CoreBlu X3
User Manual

Product Name	CoreBlu X3
Product Owner	Najam us Saqib
Released by	Muhammad Ahsan
Ver #	1.0
Release date	26-April-2021
Reference documents	
Release summary	First Release

Revision history

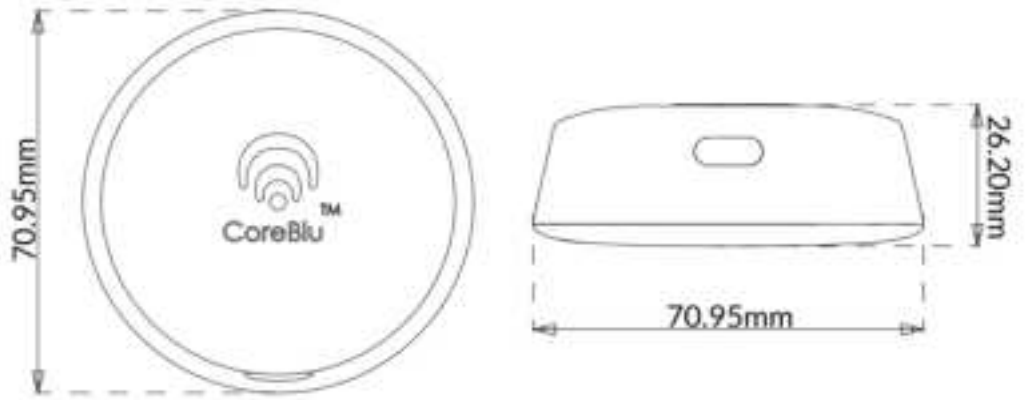
Date	Version	Released by	Release summary
26-April-2021	1.0	Muhammad Ahsan	First Release

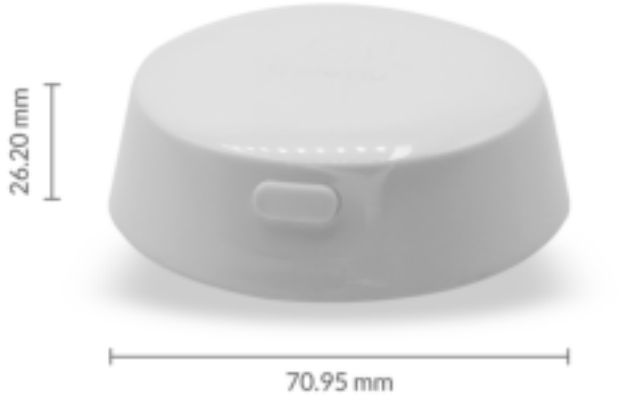
Contents

Introduction:

The CoreBlu line is a series of advanced Bluetooth Low Energy 5.x beacon devices using multi standard beacon technology.The CoreBlu-X3 is specially conceived for advanced business solutions using location based and indoor navigation based applications. It features an ultra-low power consumption and long battery life. The CoreBlu-X3 can be easily mounted on various
surfaces and uses commercially available replaceable large capacity batteries.The CoreBlu-X3 comes with a downloadable SDK with an extensive library for easy integration into a wide range of location based and indoor navigation based applications. It also includes a wide range
tools facilitating optimal setup, installation and health-checks.

Physical characteristics:





Usage:

- CoreBlu X3 is designed to be mounted anywhere on various surfaces with the help of double sided tape or screws to be detected by nearby smartphones.
- CoreBlu X3 is mainly used in indoor navigation applications.
- CoreBlu X3 also includes a wide range of tools facilitating optimal setup, installation and health-checks.
- Long button presses allow the beacons to restart/wakeup (if sleeping) and show indication in the front LED.

Features:

- **Bluetooth Radio**
  - ❖ Type: Bluetooth: Low energy 5.0
  - ❖ Advertisement: iBeacon, Eddystone & cBeacon (Averos Proprietary).
  - ❖ Advertisement Interval: 100ms to 10.2seconds.
  - ❖ Frequency: 2.4GHz.
  - ❖ Transmit Power: +4dBm to -20 dBm.
  - ❖ Antenna Type: PCB antenna, Omni Directional.
- **Sensor**
  - ❖ Motion sensing: 3 Axis Accelerometer.
- **Battery**
  - ❖ Battery type: ER14505 x 2, 4800mAh, Replaceable.
- **Enclosure**
  - ❖ Material: ABS.
  - ❖ Protection Class: IP64.
- **Operating Environment**
  - ❖ Temperature Range -20°C to 70°C.
  - ❖ Operating Humidity 90%.
- **User interface**
  - ❖ User interface button.
  - ❖ User indication LED.

Quick Start:

After unpacked the CoreBlu X3, we have the following steps to check the device quickly.

- **Hardware Test**

  Press the button for 5 sec and observe LED blinking in front of CoreBlu X3. The device will now wake up from sleep mode.

- **Software Test**

  CoreBlu X3 has a Serial QRCode printed on the side, which maps to the Beacon MAC address. To verify the CoreBlu X3 is transmitting packets we have to scan the Barcode via Beacon Manager application. Once Beacon Manager has been installed in the smartphone, select iBeacons. After that click the *no filter selected* button on top left of screen then click QR Code button, scan the QRCode on CoreBlu X3 and press apply, if CoreBlu X3 is turned on it will show on the list on the screen.

Configuration Setting:

Please refer to the configuration guide.

Warning:

CoreBlu X3 contains electronic elements and a battery which should be properly disposed of. If a beacon needs to be disposed of, please contact the manufacturer technical support first.

FCC Caution:

This device complies with part 15 of applicable FCC Rules. Its operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with The instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirements. The device can be used in portable exposure conditions without restriction.