# **Bushido**

1. What do the numbers marked into the plastic break unit housing mean?

By sliding the break of the Bushido into the groove noted by each number you can easily adjust the hight of the roller so it can reach wheels of different diameters.

Setting 1 : For Mountainbikes (wheel diameter 600 -640mm)

Setting 2 : For racing bikes (wheel diameter 630 - 670mm)

Setting 3 : For town bikes (wheel diameter 660 - 710mm)

The wheel diameter stated for a racing bike is the measured diameter which may not be the same as that marked on the tire!

2. The error message "under voltage" is displayed on the display?

If you see this message it simply means there is not enough voltage being generated for the break to work & communicate with the display. This message will go as soon as you ride faster.

3. The error message "Over Heating" is displayed on the display?

The break is becoming too warm & can not displace the energy produced. If this message does not disappear (ie you do not reduce the tempo) the break will automatically reduce the break force. Check that ventilator on the side of the break is turning (you can also hear this turn at high speed sometimes when riding hard). Always make sure that the ventilator grill is free of dust. If you think the ventilator is not working contact your local Tacx Service Centre.

4. The buttons work automatically when damp with sweat?

The buttons work from the energy in your fingers like a touch screen. The more sweat on your fingers the more sensitive these buttons become. Its possible if your head is over the display that drops of sweat falling on the buttons can actually activate them! So if your having a problem with this you can easily lock the buttons by pressing the 'Right Arrow' 3 times. To deactivate the lock simply press the 'Right Arrow' again 3 times.

5. Which Ant+ Heart rate transmitter belts & USB sticks can I use?

Tacx can not guarantee that all makes of Ant+ USB dongle & Heart rate belts will work with the Bushido. Some makes of ANT heart rate belt use a coded protocol that is not compatible with the open format that Tacx uses.(the heart rate belt from Suunto is a example of this ) & this does not work with the Bushido. With the Tacx T1992 heart rate band you have a interference free reception of up to massive 5meters!

6. Is it possible to use my analogue heart rate belt with the Bushido?

The Bushido works also with analogue heart rate belts, Simply select in the settings menu to scan for Analogue in place of ANT+

7. The link between the break & the computer is broken?

ANT technology has much less chance of issues with interference then a analogue system. In the unlikely event that your getting a poor reception try to move the Bushido display unit closer to the USB ANT dongle

8. My Bushido Computer display is blocked, How can I reset the display?

There are a few different ways to reset the display.

## Factory setting

Go to Settings > INFO & push 10 times on the 'Right Arrow' until you hear a signal. Now all the programs & settings reset back to the way the unit was when first purchased. the firmware of the Bushido display will remain the same as the last update.

#### **Replace the battery**

If you replace the battery's then only the date & time need to be set again. All the other rider settings & performances are saved.

### **Firmware update**

After a firmware update you only need to enter the time & date in the settings menu again. All the other rider settings & performances are saved. If after the update you have a problem then try a factory reset as noted above.

9. What the ideal calibration number?

The ideal number should be between 10 - 15. When your calibration number is outside this check that you have enough tire pressure (for a race bike 7-8bar) & that you have a good pressure between the roller & tire. Ideal is about 3 - 3.5 full turns after the roller has just made contact with the tire. Make sure the break is in the correct slot for the type of bike used. For example a race bike shoud use slot 2.

10. How does the average speed setting of an opponent work?

The average speed setting for an opponent is calculated from every recorded data point. So your riding against a percentage of the performance at the time it was recorded. So for example a opponent may start out fast & end slow if thats how the data was originally recorded.

11. There is no cadence sensor fitted so how is the Cadence worked out?

The cadence is worked out by the Bushido computer display by the peaks in torque during each pedal revolution. As you push down on the pedals you produce a little more energy then on the back stroke. These peaks represent your cadence quite accurately. check the **bushido website** 

12. What do those little coloured LED lights mean on the break unit?

#### Power

The start colour is green, as you ride harder the colour changes to Yellow & then Red.

## Speed

The faster you ride the more lights!

### **Cadence**

The faster you pedal the faster the lights blink!

13. Can I use the Bushido with the Tacx Training Software?

This is possible with the T1990 Bushido PC Upgrade. This pack includes the Tacx Training Software & a USB ANT+ Dongle that will effectively turn your Bushido into the worlds only true wireless VR trainer!

14. Is it possible to update the Bushido break & display?

This is only possible if the Bushido is linked to a PC with the T1990 Bushido PC Upgrade. Once the Tacx Training software is open you can easily update the break via a few mouse clicks.