



Airstep Cortex Edition

User Manual

Introduction

AIRSTEP Cortex Edition is the ultimate foot controller designed specifically for Neural DSP Nano Cortex. It allows hands - free switching of all presets and banks, toggling of all effects, setting tap tempo, cycling through Neural Captures, and engaging the tuner.

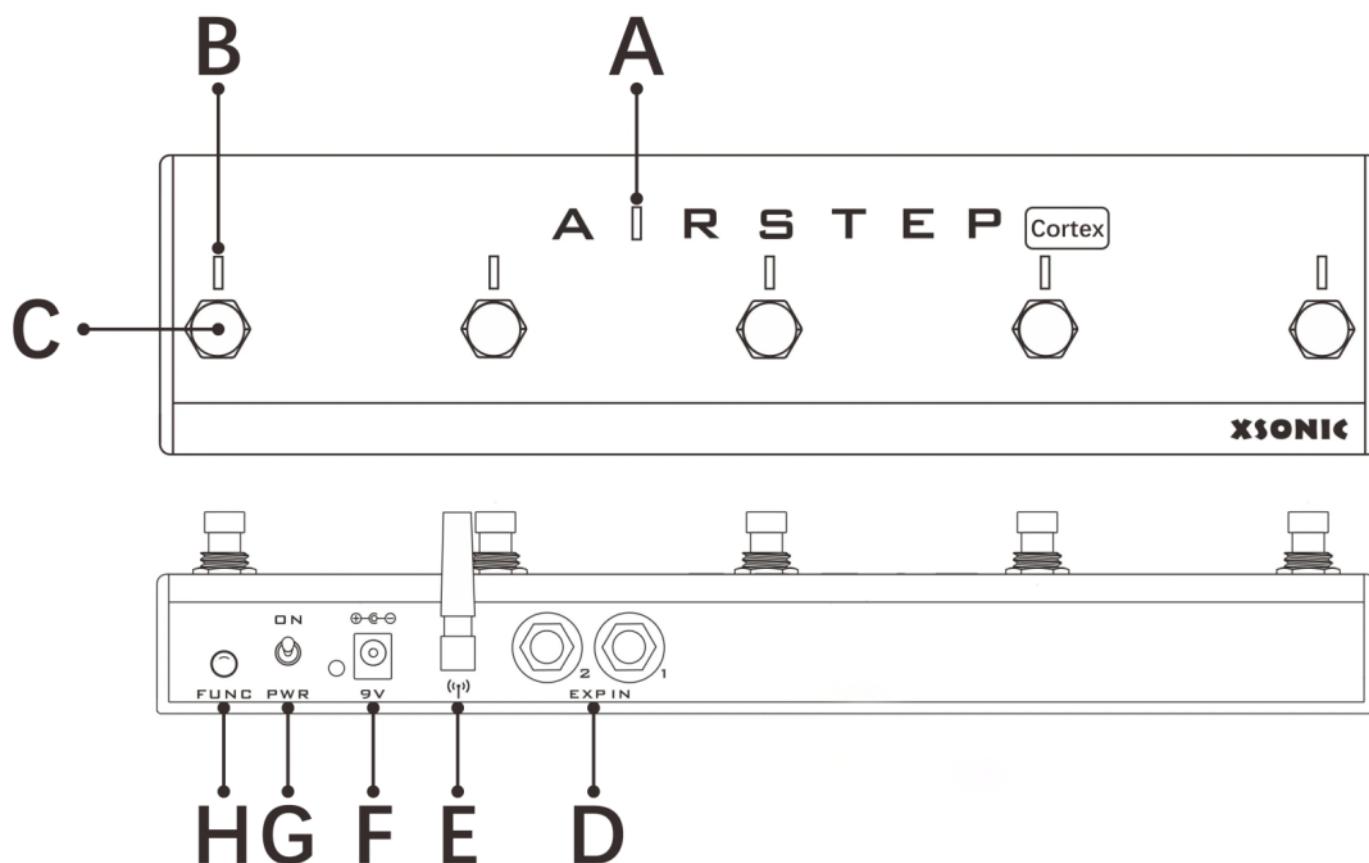
It also features two expression pedal inputs for real-time parameter control. All parameters of the supported effects can be controlled. The pedal functions and footswitch trigger modes can be easily configured through the AIRSTEP Cortex app.

No setup required - just plug and play. Transforms your Nano Cortex into a fully portable, performance - ready rig. The perfect foot controller solution for every Nano Cortex user, delivering unprecedented convenience and an exceptional playing experience.

Features

- Fully compatible with Neural DSP Nano Cortex
- Hands-free control of presets, effects, tap tempo, and tuner
- Two expression pedal inputs for real-time control of level, gain, or assignable parameters
- Onboard LEDs provide real-time visual feedback for presets, banks, effect status and BPM
- Dedicated app for setting expression pedal functions and footswitch trigger modes
- Truly plug and play — no MIDI knowledge required
- Firmware upgradable to ensure compatibility with future updates
- Rugged extruded aluminum housing for maximum durability

Interface



A. Main LED Indicator

Indicates the connection status with the Nano Cortex. It stays solid when connected and blinks when not connected. The LED is **blue** in Preset Mode and **green** in Effect Mode.

B. Footswitch LED Indicators

Labeled **A**, **B**, **C**, **D**, and **E** from left to right, matching the five footswitches below. They display the current preset and bank, effect on/off status, and BPM in real time.

C. Footswitches

Provide hands-free control over all key Nano Cortex functions.

D. Expression Pedal Inputs

Supports two expression pedals simultaneously. Parameters can be assigned independently for each input in the AIRSTEP Cortex app.

E. Antenna

Provides wireless communication with the Nano Cortex and the apps.

F. Charging Port

Supports charging via the included USB-A to DC cable or a standard 9V DC pedal power supply (**center-negative**).

G. Power Switch

Turns off the unit when not in use to conserve battery life.

H. Function Button

Reserved for future use. Currently inactive.

Instructions

Before Using

AIRSTEP Cortex Edition Firmware Update

Update your AIRSTEP Cortex Edition to the latest firmware to ensure compatibility with the latest Nano Cortex version, improve stability, and access the newest features.

[How to update firmware?](#)

Connection

AIRSTEP Cortex Edition will automatically search for and connect to a nearby Nano Cortex via Bluetooth. Once connected, the main LED on the AIRSTEP Cortex Edition will turn solid.

After this connection is established, open the Cortex Cloud app and connect to AIRSTEP Cortex Edition to enable simultaneous control. You can also open the AIRSTEP Cortex app to assign expression pedal functions and adjust footswitch trigger modes.

NOTE:

- Before connecting, ensure the Nano Cortex's Bluetooth is turned on.
- AIRSTEP Cortex Edition will not connect to the Nano Cortex if the Nano Cortex is already connected to the Cortex Cloud app.
- AIRSTEP Cortex Edition must connect to the Nano Cortex first **before** the AIRSTEP Cortex Edition can be connected to the Cortex Cloud app and the AIRSTEP Cortex app.
- AIRSTEP Cortex Edition supports only one phone connection at a time. Therefore, the Cortex Cloud app and the AIRSTEP Cortex app can be used simultaneously only on the same phone.
- When the Nano Cortex needs to exchange large amounts of data with the Cortex Cloud app (for example, during backup or restore), it is recommended to disconnect AIRSTEP Cortex Edition.
- AIRSTEP Cortex Edition can also be used independently without connecting to any app.

Footswitch Function



64 Presets are organized into **16 banks** with **4 Presets** each. Use Dual-Press to switch banks.

Dual Press



Preset Mode (Blue LED)

AIRSTEP Cortex Edition starts in **Preset Mode** by default, indicated by the **blue LEDs**.

- **Short Press:**
 - Switch A–D: Recall **Preset 1-4** within the current bank. If the target preset is already active, press the same switch again to trigger **Tap Tempo**.
 - Switch E: **Enter Effect Mode**
- **Long Press:**
 - Switch E: Toggle **Tuner**
- **Dual Press:**
 - Switch A + B: **Preset -**
 - Switch B + C: **Preset +**
 - Switch C + D: **Bank -**
 - Switch D + E: **Bank +**

The current preset is indicated by the alternating blinking of the blue and green LEDs.

● **Blue LEDs** show the preset slot within the current bank.

● **Green LEDs** show the current bank number. When the bank number is above **5**, the green LEDs no longer indicate the bank.

Effect Mode (Green LED)



Dual Press



Effect Mode (Green LED)

In **Effect Mode**, AIRSTEP Cortex Edition gives you direct control over individual effect blocks.

- **Short Press:**
 - Switch A: Toggle **FX1**
 - Switch B: Toggle **FX2**
 - Switch C: Toggle **FX3**
 - Switch D: **Tap Tempo**
 - Switch E: **Return to Preset Mode**
- **Long Press:**
 - Switch A: Toggle **Tuner**
 - Switch B: **Neural Capture slot -**
 - Switch C: **Neural Capture slot +**
 - Switch D: Toggle **FX4**
 - Switch E: Toggle **FX5**
- **Dual Press:**
 - Switch A + B: **Preset -**
 - Switch B + C: **Preset +**
 - Switch C + D: **Bank -**
 - Switch D + E: **Bank +**

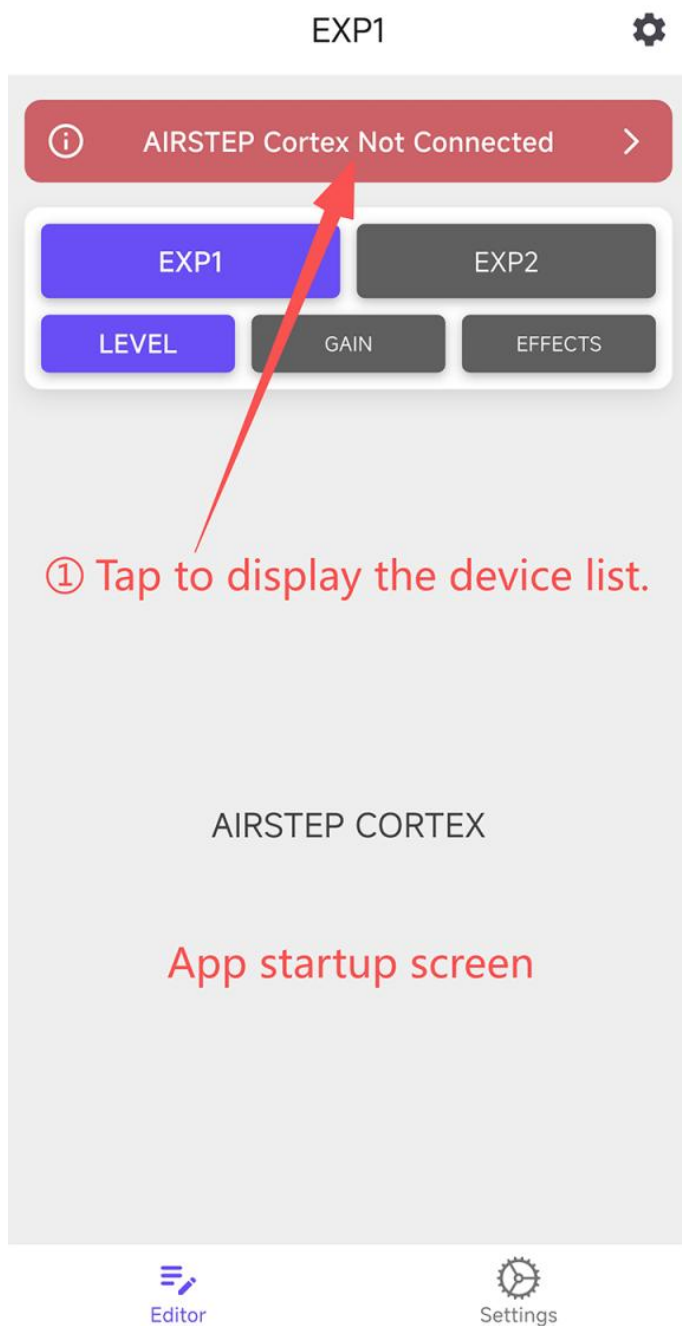
● The green LEDs indicate effects on/off status from left to right: **FX1, FX2, FX3, FX4, FX5**.
LED D blinks to indicate the current **BPM** when **FX4** is enabled.

AIRSTEP Cortex App

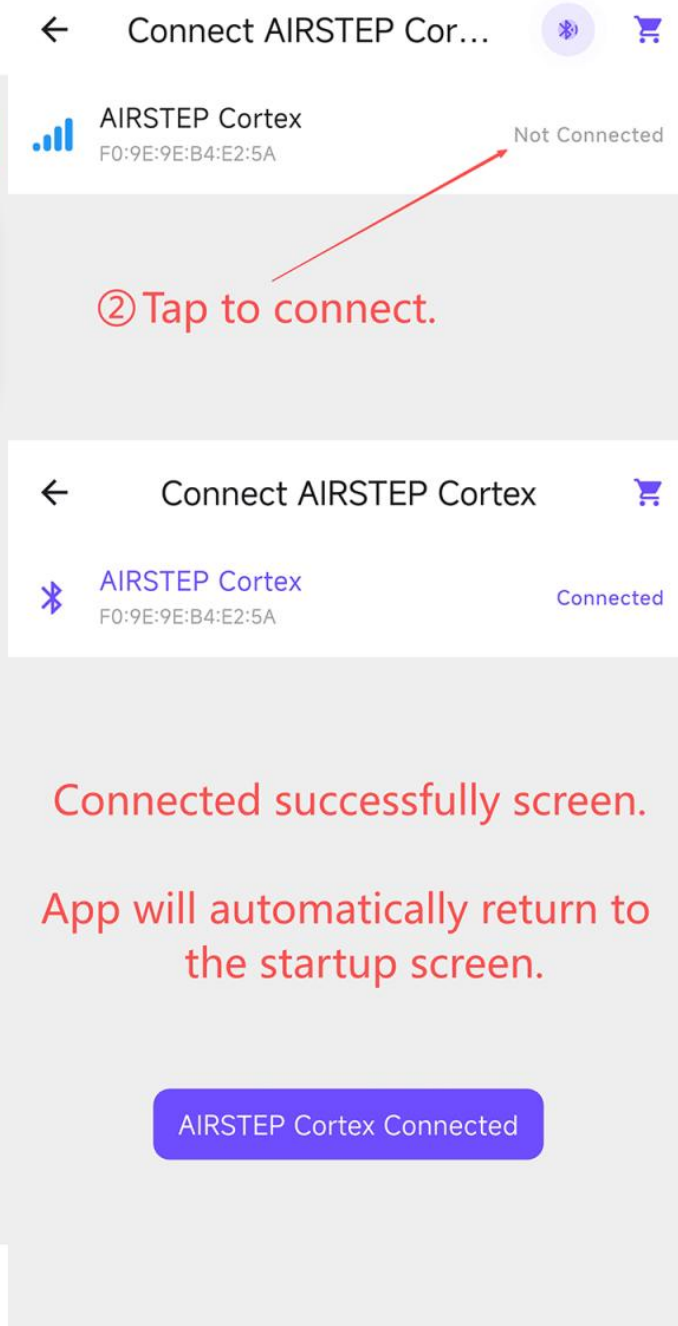
The AIRSTEP Cortex App connects to AIRSTEP Cortex Edition via Bluetooth and is available for both iOS and Android. Search "**AIRSTEP Cortex**" in the App Store or Google Play to download.

Note: Grant Bluetooth and location permissions when prompted.

In the AIRSTEP Cortex app, you can easily assign the two expression pedals to control effect parameters. We support all parameters for the most essential effects. In the app settings, you can also change the AIRSTEP footswitch trigger mode between **Release** and **Press**.



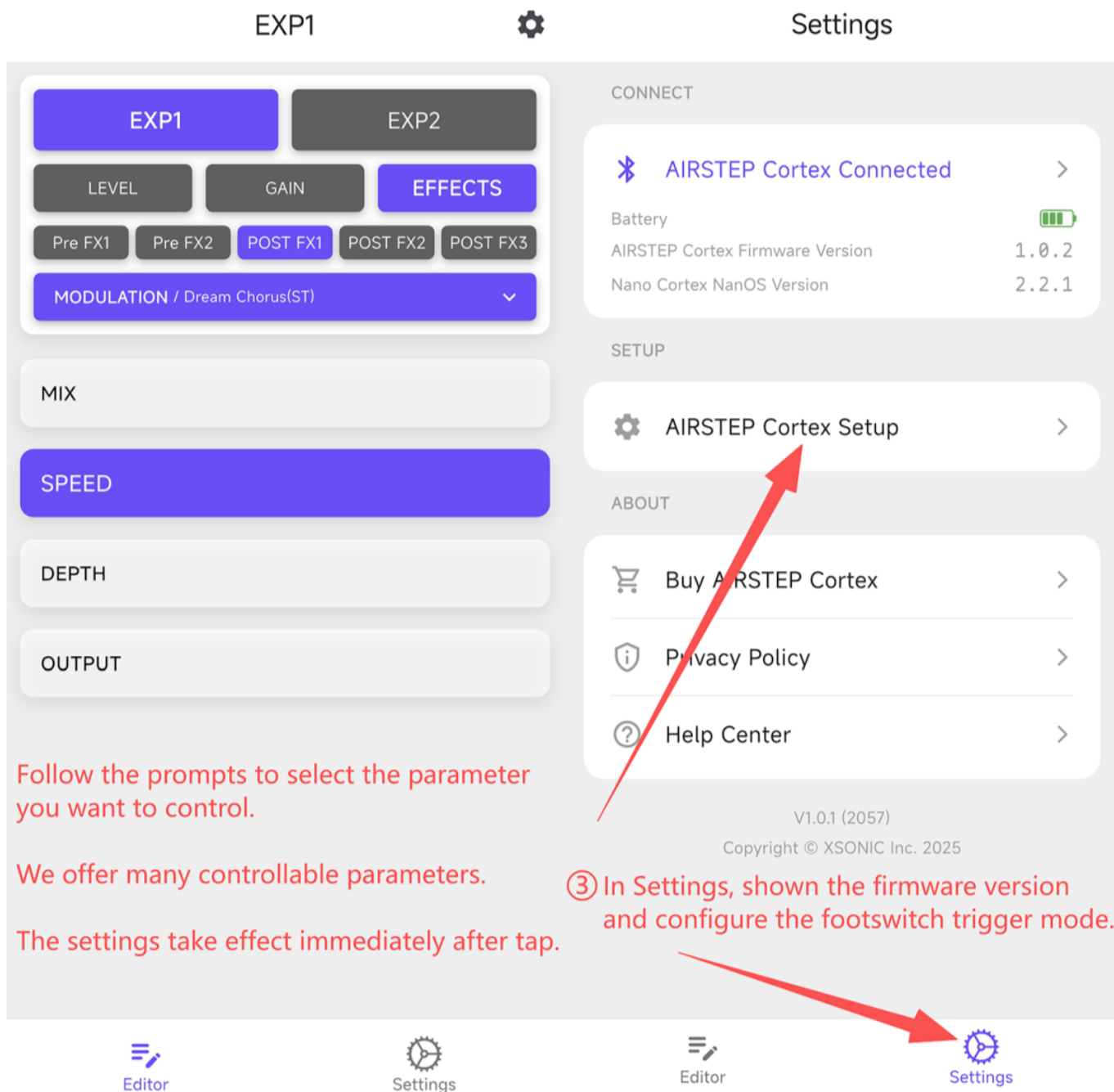
① Tap to display the device list.



② Tap to connect.

Connected successfully screen.

App will automatically return to the startup screen.



Using Expression Pedals

AIRSTEP Cortex Edition works with standard TRS expression pedals. This is the wiring used by most brands. Pedals with reverse polarity are **not supported**.

Two expression pedals can be connected simultaneously for real-time control of parameters, which can be assigned in the app.

By default, EXP1 controls LEVEL and EXP2 controls GAIN.

Battery and Charge

Use the included charging cable with a phone charger, or a **9V DC pedal power supply (center-negative)**. The charging indicator will turn red while charging and green when fully charged. To prevent overcharging and extend battery life, unplug the charger once charging is complete.

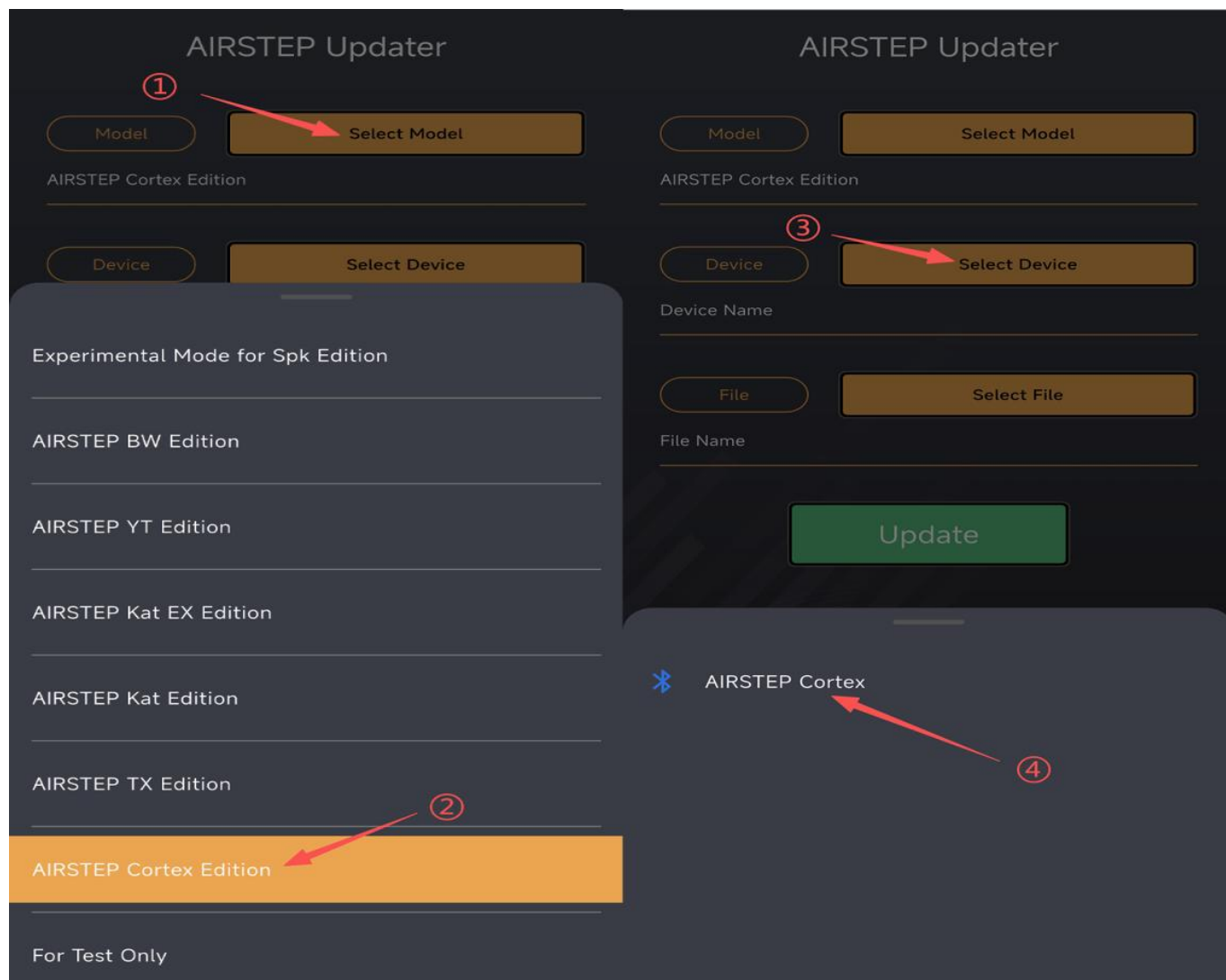
When fully charged, AIRSTEP Cortex Edition can work for up to 300 hours.

Firmware Update

To update the firmware, search "**AIRSTEP Updater**" in the App Store or Google Play to download. After installation, launch the app and make sure to grant Bluetooth and location permissions when prompted.

To enter firmware update mode, make sure the AIRSTEP Cortex Edition is powered off. Then, press and hold the footswitch D while powering it on. The LED B will light up, indicating that the device has successfully entered firmware update mode.

Then, follow the on-screen instructions in the app to complete the update process step by step, as shown in the diagram.



AIRSTEP Updater

Model

Select Model

AIRSTEP Cortex Edition

Device

Select Device

AIRSTEP Cortex

5

File

Select File

AIRSTEP_Cortex_Firmware_V1.0.2

AIRSTEP_Cortex_Firmware_V1.0.2

6

AIRSTEP Updater

Model

Select Model

AIRSTEP Cortex Edition

Device

Select Device

AIRSTEP Cortex

File

Select File

AIRSTEP_Cortex_Firmware_V1.0.2

Update

7

How to Update ?

Version: 4.1.0

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AIRSTEP Updater

Model

Select Model

AIRSTEP Cortex Edition

Device

Select Device

AIRSTEP Cortex

File

Select File

AIRSTEP

Update Firmware...16%



How to Update ?

Version: 4.1.0

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AIRSTEP Updater

Model

Select Model

AIRSTEP Cortex Edition

Device

Select Device

AIRSTEP Cortex

File

Select File

AIRSTEP

Upgrade successfully

Exit

How to Update ?

Version: 4.1.0

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