

## **Contents**

Introduction  
Specification  
Defaults  
Requirements Layout  
Getting Started  
Network and Wifi  
Time Zone Security  
Operation  
Status Bar  
Weekly Events Edit  
Weekly Events  
Override Events Edit  
Override Events  
Event Simulator  
Time zone and RTC  
Backup  
Updates  
Recovery

## **# Introduction**

The WMT model 1u1s is a single switch controller designed for Gates, Doors and Bells.

The two modes of operation include Gate mode by prolonged switching, or Bell mode by short timed switching.

Ethernet, Access Point Wifi and Local Wifi is built in, allowing setup and configuration by Wired Networking (Ethernet), by Wifi Networking (Local Wifi) or by directly accessing the unit through it's Wifi Access Point.

An easy to use scheduler called the Event Editor allows you to setup your standard weekly events, holiday and down-time events, and special events.

An onboard micro computer removes the need for a PC or Server; No Software and no drivers are needed.

Control, if allowed by the built in security, can be granted to any tablet or PC anywhere in the world via the Internet.

## **# Specification**

Dimensions: 145mm \* 90mm \* 40mm

1x Relay 0-240v @ 10amp with NC and NO operation

1x Ethernet Port

1x Wifi in Access Point mode @ B/G/N 150mbit

1x Wifi in Local Client mode @ B/G/N 150mbit

### **# Defaults**

Access Point SSID: gate01

Access Point Password: 12345678

Access Point IP Address: 10.1.1.1

User Interface Username: admin

User Interface Password: admin

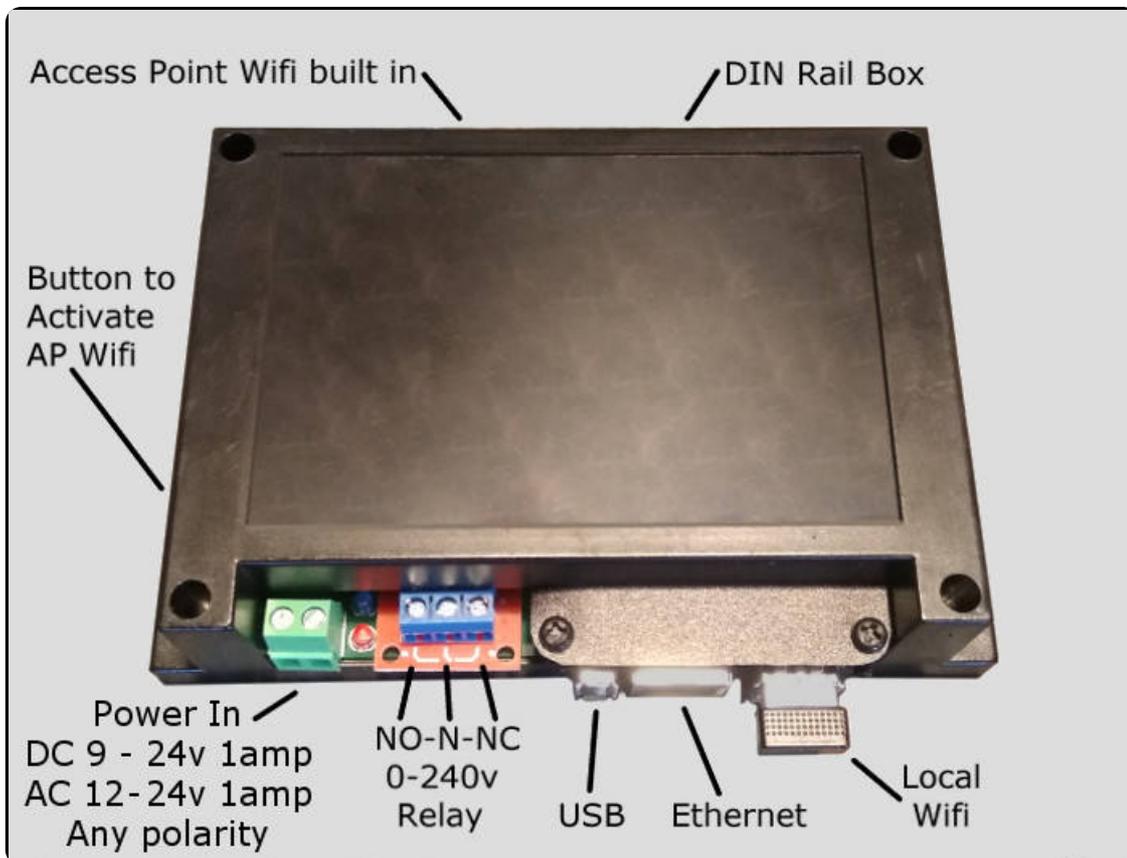
### **# Requirements**

DC 9v to 24v @ 1amp, any polarity.

AC 12v to 24v @ 1amp.

Needs weather shielding.

### **# Layout**



## # Getting Started

The red LED will turn on when power is applied, after 10-20 seconds the green LED will turn on, indicating that the WMT has booted up.

The blue LED will turn on if the Wifi Access Point has been enabled. To activate the Access Point if turned off, quick press the button on the side, the blue LED should then light up.

Using a Laptop or Tablet connect to the Access Point, the default SSID is: gate01. The default password is: 12345678.

Windows may take a while and sometimes two attempts to connect to the WMT. After connection, Windows will remember the WMT's MAC address and connect much quicker from then on.

Ensure you are connected to gate01, open a browser such as Chrome, Firefox or Internet Explorer/Edge, and type in the following address in the URL bar: 10.1.1.1

The Setup page will ask you for the admin user name and password, the default name is: admin, and the default password is: admin.

## # Network and Wifi

If you wish to access the WMT through your network, you can use Ethernet or Wifi.

To use Wifi, Click Settings at the bottom of the page. In the section called Local Wifi, Click the Wifi Wizard button, you will be guided through connection to your Local Wifi Network. The Wifi Wizard will connect using DHCP and display the IP Address your router has supplied. Use the IP address supplied to gain access to the WMT from your local network.

## # Time Zone

To ensure Daylight Saving and the correct time is observed by the WMT, select your local time zone, at the bottom of the user interface, Advanced, click 'Settings', next to Localization.

Click 'Save Settings' at the top Status Bar.

To set the correct time, click the button called 'Update Device Time' next to the 'Time Settings' section middle of the user interface page.

## # Security

To secure the WMT, change the Access Point password and or change the Admin login username and or Admin password.

Before you proceed, ensure that you keep this information somewhere safe, if you forget this information you won't easily be able to access the WMT and will need assistance from the vendor.

These options are located at the bottom of the user interface in the section called 'Advanced', click the 'Settings' button.

After clicking 'Save Settings' at the top Status Bar, you may need to reconnect to the WMT Access Point if that is your main connection.

## # Operation

The WMT operates in two modes, Bell mode and Gate mode.

Gate mode is for Gates and Doors that are opened or closed at different intervals.

Bell mode is for Schools and Institutions that require a Bell or other signaling to occur at different times of the day.

To choose between the two modes, either activate Bell mode or disable Bell mode to be in Gate mode, the settings is in Advanced Settings at the bottom, next to Bell Mode option.

## # Status Bar

The Status Bar at the top of the user interface allows manual control of the Gate or Bell, and various indicators of the status of the WMT described below.

Settings	Loaded	Save Changes	Reload Page	Override Gate	5	Open	Close
Wifi Connection	Connected	AP Wifi On Boot	Yes	Secure Device	AP Wifi is Off		
Current Event	Wednesday	This Interval	None	Next Interval	08:00 - 18:00		
Gate Position	Open	Expected Pos.	Closed	Override Pos.	Reverting in > 4 mins		

Description by column:

Settings: Shows when you have made any changes that require you to click the 'Save Changes' Button.

Wifi Connection: Shows when the user interface page loses connection to the WMT.

Current Event: Shows the current active event in the Scheduler. This maybe a day Weekly event or an Override event.

Gate Position: Shows whether the Gate is Open or Closed, or the Bell is Quite or Activated.

Save Changes: This button should be clicked after any or a number of changes to the Scheduler or settings.

AP Wifi On Boot: Shows whether the AP Wifi is turned on when the WMT is turned on or rebooted.

This Interval: Shows the current Interval. If showing none, there are no events occurring, an event would be Gate Open, or Bell Ringing.

Expected Pos: Shows the position the Gate or Bell would normally be in from the Scheduler programing. When you override the Gate or Bell, the Gate/Bell Position will not match the Expected Position.

Override Gate: Allows you to Open or Close the Gate or Ring the Bell. The default parameter shown above is 5, representing 5 minutes before defaulting back to the Scheduler programming. This number can be changed by clicking on it. For Gate Mode, this number is in minutes. For Bell Mode this number is in seconds.

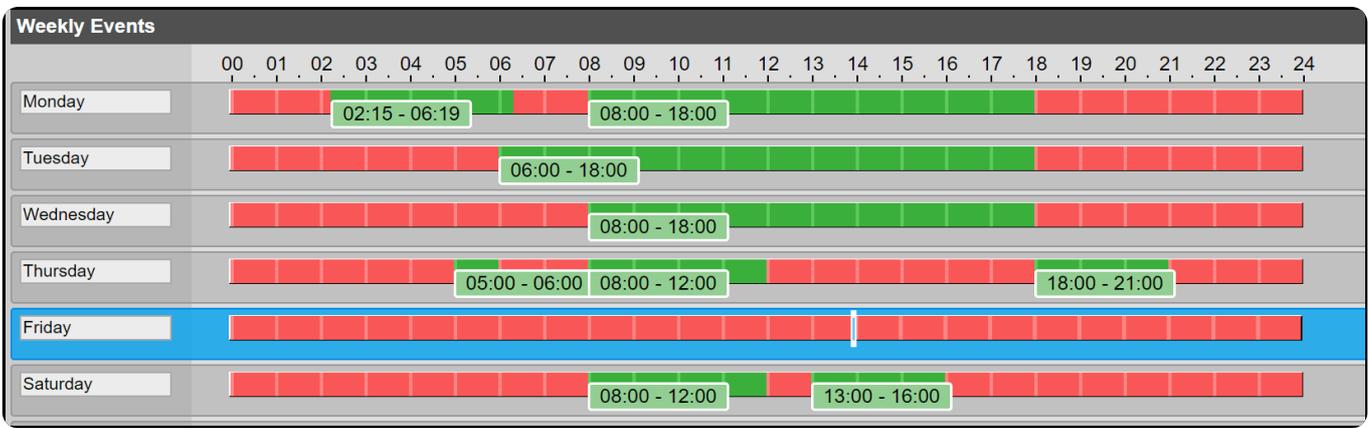
Secure Device: Shows you the state of the Access Point Wifi.

Next Interval: Shows when the next programmed Interval for the current Event is due.

Override Pos: Shows when you have started an Override condition, and how long before the condition reverts back to the Scheduled programing.

## # Weekly Events

Weekly events are the usual events that happen day to day, and are over-ridden by Override Events.



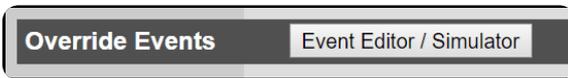
The numbers across the top represent the time of day, as is typical with 24 Hour time.

The red sections represent Gate Closed or Bell Silent and the green sections represent Gate Open or Bell Active.

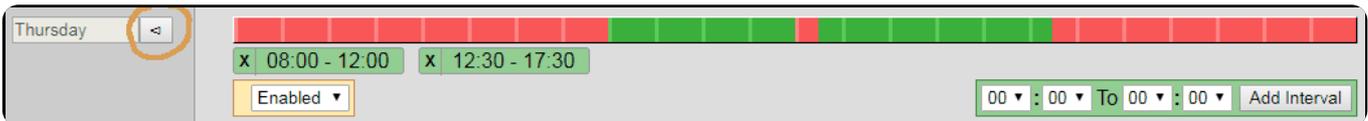
A Weekly event will be highlighted in blue if it is current active event

To Edit Weekly Events see below.

### # Edit Weekly Events



Clicking the 'Event Editor / Simulator' button will take you to the Event Editor page.



To edit Weekly events, click the arrow button next to the day.

Shown in the middle are the already added Intervals. Each Interval shows the time from start to finish.

To Add an Interval, select the pull down menus in the Green edit box on the right, for example select 10:00 To 11:00, then click the 'Add Interval' button.

To Delete an Interval, click the X next to the Interval block.

You can Disable the day, by selecting the box called Enabled. This won't remove your Intervals, the day (Event) just won't occur. This is ideal for unexpected down time.

### # Override Events

Override events override Weekly events and are for scheduling anything that isn't weekly, such as Monthly events, Yearly events and One-off events.

Override Events		Event Editor / Simulator	
All Day Event	<input checked="" type="checkbox"/>	Closed	17th Apr 2019   All Day
Time of Day Event	<input checked="" type="checkbox"/>	Closed	18th Apr 2019   At   10:00 To 11:00
Date to Date Event	<input checked="" type="checkbox"/>	Closed	1st Jan Yearly   To   9th Jan Yearly
Monthly Event	<input checked="" type="checkbox"/>	Closed	1st Monthly   All Day

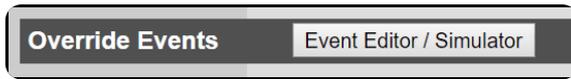
Override events come in two types - 'Open' or 'Closed' shown in Green or Red and in three flavours 'All Day', 'From date to date' and a 'Time period at date'.

The tick shows if the event is enabled, and the event should be shown in grey if disabled.

An Override event will be highlighted in blue if it is current active event.

To Edit Override Events see below.

## # Edit Override Events



Clicking the 'Event Editor / Simulator' button will take you to the Event Editor page.



Each event can be moved by dragging the up and down arrow icon, and will set its priority.

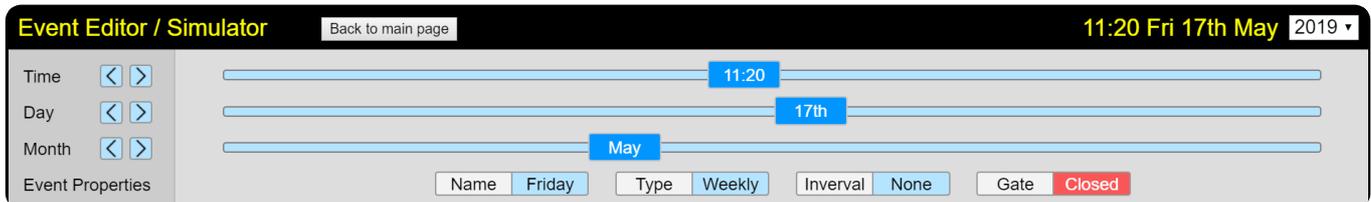
The highest priority is at the top, going down in descending order. If for example an Open event is From 10 till 12 on the 5th, and underneath is an event Close All Day on the 5th, the open even will be activated from 10-12 and then fall down to the Close event All day on the 5th.

To disable the event click the Tick button

To change the date click the Calender button

Testing which event overrides another event can be accomplished by using the Event simulator sliders at the top, read below.

## # Event Simulator



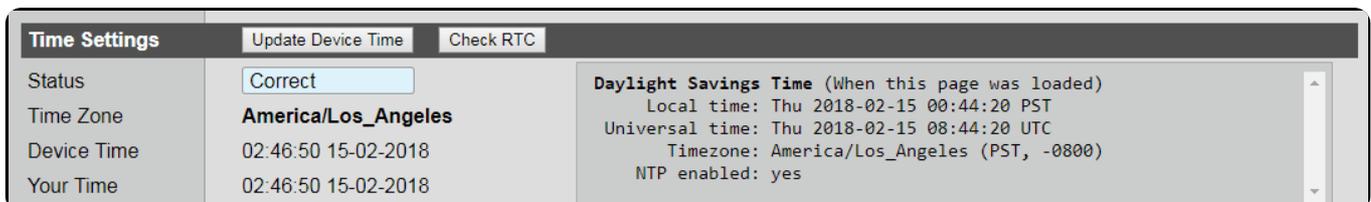
The event simulator allows you to test which events are activate at which times, by either dragging the Time, Day or Month sliders, or by selecting the Year top right of the screen.

For more precision you can click the Left and Right arrow buttons on the left of each sider.

As the simulated time and date changes the blue highlighted event will change, giving you visual confirmation of how the WMT will act.

## # Time zone and Real Time Clock

This section shows you the selected time zone, and the difference between your computer time and the WMT time.

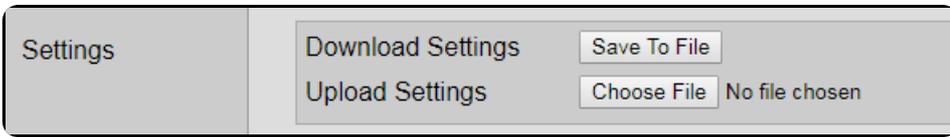


The 'Update Device Time' button will send your computer time to the WMT.

The 'Check RTC' button will give you a diagnostic of the onboard Real Time Clock, which is only necessary when there is no Internet connection to the WMT.

## # Backup

The Settings can be saved and restored by using the Download and Upload options in Advanced / Settings.



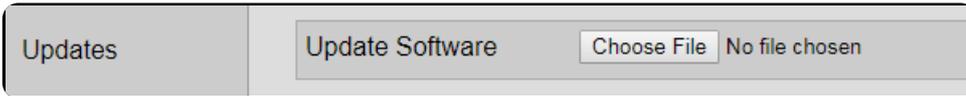
## # Updates

Updates can be applied any time to fix bugs and gain new features, updates will not change your settings.

The latest update file can be found in the downloads section of the website. Download to your PC.

Firstly, save a backup of your settings, by clicking 'Download Settings' in the Settings / Advanced / Settings section.

Updates are in the Advanced section at the bottom, click 'Settings' then near the bottom of this section is the Updates section, click 'Choose File', then select the update file from your PC. Click Okay or Continue, and instructions will be provided from the WMT software.



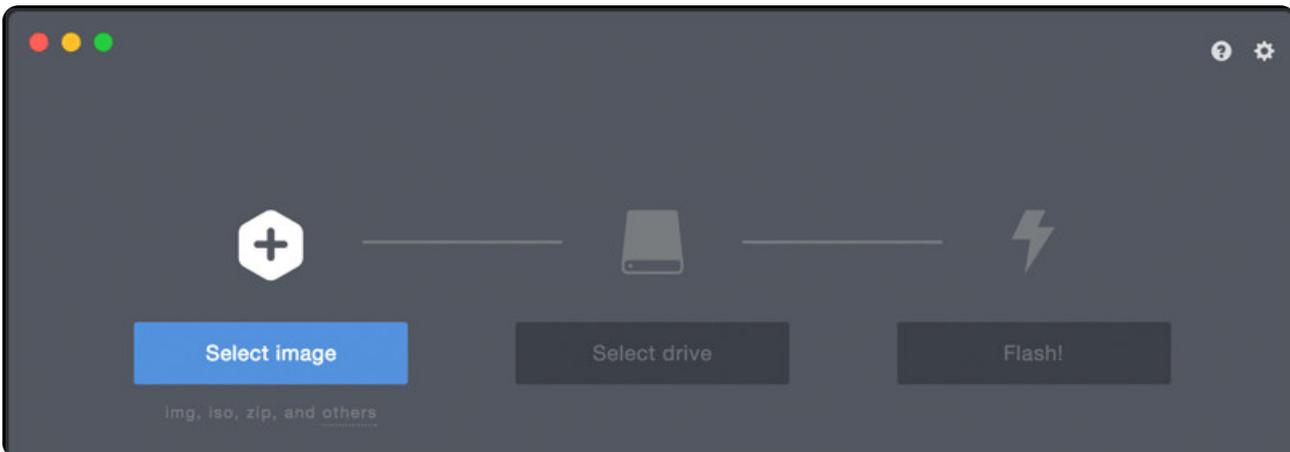
If updating your device fails, or the system doesn't work correctly after a power cycle, a full Recovery shown below will be necessary.

## # Recovery

If your WMT is bricked or somehow the on-board storage gets corrupted, a recovery image is available in the downloads section of the website.

Recovery is also necessary if Updating your device has failed.

Download Etcher, an open source SD-Card writing software at [etcher.io](https://etcher.io) Use Etcher to write the Recovery Image provided in the downloads section to a Micro SD-Card of size 8gb or larger.

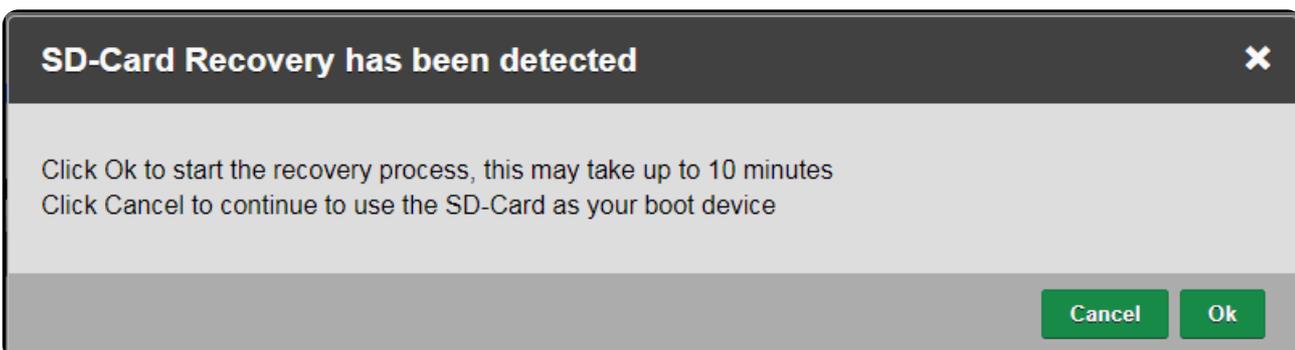


Remove all power from the WMT and remove the four screws.

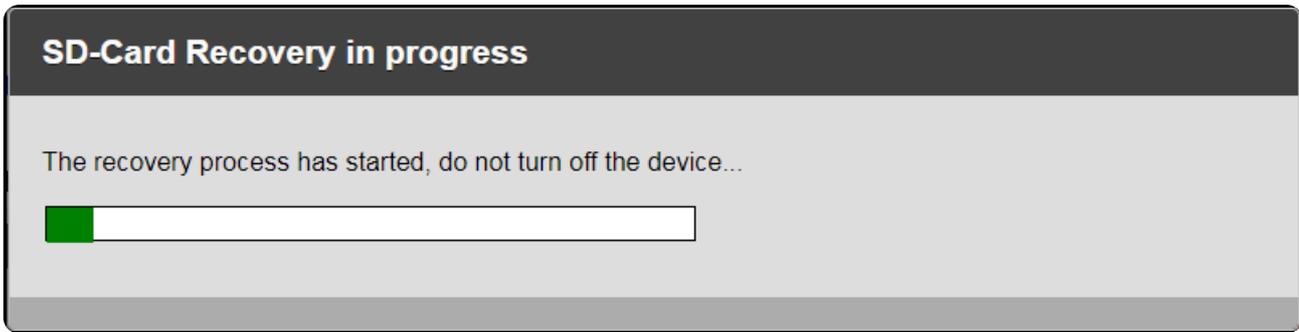
Locate the SD-Card holder on the side of the main board, and plug in the SD-Card with label pointing up, it will snap click in to place when inserted correctly.

Power on the WMT, then using a laptop or other wireless device, using the AP Wifi defaults and password defaults listed in the manual, connect to the Access Point and log-in.

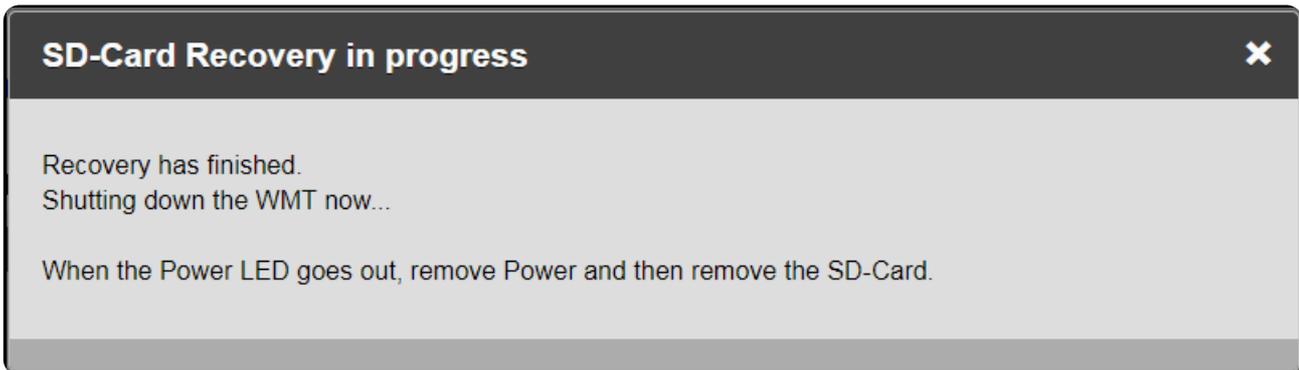
You will then be prompted to start the recovery process.



The process should take about 5 minutes.



Once finished, the power LED should go out, remove all power from the WMT, remove the SD-Card, and power on the WMT again.



You will then have a fresh factory restored WMT.