✳luetooth
Extender

Get Started
Bluetooth Extender 1.0

![S3 Engineering Lanka (Pvt) Ltd. logo]

S3 Engineering Lanka (Pvt) Ltd.

■ **Bluetooth Extender**
BE- 555
User's Guide

The Bluetooth Extender device is used to extend Bluetooth coverage of DiHAC device that was designed by S3 Engineering Lanka (Pvt) Ltd. This device can be extended Bluetooth coverage from 20-30 m radial distance. This device is a smart & simple 230 VAC power plug and play device. User can input all device data by using a Bluetooth Coder device that is specially designed by S3 Engineering Lanka (Pvt). Ltd.

Instructions:

Main part of the Bluetooth Extender

1. 230 VAC power input socket
2. Operating mode adjustable male pin headers
2. Power & data input connection slot (with Bluetooth Coder)
3. Bluetooth antenna

Power & data output slot pinouts with Bluetooth coder.

Bluetooth Extender device	Bluetooth Coder device	
	Section 1	Section 2
EN	EN	EN
VCC	VCC	VCC
GND	GND	GND
TX_1	D1	D5
RX_2	D2	D6
TX_2	D3	D7
RX_1	D4	D8

Easy steps to use Bluetooth Extender device

1. Connect the Bluetooth Extender device with Bluetooth Coder device by using above pin configuration.
2. Don't power up the device through the AC power input cable.
3. Remove two male pin headers from the device.

N/A RX_1 TX_2 RX_2 TX_1 GND VCC EN
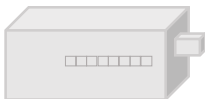
Top view of power & data input connection slot

Removed male pin header

4. Select and upload the device data by using a Bluetooth Coder device and Bluetooth gadget pack software.

5. After uploading all the data, remove the power and data cable.
6. Set the two male pin headers again at the suitable position.
7. Connect 230 VAC power input and power up Bluetooth Extender device.
8. Finally, Bluetooth extender device will be connected with DiHAC device automatically.

Instructions for Bluetooth gadget pack Software

Page 1

Page 1 Instructions

* Input Bluetooth Extender device name, Pairing password, Role of the device, Connection mode, MAC address and Baud rate of the device.
* Suitable instruction for Role of the device & Connection mode fields are Slave and Specified address mode respectively.
* MAC address must be the DiHAC device MAC address.
* MAC address must be 14 digit number as xxxx,xx,xxxxxx and device name, pairing password must be less than 33 characters and 11 character respectively
* Normal communication baud rate is 9600. (But user can use 19200, 38400, 57600, 115200, 230400, 460800)

* COM port number is the serial data communication port number (COM port number of the USB)
* This page only for individual data uploading

Page 2

Page 2 Instructions

* User can select multiple configuration type.
* All the multiple device instructions can be provided by choosing device configuration tab window.
* Bluetooth Module tab only for any of Bluetooth modules.

User can choose two configuration modes such as user configuration mode and default configuration mode. If you use Bluetooth extender device, Role of the device and connection mode must be in Master and Specified address mode respectively. Also DiHAC MAC address must be set as MAC address field in software and Baud rate value must be 9600 for Bluetooth Extender working properly.

Graphical view of extending pattern of Bluetooth coverage
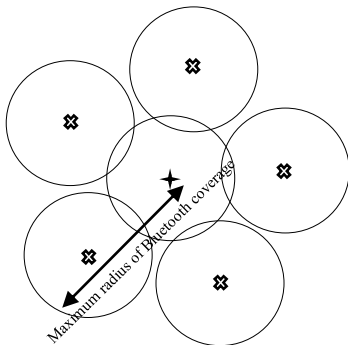
✛ -	DiHAC device
✖ -	Bluetooth Extender devices

Default parameters of Bluetooth Extender device

Name   : Bluetooth Extender
Password   : 1234
Mac address   : 0000,00,000000
Baud rate   : 9600
Role   : Master
Connection Mode : Specified mac address

Bluetooth Extender parameters for DiHAC working properly

Name   : Any name
Password   : Any password
Mac address   : DiHAC Mac address
Baud rate   : 9600

If you change baud rate value of Bluetooth Extender device, you must change DiHAC baud rate value into baud rate of Bluetooth Extender value.

Role   : Master
Connection Mode : Specified mac address

Bluetooth Extender parameter lengths & Details

Name   : Less than or equal 32 characters
Password   : Less than or equal 10 characters
Mac address   : must be as xxxx,xx,xxxxxx
Baud rate   : 9600, 19200, 38400, 57600, 115200, 230400, 460800
Role   : Slave, Master or Slave – Loop

In slave mode, it communicates with DiHAC device through physical connection. Also this mode, this device can be used as an additional voice controller device for DIHAC. Slave -Loop mode only for device testing.

Connection Mode : Specified mac address , any address

In any address mode, This device can communicate with more DiHAC devices.

Bluetooth Extender device as an additional voice controller

If DiHAC device voice controller section has any breakdown, User can use this device as an additional voice controller.

1. Format Role parameter of this device as Slave.
2. Format Connection Mode parameter of the device as any of them.
3. Format baud rate value into same value in DiHAC device.
4. Remove two male pin headers like page 2 instructions.
5. Connect the Bluetooth Extender device as follows.

Bluetooth Extender device	DiHAC device
RX_2	ETX
TX_2	ERX

6. Connect 230 VAC power input and power up Bluetooth Extender device.

Bluetooth Extender device working status

No blinking   - Power failure
Blinking after 2 second   - Data configured mode
Blinking after 1 second   - Unpaired mode
Blinking after 3 or more second - Paired mode with DiHAC

Safety Guide for users

Electrical safety

➢ Accessories
 • Use only approved accessories.
 • Do not connect with incompatible products or accessories.

➢ Faulty damaged products
 • Do not attempt to disassemble this device or its accessories.
 • Only qualified personnel must service or repair the device and
 its accessories.

General Precautions
You alone are responsible for how you use your device and any
consequences of its use. You must always switch off your Bluetooth
coder device whenever the use of the device prohibited.

 • Avoid applying excessive pressure to the device
    Do not apply excessive pressure on the Bluetooth coder
 device casing. Also do not apply the excessive pressure on the
 Uploading button when press the button.

 • Protect your device
    * Always treat your Bluetooth device and its accessories with
 care and keep them in a clean and dust-free place.
    * Do not expose your device or its accessories to open flames
 or lit tobacco products.
    * Do not use harsh chemicals, cleaning solvents, or aerosols to
 clean the device or its accessories.
    * Do not attempt to disassemble your device or its accessories,
 only authorized personal must do so.
    * Store your device or its accessories at temperature between
 0^0 C to 40^0 C.

* Please check local regulation for disposal of electronic products.

- Damage requiring service

   Unplug the device from the electrical outlet and refer servicing to an authorized service technician or provider under the following conditions.

   * The product has been exposed to rain or liquid, dropped, subject to impact or damaged.
   * There are noticeable signs of overheating.

- Avoid hot area

   The product should be placed away from heat source such as radiators, heat registers, stoves, or other products that produce heat.

- Avoid wet area

   Never use the product in rain, or near washbasins or other wet or high humidity locations. If your product get wet, do not try dry the product with the use of an oven or dryer, as this may damage your product.