

FOR BETA 2 USE ONLY



LED Orientation

Please note the orientation of the LED indicators below. Each can either be OFF, Green or Red.





Tools Installation

In order to update your beta device firmware, you must install a mobile app (Android or iOS) and a PC app.

Install the **nRF Toolbox** app by Nordic Semiconductor:

Android

Requires Android 4.3 or greater device from Google Play:

https://play.google.com/store/apps/details?id=n o.nordicsemi.android.nrftoolbox&hl=en



iOS

Requires iOS 8.0 or later from iTunes:

https://itunes.apple.com/us/app/nrftoolbox/id820906058?mt=8

nRF Toolbox

By Nordic Semiconductor ASA Open (Tunes to buy and download apps.



View in ITunes

Description

The nRF Toolbox works with a wide range It contains applications demonstrating ILL Rate Monitor, Blood Pressure Monitor, Hea

nRF Toolbox Support +

What's New in Version 1.4

Fixed bug in Hex to Ilin converter in DFU p Also fixed some GUI for IOS8.



E-Motion Test Tool Installation

- 1. Download the zip file containing the <u>E-Motion Test Tool</u> app on a PC with Windows 7 SP1 or greater that has an ANT+ USB key & drivers installed.
- 2. You will need to **Unblock** the downloaded file before extracting it:

R.	IRT_GUI Properties ×					
General Security Details						
	IRT_GUI					
Type of file:	Compressed (zipped) Folder (.zip)					
Opens with:	😭 Windows Explorer <u>C</u> hange					
Location:	C:\Users\Jason\Downloads					
Size:	488 KB (500,448 bytes)					
Size on disk:	492 KB (503,808 bytes)					
Created:	Today, October 24, 2014, 1 minute ago					
Modified:	Today, October 24, 2014, 1 minute ago					
Accessed:	Today, October 24, 2014, 1 minute ago					
Attributes:	Read-only Hidden Advanced					
Security:	This file came from another computer and might be blockal to help protect this computer.					
	OK Cancel Apply					

3. Extract IRT_GUI.zip to a location on your computer, i.e. C:\IRT\

	Name			
GUI				

4. Launch the application by double clicking on IRT_GU



R E-Motion Test Tool 1.6.6 - 🗆 🗙					
Calibration (Curve)	Get/Set Parameter	E-Motion Rollers		Power Meter	
Drag 0.1584683531	17 🗸 32895	Device ID	37894 Close	Device ID	0 Search
RR 16.261333788	AccelerometerSleep	Serial No	76969406	Manufacturer	
Get Set	BluetoothEnabled AntBemoteEnabled	Firmware Rev	0.9.25 DFU	Model	
	✓ AntBikePowerEnabl	Hardware Rev	3	lype	
Start	AntFECEnabled AntExtraInfoEnablec	Battery Voltage	7.69 Charging		
Load	AntBikeSpeedEnabl 🗸	Operating Time	0:00		Load
		Servo Offset	350 Set		
	Features 65535	riywheel	0		
	Get Set	00.0	0	000	
Profile	Activity	MPH	Watts	Watts	
Weight (kg) 81.80	0.0 Chart		-		
Wheel (mm) 2096	Distance (km)	0.0	0	0	30 🜲
Get Set	U:UU:UU Timer	Average	Average	Average	Moving Avg (sec)
Resistance		Received servo posit	ions message. Max pos	itions: 7	•
Standard 🗸		Received Parameters	page: 20 - [07][04][e8]	[03][84][03] itions: 7	
Load +		Received Parameters	page: 20 - [07][06][20]	[03][#][#]	
Position	U .	Sending 0 parameter			
2000 Set		Error trying to set calit Received battery rea	oration: Failed to set dra ding.	ig, piease retry.	
Positions		Sending 0 parameter. Sent servo offset con	imand.		~
Sent servo offset command.					.::

PLEASE NOTE: More detailed instructions on use of the E-Motion Test Tool are available <u>here</u>.



Firmware Update

 Download the appropriate latest firmware from <u>http://www.insideride.com/beta-downloads</u> and save to your device. NOTE that there are different firmware versions for beta 1 and beta 2 devices.

Android

The easiest way to get the file on Android is to navigate to the above URL from your device, click the link next to **Latest** and save to your device.



Firmware Update Latest 0.9,8 in testing now, await notice Older: 0.9,7



The file should appear in **Downloads** or **Google Drive** on your device depending on your settings.

iOS

You will need to download the file to your PC or Mac and use iTunes to load the file on your device.

Follow the instructions from the app screen:



-User can add Folders and Files with HEX and ZIP extensions from Emails and iTunes.

-User added files will be appeared here.

- In order to add files from iTunes:

1. Open iTunes on your PC and connect iPhone to it.

2.On the left, under Devices select your iPhone.

3.on the top, select tab Apps.

4. on the bottom, under File Sharing select app nRF Toolbox and then add files.





 From your mobile device, launch the nRF Toolbox App and tap the icon DFU (Device Firmware Update).



- 3. Tap **SELECT FILE TYPE** and select the **application** item.
- 4. Tap SELECT FILE
- 5. Locate the firmware file you downloaded



 Ensure your E-Motion Roller device is ON. The rollers will automatically sleep when there is no motion. If you

BETA - Device Firmware Update Instructions



do not see any lights on or blinking, jiggle the rollers and the device should wake. If they still do not wake, push the button on the side.

- Launch the E-Motion Test Tool app, i.e. C:\IRT\IRT_GUI.exe if not already running.
- If the app was already running, you may need to press Search to connect with your device again.
- 9. The tool should find your rollers and display the Device ID.
- 10. Press the **DFU** button. You should see this updated status to the right.

If not, press DFU again.

11. You will know the device is in DFU mode when the **REAR LED** turns solid red.

It will stay this way until timeout after several minutes if a connection is not established.

Repeat from step 7 if the DFU times out.

NOTE: The device will remain in this mode for approximately 2 minutes and then reset if a DFU connection is not made.

E-Motion Rollers					
Device ID	55198	Close			
Serial No	6D9D79E				
Firmware Rev	1.0.9	DFU			
Hardware Rev	3				
Model	21064				

Sending DFU command, channel should disconnect. E-Motion channel status changed: Searching

E-Motion channel status changed: Searching



12. From the **nRF Toolbox** app on your Android device, tap **Select Device** and tap **IRT DFU** under **Available Devices**.



- Press the UPLOAD button. If the button is not available or greyed out, ensure that you've selected a valid file and device.
- 14. The upload has now started and you should see BOTH LEDs on the device turn solid red.
- 15. Progress towards 100% should take only a few moments. If the process does not complete or it takes more than a few minutes to complete, restart from step 6.
- 16. Once the firmware upload completes the device will reset into normal mode with the FRONT LED solid green and the REAR LED blinking green.

