

The 511 FreeWeigh Version 2 is a hand held remote control load weight management unit designed to be used with most of the Vishay PM Onboard Ltd. range of in-cab displays, e.g. 1155, 1200, 1300.

The equipment consists of a sender that plugs in to the display and is mounted on the dashboard or near the roof in the cab with the aerial vertical, and a remote receiver unit that can be carried around when away from the cab.

The remote unit has a range of about 50 metres in open terrain. The signal level is shown on screen, if the signal strength drops too low then communications is lost. Any displayed weight will be lost.

The installation uses the 868Mhz frequency and is exempt from the requirements of the Wireless Telegraphy MPT 1340 licence.

## Equipment Features

### On / Off buttons.

Pressing the **On** button shows the last screen used. If display (any) turned off and on again without turning off the 511 then the 511 will show whatever was on the screen when the display was turned off. (To change this, completely cycle the 511 using the **Mode** button, the data will be updated and the latest data from the display will be shown).

**Mode button** - used to set the frequency in use and also to access the Net, Gross, Load and Total Weight values. (Total is only available with a 1200 display).

### Zero and Print buttons

These are active in all screens, if one of these is pressed the appropriate word will appear on screen. This will remain on screen until either the transceiver in the display acknowledges or the Mode button is pressed. This ensures that the signal is received even in poor signal conditions.

**Print button** - used to print the load value on an in-cab printer, to choose between the English and French languages and to alter the amount of illumination from the display.

**Zero button** - used to zero the load value.

**Battery indicator** - this is a segmented bar display on the unit.

**Signal strength indicator** - this is a segmented bar display on the unit.

## Important Notes

If two or more 511 units are used near each other they must be on different operating frequencies, at least one channel apart.

The remote is manufactured to IP66 rating and can be used in wet and dusty conditions but **MUST NOT** be completely immersed in water.

## Setting Up

With the required frequency set on the display, the display turned on and the remote 511 unit batteries fully charged enter setup mode by holding the **Mode** button down and pressing and releasing the **ON** button.

The current firmware version and serial number will be displayed.

Release the **Mode** button.

The current communications channel is then displayed.

If data is received from the display then 'FOUND' is shown.

If no data is received then 'SEARCHING' is shown.

Use the **Print** and **Zero** buttons to access the range of channels until the same frequency as the display is found. Wait approximately 2 seconds between each button press for the signal to be found.

Press the **Off** button to set the frequency.

The Cyclic Redundancy Check should always be set to **OFF**, this checks all transmitted data for errors.

Pressing **OFF** in setup will save changes.

**Setting Up continued** Press the **ON** button. Pressing this will show the last known weight values within 5 seconds. Check the signal strength on the bar display on the left hand side of the instrument. A signal strength of less than 500 mV produces the best reception.

**NOTE:**

Because of the way the signal is radiated from the display try to use the 511 unit more or less at the same height as the in-cab display.

Set the language option if required using the **Print** button to toggle between the two available. Set the brilliance of the display using the **Print** button to increase and the **Zero** button to decrease.

The unit is lit for about 8 seconds each time a button is pressed.

**NOTE:**

Increased brilliance will reduce the battery life.

Set the contrast level on the display using the **Print** button to increase and the **Zero** button to decrease.

Use the **Mode** button to access the Net, Gross, Load and Total weights.

Use the **Print** button to print the load value.

The 511 unit will show PRINT and will clear the display when the ticket is printed and a valid response is received from the in-cab instrument.

Turn the 511 unit off with the **Off** button.

Turning off during the setup display will save any changes.

## Charging the 511 unit

To charge the unit correctly:

Ensure that the unit is switched ON before plugging in the charger lead.

Plug in the charger lead, the unit will beep twice to indicate that it is charging.

Press the **Off** button.

The unit will display a bar indicator to show the progress of the charging level and will switch off automatically when fully charged.

It is possible to use the 511 unit during this time, depending on battery level.

The batteries are NIMH cells, potted into the housing.

These have to be returned to Vishay PM Onboard Ltd to change.

The nominal battery voltage is 3.7 Volts and the unit is useable down to about 3.6 Volts. A charging reminder will be displayed. The maximum charging voltage is 4.2. A low battery voltage warning will be displayed. Only charge when below half.

Discharged to full charge is approximately 3 hours.

If a charger is attached to the 511 the state of charge will be shown. The charger may be left connected if required, without damage.

## Faults

If the unit does not display a weight when turned ON, turn the unit OFF and ON again.

If a weight is still not registered check that the display and the handheld 511 unit are set to the same channel.

Try another channel if reception is poor or interference is apparent.

**See Also the latest driverguide :** [511v2driverguide/v1/181109](#)