Guide
Ver.1a

iBS02 User Guide

Introduction

This application note is a guide for users to operate iBS02 beacon. The quick verification is using INGICS iBS01 Utility APP. Please download this APP with below link:
https://play.google.com/store/apps/details?id=com.ingics.tag.igstagconfig

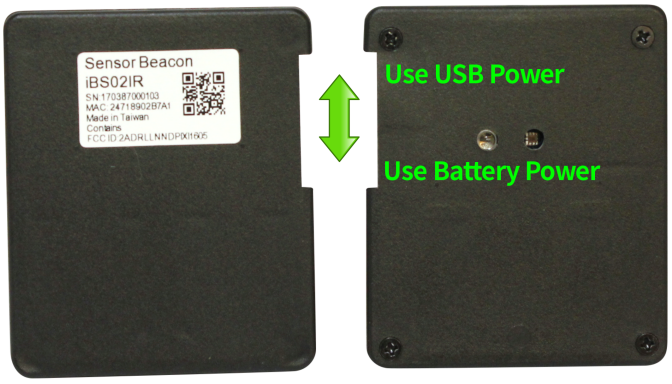
Operation

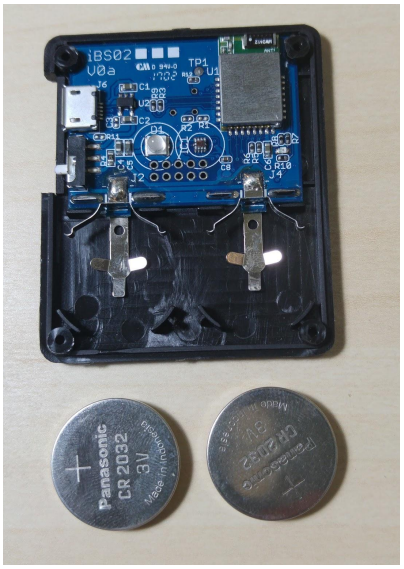
Beacons are shipped with 2x CR2032 Panasonic coin batteries. Figure on the bottom right is an instruction for inserting the battery in case you need to change the battery.

Users can also power the tag by a micro-USB cable from a standard USB host port(like the USB port in a PC) or normal smartphone charger.

There is a power switch like in the figure below. In default shipping condition, the power switch is switched off. Switching on/off depends on the power source. After power on, it starts and continuously advertises the beacon message through BLE.

Switch Position	USB Power	CR2032 Battery
Up	On	Off
Down	Off	On

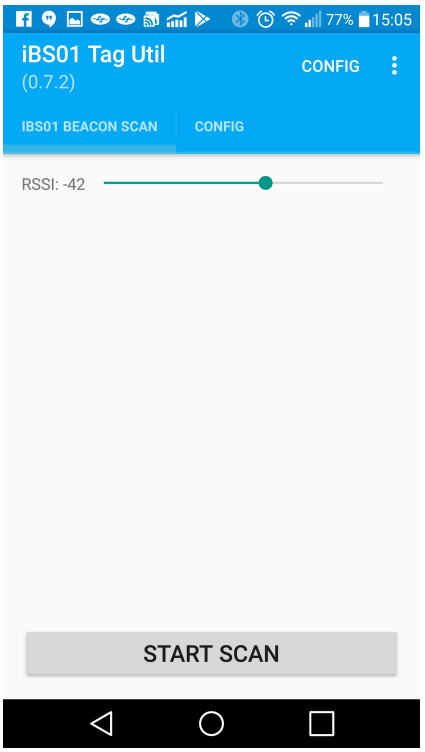
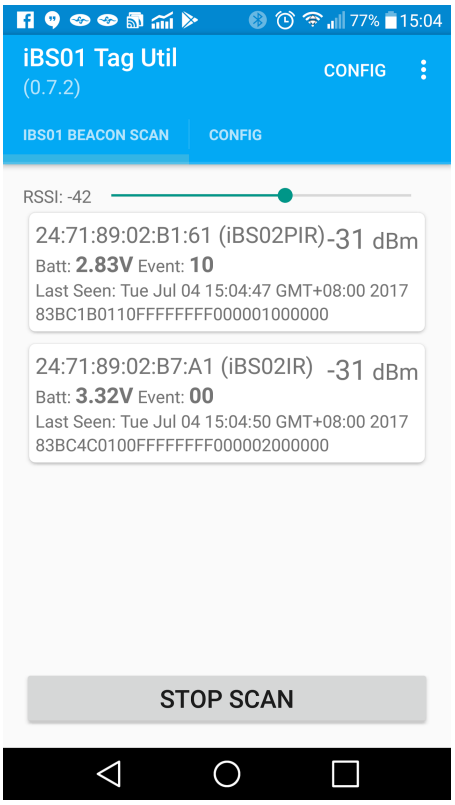




Quick Start

When powered on iBS02 Tag starts to advertise immediately. User can use BLE scan app to scan iBS02 Tag to get

payload to see its working.Detail procedure as following:

1. Power on iBS01 with Battery or USB(suggest USB)	2. Launch “iBS01 Utility” and start scan	3. Tag Info is in payload, detail information please check format document
		

Configuration

There are several parameters you may want to configure. Basic procedure is as below,.

1. Power off and Power on, iBS02 will be connectable **within 20 secs**
2. Open iBS01 Tag Utility, on the upper right corner, click CONFIG Tab and you can see the scanned tag. Select it and connect it **within 20 secs** after iBS02 powered on.
3. After Connect, you can see and change the parameters in the CONFIG page.
4. Disconnect and power off then power on iBS02 to apply changes

Waste Electrical and Electronic Equipment Recycling

Our product is compliant with the WEEE directive for re-use/recovery/recycling. This cross-out wheeled-bin symbol is a reminder that this product should not be treated as household waste. Instead hand it over to the appropriate collection point for the recycling of electrical and electronic equipment in accordance with local environmental regulations for waste disposal.

Since our product is not sold directly to the end user and generally it is a part of our customer’s solution, our customer is recognized as a professional seller. Our customer has the responsibility to comply with the requirement of the directive too. To help our customers, when necessary, we will provide a WEEE compliant assessment report for registering and communicating with the local authorities and recycling agency.

Certification

Japan MIC Regulatory
211-180707

FCC Regulatory
2AH2IIBM40R2

IC Regulatory
21379-IBM40R2

Statement

Federal Communication Commission Interference Statement

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 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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

Industry Canada Statement

This device complies with Industry Canada licence-exempt RSS standard. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement

This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Cet équipement est conforme aux CNR-102 d'Industrie Canada. Cet équipement doit êtreinstallé et utilisé avec une distance minimale de 20 centimètres entre le radiateur et votrecorps. Cet émetteur ne doit pas être co-localisées ou opérant en conjonction avec autreantenne ou émetteur. Les antennes utilisées pour cet émetteur doivent être installés etfournir une distance de séparation d'au moins 20 centimètre de toute personne et doit pas être co-située ni fonctionner en conjonction avec une autre antenne ou émetteur.

CE Regulatory

iBS02 series has been tested and complies with the essential requirements of the DIRECTIVE 2014/53/EU. Below is the copy of the CE Conformity of Declaration.

DECLARATION OF CONFORMITY

EU EU RED - DIRECTIVE 2014/53/EU -

This Declaration that the following designated product

Sensor Beacon
Model No.: iBS02
Multi-listing Model No.:
iBS02M2, iBS02H2, iBS02IR2, IBS02PIR2
Brand Name: INGICS

(Product identification)

complies with the essential requirements of the EU RED - DIRECTIVE 2014/53/EU on the approximation of the laws of the Member States relating to ***Radio Spectrum Matters/Health Matters.***.
Assessment of compliance of the product with the requirements relating to radio spectrum matters was based on Annex IV of the Directive **2014/53/EU** and the following standard:

EMC	Radio Spectrum	Safety
EN 301 489 -1: V 2.2.0 (2017)	EN 300 328 (V2.2.2,2019-07)	EN 60950-1:2006+A11:2009 +A1:2010+A12:2011+A2:2013
EN 301 489 – 17: V 3.2.0 (2017)		**Health**
		EN 62479 : 2010
		EN 50663 : 2017

(Identification of regulations / standards)

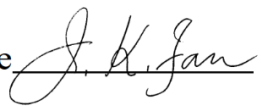
This declaration is issued for

INGICS TECHNOLOGY.
2F., No.15-2, Changshou St.,
Shulin Dist., New Taipei City 238,, Taiwan, R.O.C.

(Name / Address)

Furthermore we declare that our product will be produce in correspondence with all requirements according to the Directive **2014/53/EU** .

Name: J.K.Fan Title: President

Signature 

Date: 2021. 06. 02

Revision History

DATE	REVISION	CHANGES
Jun 25, 2017	0a	Initial release
Aug 28, 2017	0b	Modify Operation and Configuration section
Dec 12, 2019	0c	Update regulation statement
Jan 15, 2020	01	Add conformity declaration of CE certification
June 2, 2021	01a	1. Add Waste Electrical and Electronic Equipment Recycling section for appropriate recycling the equipment 2. Rearrange page 3. Add Certification section