

# Quick Start Manual

## Keg Washing & Filling Machine



**KL25959**

**KegLand Distribution PTY LTD**

**[www.KegLand.com.au](http://www.KegLand.com.au)**



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## Wiring

This unit will arrive unwired and it will require a licensed electrician to install three phase power with grounding to provide power to the unit.

## Specifications

Power	3 KW
Capability	30-40 kegs/hour
Washing Method	Inverted
Suitable Keg Sizes	5L – 60L

## Requirements

Air Source Pressure	0.5 – 0.6 MPa
Beer Source Pressure	0.15 – 0.25 MPa
CO <sub>2</sub> Pressure	0.2 – 0.3 MPa
Cylinder Valve Pressure	0.5 – 0.6 MPa
Air Blow Pressure	0.3 MPa
Filling Protection Pressure	0.05 – 0.10 MPa

## Keg Washing Procedure

For commercial stainless steel kegs, the following washing procedure is followed:

Load the Keg → Keg Coupling → Drain → Water Rinse → Air Blow / Drain → Caustic Wash → Caustic Recycle → Hot Water Wash → Drain → Sanitiser Wash → Sanitiser Recycle → Water Wash → Water Recycle → Steam Sterilisation → Water Wash → Water Recycle → CO<sub>2</sub> Purge → CO<sub>2</sub> Pressurise

## Keg Filling Procedure

For commercial stainless steel kegs, the following filling procedure is followed:

Load the Keg → Keg Coupling → CO<sub>2</sub> Pressurise → Filling → CO<sub>2</sub> Blow of Filling Heads → Stop → Unload Keg

(When filling PET kegs, make sure to close the needle valve of the cylinder)

## CIP Procedure

Connect CIP Liquid to Beer Inlet → Install Washing Accessory → Start → Stop (Once CIP Time has elapsed)

## Pressure Adjustments and Air Pressure Regulator Maintenance

To adjust the set pressure on any of the pressure regulators follow the steps below:

1. Pull up on the adjustment knob to unlock
2. Turn the adjustment knob clockwise to increase output pressure and counter clockwise to decrease output pressure
3. Push the adjustment knob back in once at the desired output pressure to lock and set this pressure.

Pour iso vg32 or equivalent lubricant into the air pressure lubrication reservoir periodically, inspect the filter / water trap and drain off any water which has built up in the water trap



(0 means little oil and 9 mean enough oil. No show between 0 and 9)

## Adjustment of Pneumatic Cylinder Actuation Speed

The actuation of the pneumatics can be controlled by adjusting the needle valves on the pneumatic arms.

- Reduce raising speed; adjust upper needle valve clockwise.
- Reduce falling speed; adjust lower needle valve clockwise.

Ensure that you tighten the lock nut on the needle valve after making any adjustments.

Each pneumatic cylinder can be manually actuated allowing you to inspect the raising/lowering speed by pressing the corresponding red button on the five-way air manifold.

## Operation and General Maintenance

### Operation Procedure

1. Fill the hot water tank with clean water by opening up your water valve leading into this tank. Filling of the hot water tank will automatically shut off once the float valve has reached its raise position. Water will be automatically replenished into the hot water tank as required.
2. Open the inlet of the caustic tank and close it when the level reaches 15 – 20mm to the caustic tank. Dispense the caustic for use.
3. Invert the keg and place onto the washing head
4. Perform a final check before starting the keg washing procedure to ensure all pressures and settings are correct.

### Maintenance

1. Turn off power, air source and beer source after finishing washing/filling run and clean the operating platform
2. Clean the sanitiser tank and fill the sanitiser tank before operating. Change the sanitiser periodically
3. Clean the filter periodically
4. Ensure the water trap is emptied periodically and the lubricator is filled with lubricant.

If you will be shutting down the machine for a long period of time or the ambient temperature is expected to drop below 0C; drain off all the water in the water pump and pipeline system to prevent any water freezing or damaging the internals of the pump/pipes.



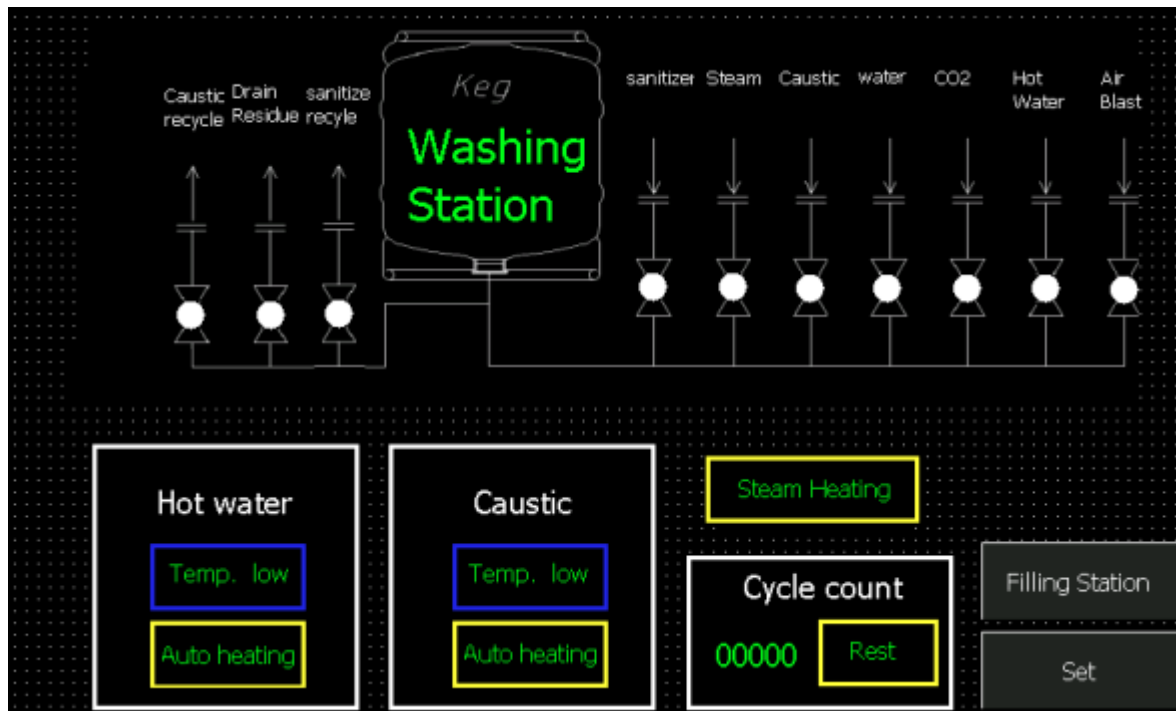
## Common Faults and Troubleshooting

Fault	Possible Cause	Solution
No water in water pump	Loose or damaged seal	Inspect the seal and tighten / replace
Leaking Keg during washing / filling	Cylinder Loose	Inspect cylinder pressure
	Keg not seated correctly	Fix keg position
	Poor seal on keg spear	Adjust seal ring
Power Failure	Voltage exceeds the working limit of PLC	Inspect input Power
	Short circuit	Inspect Circuit
Indicator Lamp not working	Lamp is damaged	Replace Lamp
Residual beer in keg after washing	Washing time is too short	Adjust time on PLC
	Extractor tube damaged	Inspect tube for damage and replace if required
Low Filling Speed	Retain-Valve pressure is too high	Adjust pressure
Cannot Fill	Beer source pressure is too low	Adjust pressure

## PLC Time Parameter Adjustments

Follow the steps below to adjust any of the time parameters.

Below is the keg washing process page



**Step 1.** Press **Set**. A Login popup will then be shown as below.

A screenshot of a 'Login' popup window. The window has a title bar with 'Login' and a close button (X). Below the title bar, there are two input fields: 'User:' and 'Password:'. Both fields are currently empty.

**Step 2.** Input **123** as the **User** and **8760** as the **password**. Then press enter which will return you to the keg washing process page.

A screenshot of the 'Login' popup window after input. The 'User:' field now contains '123' and the 'Password:' field contains '8760'.

**Step 3.** Press **Set** to adjust the washing process time parameters.

The 'Washing Preset' screen displays four steps with their respective sub-steps and time parameters. The background is dark with a grid pattern. The text is in green.

Step 1: Keg Fixing		Step 3: Caustic	
Keg Fixing	00.0 sec	Caustic Rinse	00.0 sec
Open Keg Spear	00.0 sec	Recycling	00.0 sec
Residue Draining	00.0 sec		

Step 2: Water		Step 4: Hot Water	
Water Rinse	00.0 sec	Hot Water Rinse	00.0 sec
Draining	00.0 sec	Draining	00.0 sec

At the bottom right, there are two buttons: 'Next' and 'Home'.



**Washing Preset**

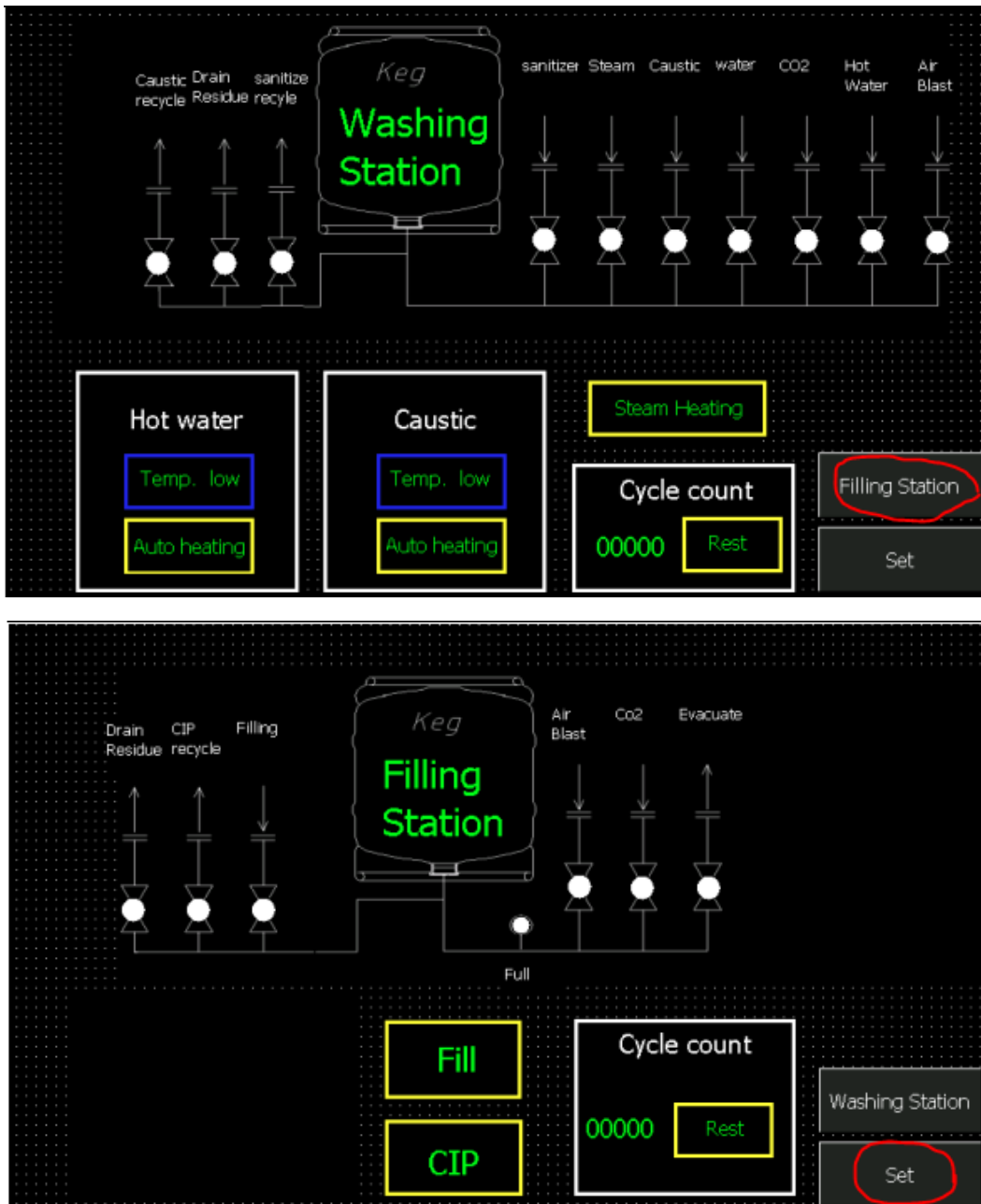
<b>Step 5: Hot Water</b>		<b>Step 7: sanitizer</b>	
Hot Water Rinse	00.0 sec	sanitizer Rinse	00.0 sec
Draining	00.0 sec	Recycling	00.0 sec
<b>Step 6: Water</b>		<b>Step 8: Water</b>	
Water Rinse	00.0 sec	Water Rinse	00.0 sec
Draining	00.0 sec	Recycling	00.0 sec

**Washing Preset**

<b>Step 9: Steam</b>		<b>Step 11: CO2</b>	
Steam	00.0 sec	CO2 pressurizing	00.0 sec
Evacuation	00.0 sec	<input type="button" value="Switch Language"/>	
<b>Step 10: Water</b>		Press "STOP" button for 3 seconds to restore factory setting.	
Water Rinse	00.0 sec		
Evacuation	00.0 sec	<input type="button" value="Back"/> <input type="button" value="Home"/>	

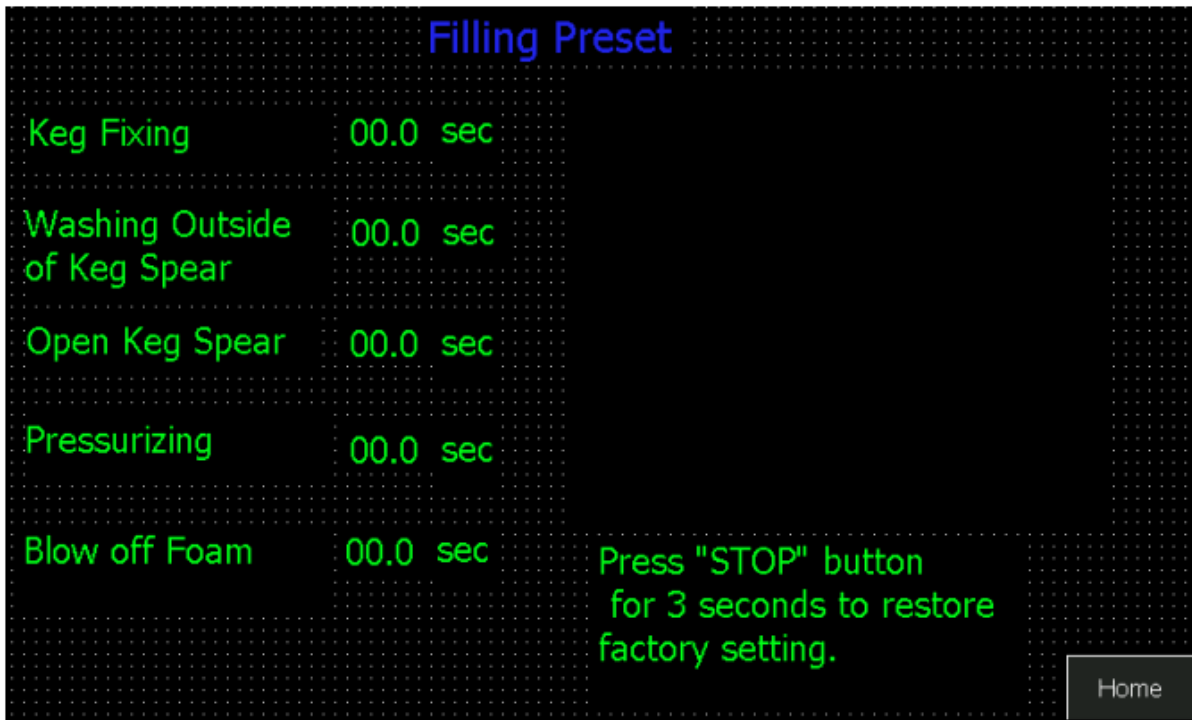


Step 4. To adjust the Filling Process time parameters press **Filling Station** and then press **Set**.





Step 4. Adjust the Washing process time parameters as required



If you do not need any of the processes to function then set its time value as "00.0 sec"

**USER ID: 123 PASSWORD: 8760**