

Firmware update instructions for the Tacx smart series trainers (android)

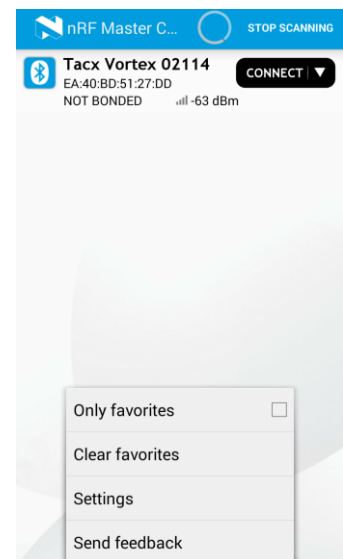
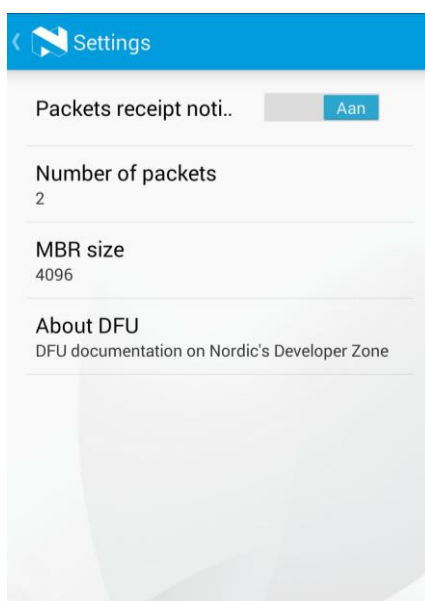
This instruction set will guide you thru the steps needed to update a Tacx Smart trainer.

Prerequisite:

- A copy of the new firmware .hex file on the Android device/Cloud
- An Android device with Bluetooth low energy capabilities
- The latest version of Nordic's "nRF Master Control Panel (BLE)" application (this app can be found in the [play store](#))
- A Tacx Smart trainer with the power cord plugged in, or in case of the Bushido powered by cycling during the whole procedure. (slow cycling is sufficient)

Step 1: Set-up the nRF Master Control Panel(BLE)

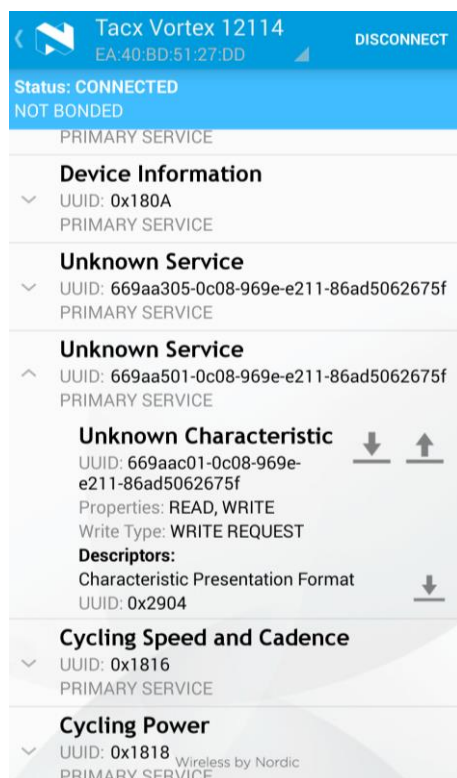
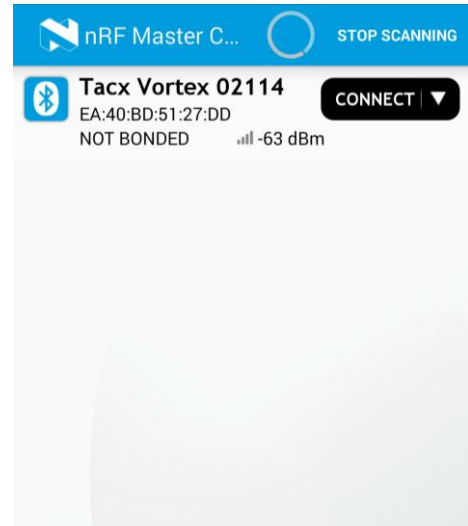
- Open the nRF Master Control Panel application
- Select the **Menu** button on your Android device (this can be a dedicated button on a on screen button)
- A menu will pop-up select the **Settings**→**DFU options**



- Set the "Packet receipt noti.." to ON
- Set the "Number of packets" to 2
- Set the "MBR size" to 4096
- Press 2 times the back button to go back to the main menu. (this can be a dedicated button on a on screen button)

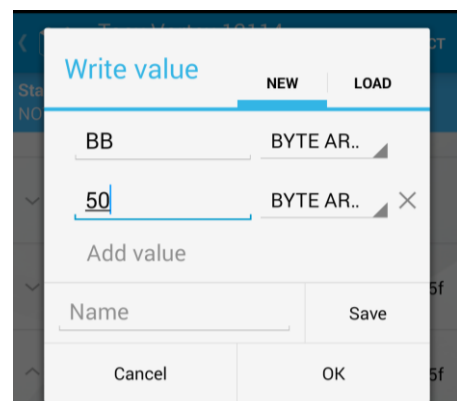
Step 2 : Put the trainer in update mode

- Press the **“Scan”** button
- One or more devices will show in the list
- If no devices is listed, check if you trainer is powered
- Press **“connect”** next to the trainer with the matching last 4 serial number digits of the trainer you want to update



- Select the **“unknown service”** with UUID 669aa501-0c....
- Select the **arrow that is pointing up** next to UUID 669aac01-0c.....

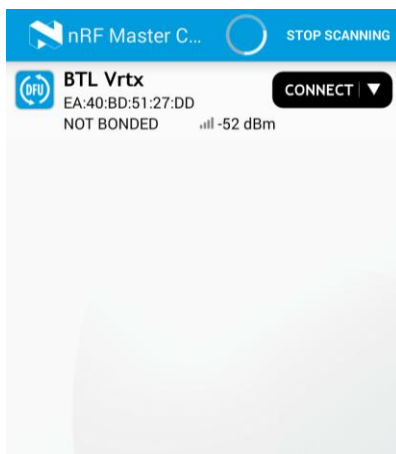
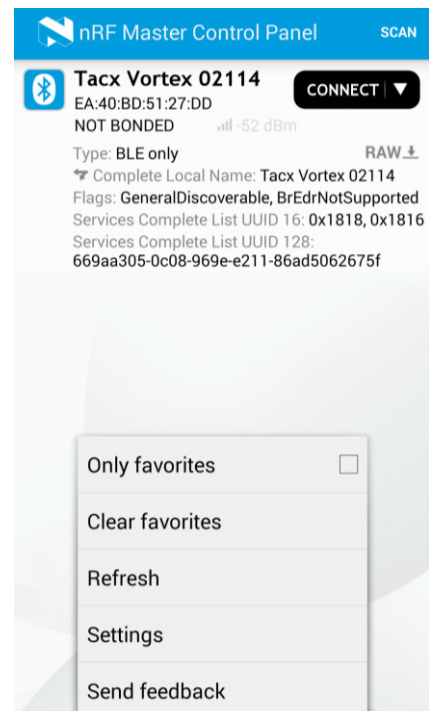
- Fill out the form starting with entering **BB**
- Press **“Add value”** and enter:
50 in case of a Vortex
51 in case of a Bushido
24 in case of a Satori
- Press **“OK”**
- The bluetooth **connection** will now be **closed** by the trainer.
- Press the **back** button to go back to the main menu. (this can be a dedicated button on a on screen button)



Step 3 : Upload new firmware

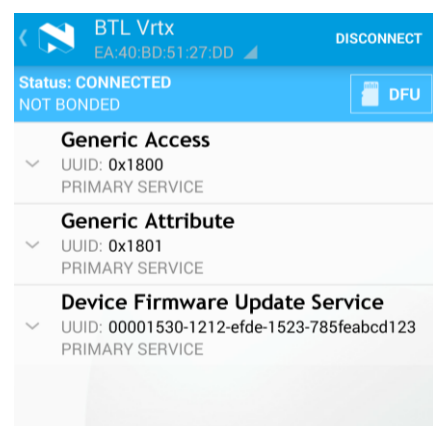
Note: The Trainer is now in firmware update mode for 30sec.

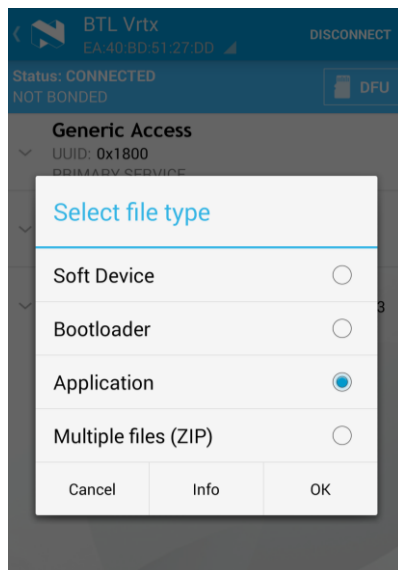
- Make sure that the application is not scanning for devices
Otherwise press “**stop scanning**”
- Press the Menu button and select “**Refresh**”
- Press “**scan**”



- There should appear a “**BTL...**” or “**DFU...**” device in the list of scanned devices. Press “**Connect**” next to this device
- If there is no “**BTL...**” or “**DFU...**” device than repeat step 1.

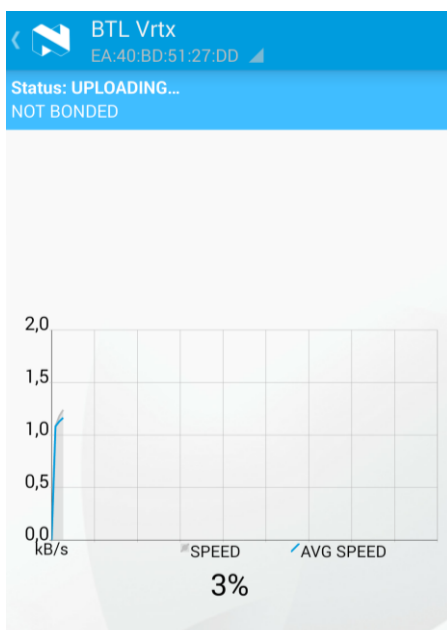
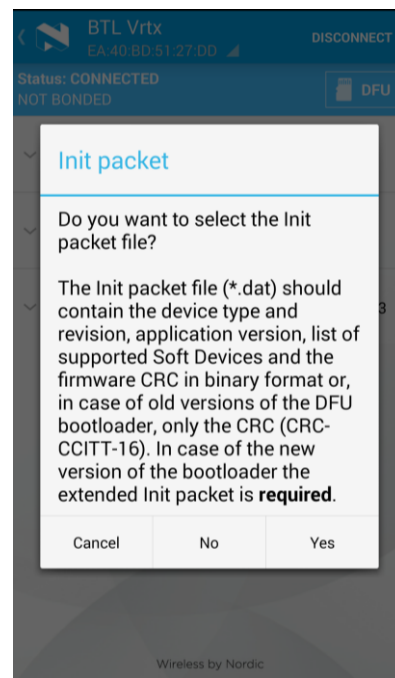
- Press the **DFU button** in the right corner





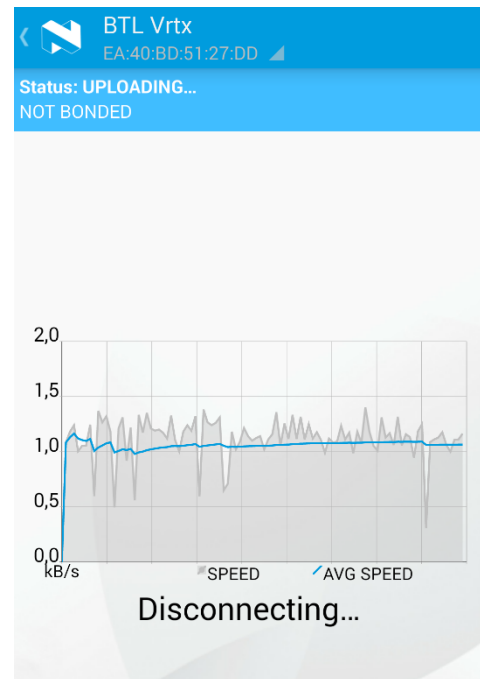
- Select “**Application**” from the option list
- Press “**OK**” to confirm
- **Select the firmware .hex file** with your personal file browser

- Press “**No**” in the “**Init packet**” screen

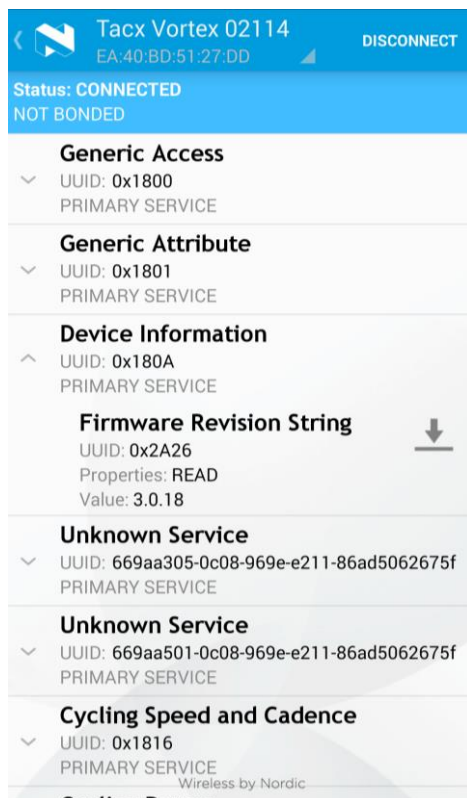


- This **graph** shows the progression of the firmware **upload**

- When the **upload is finished** the bluetooth will be disconnected by the application.



Note: To **reset** the trainer unplug the power cord and re-plug it after 10 seconds. In case of a Bushido stop cycling for **5 minutes** before proceeding to the next step.



- Press "**Scan**" to find your device
- Press "**connect**" to connect
- Open the "**Device Information**" service
- Press the **downward arrow**
- The **version number** will appear
- **Check** if this is the **version** of the file you uploaded to the trainer
- If the **version** is **not** the version you'd expected retry step 1,2,3
- If the **version** is the **correct** one you're successfully updated the trainer