP 3

Next you can adjust the **Percentage** value for this formula.

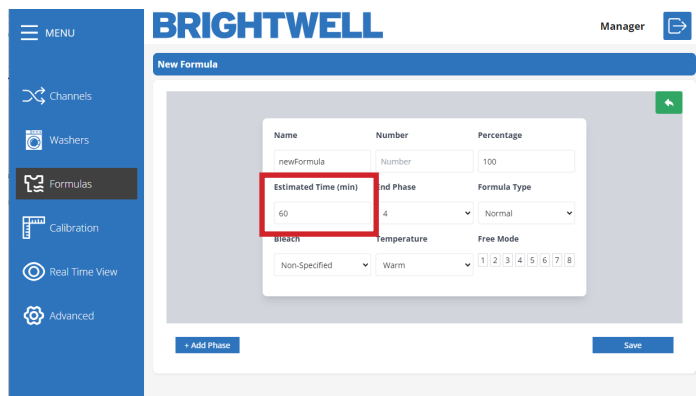
This can be adjusted to reduce the percentage of product delivered for this formula. Can be used if dosing to a different sized machine etc.



STEP 4

After this you can adjust the **Estimated Time (min)** value for this formula.

This is a rough time that the formula will take to complete.

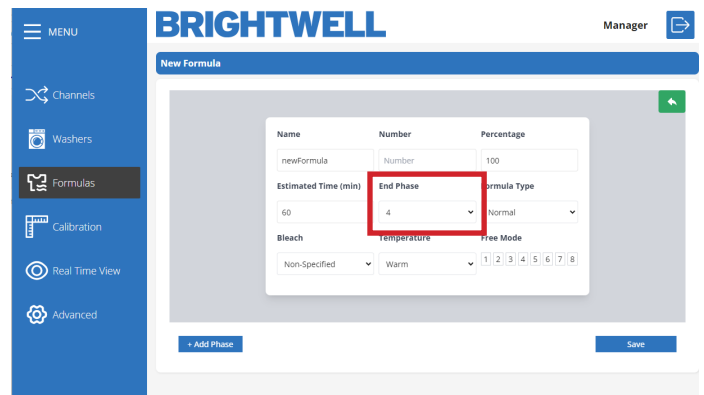


EDITING OR ADDING A NEW FORMULA

STEP 5

Using the drop down located here you are able to set the **End Phase** for this formula.

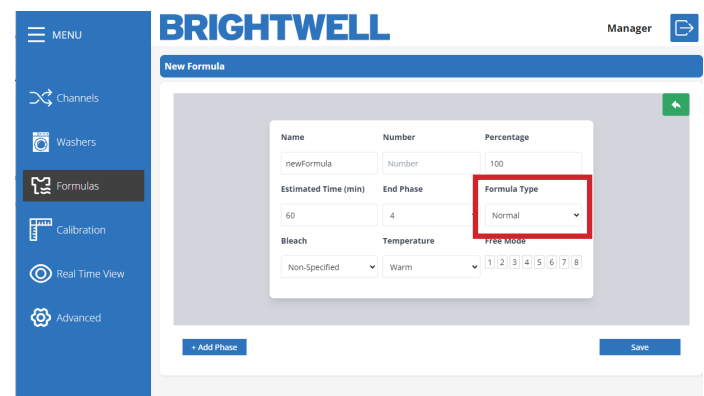
The End Phase denotes what the final phase the washing machine needs to enter to trigger a complete cycle for this Formula.



STEP 6

You can now select the **Formula Type** you are creating;

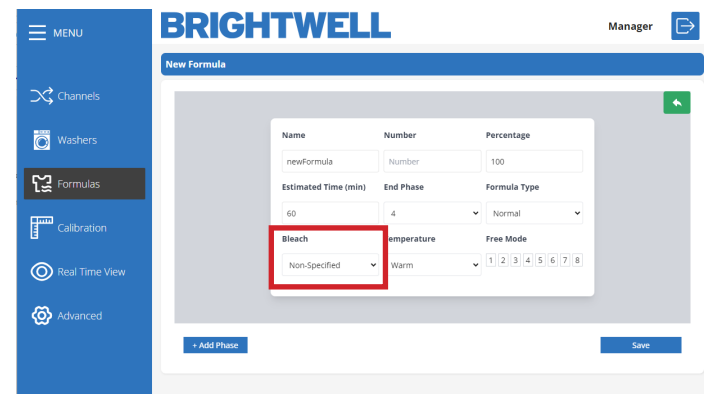
- Delicate
- Normal
- Heavy Soil
- Re-Process
- Desize
- Rinse/Spinning
- Recovery
- Other



STEP 7

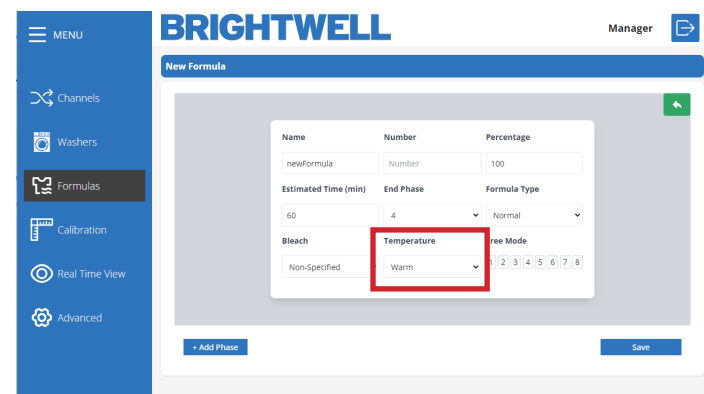
If you have bleach for this formula, you can use the drop down here to select;

- Non Specified
- No bleach
- Yes (No chlorine)
- Yes (With chlorine)



STEP 8

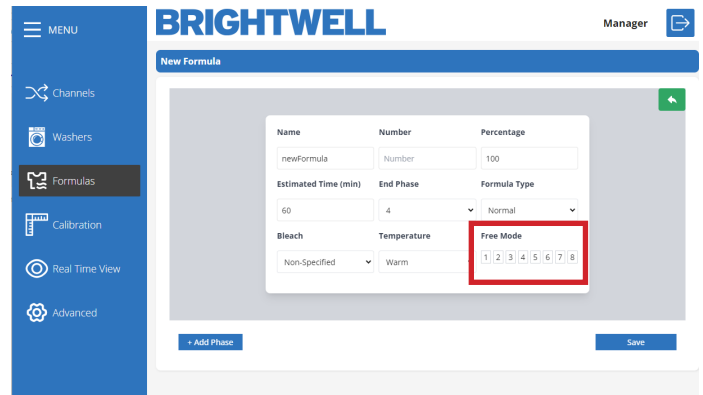
Here you can adjust the **Water Temperature** for this formula.



EDITING OR ADDING A NEW FORMULA

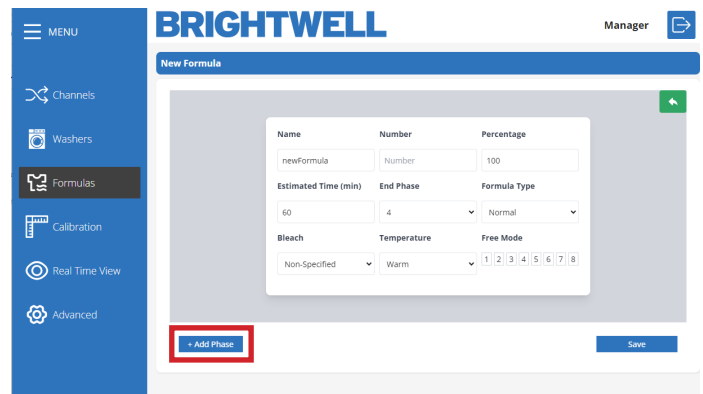
STEP 8

If you are using **Free Mode** for your unit you can set the **Formula Input Signals** here.



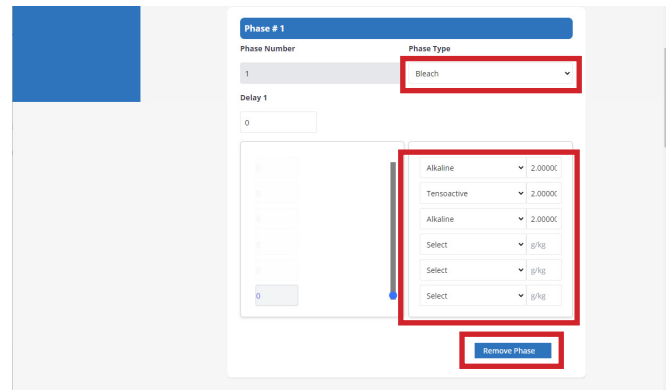
STEP 6

Now that you have completed the basic details for the formula you will need to set up the phases. Press the **Add Phase** at the bottom left.



STEP 7

Within the **Add Phase** screen you can adjust the **Product Delivery** levels for each phase. Using the dropdown menu you can select the dosing phase, your chosen products will be listed below. You can add, remove or adjust the values as required. Also, you can **Remove Phase** to delete completely.

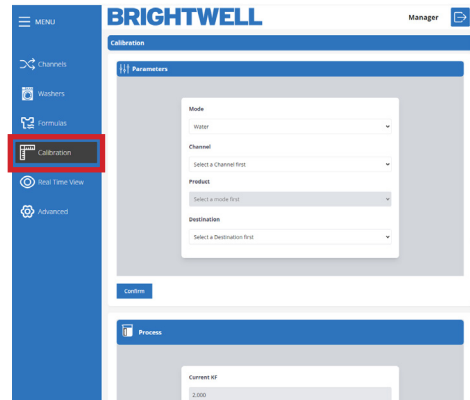


RUNNING A CALIBRATION WITH THE CONFIGURATION TOOL

STEP 1

To run a calibration on your Multiplex unit press the **Calibration** icon in the side menu, located here.

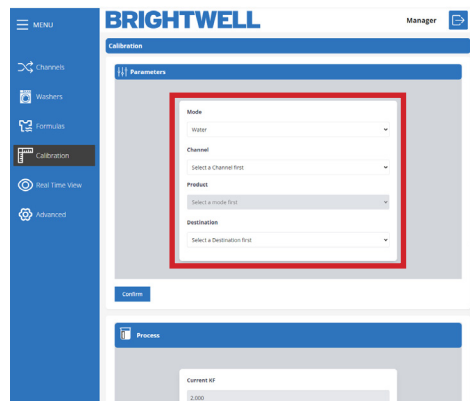
Please note - You can **ONLY** run a calibration via the webtool on a Multiplex 1 and 1 Pro.
For Multiplex 2 and 2 Pro please refer to the "Built in Screen" guide



STEP 2

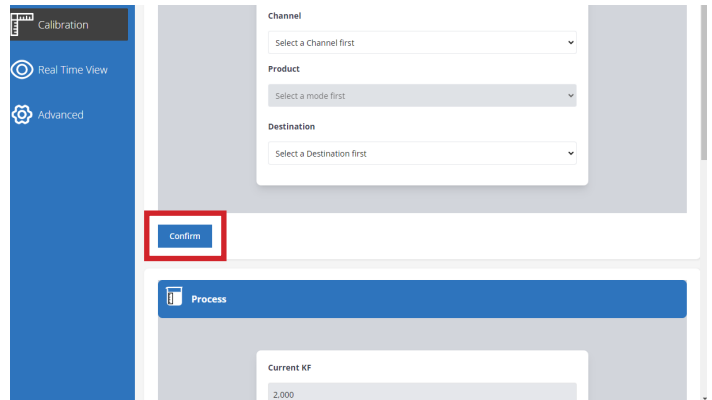
Before you run a calibration on your unit you will need to confirm the details on that channel. These include;

- Mode (Water or Product)
- Channel (The channel you want to run the calibration through)
- Product (If product is selected, you can chose which one you want to use)
- Destination (This can be either a measuring vase or a outlet of your choice, if you do not have a vase attached)



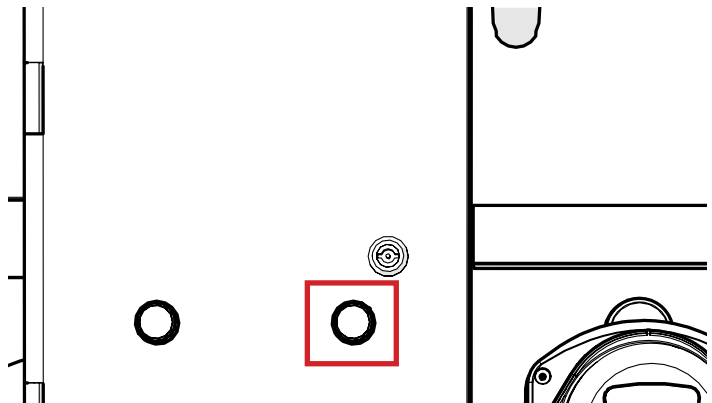
STEP 3

Once you have confirmed the settings press the **Confirm** button to begin the calibration.
Please confirm you have a measuring vase or suitable vessel ready to capture the outflow for calibration.



STEP 4

Now that the unit is ready for calibration go to your unit and **press and hold** the **Calibration** button on the unit and it will begin to flush.

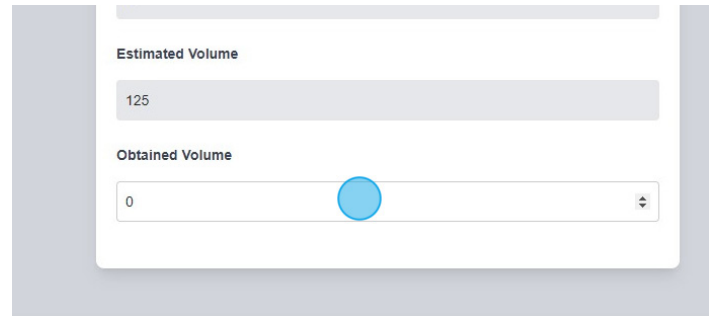


RUNNING A CALIBRATION WITH THE CONFIGURATION TOOL

STEP 5

Once the calibration has run confirm the volume of liquid dispensed and enter the values in the **Obtained Volume** tab. Press the **Confirm** button to save these settings.

The unit will now automatically generate the new **Flow rate** and **Kf** for the unit. Setting these values in the relevant sections.

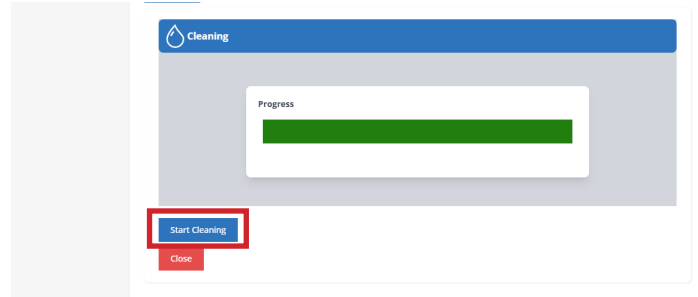


The screenshot shows a configuration tool interface with two sections: 'Estimated Volume' and 'Obtained Volume'. The 'Estimated Volume' section has a text input field containing the value '125'. The 'Obtained Volume' section has a slider control with a blue circular knob positioned at the far left, and the value '0' is displayed on the left side of the slider. A small up/down arrow icon is visible on the right side of the slider.

RUNNING A CLEANING FLUSH

STEP 1

To run a cleaning cycle and remove any chemical from your hosing press the **Start Cleaning** button at the bottom.



REAL TIME VIEW

Number	KG	Formula Num.	Formula Name	Washer Customer	Phase Status	Finish	Pause
1	50.00	1	Bedsheets	0	🧺 🧺 ⚠️ 🌀 	<input type="checkbox"/>	
2	0.00	0		0	 	<input type="checkbox"/>	

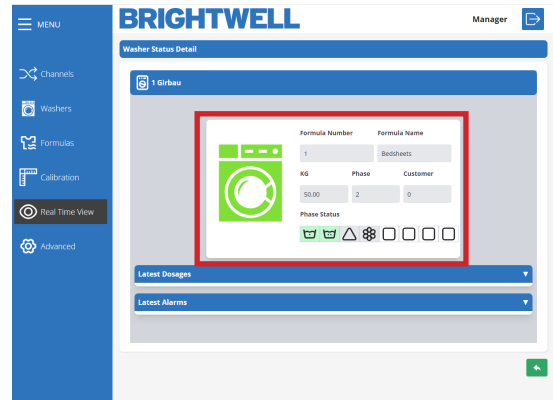
- 1 Number 1 is the machine realtime dashboard
- 2 Number 2 opens the more in depth machine information screen

REAL TIME VIEW

STEP 1

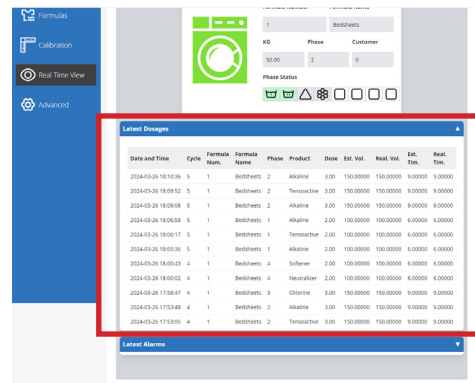
If you expand the view on a single machine you can view more in depth details about the status. The main screen will show;

- Formula Number
- Formula Name
- KG
- Phase
- Customer



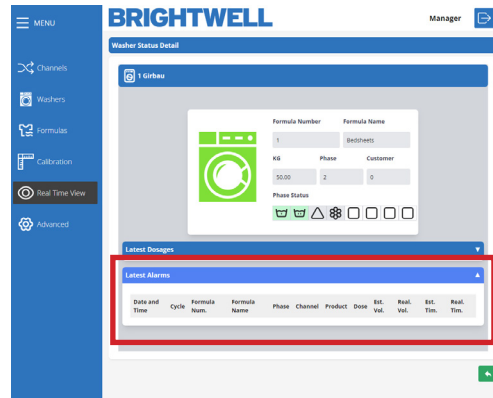
STEP 2

If you choose to expand the Latest Dosages tab it will display more detailed information along with time stamps.

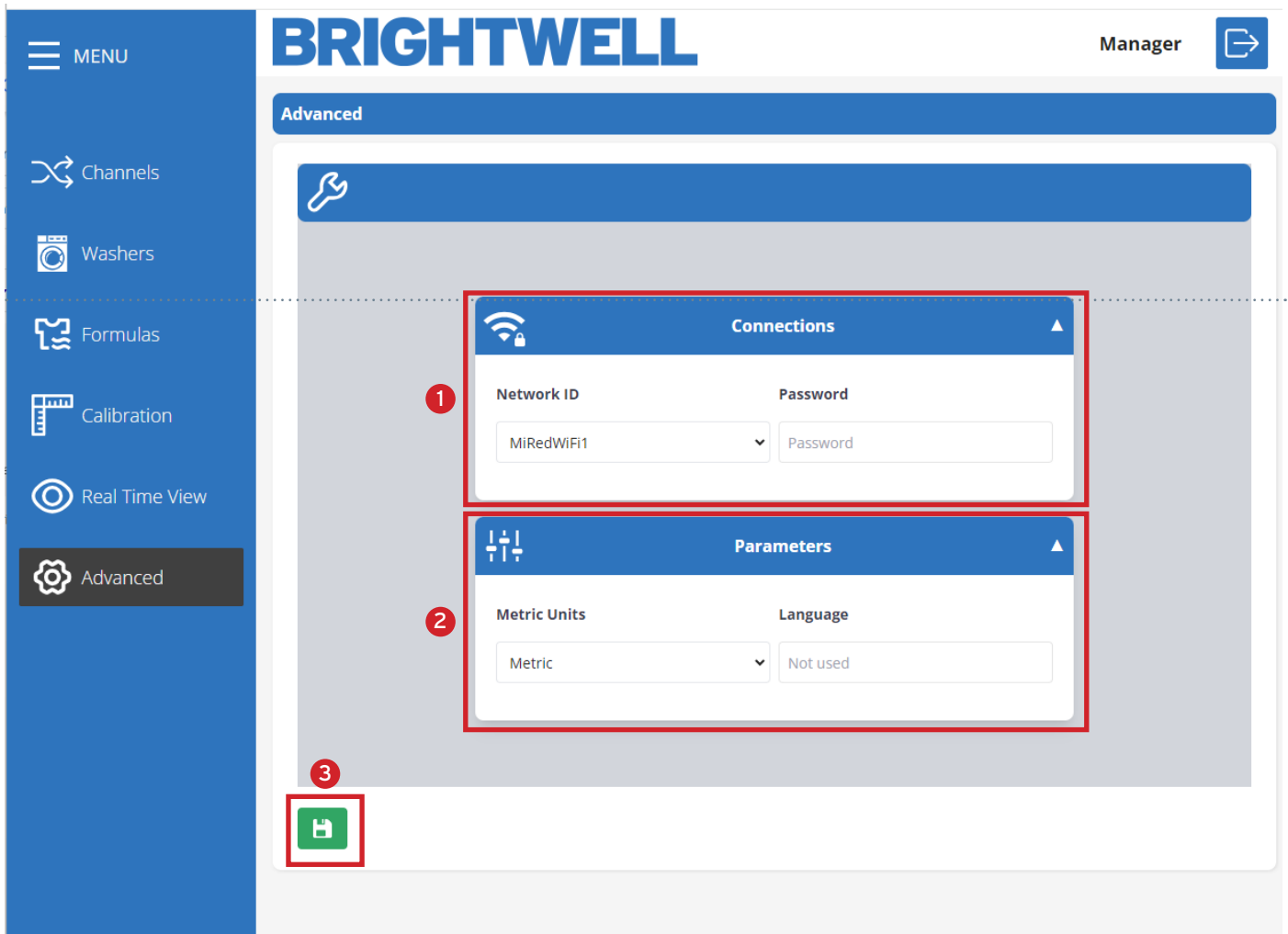


STEP 3

You also have the ability to expand all the alarm information on the Brightwell page. Displaying any issues that the machine has encountered in the latest session.



ADVANCED SETTINGS



- 1 Number 1 allows you to edit the current Wifi settings. Using the drop down menu to change the Network ID and the text box to adjust the password.
- 2 Number 2 are the Units and language settings for the unit. Allowing you to adjust based on your needs.
- 3 Number 3 is the Save icon. Use this to save any settings you have adjusted from the menu above.