

**WiSeConnect BLE Mesh Listener
Hardware and Technical Specification**

Preliminary Version (Rev 1.1)

Issued: 11/03/2016

Revision History

Rev No	Date	Notes
Rev 1.0	12/30/2015	Initial Release
Rev1.1	11/03/2016	Block diagram added.

General Information

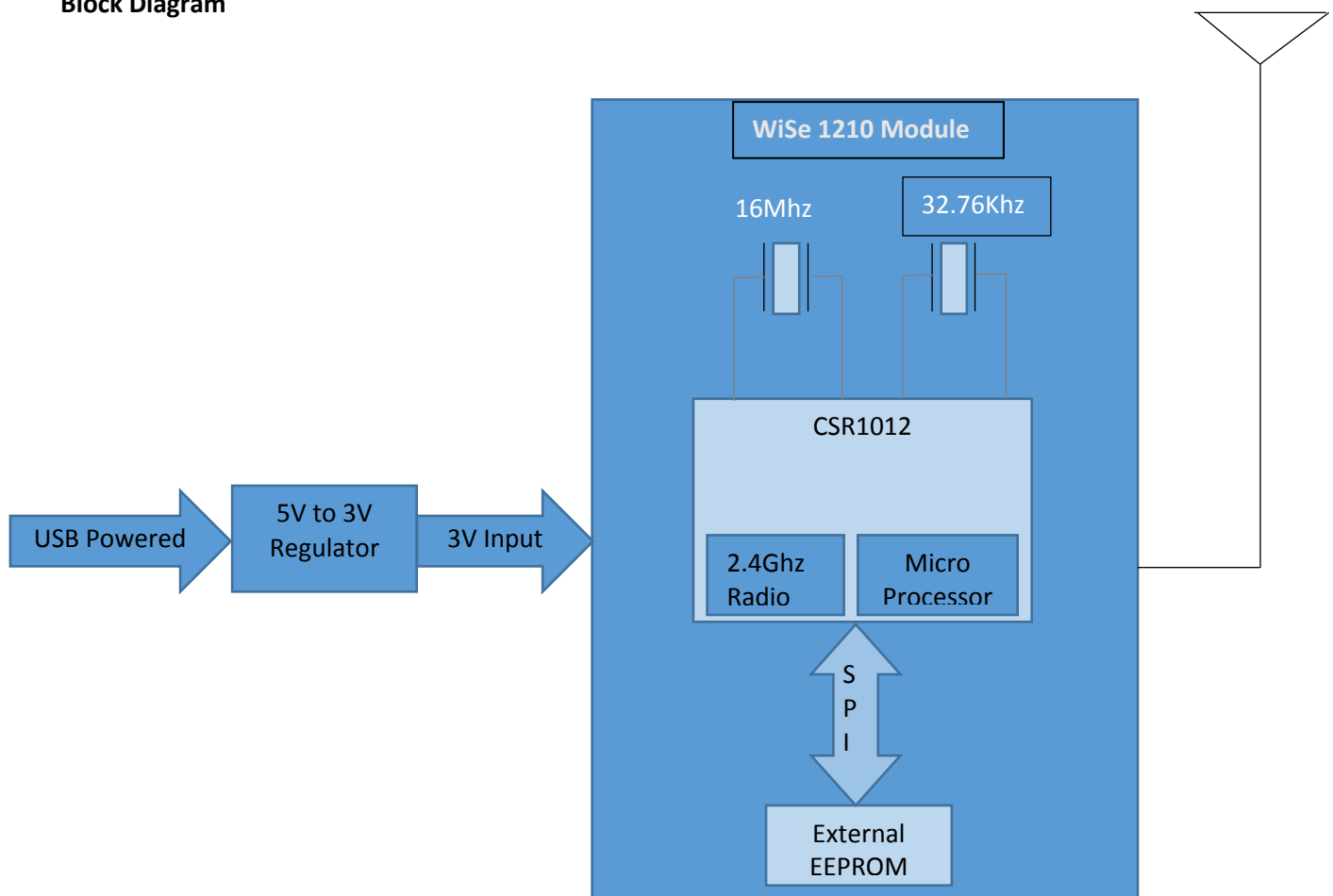


Figure 1. WiSeConnect BLE Mesh Repeater/Listener

Operational Description

The WiSeMesh BLE Listener/Repeater (L/R) is a bi-directional communication device that can be easily be applied at various points throughout the WiseMesh network to provide tag listening and add performance, redundancy, robustness and to extend coverage of the WiSeMesh network. The WiSe BLE L/R works in conjunction with WiSilica's WiSeMesh BLE/WiFi AP and WiSeMesh BLE Tags.

Block Diagram



Key Features

Dual Communication and Security

Each WiSeMesh BLE L/R can send and receive data in real time from the BLE connected devices and WiSe BLE Tags to and from the WiSilica cloud. Each WiSeMesh BLE L/R is AES 128k encrypted for device and network security.

Ease of Application

The WiSeMesh BLE L/R is compact in size, easy to install, and are available in micro USB configurations.

Specifications

Radio Frequency

(BLE 4.1) 2.4-2.5 Ghz

Device Security

AES 128k Encryption with 3 level pairing keys (Network, APP, GUID)

Antenna

Integrated Antenna, Omni Directional Antenna
1 x 50 ohms SMA connector: 1/2 wave whip
BLE- 2.4GHz ~ 2.5GHz 2dBi

Power

Supply 35 mA peak current @ 5V DC

Physical interfaces

Micro USB

Dimensions

79 X 50 X 18mm

Operating Conditions

Temp 0-50°C

Pairing the Listener

Once logged in; Click on the (+) sign on the right bottom to see the listeners in the pairing mode.

(Note: Listeners are in pairing mode for the first 30 seconds once they are powered on)

- Select the listeners that you want to pair from the list and click on the 'Pair' option that pops up upon selection of a listener.
- Once you click the 'Pair' button, the listener is added to the database which can be verified with the success message.
- You can now go to the Home screen of the app to see the listener. A long press on these listeners opens up options to Edit, Delete and do an OTA update.
- Edit options can be used to rename the listeners.

User Manual

Pairing a Listener



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TABLE OF CONTENTS

Table of Contents.....	3
Table of figures	4
Prerequisites.....	5
Hardware Versions Used	5
Device Commissioning	5

TABLE OF FIGURES

Figure 1 "Add device" option	5
Figure 3 Filter (optional)	6
Figure 4 Scan for devices	6
Figure 5 "Test" option.....	7
Figure 6 Pair the device	7
Figure 7 Paired device under default group.....	8

PREREQUISITES

- App should be in Skip login mode.

HARDWARE VERSIONS USED

Sl#	Particulars	Version
1	App	iOS SDK V_3.0.3.0_B_1
2	Wise Listener	1.3.93

DEVICE COMMISSIONING .

- a) Click on “(+)” and select “Add Device” from the main menu options.

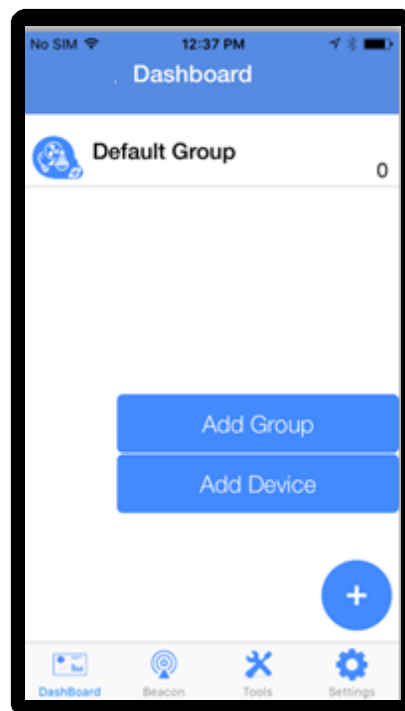


Figure 1 "Add device" option

- b) Click on filter icon if the user wants to filter out a particular type of device that needs to be scanned for in the presence of multiple device types.(OPTIONAL)

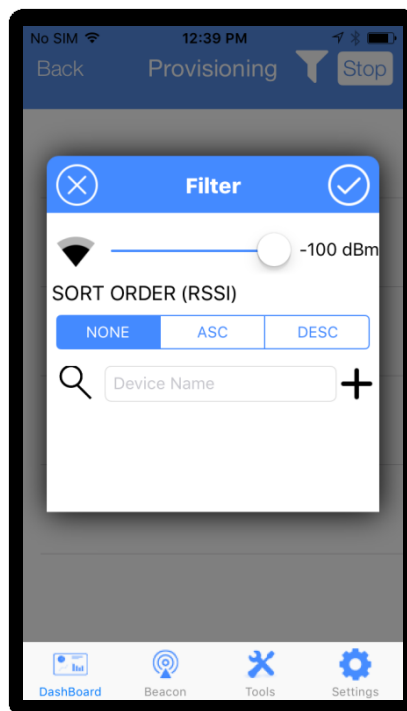


Figure 2 Filter (optional)

- c) Click on “Scan”

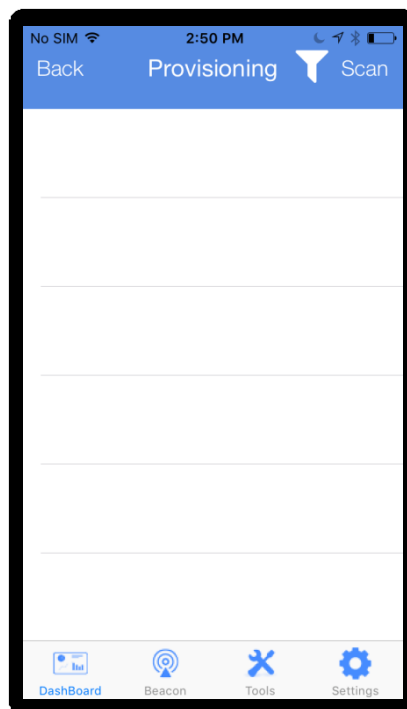


Figure 3 Scan for devices

- d) When Wise Listener device appears in the scanned list , swipe leftwards on the device name and click “Test” button to test its connection.

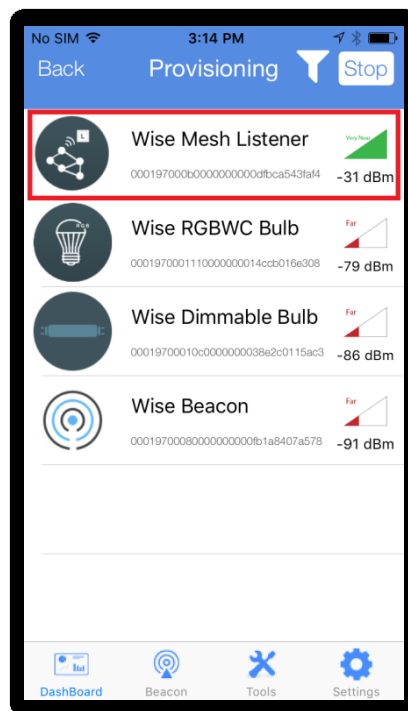


Figure 4 "Test" option

- e) Click on “Pair” button to get the device paired.

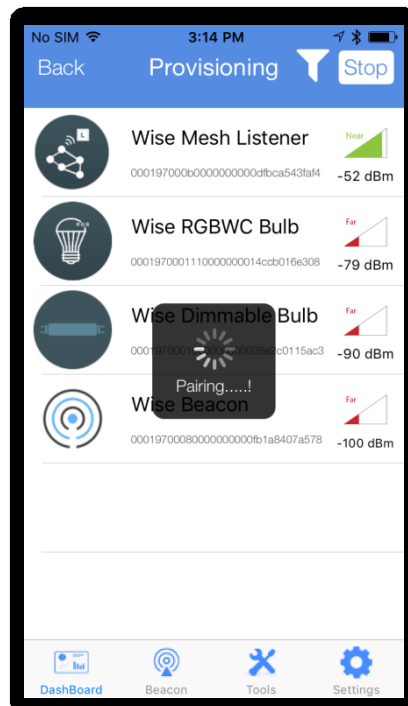


Figure 5 Pair the device

- f) Paired Wise Listener device can be seen under Default group in the dashboard.

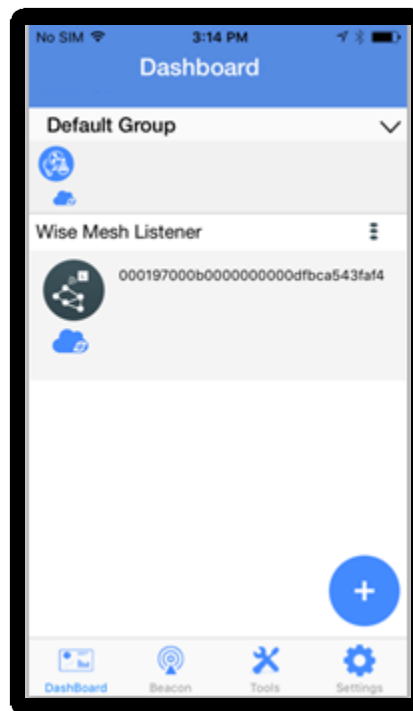


Figure 6 Paired device under default group

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

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC Rules. 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.