



TWM TRAFFIC CONTROL SYSTEMS

WORKBENCH SOFTWARE HANDBOOK



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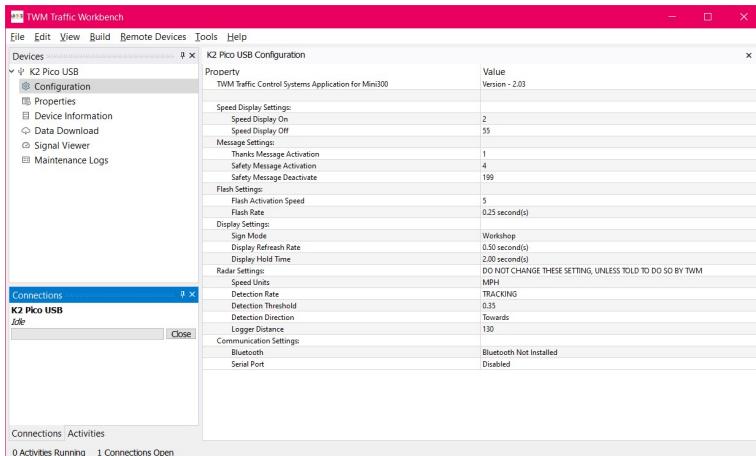
01.0 - Workbench Introduction

This handbook serves a basic introduction to the TWM Workbench software tool. The standard edition of this is provided as an easy-to-use configuration tool for TWM products that utilise the Kestrel radar technology.

01.1 - Workbench User Interface

The software uses a modern and configurable docking widget system which allows the user to dock, show, hide and pin windows when and where they like to maximize productivity

The screenshot below shows a typical layout:



Throughout this handbook we will be giving an outline of each function available to you in workbench.

Notes

01.2 - Devices Widget

The devices Window shows any devices currently “connected” to the computer, these can be connected via USB and Bluetooth, along with any remote connection devices you have set-up.

Each radar device will have a number of “tools” in a sub-menu, to expand the sub-menu click the > next to the device name.

From the devices sub-menu you have a number of options to choose from, we will go through these in further details later in the manual. Below we give a brief description of each of the tools available to you.

| Devices | Configuration |
|----------------------|--|
| ψ K2 Pico USB | This tool will load a list of user configurable setting for how the sign works. |
| ⚙ Configuration | Properties This tool will load system information and allows for firmware upgrades and switching of applications |
| 📄 Properties | Device Information This tool allows you to store information about your sign. |
| ⓘ Device Information | Data Download This tool allows you to download data from your radar and store it on your computer. |
| ⬇ Data Download | Signal Viewer This tool allows you to see what the radar is currently detecting. |
| ⌚ Signal Viewer | Maintenance Logs This tool allows you to store information about maintenance you have done to the sign. i.e. changed batteries |
| > ⌂ Remote sign | |

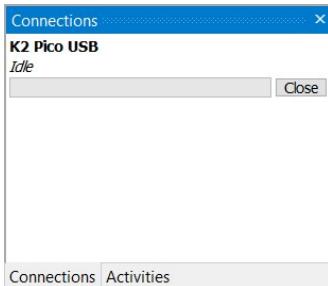
Notes

01.3 - Connection Widget

The connections widget shows you current status of signs you are connected to.

For example, if you were looking at the properties page, it might say "Retrieving Properties" as it loads the information. Normally it will display as "Idle".

If you are connecting to remote sign you will also see the following connection status



“Connecting to server” - Normally only shows for a very short time however if this status remains for a long period of time, please check your internet connection.

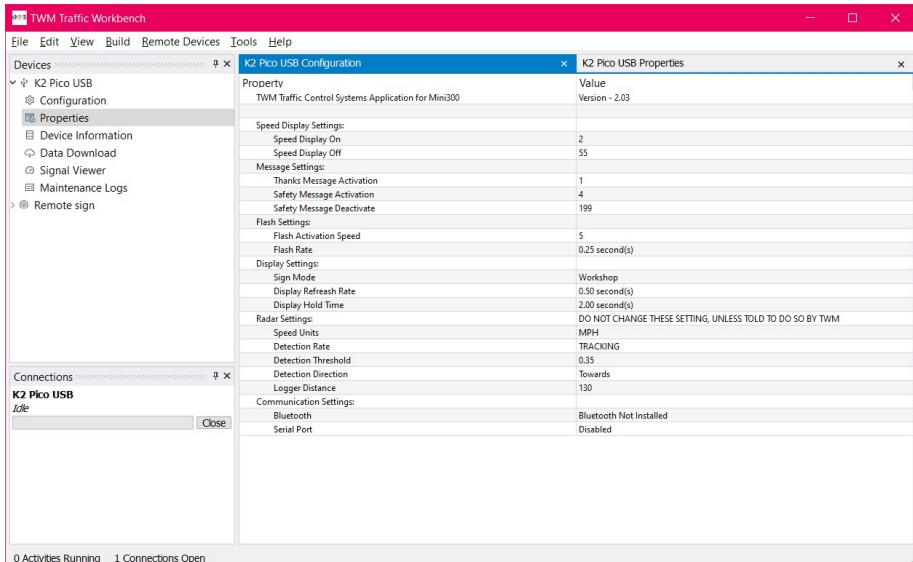
“Contacting device” - Depending on how busy the server is, this status should only display for around 30 to 60 seconds. This message indicates the server is asking the sign to call home.

“Waiting for device” - The server has requested the sign to call home and is waiting for the data connection to be established



01.4 - Main Widget

The main widget is the only widget that can not be repositioned. This is where the different tools will display when they have been opened. The below screen shows the configuration tool open for a sign connected via USB.



If you have multiple tools open, tabs will show at the top of the main widget to allow you to switch between them. You can also be connected to multiple signs at the same time and switch between each of the signs tools that have been opened using the tabs at the top.

Notes

02.0 - Data Collection

This section of the manual is going to talk you through how to download data from your sign, TWM along with developers of the workbench software and radars have tried to keep the way you collect data is the same weather you are connect the sign via USB, Bluetooth or Remotely.

The steps shown throughout this section have been done via a USB connection, however the same steps apply to all other connection methods.

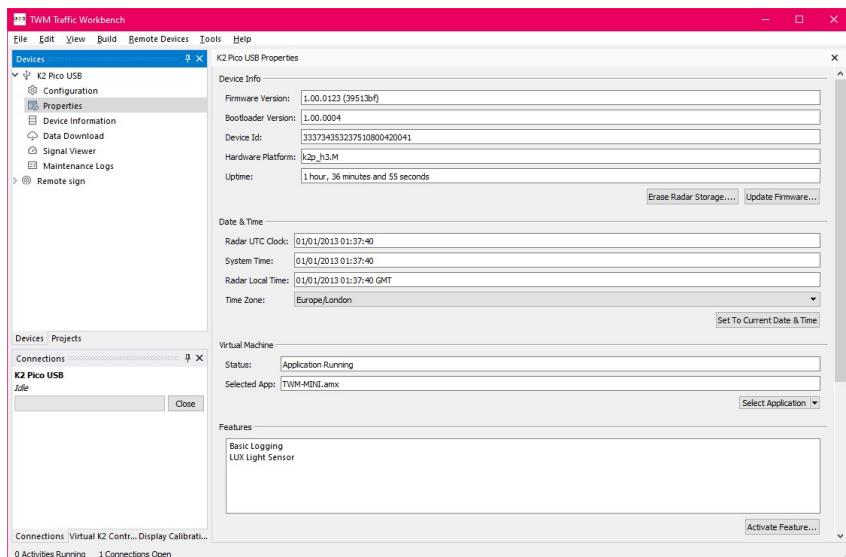
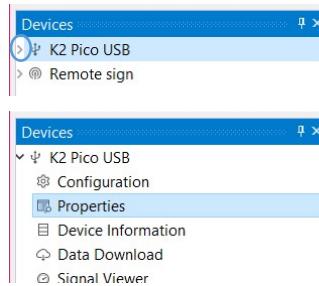
02.1 - Do you have data collection? (If not, you can upgrade)

If you are unsure if you have the data collection capabilities on your sign, you can check this by opening the properties tool.

To open the property tool, expand the radar menu by clicking the “>” next to the radar you would like to check. (see screenshot to the right)

Once you have expanded the radar menu. Double click on properties, this will open the tool in the main widget as shown below

When the properties window is open, look for the “Features” section and in here you will see LUX Light Sensor. If data collection is enabled, you will also see Basic Logging



02.2 - Downloading Traffic Data

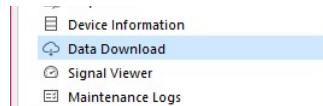
Step 1

Expand the radar menu by clicking the “>” next to the radar you would like to download data from.
(See screen shot to the right)



Step 2

Double click on “Data Download” from the radar menu. This will open up the download selection wizard.

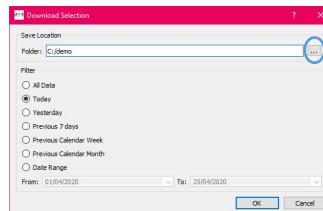


Step 3

Select where you would like the data to be saved onto your computer. To do this, click the “...” button next to the folder input box

Tip

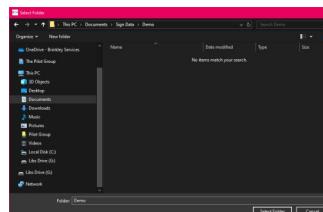
When you navigate to the folder it will only show other folders and will not show any other type of files



Navigate to the folder you would like to download the data to and click “Select Folder”

Tip

If you have multiple sign we suggest creating a folder for each sign.



Step 4

Under the “Filter” section, select the range of data you would like to download.

All Data - Will download all data the radar has ever recorded, this will include test data from when the radar was manufactured and when the sign was manufactured.

Today - Will only download data from midnight till the time you are download data

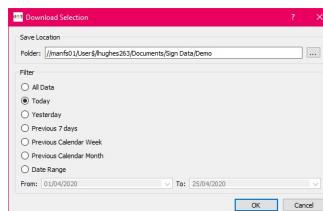
Yesterday - Will download all the data from the day before

Previous 7 days - Will download data for the last 7 days

Previous Calendar Week - Will download the last weeks data (Sun–Sun)

Previous Calendar Month - Will download the whole of the last month

Data Range - Allows you to select the data range you want to download

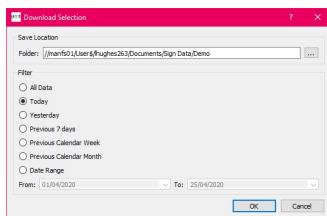


02.2 - Downloading Traffic Data - Continued

Step 5

Once you have selected the data range you would like to download, click “OK”

This will start the download process and the File Transfer Progress window will show.

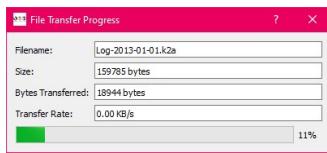


Step 6

Wait for the data to download.

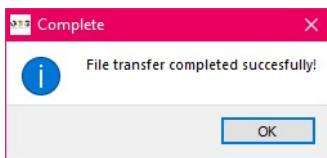


If you are download a large range of data this can take awhile, while you are doing this you can not do anything else in workbench. The progress bar resets for each day downloading.



Step 7

When the data has fully download, you will receive a message letting you know its complete.





Notes

02.3 - Creating a PDF Report

Step 1

Click the file menu

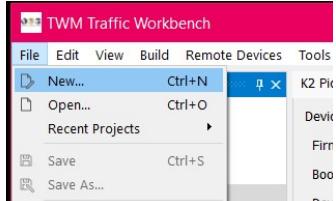


Step 2

Click “New..”

Tip

You can also open the wizard by pressing Ctrl and N on your keyboard

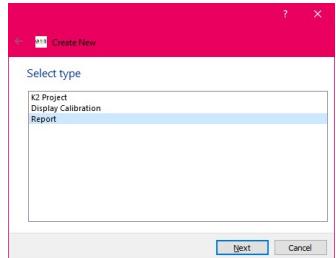


Step 3

Select “Report” and click next

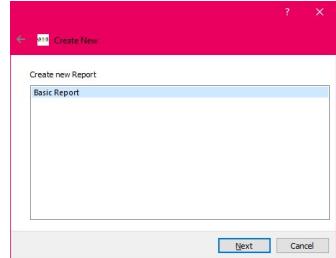
Tip

Unless you have been upgraded to the developer edition of workbench you will only see the report option and not the other options shown in the screenshot



Step 4

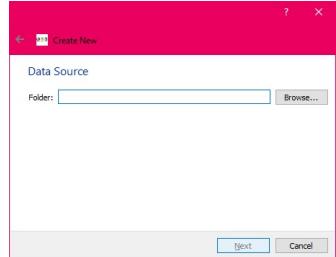
Select “Basic Report” and click next



Step 5

Workbench will now ask you to select your data source, this is the folder which you download the data into earlier.

Click the “Browse” button



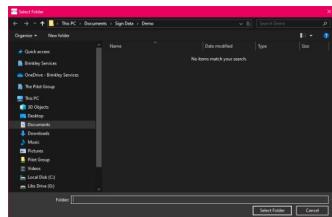
02.3 - Creating a PDF Report - Continued...

Step 6

Navigate to the folder which you downloaded the data into, once you are in the folder click “Select Folder”

Tip

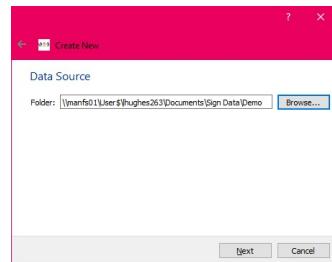
When you navigate to the folder it will only show other folders and will not show any other type of files



Step 7

The folder input box should now show the path to the folder where you download the data into earlier.

Click the Next button



Step 8

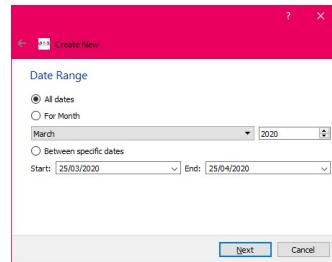
Now the wizard will ask you what data range you would like to create a report for. You can select either of the following.

All Dates - This will generate a report for all the data that is in the folder you selected.

For Month - This will generate a report just for the month you have selected (The data must have already been download into the folder)

Between specific dates - allow you to pick the date range you would like to generate a report for.

Once you have selected the date range you want, click next.



Notes

02.3 - Creating a PDF Report - Continued...

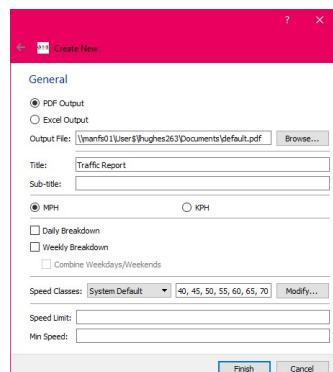
The screenshot to right shows the last window of the wizard, there is a couple of steps to complete on this window

Step 9

Select PDF Output

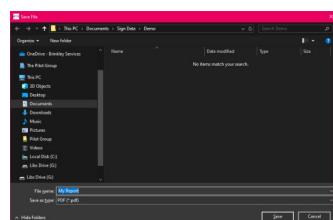
Step 10

Output file, click browse.



Step 11

Select the location and file name that you would like and then click save. The same as if you was saving a file in another application.



Step 12

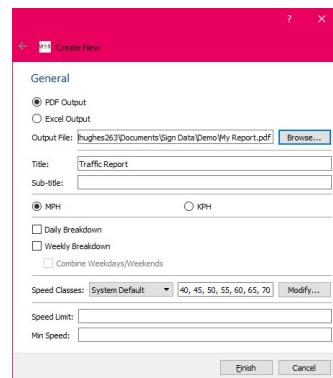
Set the title you would like on the report, using the Title input box. By default this is Traffic Report

Step 13

Set the sub-title you would like on the report, using the Sub-title input box. By default this is blank

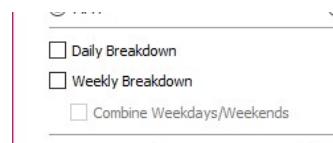
Step 13

Set the speed units you would like the report in By default this is set to MPH



Step 14

By default workbench will generate an overview of the data range you selected, you can also select to have Daily and/or Weekly breakdowns by ticking the boxes.



02.3 - Creating a PDF Report - Continued...

Step 15

Enter the speed limit of your road into the Speed Limit input box

Speed Limit:

Min Speed:

Step 16

Enter the minimum speed you would like to show on the report. For example 5mph, which will eliminate any people walking in the detection zone of the sign

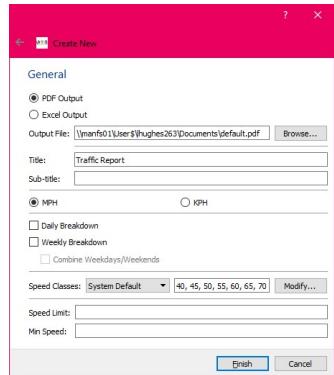
Step 16

Once you have entered all the information, click Finish.

Workbench will now generate and save the report into your selected location.

Tip

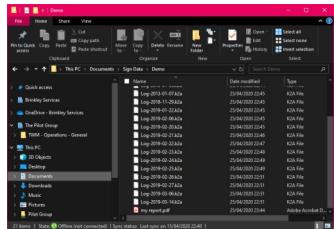
Depending on the amount of data being processed you may see a progress window whilst the report is being created.



Step 17

Using windows file explorer, navigate to where you selected to output the report too and you will find a PDF with the file name you selected.

Open the PDF using your favourite PDF viewer.

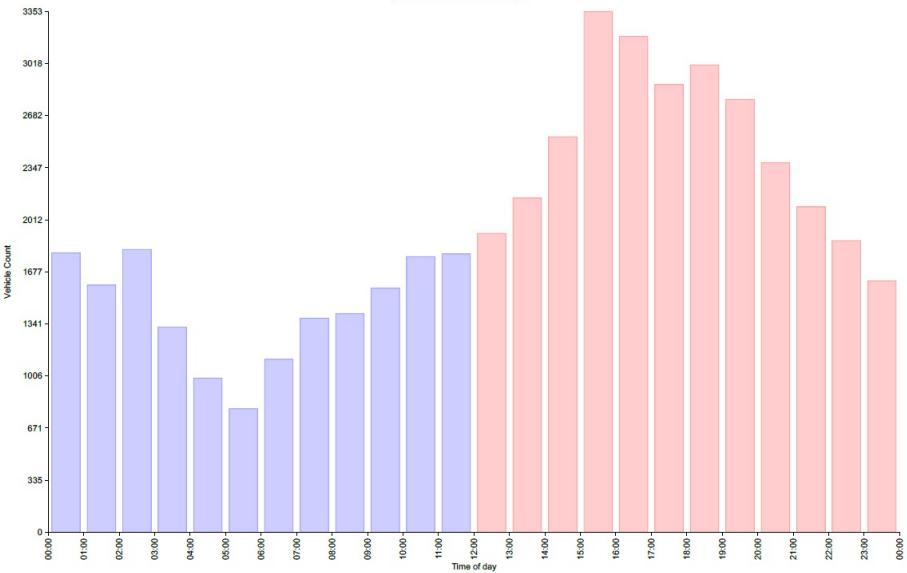


Notes

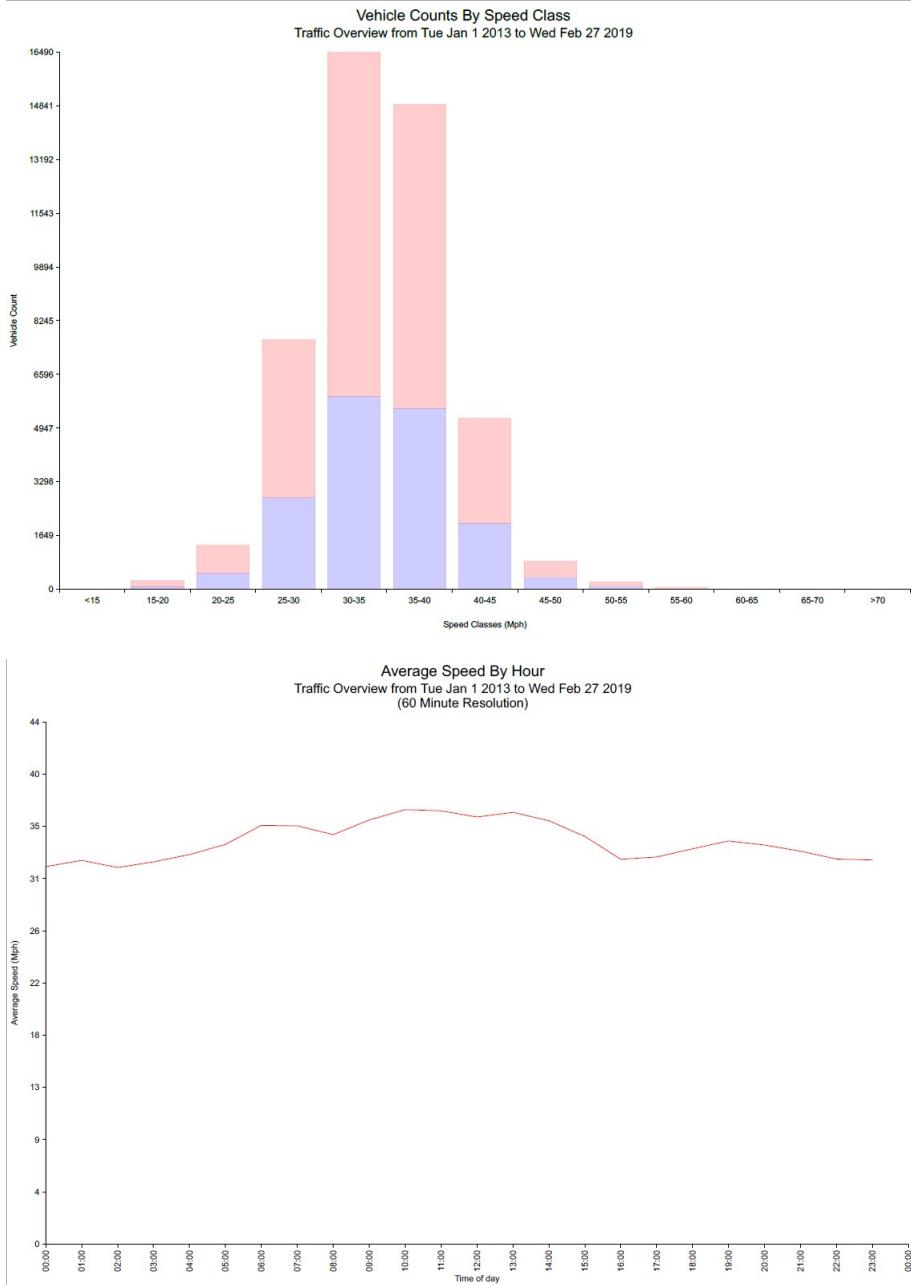
02.4 - PDF Report Sample Screenshots

| | | Traffic Report | | | | | | | | | | | | | | | | | | |
|---|---------|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----|-------|-----------------|-------|-------|--------|--------|--------|
| | | Traffic Overview from Tue Jan 1 2013 to Wed Feb 27 2019 | | | | | | | | | | | | | | | | | | |
| | | Vehicle Speed Classes (Mph) | | | | | | | | | | | | | | | | | | |
| <15 | | 15 20 | 20 25 | 25 30 | 30 35 | 35 40 | 40 45 | 45 50 | 50 55 | 55 60 | 60 65 | 65 70 | >70 | Total | 85th Percentile | | | | | |
| Time of day | 00:00 | 0 | 10 | 70 | 487 | 799 | 326 | 79 | 24 | 3 | 1 | 0 | 0 | 0 | 1799 | 35.8 | | | | |
| | 01:00 | 0 | 3 | 29 | 378 | 781 | 301 | 67 | 18 | 8 | 6 | 0 | 1 | 0 | 1592 | 35.8 | | | | |
| | 02:00 | 1 | 11 | 52 | 515 | 834 | 293 | 83 | 25 | 6 | 1 | 0 | 0 | 0 | 1821 | 35.5 | | | | |
| | 03:00 | 1 | 3 | 46 | 332 | 581 | 260 | 72 | 18 | 7 | 1 | 0 | 0 | 0 | 1321 | 36.4 | | | | |
| | 04:00 | 1 | 5 | 35 | 210 | 419 | 230 | 63 | 23 | 4 | 1 | 0 | 1 | 0 | 992 | 37.3 | | | | |
| | 05:00 | 0 | 6 | 20 | 154 | 305 | 192 | 91 | 19 | 7 | 2 | 1 | 0 | 0 | 795 | 36.0 | | | | |
| | 06:00 | 0 | 1 | 35 | 137 | 323 | 355 | 209 | 37 | 12 | 4 | 0 | 0 | 0 | 1113 | 40.4 | | | | |
| | 07:00 | 0 | 11 | 38 | 175 | 347 | 504 | 246 | 44 | 11 | 2 | 0 | 0 | 0 | 1378 | 40.3 | | | | |
| | 08:00 | 0 | 15 | 59 | 177 | 391 | 543 | 189 | 25 | 6 | 1 | 0 | 1 | 0 | 1407 | 39.2 | | | | |
| | 09:00 | 0 | 15 | 39 | 117 | 383 | 703 | 255 | 43 | 11 | 2 | 1 | 0 | 0 | 1571 | 39.9 | | | | |
| | 10:00 | 0 | 6 | 29 | 61 | 363 | 923 | 328 | 51 | 9 | 3 | 0 | 1 | 0 | 1774 | 39.9 | | | | |
| | 11:00 | 0 | 4 | 36 | 64 | 382 | 910 | 345 | 37 | 9 | 2 | 1 | 1 | 1 | 1792 | 40.1 | | | | |
| | 12:00 | 0 | 12 | 51 | 116 | 426 | 946 | 313 | 36 | 15 | 5 | 2 | 0 | 0 | 1924 | 39.7 | | | | |
| | 13:00 | 0 | 3 | 36 | 94 | 511 | 1031 | 401 | 61 | 10 | 3 | 1 | 0 | 1 | 2152 | 40.0 | | | | |
| | 14:00 | 0 | 10 | 46 | 169 | 719 | 1112 | 387 | 55 | 11 | 8 | 3 | 0 | 1 | 2547 | 39.6 | | | | |
| | 15:00 | 0 | 17 | 94 | 409 | 1183 | 1204 | 384 | 55 | 13 | 3 | 0 | 0 | 1 | 3193 | 37.1 | | | | |
| | 16:00 | 6 | 46 | 144 | 603 | 1378 | 745 | 230 | 27 | 11 | 2 | 0 | 1 | 0 | 3193 | 37.1 | | | | |
| | 17:00 | 6 | 42 | 127 | 553 | 1137 | 759 | 216 | 33 | 5 | 1 | 2 | 1 | 0 | 2882 | 37.4 | | | | |
| | 18:00 | 1 | 25 | 114 | 533 | 1133 | 864 | 286 | 36 | 8 | 5 | 1 | 2 | 0 | 3010 | 38.0 | | | | |
| | 19:00 | 0 | 9 | 66 | 507 | 977 | 826 | 330 | 43 | 19 | 7 | 2 | 1 | 0 | 2787 | 38.9 | | | | |
| | 20:00 | 1 | 7 | 52 | 501 | 854 | 645 | 237 | 66 | 10 | 5 | 0 | 1 | 1 | 2379 | 38.6 | | | | |
| | 21:00 | 1 | 10 | 56 | 468 | 832 | 501 | 161 | 30 | 10 | 5 | 2 | 0 | 1 | 2056 | 38.0 | | | | |
| | 22:00 | 0 | 11 | 61 | 460 | 769 | 883 | 130 | 33 | 8 | 3 | 0 | 0 | 0 | 1678 | 37.3 | | | | |
| | 23:00 | 0 | 5 | 38 | 424 | 686 | 333 | 101 | 24 | 4 | 2 | 0 | 0 | 1 | 1618 | 36.8 | | | | |
| AM Total | | 3 | 90 | 486 | 2807 | 5906 | 5540 | 2027 | 364 | 93 | 26 | 4 | 5 | 2 | | | | | | |
| PM Total | | 18 | 197 | 885 | 4865 | 10584 | 9351 | 3220 | 499 | 124 | 49 | 13 | 6 | 7 | | | | | | |
| Total | Percent | 21 | 287 | 1373 | 7672 | 16490 | 14891 | 5247 | 863 | 217 | 75 | 17 | 11 | 9 | 0.04% | 0.51% | 2.91% | 16.26% | 34.96% | 31.57% |
| Total Vehicles : 47173 | | | | | | | | | | | | | | | | | | | | |
| 30th Percentile : 30.5 MPH | | | | | | | | | | | | | | | | | | | | |
| 50th Percentile : 33.3 MPH | | | | | | | | | | | | | | | | | | | | |
| 85th Percentile : 38.7 MPH | | | | | | | | | | | | | | | | | | | | |
| 95th Percentile : 41.9 MPH | | | | | | | | | | | | | | | | | | | | |
| Average Speed : 33.9 MPH | | | | | | | | | | | | | | | | | | | | |
| Highest Speed : 68.1 MPH | | | | | | | | | | | | | | | | | | | | |
| Total Over Speed Limit : 60.2 % (37820 / 47173) | | | | | | | | | | | | | | | | | | | | |

Vehicle Counts By Hour
Traffic Overview from Tue Jan 1 2013 to Wed Feb 27 2019
(60 Minute Resolution)



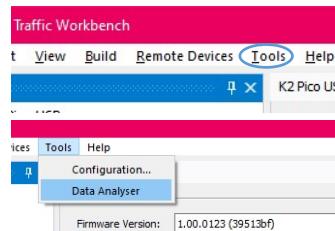
02.4 - PDF Report Sample Screenshots - Continued...



02.5 - Exporting Data to CSV/Excel

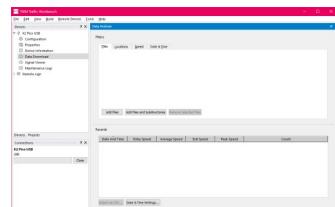
Step 1

Click the Tools menu



Step 2

Click the Data Analyser



Step 3

You have two options you can either select to a data file or the whole folder where your data is stored.

If you have a lot of data we suggest selecting just the data files you would like.

Step 3a

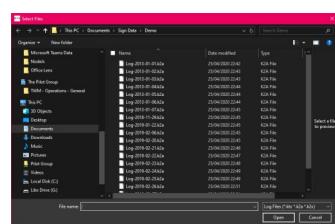
To select just the data files you would like, click the “Add Files” button

Navigate to your folder and select the files you would like and click open.

Tip

You can select multiple files by pressing either shift or ctrl and click on the files you would like.

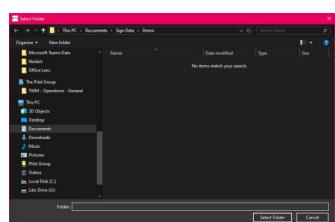
The files are named log-*year*-*month*-*day*



Step 3b

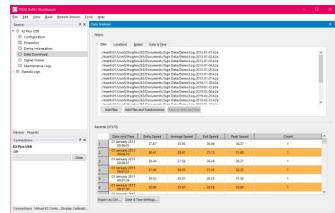
To select just the whole folder where your data is stored, click the “Add Files and Subdirectories” button.

Navigate to your folder and click “Select Folder”



Step 4

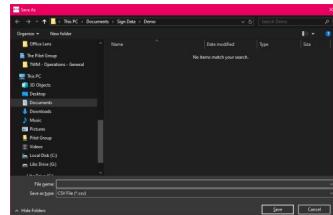
Once the data has loaded, click the “Export as CSV..” button



02.5 - Exporting Data to CSV/Excel - Continued...

Step 5

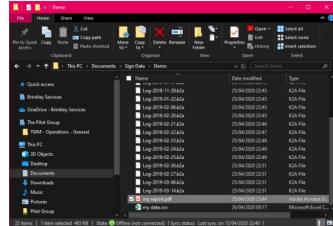
Select the location and file name that you would like and then click save. The same as you would if you are saving a file in another application.



Step 6

Using windows file explorer, navigate to where you selected to output the report too and you will find a CSV with the file name you selected.

Open the CSV using your favourite spreadsheet software.

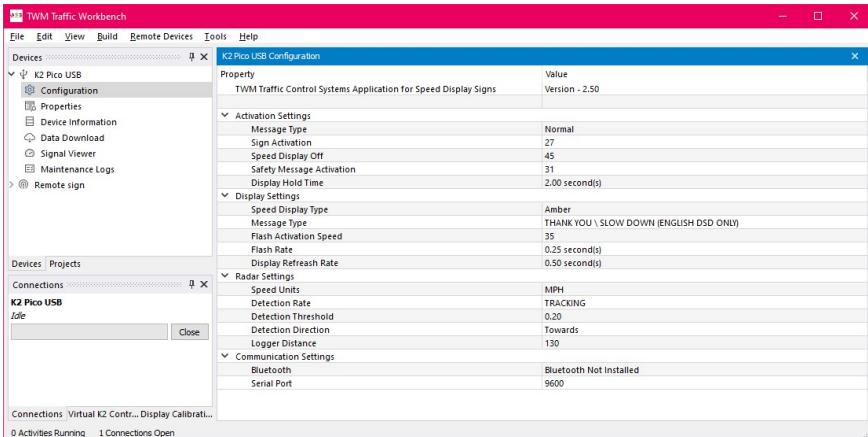


Notes

03.0 - Sign Configuration Tool

The sign configuration tool is where you choose how the sign display. Depending on the sign you have and application the sign is running, your options will change. We try to keep descriptions of each setting as self explanatory as possible.

This handbook is a general manual and we will only be going through the most common and standard setting. The Screenshot below shows the configuration tool for speed display signs



03.1 - Standard Settings

There are a couple of setting that are standard across all TWM signs, these are detailed below:-

Message/Display Type - This has two options, **Normal** and **Covert**. **Normal** mode has the sign display as per your settings. **Covert** mode turns off the display, this is useful when you have data collection radar. If you have VAS sign you will also see an option called LED Test, this turns all the LEDs on show you can see if there is any LEDs out on your sign

Sign Activation - This is the speed which the sign starts to display at.

Display Hold Time - This is the time in which the sign will hold the display after the radar can no longer track the object

Speed Units - This is the unit shown and if you have a speed display the unit of the display. Standard options are MPH and KPH other units are available upon request, if you require other units please email support@twmtraffic.com

Detection Rate - This is how often the radar looks for an object, default this is set to tracking which means the radar will always lock on and tracks

03.1 - Standard Settings

the object through its range. We would not suggest changing this without talking to a TWM Technician before hand.

Detection Threshold - This is the minimum signal strength required to activate the sign, default is 0.35. We would not suggest changing this without talking to a TWM Technician before hand.

Detection Direction - The direction of the traffic that is being detected, default is Towards.

Logger Distance - When Detection Rate is set to Tracking this is not used, however if the Detection Rate is set to any other setting this is the distance the radar is detecting at is in meters. Please note this does not adjust the distance which the sign will display at.

Serial Port - This is the baud rate of the serial port, the serial port is used for Debugging only by default.

03.2 - Speed Display Settings

Along with the setting detailed in the last section you also have the following setting available:-

Speed Display Off - This setting is the speed in which the sign will stop displaying the approaching object speed.

Safety Message Activation - This is which the sign will start display the safety message, i.e. "SLOW DOWN", "ARAF SLOW" or Sad Face.

Speed Display Type - This is dependent on the sign you have, please contact TWM support before changing this setting.

Message Type - This is dependent on the sign you have, please check your order conformation or contact TWM support before changing this setting.

Flash Activation - This is the speed which the display will start to flash.

Flash Rate - This is how fast the display flashes in seconds.

Display Refresh Rate - This is how often the sign will update the speed display.

03.3 - VAS - IAC Controlled Signs Settings

IAC Controlled signs have a very basic range of settings

Sign Activation - This is the speed which the sign starts to display at.

Display Hold Time - This is the time in which the sign will hold the display after the radar can no longer track the object

Display Refresh Rate - This is how often the sign will update the display.



Notes

03.4 - VAS - Bespoke Sign Setting

IF YOUR SIGN HAS BESPOKE
SOFTWARE, DETAILS WILL BE
ATTACHED TO THIS PAGE.

IF YOU BELIEVE YOU REQUIRE BESPOKE SOFTWARE
FOR YOUR SIGN PLEASE EMAIL
SUPPORT@TWMTRAFFIC.COM

04.0 - Remote Connections

This section of the handbook will talk you through how to setup workbench to connect to a remote sign. Please note that you must have ordered the remote connection upgrade to be able to use this feature. If you are unsure if you have the remote connection upgrade please check your order confirmation or contact TWM's support team at support@twmtraffic.com

04.1 - Server Settings

To be able to connect remotely to a sign, workbench need to be configured to communicate with TWM Bridge Server. To do this please follow the steps below

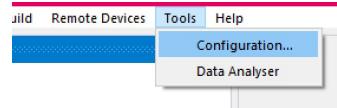
Step 1

Click the Tools menu



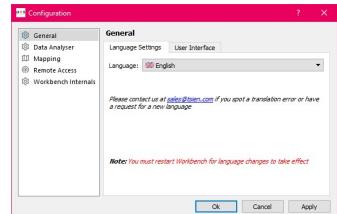
Step 2

Click the Configuration



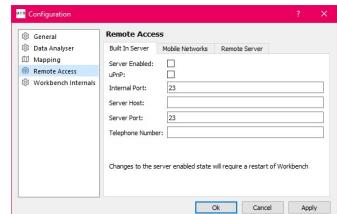
Step 3

The Configuration window will show, click on Remote Access



Step 4

On the Built In Server tab make sure the Server Enabled box is unticked.



Step 5

On the Remote Server tab enter the following information.

Server Address: signs.twmsigns.com

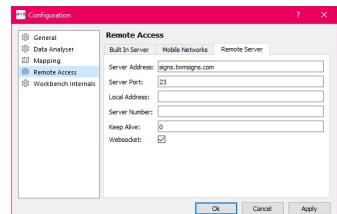
Server Port: 23

Local Address:

Server Number: 00447908419818

Keep Alive: 30

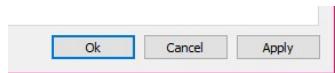
WebSocket: ticked



04.1 - Server Settings - Continued...

Step 6

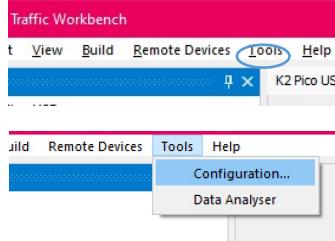
Once you have updated all the setting click ok



04.2 - Adding Mobile Network Settings

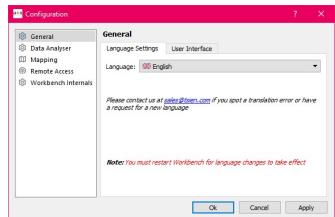
Step 1

Click the Tools menu



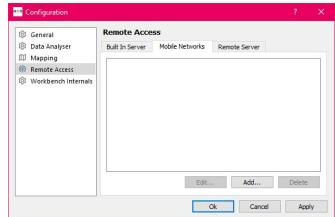
Step 2

Click the Configuration



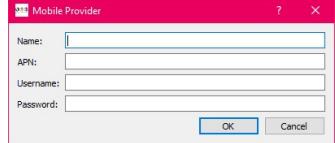
Step 3

The Configuration window will show, click on Remote Access



Step 4

Click Mobile Network tab and click the Add button

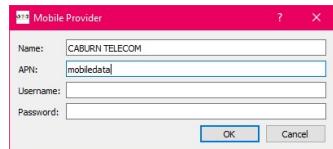


Notes

04.3 - Standard Network Settings

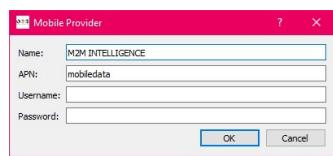
CABURN TELECOM

NAME: CABURN TELECOM
APN: mobiledata
Username: **NO USERNAMER LEAVE BLANK**
Password: **NO PASSWORD LEAVE BLANK**



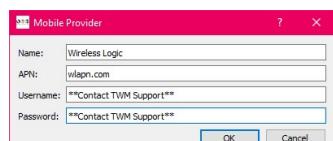
M2M INTELLIGENCE

NAME: M2M INTELLIGENCE
APN: mobiledata
Username: **NO USERNAMER LEAVE BLANK**
Password: **NO PASSWORD LEAVE BLANK**



Wireless Logic

NAME: Wireless Logic
APN: wlapn.com
Username: **Contact TWM Support**
Password: **Contact TWM Support**



o2 - Contract

NAME: o2 Internet - Contract
APN: mobile.o2.co.uk
Username: o2web
Password: password



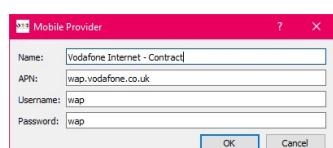
o2 - PAYG

NAME: o2 Internet - PAYG
APN: payandgo.o2.co.uk
Username: payandgo
Password: password



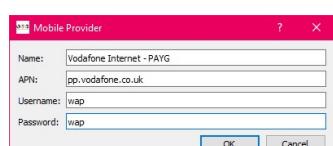
Vodafone - Contract

NAME: Vodafone Internet - Contract
APN: wap.vodafone.co.uk
Username: wap
Password: wap



Vodafone - PAYG

NAME: Vodafone Internet - PAYG
APN: pp.vodafone.co.uk
Username: wap
Password: wap



04.3 - Standard Network Settings - Continued....

EE Internet

NAME: EE Internet
APN: everywhere
Username: eesecure
Password: secure

Mobile Provider

| | |
|-----------|-------------|
| Name: | EE Internet |
| APN: | everywhere |
| Username: | eesecure |
| Password: | secure |

OK Cancel

3 Internet

NAME: 3 Internet
APN: three.co.uk
Username: **NO USERNAME LEAVE BLANK**
Password: **NO PASSWORD LEAVE BLANK**

WIFI Mobile Provider

Name:

APN:

Username:

Password:



04.4 - Adding a Remote Device

To add a remote device, please ensure you have setup the server and network setting before continuing.

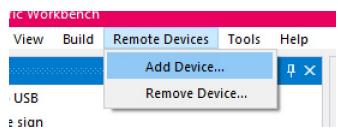
Step 1

Click the Remote Devices menu



Step 2

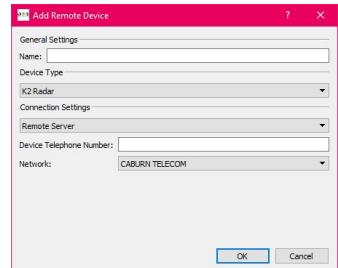
Click the Add Device menu



Step 3

The Add Remote Device window will open.

Enter the name you would like to call the sign, if the sign is in static location we suggest using the road name and the direction of the traffic being detected.



Step 4

Ensure the connection settings are set to Remote Server.



Step 5

Enter the telephone number of the sim card installed in the sign



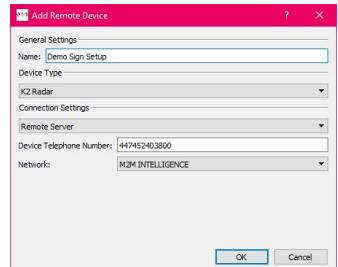
Step 6

Select the network of sim card installed in the sign



Step 7

Once you have entered all the setting, double check they are all correct and click ok.



04.5 - Remote Device Settings

If you have been provided this handbook with your sign we will prefill information for signs below.

Device 1

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

Device 2

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

Device 3

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

Device 4

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

04.5 - Remote Device Settings - Continued

Device 5

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

Device 6

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

Device 7

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

Device 8

| | |
|----------------------|--|
| Name: | |
| Device Type: | |
| Connection Settings: | |
| Telephone Number: | |
| Network: | |

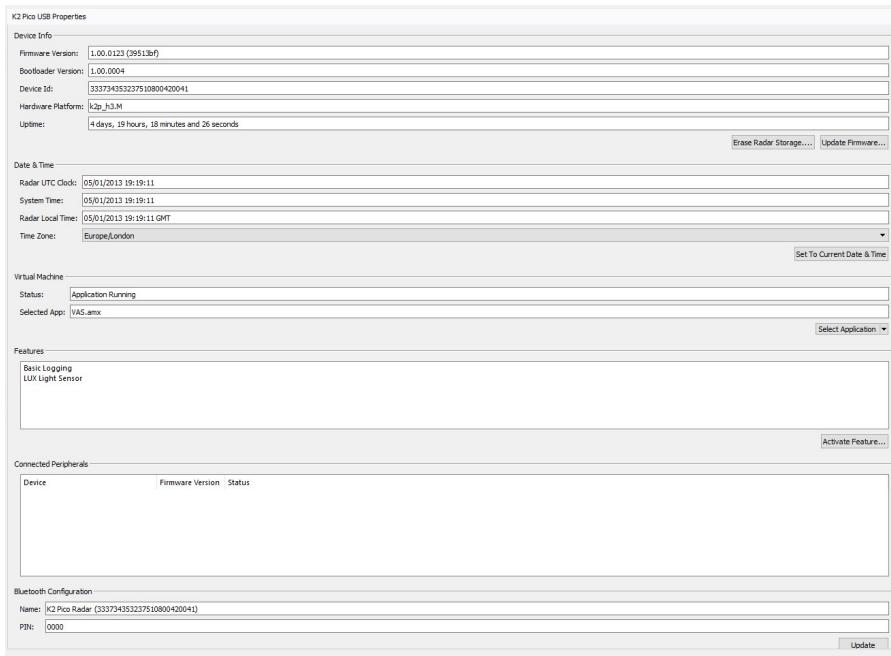


Notes

05.0 - Radar Properties

This section of the manual is going to talk you through the radar property tool which allows you to check, update and configure the radars systems properties like the system clock and Bluetooth pin and name.

Below is a screenshot of a radar's properties tool



05.1 - Set Date and Time

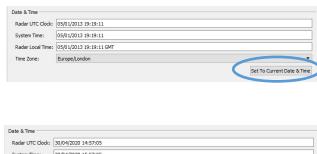
Step 1

To set the date and time, first check the time zone is set correctly.



Step 2

Click the Set to Current Date & Time, this will use your computers clock to set the radars clock.



Step 3

Check that the radar local time is now showing the correct time

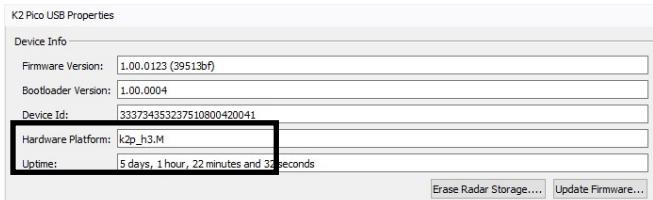


05.2 - Updating Firmware

Every now and then we may send you a notification letting you know that new firmware is available for your sign, this will generally be to either improve the functionality of the radar or add new features. Details about what the firmware does will be in the release notes.

Although firmware can be updated remotely if you have the remote upgrade, we strongly recommend that you visit the sign to complete the update via USB.

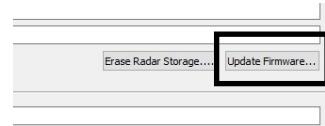
When you go to download the latest firmware, you will need to have made a note of the device ID and the hardware platform, both of which are found under the Device Info section of the properties tool as shown below.



Once you have downloaded the latest firmware follow the following steps to update the radar

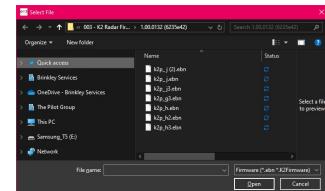
Step 1

Click the Update Firmware



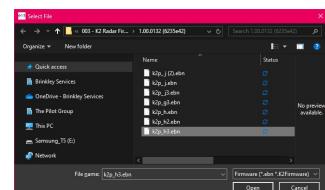
Step 2

Navigate to where you saved the firmware when you downloaded it.



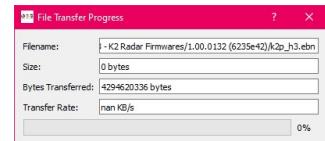
Step 3

Select the file and click open



Step 4

The file transfer window will open, once the firmware has been transferred the sign will reboot and the firmware will be updated.



05.3 - Updating Application

Every now and then we may send you a notification letting you know that new application update is available for your sign. This will be to either improve the functionality of the radar or add new features. Details about the update will be in the release notes.

Although applications can be updated remotely if you have the remote upgrade, we strongly recommend that you visit the sign to complete the update via USB.

Once you have downloaded the latest firmware follow the following steps to update the radar

Step 1

Click the File menu

Step 2

Click the Configuration

Step 3

Navigate to where you saved the firmware when you downloaded it.

Step 4

Select the file and click open.

Step 5

Select the device you would like to update and click OK

Step 6

The file transfer window will open, once the has updated the sign may reboot and the application will be updated.

05.4 - Upgrading to non-data collection to data collection

If you have brought your sign without data collection, you are able to upgrade to data collection at any point. For details and pricing please contact TWM's support team or sales team.

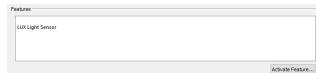
Once you have ordered your upgrade you will receive an license key, to upgrade your radar follow the steps below.

Tip

Save the email with your license key on the device you are going to use to connect to the sign, you can then copy and past the key into box instead of having to type it out.

Step 1

Click the Activate Feature



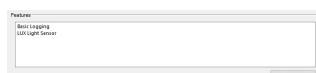
Step 2

Enter you license key into the input box



Step 4

The sign will reboot

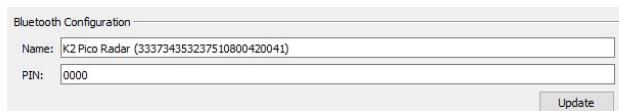


Step 4

You will know see basic logging listed under the features section

05.5 - Changing Bluetooth Name and Pin

If you have brought the Bluetooth upgrade you can change the device name and pin number, by entering the name and pin you would like in the Bluetooth Configuration section of the properties tool and then clicking update

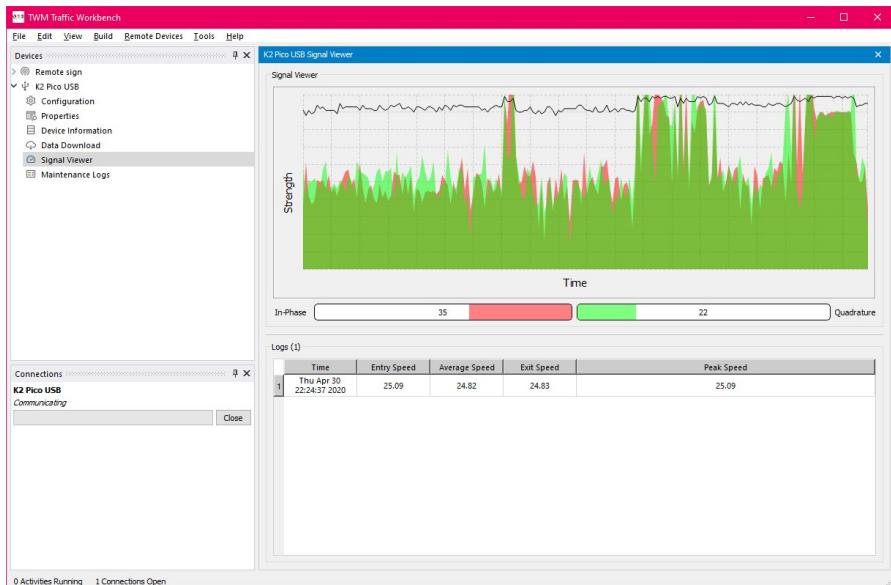


06.0 - Signal Viewer

The signal viewer shows you in real time what the radar is detecting and if you have data logging it will also show you the data it is logging.

This feature is handy to check that you are detecting vehicles properly when you are setting up or moving the sign.

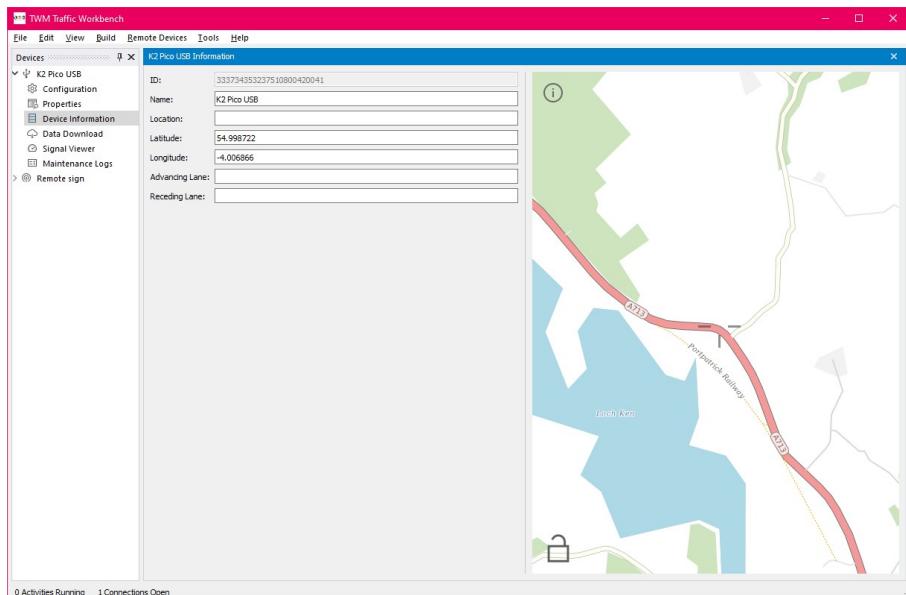
When no object is being tracked the red and green sections should be no higher 60%, when an object is being tracked it should be greater than 60%



Notes

07.0 - Device Information

The device information tool allows you to set a name for your device, along with storing information about the location of your sign.



To unlock the map and the coordinate input boxes, click on the map and press the shift key once. Once the map is unlocked you can drag the map to the location of your sign.

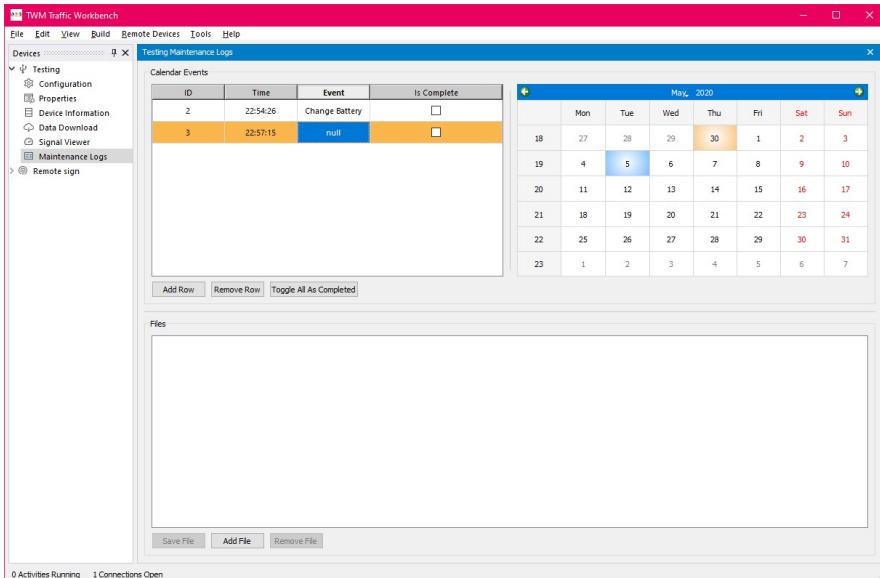
Tip

This information is stored just on your computer, if you are in an office environment and multiple people need access to this information speak to your IT department regarding setting a common data, details of this are in section 09.0.

Notes

08.0 - Maintenance Log

The maintenance logs tool allows you store information about maintenance carried out on your sign. For example keeping track of where your movable sign has been and when you have changed the battery.



To add an event select the day on the calendar and then click add row, a new row will be added to Calendar Events section, to set the event information, double click where it say “null” and enter your details.

You can also store some files and images on the maintenance log, however we recommend keep this to small files and not for storing large amounts of files.

Tip

Convert images and documents to web safe PDF's, they are a lot smaller than original file and fine for viewing on a computer monitor.

Large amounts of data storage will cause workbench to become unresponsive and slow in loading.

Tip

This information is stored just on your computer, if you are in an office environment and multiple people need access to this information speak to your IT department regarding setting a common data, details of this are in section 09.0.

09.0 - Database Setup

To connect workbench to a common database you must have the following already setup.

- MySQL V4 or Higher
- MySQL connector

We recommend that this is only carried out by IT department or advance user that already have an understanding of MySQL, we do not provide support for setting up MySQL databases or the MySQL connector.

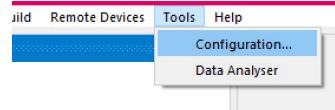
Step 1

Click the Tools menu



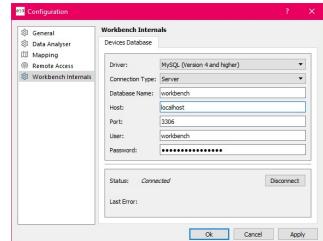
Step 2

Click the Configuration



Step 3

Enter your server configuration and click ok. You will need to restart Workbench for the changes to be full applied.



Step 3

Repeat the process on each computer

Tip

Make sure only on computer has all the data when setting this up, so you do not end up with duplicates.

10.0 - Troubleshooting

I don't have a USB cable, what type of cable do I need?

The USB cable is a straight USB Tape A to USB Type A cable, these can be purchase by contacting TWM's sales team.

My sign connects via USB but is not showing up?

Check the sign is powered up and the green power LED is flashing.

My Sign has the green power LED blinking but it is still not showing in workbench?

Try a different USB cable and check that the USB port on the sign is not damaged. If the issue continues contact support@twmtraffic.com

My Sign has power but the green power LED is not blinking?

Try turning the power off and on again, if it is a battery power sign try a different battery. If the issue continues contact support@twmtraffic.com

My Sign has power but the green power LED is not blinking?

Try turning the power off and on again, if it is a battery power sign try a different battery. If the issue continues contact support@twmtraffic.com

I am unable to connect to my remote sign, workbench status says connecting to server?

Check that the server setting are correct (see section 04.1) and that the device is set to use the remote server (see section 04.4). If the issue continues contact support@twmtraffic.com

I am unable to connect to my remote sign, workbench status says waiting for device?

Check the mobile signal in the area, leave it for 10 to 15 minutes and try again. Check no one else is trying to connect to the sign. If the issue continues contact support@twmtraffic.com

I am unable to connect to my remote sign, workbench status disappears quickly?

This normally means someone else is already connected to the sign, Check no one else is trying to connect to the sign. If the issue continues contact support@twmtraffic.com

10.0 - Troubleshooting

I've lost the phone number for my remote sign?

Contact support@twmtraffic.com, you will need to provide who originally brought the sign and either your purchase order number or TWM's Invoice number.

I have forgot my Bluetooth pin, how do I reset the pin?

You can plug into the sign via USB to rest your pin

My reports show a large count under 5mph?

Set the min speed on in report wizard, the sign may be picking up people and/or thing blowing in the wind.

My reports show a vehicle traveling at a very high speed?

You can set a maximum that the report will show, in the configuration tool under Data Analyser

Notes

11.0 - Software License Information

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12.0 - Useful Information

General Contact Information

Email: info@twmtraffic.com
Phone: 01606 59 66 22 option 3
Address: TWM Traffic Control Systems
Oasis Business Park
Road One
Winsford Industrial Estate,
Winsford
CW7 3RY
Website: www.twmtraffic.com

Support Contact Information

Email: support@twmtraffic.com
Phone: 01606 59 66 22 option 2

TWM Central Management System

Website: cms.twmtraffic.com

Contact support@twmtraffic.com if you require login details, please note TWM's CMS is a pay for services.

Downloads

Workbench: cms.twmtraffic.com/downloads/workbench
Workbench Maps: cms.twmtraffic.com/downloads/workbench
Radar Firmware: cms.twmtraffic.com/downloads/radar/firm
Radar Applications: cms.twmtraffic.com/downloads/radar/app
Chrome: www.google.com/chrome
Adobe: get.adobe.com/uk/reader
MySQL: dev.mysql.com/downloads/installer
MySQL ODBC: dev.mysql.com/downloads/connector/odbc/

Free Alternative to Microsoft Excel

Google: www.google.co.uk/sheets/about/
Open Office: www.openoffice.org/download/index.html



TWM TRAFFIC CONTROL SYSTEMS

a pilot group company

E-Mail: support@twmtraffic.com

Tel: 01606 59 66 22

Location: Winsford, Cheshire, CW7 3RY