Bendlab's Evaluation Kit Quick Start Guide

New! Don't have an Android device or want to connect your eval kit to your PC wirelessly (using Arduino), now you can! Check out our newest example and documentation <u>here</u>.

Our intention with our evaluation kit is to make testing and prototyping as plug and play as possible. In this guide we'll walk you through connecting to your sensor with our companion Android app over BLE.

Android app + BLE

1. Plug the BLE Module onto Eval Kit and then insert the battery into the underside of the BLE module.



- 2. Plug the battery into the BLE module. Once plugged into the BLE module it will begin and continue advertising for 30 seconds.
- 3. While the BLE module is advertising the red LED on the BLE module will pulse.
- 4. **Android app:** Install and launch the Bendlabs Connect app from the Google Play Store. <u>Bend Labs Connect</u> (Google Play Store)

Windows app: Install and launch the Bendlabs Connect app from the Microsoft Store Store.

Bend Labs Connect (Microsoft Windows Store)

5. The application will discover the advertising evaluation kit and display the device's name and MAC address. Click the discovered device named ads_eval_kit.

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SensorDemo		
RSSI:	 Show all 	ć
Available devices:		
ads_eval_kit FE:37:2E:65:3E:01 RSSI: -68		
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6. Once the device has successfully connected you'll see the title in the upper left change from "connecting" to "connected".



- 7. Once connected to the device tap the Real Time menu item to see angular output from the connected one or two axis senor.
 - a. **Record Data:** From this screen you can record angular output using the Floating Action Button in the bottom right hand corner of the screen. Tap this button to start recording and tap again to stop.

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b. **Export Data:** All recorded data is stored in an .sqlite database that can be exported. Click the 3 dot menu in the upper right and tap 'Export database'. You can then choose where you'd like to export to.



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8. Force close the app to disconnect from the eval kit.

- 9. When the app has disconnected the red LED on the BLE module will blink for 30 seconds before shutting off.
- 10. In order to power the BLE module back on and advertise single press the power button on the BLE module.

Notes

- It's possible to swap the same BLE module between both 1 and 2-axis evaluation kits.
 - Remove the battery while transferring a single BLE module between evaluation kits.
- Avoid touching the male and female header solder pads during operation. Doing so can cause the evaluation kit to halt.



Power Button Operation

BLE Module State	Power Button Function
Power off	Long press the power button (2 or more seconds) to shut off the evaluation kit.
Connected/Advertising	Press power button to turn on the evaluation kit and begin advertising for 30 seconds.

LED User Interface

LED Status	BLE Module State
Off	Module is off
Blinking	Module is advertising and ready to connect
On	Module is connected to the Bendlabs' Sensor Demo App

Contains FCC ID: 2AA9B05

Contains transmitter module with certificate number:



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Bend Labs:

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