Pet Scan RT250 Electronic RFID Reader User Manual (V1.0)

CATALOG

1, Produce Presentation

1.1 Product features

- Support ISO norms 11784/85 &14223 protocol.；

- Working Frequency: ISM 134.2Khz；

- Focused on goods tracking and data collecting；

- Data Transmission: Bluetooth 2.0+EDR；

1.2 Produce description

ZR004 is a Pet Scan RT 250 Electronic RFID reader, operation is simple, it Support Bluetooth to transmit data.

1.3Applications

- Animal tracking

- Parking lot

- Warehouse and logistics

- Produce line

- Assets management

1.4 Photos

2, Parameters

Model	Value
Working Frequency	ISM 134.2KHz
Protocol	11784/85 &14223
RF Power	MAX 38.8dBm, software adjustable
Identify Distance	2 x 12mm FDXA glass tag scanning distance: 10cm 2 x 12mm FDXB glass tag scanning distance: 14cm Ear tag 26/30cm depends of the provider Reads HDX and EM4102 chips
Indication	One buzzer inside
Data Interface	Bluetooth 2.0+EDR，USB 2.0

Bluetooth Communication Distance	15 meters
Power Supply	3.7V 5500mAh lithium battery
Processor	PIC18F46K22
Memory	64KB (800 numbers)
Standby Time	12 hours
Operating current	1A (Max)
Size	600mm×60mm×35mm
OLED Display	four lines of 16 characters
Temperature	-5～40℃

3 Quick Start

3.1Buttons

The reader has four buttons.

- One round button to switch the device on/off.

- Three central buttons.

The upper button (3) and midle button (4) (scroll up and scroll down) are used to scroll the various functions of the reader on the display. The lower "OK" button (Validate or Enter) (2) is used to validate the options selected by the user when navigating through the various menus.

3.2 OLED

An OLED display comprising four lines of 16 characters.

3.3 Configuring the reader

After switching on the reader by pressing the On/Off button (1), you will see the message "Scan" with an arrow above it. Press three times upper button (3) to display the "Language" menu. Then validate by pressing button (2) The reader is initially configured to operate in English.

To change the language, press button (4) and scroll down the languages until the one you wish to use (for example spanish) is displayed. You must then validate your choice (button 2). The ollowing message is displayed for 4 seconds: English OK   and then the reader displays: Scan

The languages available are: English, French, Spanish, Italian, Portuguese, Deutsch and Polish.

Once you have selected the language pressing "OK" (4) you can switch off the reader by holding down the "On/Off" button.

3.4 Activating the reader

When the reader is switched off, you can switch it on by pressing button "OK" (1). The display shows: **Scan**

Press the "Validate" button (2) to activate chip search for 20 seconds. **Reading**

The operator must hold the reader close to the place where the chip is assumed to be,scanning over the area slowly.

Two cases may arise:

First case:

A transponder is detected. The reader emits a "beep" and displays the identification number in the following form: **FDXB**

939 274877906744

In this case the transponder is an ISO FDX B. Type transponder. The identification number takes the form of a series of 15 digits (FDX B) or 10 digits (FDX A).

The number remains displayed for one minute before the reader switches itself off.

Note: switching off the reader causes the number displayed to be erased from the memory.

Second case:

No transponder is detected. If no transponder has been detected after 20 seconds, the reader emits three "beeps" and displays: No transponder found !

This message will be erased after approximately 20 seconds. The reader will then display:

Scan

It will switch itself off automatically after two minutes to save to save battery power.

In this case, it is recommended to make two or three or three further attempts to read a chip, scanning more widely over the area in which it is assumed to be implanted. Each successive pressing of the button (4) will restart the reading in accordance with the process described above.

3.5 Bluetooth Function

Chance the Bluetooth options , the (5)Blue LED will display. In this time you can use mobile phone or laptop to match reader. Reader name is "HC-06" and password is "1234" , Bluetooth connect success, blue LED will display always.

3.6 Recharging the battery

The reader is powered by a Lithium/ion battery. This battery is designed to allow several thousand reading operations. It can be recharged by connecting the reader to a USB port. A fixed red LED (5) indicates that recharging is in progress and green (5) when it is fully loaded.

This led blink in blue when Bluetooth is activated. The service life of the battery depends not only on its use but also on the environment in which the reader is stored. An indicator on the right of the display (6) indicates the battery charge level. When the charge is too low the reader displays the following message:**Low battery**

Only around ten more reading operations will be possible before the reader switches itself off permanently. To replace the battery, it is necessary to open the reader. So it is strongly advised to consult your distributor. It is essential to use original batteries only.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital, pursuant to Part 15 or 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 casue harmful interference to radio communications, However, there is no guarantee that interference will not occur in a particular installation. If the 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.

FCC STATEMENT

1. 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.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement:

The device has been evaluated to meet general RF exposure requirement.
The device can be used in portable exposure condition without RF striction.