

Xsens DOT Quick Setup Guide



Xsens DOT Quick Setup Guide XD0501P © Xsens Technologies B.V.



1. Getting started with the Xsens DOT

Please read these instructions before using your Xsens DOT sensors for the first time. This quick setup guide contains a step-by-step workflow to start building your application with the Xsens DOT.

All product documentation (such as user manual, technical specifications, list of supported devices, release notes, SDK programming guide, Xsens DOT app documentation and license agreements) can be found on the product page:



https://www.xsens.com/developer

2. Introduction.

Xsens DOT is a wearable sensor platform, which enables developers in health, sports and ergonomics to easily build a whole new world of applications for Android or iOS.

The kit consists of:

- Xsens DOT Sensor(s)
- Xsens DOT Charger
- Straps
- Micro USB cables
- Software Development Kit (SDK)
- Xsens DOT App (Android)

The Xsens DOT charger can also serve as a storage container for up to 5 sensors. Android is the supported operating system for now.

3. Requirements

In order to use the Xsens DOT wearable sensor platform, you need Android Studio to code your own app and a mobile device that supports Bluetooth 5.0+. Further information on the sensor specifications and supported devices can be found on the product page, see Section 1 for the link.

The provided Xsens DOT App for Android can connect up to 5 sensors to start accessing basic functionalities of the Xsens DOT sensors. Further information on that can be found in Section 4.



4. Step-by-step guide

- 1. Open the package and charge the sensors. See sections 4.1, 4.2 and 4.3 below for instructions on how to use the sensors.
- Download the Xsens DOT App to connect the Xsens DOT sensors and have first insights into the functionalities of the sensors. See section 4.4 below for instructions on how to use the Xsens DOT App.
- 3. In order to start developing your own app, download and read the SDK programming guide and the SDK folder. Both can be downloaded from the product page, the link is provided in section 1.
- 4. Download Android studio to start developing your app.

4.1 Xsens DOT Sensor instructions

- 1. To turn on the sensor, connect it to a micro USB cable with a power supply. Afterwards, they can be disconnected from the cable.
- 2. To turn off the sensor, press the orange button for about 3 seconds
- 3. After charging, make sure to switch off the sensor if not needed.
- 4. When left idle for 10 minutes, the sensors go in power-save mode. To activate them, simply shake them or rotate them.

LED Pattern	State	LED Pattern	State
OFF	Power off	Blink 1x second	Waiting for connection
ON	USB Powered (battery full)	Blink 1x every 10 seconds	Connected – not measuring
Flashing 1s/cycle	Charging (battery <25%)	Blink 2x every 10 seconds	Connected – measuring
Flashing 2s/cycle	Charging (battery <50%)	Fast blink 8x + short	Advertisement
		pause	
Flashing 3s/cycle	Charging (battery <75%)	Fast blink 2x + long pause	Bootloader
Flashing 4s/cycle	Charging (battery >75%)	On for 1 second and fade	Being powered off
		out in 3 seconds	-

4.2 Xsens DOT LED blinking patterns

4.3 Xsens DOT straps instructions



Place the sensor above the strap. Make sure the grey side faces the skin.



Wrap the strap around the spot you chose and stick the grey Velcro pad on the black side. Make sure the sensor is firmly in place and doesn't move underneath the strap



4.4 Xsens DOT App instructions

Xsens provides an app to access basic functionalities of the Xsens DOT sensor, which include acceleration and angular velocity data. At the moment, the app is available for Android devices and can be downloaded from the product page, see Section 1 for the link.

- 1) Connect your phone to PC
- 2) Select Transfer Files or similar
- 3) Open Computer then go into any storage on your phone. Internal Storage is preferred
- 4) Put new apk file in any folder, root folder/path is preferred or Downloads
- 5) Find and click the apk file \rightarrow it should install automatically
- 6) If the app doesn't install automatically, go to Settings and allow Unknown Source
- 7) Go back for installing
- 8) Done then try to open

Note: the Xsens DOT App is meant to show the capabilities of the sensors, perform Over-the-Air (OTA) firmware updates, perform Magnetic Field Mapping (MFM) and check the connection functionality. Source code will not be available for download.

5. Support

Support documentation, such as tutorial videos or FAQ pages or our community forum can be found on our Knowledge base available on xsens.com/support

We are happy to provide personal assistance. Please visit www.xsens.com/request-support to create a support ticket.