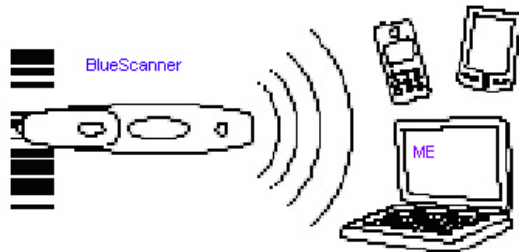


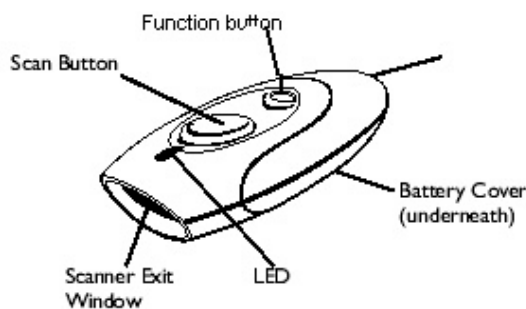
Overview of Blue Scanner Bluetooth enabled Scanner

BlueScanner is designed for easy to use. Simply press a button when scanning a barcode. The scanned bar codes can be either send to an SMS gateway or send to an application running on the ME itself.



BlueScanner uses Bluetooth technology for connecting with a Mobile Equipment (ME) like a mobile phone. BlueScanner supports service level security in bluetooth connectivity, multiple operating modes, and audio-visual indications for the status of the BlueScanner

User interface



Blue Scanner has two buttons in to control its operations, namely, scan button (Controls scanning operations) and function button (Mainly controls bluetooth functions). In addition to the buttons there will be a tricolor LED and a buzzer to give audiovisual indications regarding the status of Blue Scanner

Features

- *Wireless connectivity*
- *Multiple operational modes*
- *Service level security for bluetooth*
- *Audio and visual indications*

Wireless connectivity

For wireless connectivity bluescanner uses bluetooth technology. It requires lesser time (~2secs) to establish bluetooth connection with a remote device.

Multiple operational modes: -

Single barcode SMS mode

In this mode the scanned barcode is immediately transferred to the remote device connected to it. If a bluetooth connection does not exist, it will try to establish connection. A good beep sound will be heard if scanning and sending is successful.

Multiple Barcode SMS mode

In this mode a maximum of 25 barcodes can be scanner and can send collectively to the connected remote device and from there it can be transferred to a mobile gateway as SMS.

Single Barcode Raw Data Mode

This mode is used to send Bar code data to an application running on the mobile device or on a PC

Multiple Barcode SMS mode

This mode is used to send more than one Bar code data to an application running on the mobile device or on a PC

Other functions: -

Low battery indication

Indicate a low power state to the user by blinking the RED LED while trying to scan a bar code

Entering into inactive mode

Blue Scanner will enter into the inactive condition when there is no activity for 30

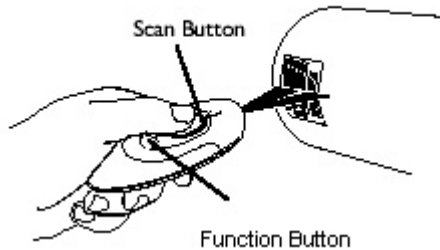
Bluetooth Enabled Scanner

seconds. At this time if Blue Scanner is in Multiple Barcode SMS mode or Multiple Barcode raw data mode it sends the already collected Barcode data to the ME. A good beep sound will be heard if sending is success or a bad beep sound will be heard if sending is failed. Disconnects the Bluetooth link and puts the BT chip in the power down mode and turn off the Green LED. Processor enters the sleep mode

Firmware upgrade through bluetooth

Firmware can be updated through the Bluetooth connection with a PC. There will be a light GUI application running on the PC equipped with a bluetooth adapter.

Scanning



A set of predefined bar codes will be used to set the Blue Scanner in different modes of operation. After one of the predefined barcodes is scanned, it will enter the new mode and store the mode in non-volatile memory

BlueScanner status display

LED status	Bluescanner status
Green LED blinking	Bluetooth link up
Green LED OFF	Bluetooth link down
Red LED blinking	Low battery warning

Technical specification

CPU:

Microcontroller... . H8S2148F (RISC 16Bit)
 Clock... ..7.323MHz
 On-Chip RAM... ..4KB
 On-Chip ROM... ..128KB

Physical specifications: 6.5X3.8X1.9 cm. 75gm with batteries

Electrical Specifications: 2 AAA batteries

Bluetooth:

Environment

Temperature for use. 5 °C to 40 °C

Temperature for storage: -20 C to 60 C

General

Interface:Radio. Bluetooth 1.1

Recognized Codes: UPC/EAN, Code 39, Code 128,

About NEST

NEST is a global software solutions and application Development Company with strong domain knowledge of Industry Automation, Real-Time Systems, Embedded Systems, Consumer Electronics, Avionics, Healthcare, Broadband and Networking & Telecom industry segments. NEST provides total solutions to Hi-tech industries right from hardware designing to integrated software application development. NEST is certified at ISO 9001 and was the 19th company globally to be assessed at SEI CMM Level 5. NEST approach to quality has been continued with initiatives in CMMI and Six-Sigma techniques

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