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 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

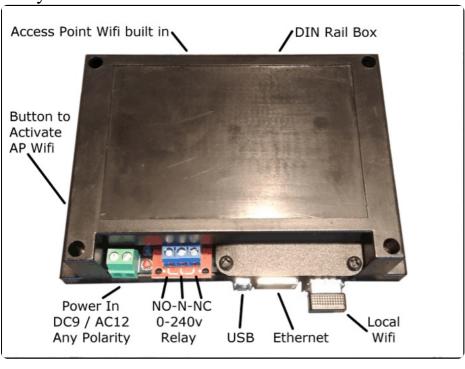
Access Point Password: 12345678 Access Point IP Address: 10.1.1.1 User Interface Username: admin User Interface Password: admin

Requirements

 $9v\ DC\ /\ 1\ Amp$ or $12v\ AC\ /\ 1\ Amp$

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 sddress 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.



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 of the week, or a holiday or special event. If holiday or special event, the name of

the event such as 'Easter' or 'Bobs Meeting' will be shown here.

Gate Position: Shows weather the Gate is Open or Close, 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 weather 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 occuring, 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.

The Scheduler

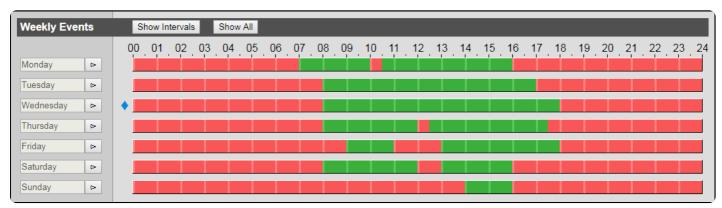
The Scheduler has three ways to control the WMT. By Weekly events, by Holiday events and by Special events.

A blue Diamond symbol moves to where the current event is, making it easy to see if your in a Holiday or Special event rather than a Weekly event.

The priority of events is important. Special events override both weekly and holiday events. Holiday events override Weekly events. Another way to think of the priority is; Special Events have the highest priority, Holiday events have the next priority and Weekly events have the lowest priority.

Weekly Events

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



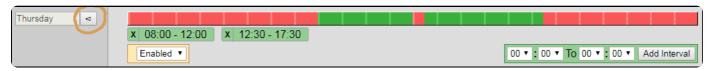
The numbers across the top represent the time of day, as is typical with 24 Hour time.

The bars underneath align to the Time above.

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

Each green section is called an Interval, and the Intervals indicate when the Gate or Bell is activated.

Clicking the Arrow button (Circled in orange below) allows you to see, edit, add and delete the Intervals. Clicking the button again will hide the editing interface.



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.

Holiday Events

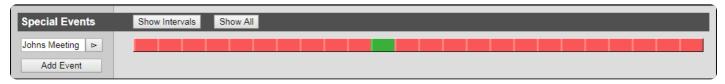
Holiday events override weekly events, and can be programed across days, weeks, months or years.



Clicking 'Add Holiday' will add a new holiday, from left to right, you can change the name, delete the holiday, enable or disable the holiday, select what happens after the holiday, specify the holiday start time, date and year, and then specify the end time similarly.

Special Events

Special events override Holiday events and override Weekly events and are for scheduling one off events such as 'Johns Meeting', or for repeat monthly or yearly events, such as 'The Cleaner' 5th Monthly 18:00 till 18:30.

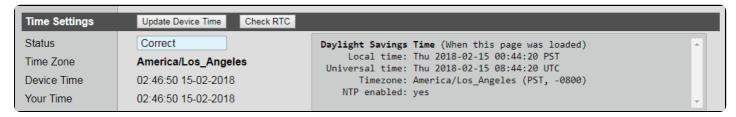


Clicking 'Add Event' will add a new Special event.

Editing the Interval(s) in a Special event is done the same way as a Weekly event, described above in the Weekly Event section and is activated by clicking the small Arrow button next to the Event name.

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.

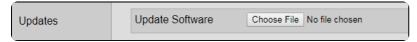
The 'Check RTC' button will give you a diagnostic of the onboard Real Time Clock, which is only necessary when there is no Internet connection to the WMT.

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.

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', the select the update file. Click Okay or Continue, and instructions will be provided from the WMT software.



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.

Download Etcher, an open source SD-Card writing software at <u>etcher.io</u>. 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.

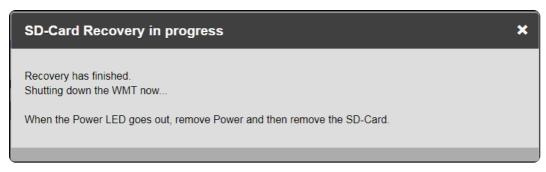
You will then be prompted to start the recovery process.



The process should take 5 to 10 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 with default options.