



# Introduction and User Manual for the Laguna WashGuard (Backup rTC Computer)

## Abstract

This document outlines the functionality of the Laguna WashGuard (Backup r-TC computer) and software. It is intended for car wash operators and technicians, providing insights into product functionality, setup, and use.

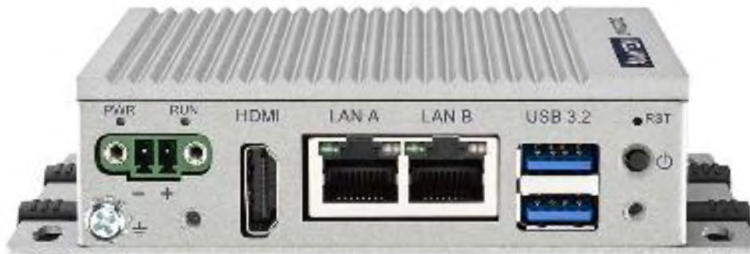


The primary purpose of the Laguna WashGuard is to act as a temporary replacement for the Main r·TC in case of failure. It operates temporarily for 15 days, allowing time for the Main r·TC to be repaired or replaced. The device utilizes the Main r·TC software license and is limited to 15 days of car wash operation.



## Key Terms

**Laguna WashGuard:** A compact DIN rail mounted backup r·TC controller that, under normal conditions, runs in the background, regularly synchronizing with the Main r·TC. In the event of Main r·TC failure, this device can temporarily control car washing operations until the Main r·TC is repaired or replaced. It is also referred to as a Backup or redundant r·TC Controller.



**Main r·TC:** The touchscreen computer that, under normal conditions, runs the r·TC software controlling the connected car wash components.





## WARNINGS:

**Do not** connect an ethernet cable to Lan A of the Laguna WashGuard if a Main r·TC is on the same network.

If you do, both the Main r·TC and the Laguna WashGuard will try to control the outputs of the I/O nodes simultaneously. If the Main r·TC wants a certain output on, and the Laguna WashGuard wants that same output off, then the output will chatter on and off several times a second, potentially damaging whatever equipment is connected to that output.

If a Main r·TC is connected to the same network, only connect an ethernet cable to Lan B of this device.

**Before connecting an ethernet cable to the Lan A port of the Laguna WashGuard, power off the Main r·TC and disconnect any ethernet cables connected to the Main r·TC.**

If you have any questions or require assistance, go to [www.lagunaindustries.com/support](http://www.lagunaindustries.com/support) and fill out a support ticket to schedule a call from a Laguna support technician. Support tickets are monitored regularly and automatically sent to all Laguna support technicians on duty.

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## Introduction

The Laguna WashGuard is a compact, industrial, DIN-rail-mounted computer that can be installed in a Laguna SmartBox integrated r-TC MCC. The WashGuard can also be retrofitted in an existing r-TC running Laguna software. The purpose of this device is to give car wash operators a temporary backup that will keep the carwash functioning if the Main r-TC fails or is damaged. The WashGuard is a temporary replacement to be used only until the Main r-TC is repaired or replaced. The WashGuard does not have a screen but is capable of most of the same functionality as the primary r-TC; however, it is limited to the last configuration synced.

Under normal operating conditions the WashGuard will regularly sync with the primary r-TC, including the carwash configuration and any software updates uploaded before the failure or damage. For the WashGuard to synchronize with the Main r-TC, both devices must run version 4.03.xx of the r-TC or later.

## Modes of Operation

### Synchronizing Mode

The Laguna WashGuard maintains a synchronizing mode when not acting as the car wash controller. The WashGuard controller will regularly and automatically synchronize with the Main r-TC backing up the latest configuration and updates.

Once the initial setup of the Laguna WashGuard is complete, WashGuard software updates will automatically sync through the primary controller. This process requires a valid WashGuard support subscription. If the software is updated on the primary r-TC, these updates will automatically be propagated to the WashGuard.

### WashGuard Washing Cars Mode

In this mode, the Main r-TC has been disconnected from the network and the Laguna WashGuard is physically connected to assume the roles of the Main r-TC, including managing the queue of cars and controlling all of the car wash equipment.

## Setup

The following setup instructions specify the steps required when retrofitting the Laguna WashGuard to an existing car wash. In most cases, Laguna will install and set up WashGuard at our facility before shipping your Laguna r-TC cabinet; however, if you are adding a WashGuard controller to an existing r-TC, follow the following steps

### Physical Connections

The physical installation of the Laguna WashGuard is simple, it requires only power and an ethernet connection. The device needs to be connected to a 24 VDC power supply (The WashGuard can run 12-24vdc, in case of power supply failure). The device needs to be connected to the same router as the r-TC. Connect the ethernet cable to Lan B (this is important, please see the Warning section above).

The Laguna WashGuard will have an ethernet address of 192.168.1.40. The Laguna WashGuard has a web interface similar to the Main r-TC. To test the ethernet connection of the Laguna WashGuard, connect a computer to the same router, then type the IP address into the browser's address bar (192.168.1.40). Once the Laguna WashGuard synchronizes with the Main r-TC, it requires the same user accounts and credentials.





## Setup on the Main r·TC

### Enable

You will need to configure the Main r·TC so that it knows that the Laguna WashGuard has been installed. On the Main r·TC's web interface, go to System Setup -> Interfaces. Under the Backup r·TC heading (WashGuard), check the Enable box. Leave the default IP address, it should be 192.168.1.40.

### Create an Account for the Laguna WashGuard (Backup r·TC)

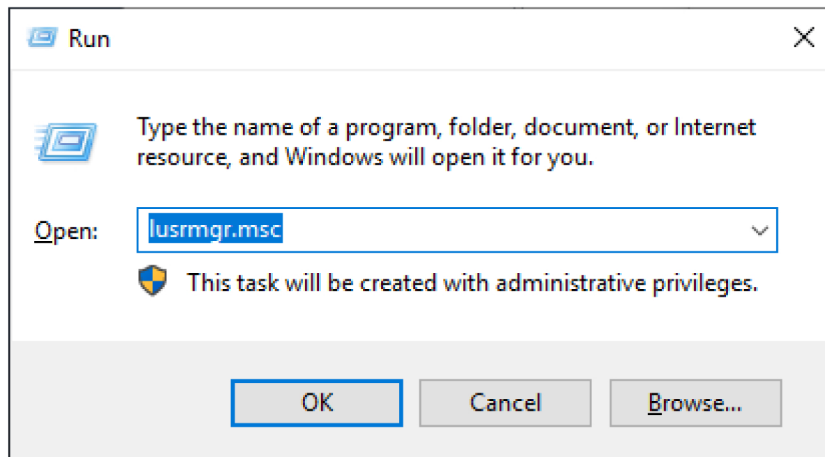
The Backup r·TC (WashGuard) will synchronize with the Main r·TC by accessing a shared folder. To do this, you must create an account on the Main r·TC that the WashGuard will use to access the shared folder.

1. Open a Run window by pressing the



and the "R" key at the same time.

2. In the run window type `lusmgr.msc` then click OK.



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3. In the middle pane, double click on the Users folder.
4. Right click on an empty part of the middle pane and select New User from the context menu.
5. Enter the following parameters then click create (for the password use “da39-a3ee”).

New User

User name: BackupRTC

Full name: Backup r-TC

Description: Account for the Backup r-TC

Password: (masked)

Confirm password: (masked)

☐ User must change password at next logon

☒ User cannot change password

☒ Password never expires

☐ Account is disabled

Help Create Close

These credentials can also be found in the Web Interface of the Laguna WashGuard. Go to Backup r-TC -> Credentials. It is important that the Usernames and Passwords match on the two different computers.

## Backup r-TC Credentials on the Main r-TC

Username: BackupRTC Default BackupRTC

Password: da39-a3ee Default da39-a3ee

Apply Submit

## Alerts

The Main r-TC and the WashGuard will generate alerts if the WashGuard cannot synchronize with the Main r-TC.

Synchronization happens on a schedule. Therefore, an issue might not be immediately reported as an alert (i.e., it may take some time before an issue is detected and reported).

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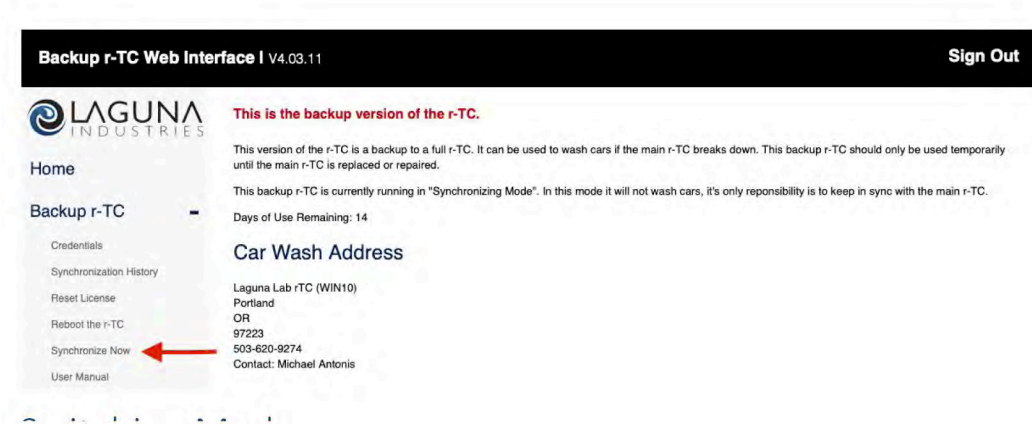
On the Main r·TC, the issue will be reported in the usual ways (on the Touchscreen Alerts Tab, on the PBS, on the web interface, etc...).

On the Laguna WashGuard, synchronization issues will be displayed on the Web interface. The Laguna WashGuard will also attempt to report the alert to the Main r·TC. In this way, even if the Main r·TC is not aware of the Laguna WashGuard, an alert will still be reported on the Main r·TC (as long as the Laguna WashGuard can find the Main r·TC on the network).

Please contact Laguna Industries immediately if the WashGuard fails to synchronize.

## Manual Synchronization

The Laguna WashGuard will Synchronize itself with the Main r·TC on a schedule (happening multiple times a day). Sometimes it will be beneficial to manually trigger synchronization, especially if the system has failed to synchronize. This can be done using the WashGuard's web interface.



## Switching Modes

### Synchronizing Mode -> Washing Cars Mode

If the Main r·TC has failed, follow this procedure for transferring control to the WashGuard:

**Be careful; otherwise expensive equipment could be damaged.**

Most importantly, ensure the Main r·TC is powered off and disconnected from the network. Please see the Warnings section above. Even if the screen of the Main r·TC is black, it could still be powered up and on the network. To switch the WashGuard into Washing Cars Mode, first reboot it. While the WashGuard is rebooting, switch the ethernet cable leading to the WashGuard from Lan B to Lan A. Once the WashGuard has rebooted, it will be in Washing Cars Mode. At this point, the car wash should be operational.

### Washing Cars Mode -> Synchronizing Mode

Once the Main r·TC has been repaired or replaced, remember to switch the WashGuard back to Synchronizing Mode before powering up and connecting the main r·TC.

To switch the WashGuard into Synchronizing Mode, first reboot it. While the WashGuard is rebooting, switch the ethernet cable that leads to the WashGuard from Lan A to Lan B. Once the Laguna WashGuard has rebooted, it will be in Synchronizing Mode.

**PLEASE NOTE that it is always best to reboot the WashGuard in a controlled way. This can be done through WashGuard's web interface, go to Tools -> Reboot the r·TC**

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## License

The purpose of the WashGuard is NOT to permanently replace the Main r·TC. The use of the WashGuard should be temporary only until the Main r·TC can be repaired or replaced. For these reasons, the license of the WashGuard only allows the device to be used to wash cars for a limited number of days. It is understood that after the Main r·TC is replaced, the WashGuard might be needed again to wash cars (if the Main r·TC breaks down again at some time in the future). For this reason, after a certain number of days where the WashGuard has NOT washed any cars, the limit will be reset to its original factory value.

The number of days remaining to wash cars is displayed on the Homepage of the WashGuard's web page. If the number of days to wash cars has been exhausted, the number of days remaining until a reset is displayed on the Homepage of the WashGuard's web page.

You cannot modify the car wash equipment configuration of the WashGuard. When the WashGuard is switched into Washing Cars Mode, it will use the last configuration that was available from the Main r·TC; it will not be possible to modify this configuration, nor will it be possible to upload a configuration from another r·TC. The only options available are access to the pulse and gate simulator.

## Regular Testing

It is strongly recommended that the WashGuard be tested regularly. We recommend testing the device once a week.

To test the device, power off and disconnect the Main r·TC from the network. Switch the WashGuard to Washing Cars Mode and wash a car. Up to two cars a day can be washed without a deduction from the number of days of washing included with the license (see License section above).

After a car has been washed successfully, switch the WashGuard back into Synchronizing mode before reconnecting the Main r·TC (see Warnings section above).

## License Reset

If the number of days available for WashGuard has been exhausted, and the Main r·TC has not yet been replaced or repaired, resetting the number of days available back to the factory defaults is possible.

This process involves resetting the software license key for the r·TC. After the reset, you must acquire a new software license key from Laguna Industries. You may be charged for this new license.

You will have to get the key directly from Technical Support at Laguna Industries. The existing key on the device will no longer work after the reset. This key may require up to 2 business days to create.

Please call Laguna Industries before resetting the license to ensure a technician can provide you with a new license after the reset.

Use the Laguna WashGuard's web interface to perform the reset. Go to Backup r·TC -> Reset License, read the warnings, and follow the instructions.

## Software Updates

As mentioned above, once the Laguna WashGuard synchronizes itself with the Main r·TC, updating the software on the WashGuard will not be necessary as long as your WashGuard support subscription is valid. After a software update is performed on the Main r·TC, it will be propagated automatically to the Laguna WashGuard