Updating Firmware
2nd Edition

![Wattbike monitor display]

0:11:34   92 rpm
LeftL 0° 180° RightL
165 Z1 Watt
90°   90°
92 avg Watt
48% 180° 0° 52%
92 ZR ♥
28/11/2014   ANT ID: 0013973   13:12

wattbike

Which firmware updating method should I use?

Windows 7 or 8 user

Please use the firmware updater app which is downloadable under the firmware section of our downloads page. Simply open the updater app, plug in your monitor and follow the instructions given.

https://cdn.wattbike.com/uploads/uk/firmware/WattbikeFirmwareUpgrade100Setup.exe.zip

Windows 10 user

We would strongly recommend following the manual updating method to avoid any issues with your monitor. Instructions for the manual update can be found on pages 2-3 of this document. Please ensure that you download the correct firmware from the link below.

https://cdn.wattbike.com/uploads/uk/firmware/Wattbike-ModelB-firmware-V12400-20160929.bin

Mac user

We would recommend the use of the Mac updater app which can be downloaded from the link copied below. Simply open the updater app, plug in your monitor and follow the instructions given.

https://cdn.wattbike.com/uploads/uk/firmware/WattbikeUpdate.app.zip

If you are having persisting problems with your firmware please call us on 0115 945 5450.

Manual Method: Wattbike Model B Monitor (WBM) Firmware Update Procedure on a Windows Operating System (Windows XP, Vista, 7 & 8).

Caution! Read these instructions in full and thoroughly!

The Firmware update procedure is relatively simple and easy to do by following the steps below. These instructions were written based on updating the WBM using a Windows 8 Operating System (W8OS). Although the procedure may look and be slightly different on predeceasing WOS's these instructions are still applicable. Where they are not the same there will be instructions written (in brackets).

- The first step that is to download the latest Firmware version from the Wattbike website **wattbike.com/uk/wattbike/downloads**, under the heading 'Firmware' click 'Model B'.

- This will automatically start the download of the firmware.bin file* (less than 500Kb in size),

- The download will automatically be saved into the default download folder (Usually 'Downloads'),

- Ensure you know where the firmware.bin file is located on the computer, for the later steps of this procedure.

The firmware file will be named according to this scheme Wattbike-ModelB-firmware-[version number]-[release date].bin, e.g. Wattbike-ModelB-firmware-V12001-20141015.bin.

1. Ensure the WBM is plugged into the mains via the external power adapter (supplied with the bike) and is charging (Red Light ON signifies this**)

**If the Red light does not display:

- The WBM is fully charged, but still plug it in

2. To initialise the update protocol called 'Program Mode';

   - Ensure the WBM is 'OFF'

   - Hold the 'ENTER' button (1) then press and release the 'ON/OFF' button (2),

   - 'Program Mode' will appear on the WBM screen

   - Using the USB A-B cable (supplied with the bike) connect the computer running Windows to the WBM.

3. The windows operating system may initialise an 'Installing new hardware window' this is normal and should be left to be completed. Once this has finished a new window may*** open with the 'firmware.bin' file showing (fig 1.0)

   - *** If this window does not open automatically the WBM can be accessed by navigating to the 'My computer' or through the 'File explorer' (Windows 8) and selecting 'Wattbike WPC' Removable disc drive or similar from the side pane (Windows 8) or in 'My computer'.
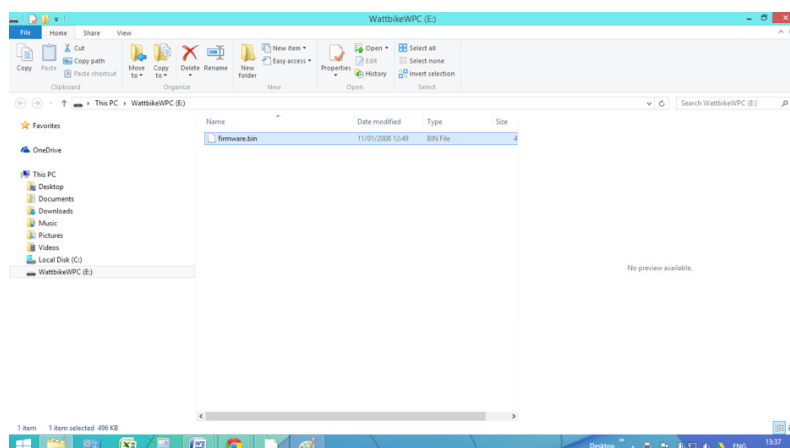

fig 1.0

4.   Delete the file firmware.bin in the WBM location by right clicking, the click 'Delete', see (fig 1.1)
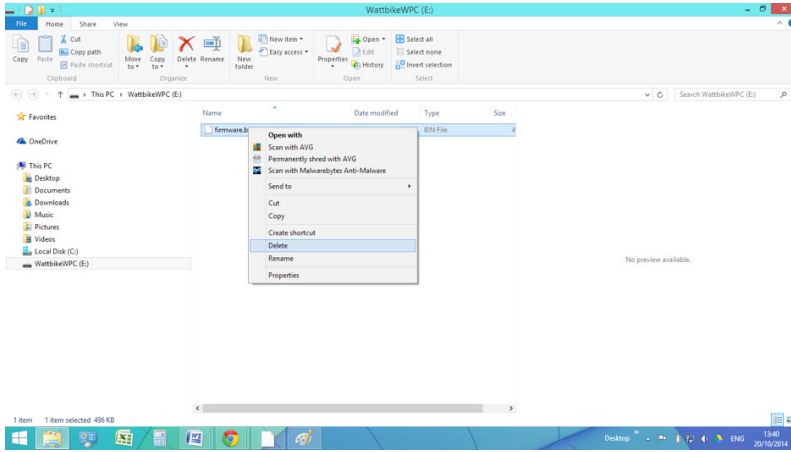

fig 1.1

5.   Once deleted, drag and drop (or copy) the newly downloaded firmware.bin file from the saved location on your Computer to the WattbikeWPC location see (fig 1.2), this will then;

6.   Copy the firmware into the WBM and update

7.   Once this is done the WBM will automatically disconnect from the computer and turn on displaying the main menu.
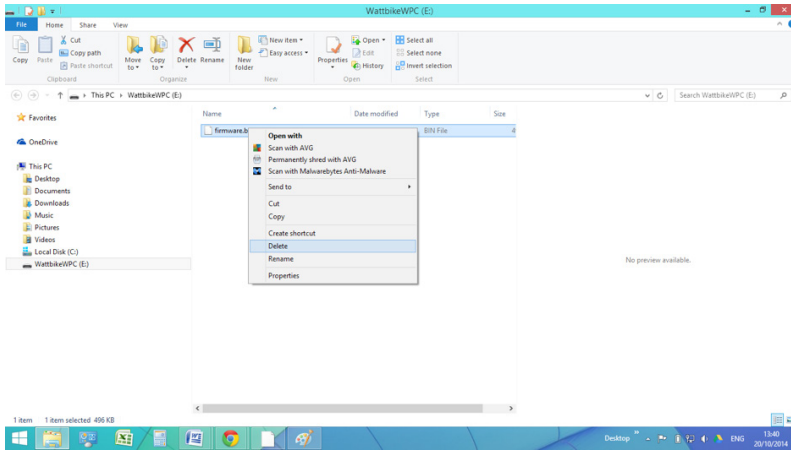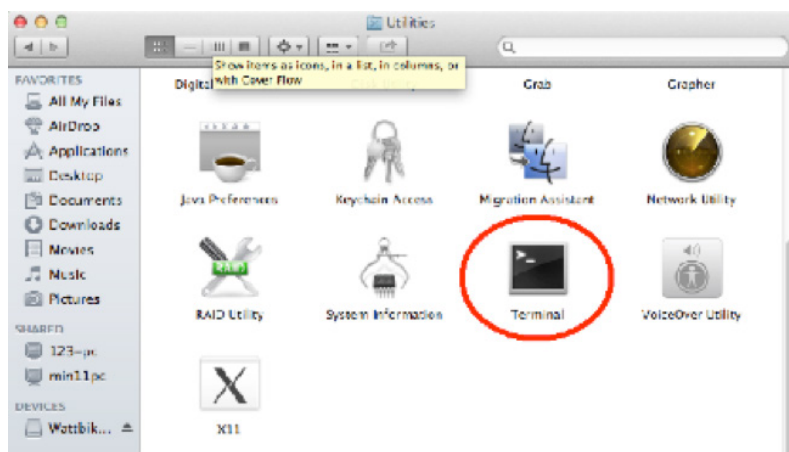

fig 1.2

If at any point during this process something does not go according to theses instructions and you suspect the WMB has been corrupted or still displays 'Program Mode' call Wattbike on 0115 945 5450 for further assistance.

Mac Instructions

The WPM firmware update procedure on OSX can only be performed with the Terminal application. Using a drag and drop from Finder (in the same way that you would in Windows) causes some extra files and folders to be copied to the WPM in programming mode, the WPM does not recognise these files and enters an undefined state and needs to be reset.

Procedure for upgrade of firmware with using of Terminal on Apple Mac computers:

1. Download the latest firmware version from the web site and save it to your desktop

2. Change the file name to firmware.bin for ease of typing at a later stage. (to do this, click on the firmware, press return/enter on your keyboard and then type the new file name

3. Connect your WPM to your Mac via a USB cable. Ensure it is switched off, then press and hold Enter and press the Power button and release. The screen should display the worlds Program Mode. (if not switch it off and try again). The WPM will then appear in finder as WattbikeWPC

4. Open Terminal: Go to Applications->Utilities and start the terminal.

5. Erase the current firmware file in the Monitor using the following command: rm /volumes/wattbikewpc/firmware.bin

6. Now Copy the new firmware file to the Perfromance Computer with the following command cp $HOME/desktop/firmware.bin /volumes/wattbikewpc

Please note: Copying the files may take a couple of minutes. You may see the following error message, this can be ignored: cp: /Users/andy/desktop/delete/firmware.bin: could not copy extended attributes to /volumes/wattbikewpc/firmware.bin: No space left on device

7. After doing this, Wattbike Monitor will restart, and the computer will show following error message.

This is due to the WPM terminating the connection with the computer. Click OK

Monitor-to-Monitor Update Procedure

This firmware update enables a feature that removes the need to have a laptop or PC to update a large number of Wattbike Performance Monitors (WPMs). This is advantageous where there is a large number of monitors to be updated, such as in gyms or studio situations.

Glossary:

Master monitor - the monitor with the latest firmware installed.

Slave monitor - the monitor with the out-dated firmware installed.

This procedure requires at least one monitor to have the most current firmware version to be able to update other monitors to that firmware.
For example:

- A monitor with a firmware version of 1.21.01 can update other monitors with firmware version of 1.20.04

- Dictionary

- Master monitor- the monitor with the latest firmware installed

- Slave monitor- the monitor with the out-dated firmware installed.

Update Procedure Requirements

- 2 x WPMs

- One of the number of monitors to be updated with the latest firmware (see updating firmware in the last section of this guide)

- 1x PC/ Laptop with a Windows OS

- 1x USB A to B cable

- Ensure ALL slave monitors have at least 45% battery life.

1. The first step will be to update one of the WPMs with the latest firmware, see the last section in this instruction manual. The monitor on the left in the figure below is the master monitor and the slave is on the right in this guide Fig 1.0.

fig 1.0

2. Place the slave monitor into program mode (Fig 1.1) by:

    a. If below 45% battery charge plug the slave monitor into the wall charger,

    b. Turn the monitor off,

    c. Pressing and holding the 'ENTER' button,

d.   Press then release the 'Power' button still holding the 'ENTER' button,

e.   Release the 'ENTER' button.

fig 1.1

3.   Using the USB 'A' to 'B' cable:

a.   Plug the USB 'A' (rectangular shaped) connection into the master monitor (seen in the pictures below).

b.   Plug the USB 'B' (squarer shaped) connection into the slave monitor (seen in the pictures below).

fig 1.2

fig 1.3

4.   The master monitor will recognise the slave monitor's program mode and will ask the user if they want to 'Update monitor firmware' (Fig 1.4), press the 'ENTER' button on the master monitor to update the slave monitor firmware (Fig 1.5).
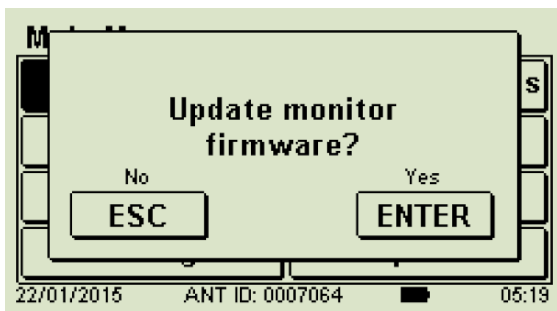

fig 1.4

fig 1.5

5.   The Master monitor will now power up the slave monitor Fig 1.6. Once this has been done the slave monitor is now a master monitor as it can update monitors with firmware less than itself.

fig 1.6

6.   The firmware update is complete, Fig 1.7.

fig 1.7

Troubleshooting

Q   The WBM has frozen with Program Mode on the screen.

Use a small object such as an open paperclip and insert it into the small RESET hole in the back of the WBM near the external power supply female socket. Press once and extract the paperclip.

Q   During the update procedure, when copying the firmware file over to the WBM, it went blank and now there is nothing on screen.

Using a small object such as an open paperclip and insert it onto the small RESET hole in the back of the monitor with the other hand hold the ENTER button and continuously press the POWER button (similar to putting the WBM into program mode) whilst pressing the RESET until program mode reappears on the screen. This is the 'Hard reset' procedure of the WBM.