

CS-I Series Cordless Barcode Scanner Quick Guide

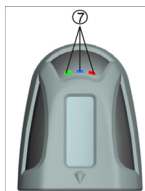
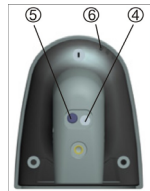
☞ A standard kit contains: a handheld unit, a base unit (with PS2, or USB, or RS232 cable), an antenna, a 5V AC/DC adaptor (for battery charge) and a CD-ROM (containing software and electrical manuals). A 5V AC/DC adaptor for RS232 cable is optional.

☞ Use dry and soft cloth to clean the handheld unit and the base unit.

Introduction to LR-433-WPAN protocol

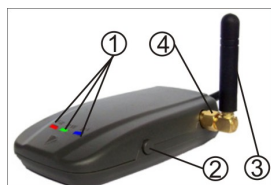
The scanner utilize 430.5 ~ 432.0MHz, 433.05 ~ 434.79MHz RF wireless communication with LR-433-WPAN wireless communication protocol. LR-433-WPAN protocol first time introduces adaptive frequency hopping technique. With this new protocol, cordless scanner is able to pick up a higher-performance RF channel from a group of channels in terms of consolidated communication. LR-433-WPAN protocol supports up to 128 handheld units (16 handheld-units/base-unit x 8 base-units = 128) within the same effective communication range. A circle of response time for one base unit with 16 handheld units is 1 second, while the response time for one base unit with one handheld unit is less than 0.1 second.

Parts of the handheld unit



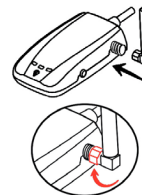
- ①Exit window ②Trigger ③Red LED (Charging indicator)
④Charge socket ⑤Power button ⑥Sound hole
⑦Red LED (Not successful transmission); Blue LED (Power); Green LED (Setting)

Parts of the base unit



- ①Red LED (Power); Green LED (Radio Frequency); Blue LED (Data In)
②Upgrade button
③Antenna
④Screw for antenna installation

Installation of antenna

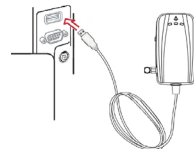


Please follows the instructions for installing antenna:

- ①Keep the antenna aligned to the side of the base unit.
- ②Keep the antenna steady; rotate the screw nut clockwise for three to four rounds until the antenna is fixed.

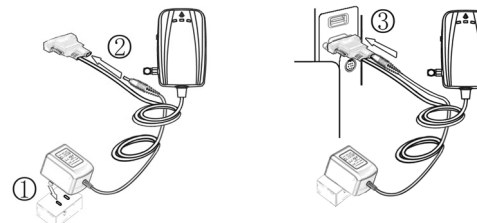
Note: It is in a reverse order to uninstall the antenna.

Installation of base unit



Steps to install base unit with USB cable:

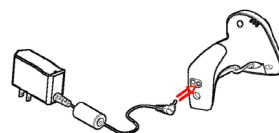
1. Plug the USB cable into the USB port of the computer.
2. Windows gives message on "new hardware found – USB HID input device found", then driver will be installed on request.
3. After successfully installing the new hardware, message will be given: "hardware installed successfully and ready to use".
4. If any problem encounters during the installation process, please unplug the USB cable from the computer and repeat step 1-3.



Steps to install base unit with RS232 cable:

1. Plug the AC/DC adaptor provided by the manufacturer into an electrical outlet.
2. Plug the output of the AC/DC adaptor into the power terminal of the RS232 connector.
3. Connect the DB9 serial communication cable with the COM port of the computer.

Charge battery



1. Please charge the battery before the first time of use.
The charge indicator (red LED) is turned on when the charging is in process. When the charging process completes, the red LED is turned off.
2. Charging time: 3.5 hours for fully charged.

Power on handheld unit: Press the power button  on handheld unit for two seconds.

Power off handheld unit: Press the power button  on handheld unit for two seconds.

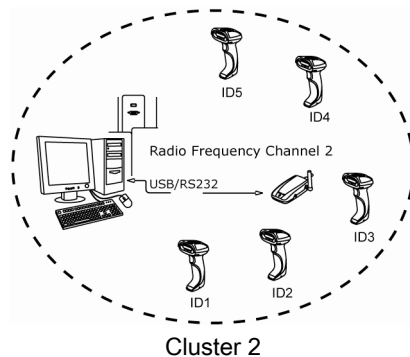
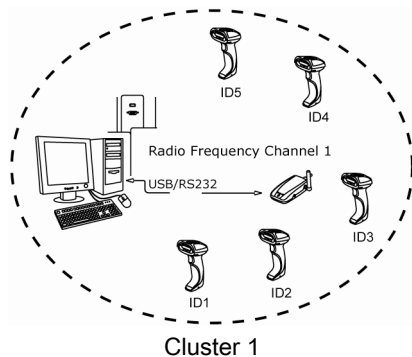
Effective data communication range

To achieve longer communication range, avoids concrete, wall and metallic storage racks between the barcode scanner and the base unit. Obstacle between the barcode scanner and the base unit would decrease the communication severely. Test result is up to 200 meters for free space data communication range under the condition of clear weather, temperature at 27°C, visibility of 5 kilometers.

Visual and audio indication of handheld unit for RF transmission

Successful Transmission	Audio (Beeper)	Red LED on handheld unit
Yes	None	Off
No	Three beeps	On

RF communication as clusters



Default setting of handheld unit



Firmware version of handheld unit



Default setting of base unit



Firmware version of base unit



RF communication setting for handheld unit

Option barcode	Option	Alpha. entry
Handheld unit RF channel No. 0701	01-08	01-08 06*
Handheld unit ID 0702	01-16	01-16 01*
RF power level 0703	10dbm to -15dbm	01-07 01*
Frequency hopping 0704	Disable Enable	00 01*

Note: 1) The factory default settings are indicated with asterisks (*); 2) Do change the settings if multiple handheld units and base units are deployed in the same effective range.

Configuration example

A handheld unit is configured with channel 2, ID 15.

- | | | | |
|--|------------------|--|-------------------|
| | 1) Scan “%SETUP” | | 6) Scan “%SETUP” |
| | 2) Scan “0701” | | 7) Scan “0702” |
| | 3) Scan “0” | | 8) Scan “1” |
| | 4) Scan “2” | | 9) Scan “5” |
| | 5) Scan “%%END” | | 10) Scan “0%%END” |

Configuration alphanumeric entry barcode



RF communication setting for base unit

Refer to “[Remote Scanner Management User Manual](#)”.