



## **HH-MR2 Reader User Manual**



Figure 1.1 HH-MR2 Reader

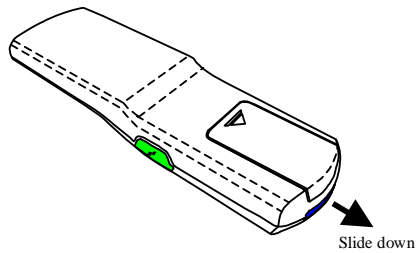
## 1 Details on Front Face and Menu Navigation

### 1.1 Front Face Information

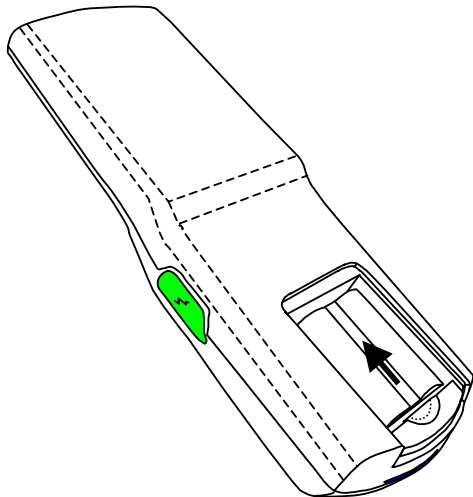
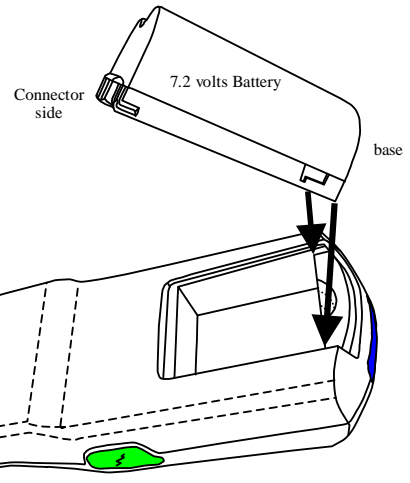
<b>Front Face Information</b>	
Reference Figure	Figure 1.1
LCD	8 rows, 16 characters per row.
Power LED Indicator (Red color)	When lighted: <ul style="list-style-type: none"><li>• Normal State: On</li><li>• When operating: On / Blinks</li></ul>
Activity LED Indicator (Blue color)	When lighted: <ul style="list-style-type: none"><li>• Normal State: Off</li><li>• When operating: On / Blinks</li></ul>
<b>Keypad Buttons</b>	
√	Enter/Accept button: To enter into a sub-menu, or execute a function, or accept a new value into the reader's configuration.
	On button: To turn on the unit, press and hold this button for 2 seconds and then release this button
	Off button: To turn off the unit, press and hold this button until the LCD and the LED go off.
X	Cancel Esc/Back button: To back-up to a parent menu or to clear memory and restart a scanning action.
▼	Next Item: To scroll forward the items in a menu or to scroll forward a list of UIDs.
▲	Previous Item: To scroll backward the items in a menu or to scroll backward a list of UIDs.
⚡	Scan tags button: There are two such buttons on the side of the HH-MR2. It is used to activate the RF power for scanning tags.

## 2 Getting Started – Install and charge the battery

### Step 1: Remove Battery Cover



### Step 2: Align the base of battery pack with the base of battery compartment before inserting the battery pack.



### Step 3: Slide the battery pack up so that the connector clicks into place. Replace the Battery Cover.

### Step 4: Use an AC/DC adaptor to supply 12 VDC to charge the battery for at least 3 hours. Red LED will blink when charging is in progress. Red LED will stop blinking when charging is complete.

## 2.1 Switch the reader on and off

To switch the reader on, press and hold the power key <√> until you see the red LED is on. If the LCD displays “Battery Low”, please charge the reader. To switch the reader off, press and hold the power key <√> for 2 seconds.

## 2.2 Settings

Your reader has various settings, called Tag Selection, LCD Backlight, LCD Contrast and Passkey.

Press any side button at “Main Menu”. When LCD prompts “Start Setting? Version xxxx”, presses <√> to activate the “Tag Selection” settings. Alternatively, press <X> to exit the setting without saving.

The first setting activated will be Tag Selection. Use the ▲ ▼ buttons to select the type of tags, FSK, ASK, ICODE UID. The default setting is FSK. Press <√> to proceed to the next setting. Press <X> to go back to previous setting or previous screen.

The next setting would be LCD Backlight. When the LCD prompts “LCD Backlight”, use the ▲ ▼ buttons to select the level of backlight. Press <√> to proceed to the next setting. Press <X> to go back to previous setting or previous screen.

The next setting would be LCD Contrast. Use the ▲ ▼ buttons to select the contrast level. Press <√> to proceed to the next setting.

The last setting will be the PIN/Passkey. Use the ▲ ▼ buttons to enable or disable the use of Passkey. Passkey is disabled by default to skip the Bluetooth Pairing process and this is the recommended setting.

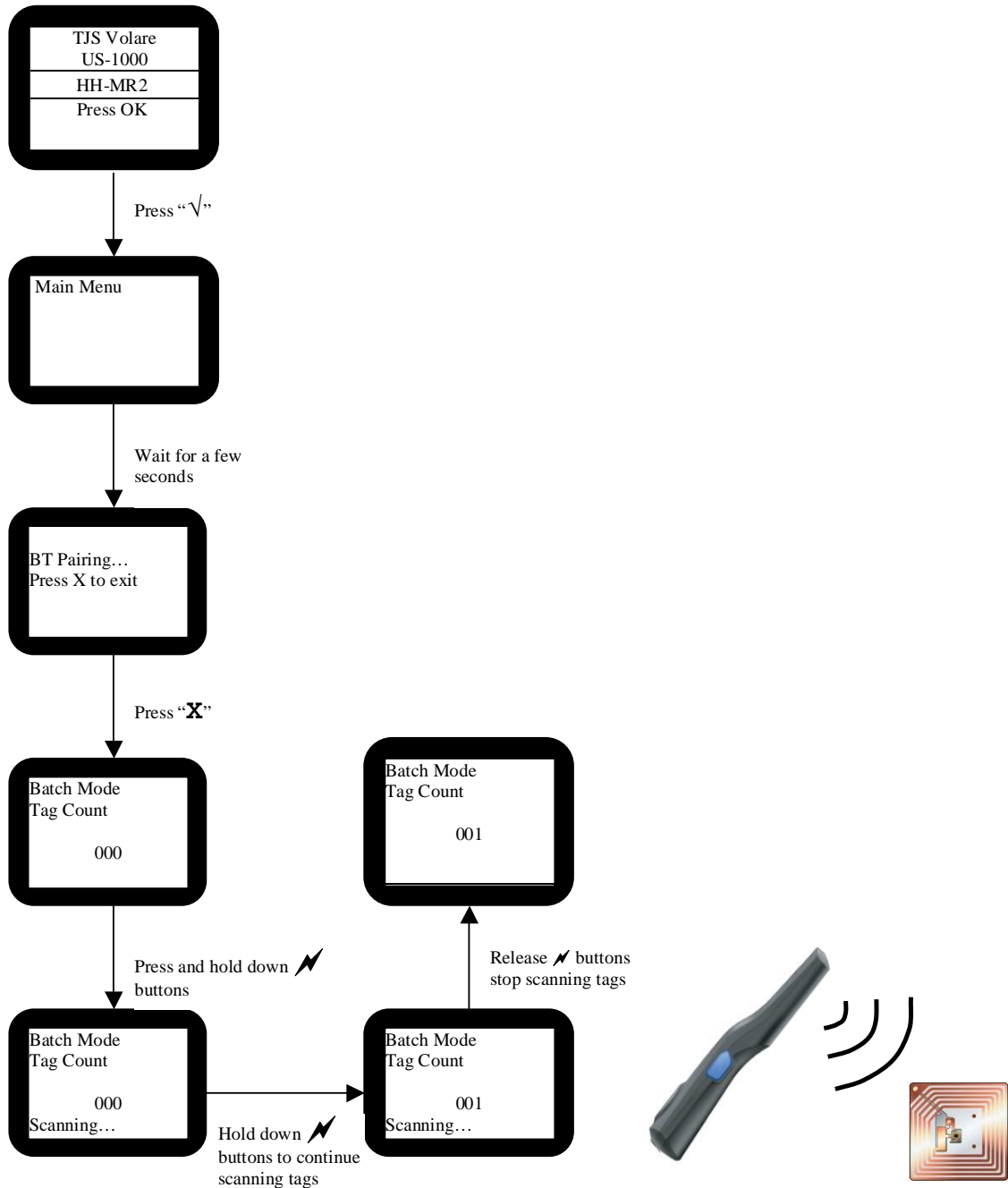
Press <√> to proceed to the next screen “Save and Exit ?”. To save and exit the setting, press <√>. To change the settings, press <X> to go back to previous screen.

## 2.3 Standby Mode

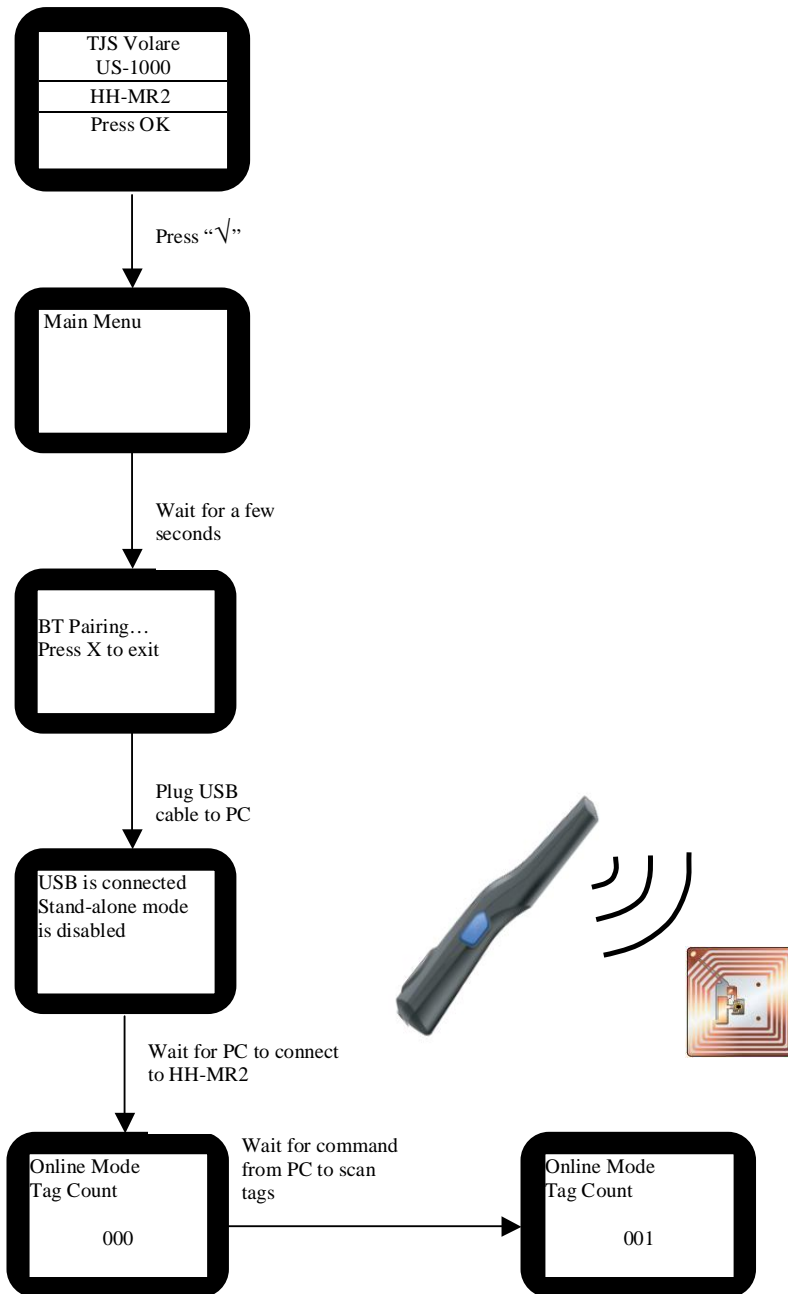
A blank screen overwrites the display when no function of the reader has been used for a certain period of time, unless the reader is connected to USB, Bluetooth or Charger. To deactivate the screen saver, press and hold the <√> button for one second.

### 3 Scan Functions

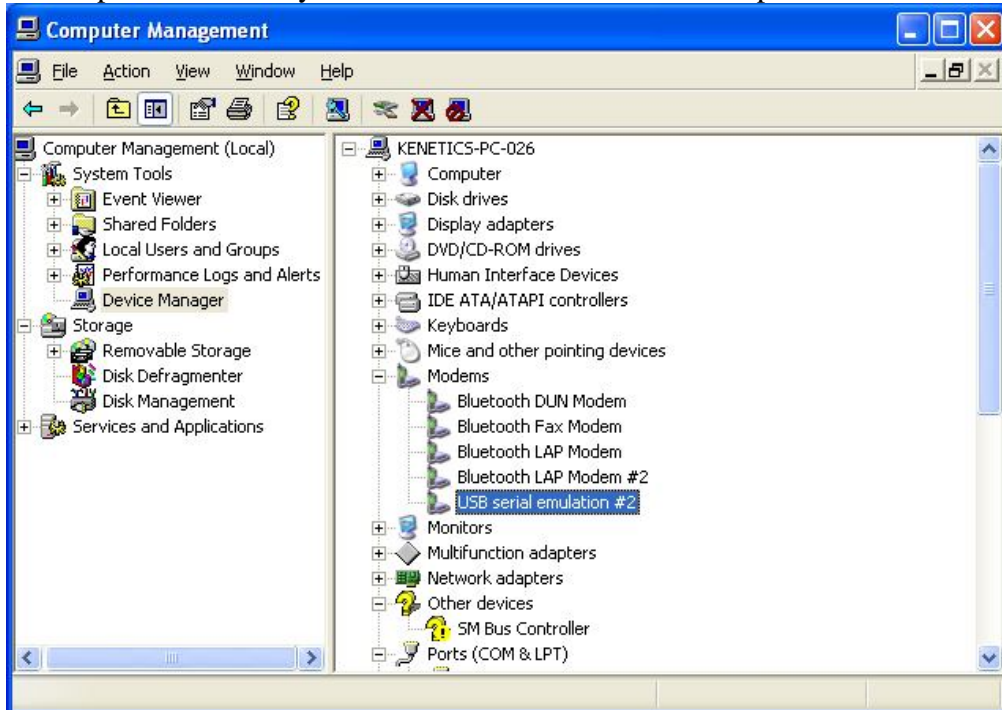
#### 3.1 Offline mode Scan Functions



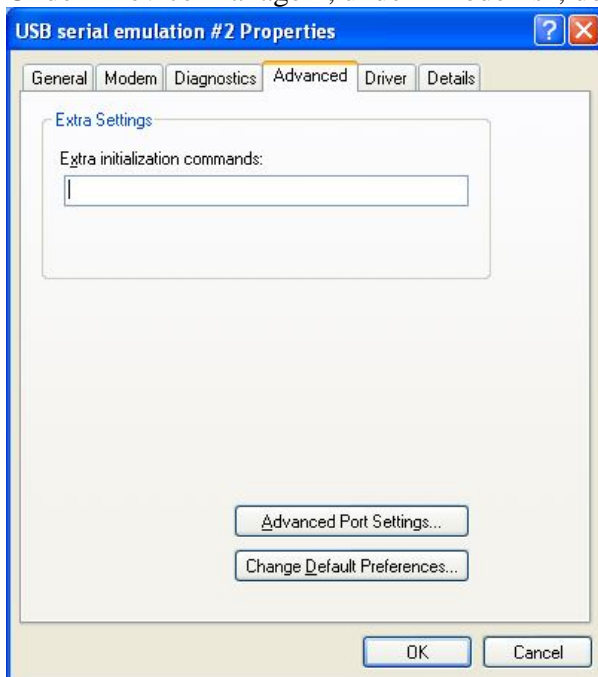
### 3.2 Online mode Scan Functions using USB



The steps below identify the COM Port number of the USB port connected to HH-MR2

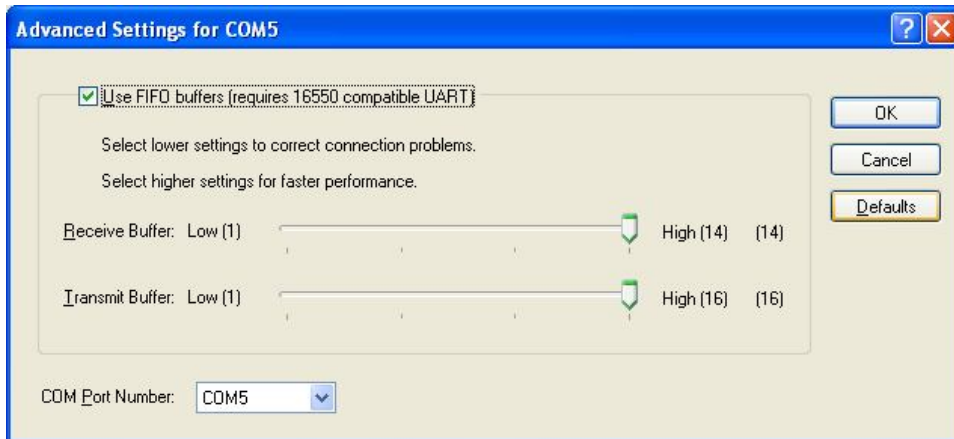


Under “Device Manager”, under “Modems”, double-click “USB serial emulation #x”



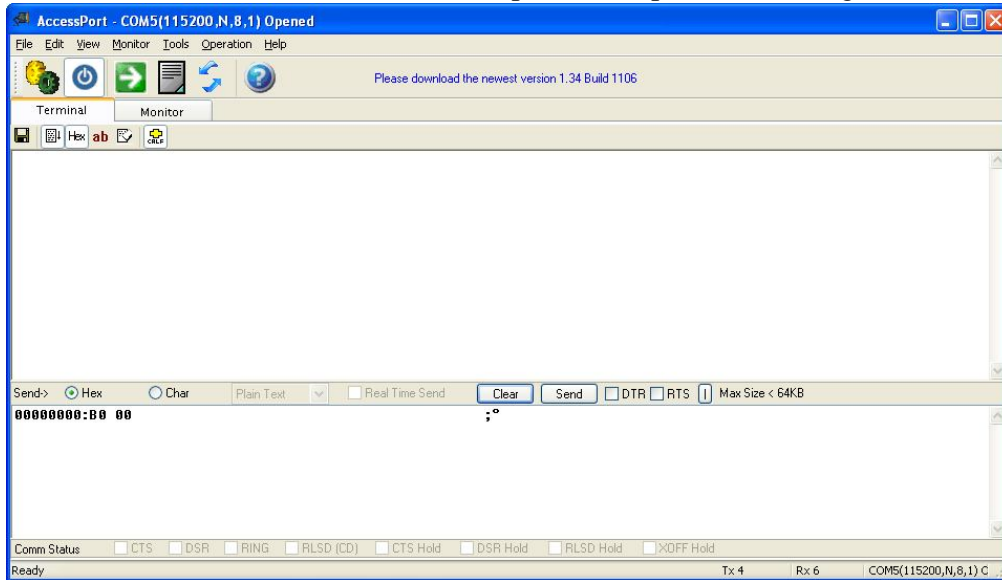
Click the “Advanced” tab, and then click “Advanced Port Settings”



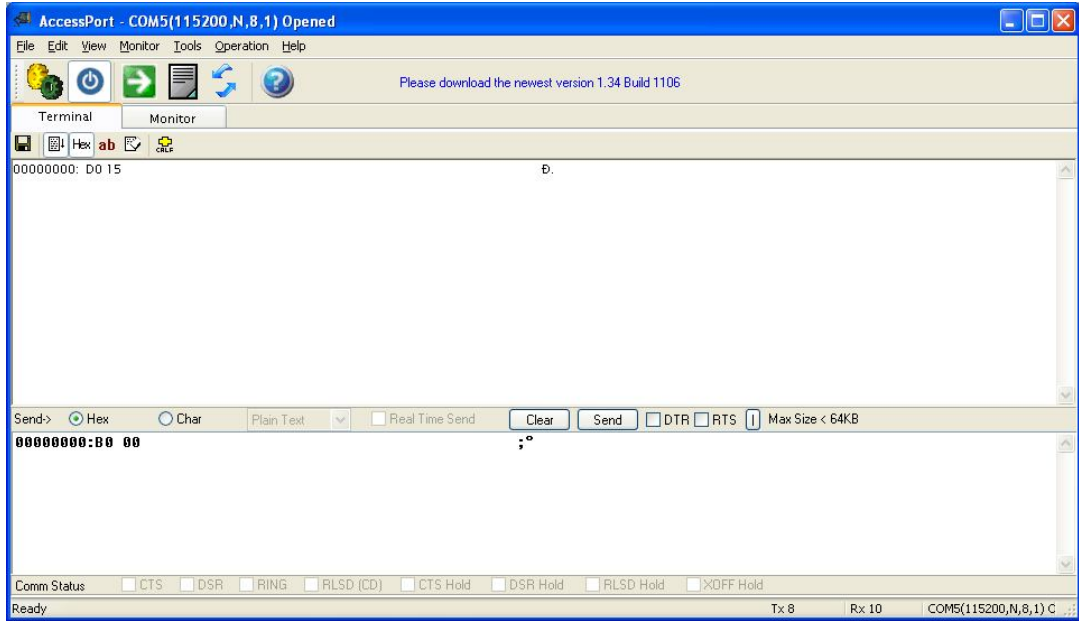


The USB COM Port number can be found here.

Once the COM Port number is known, open access port with setting 115200, N, 8, 1

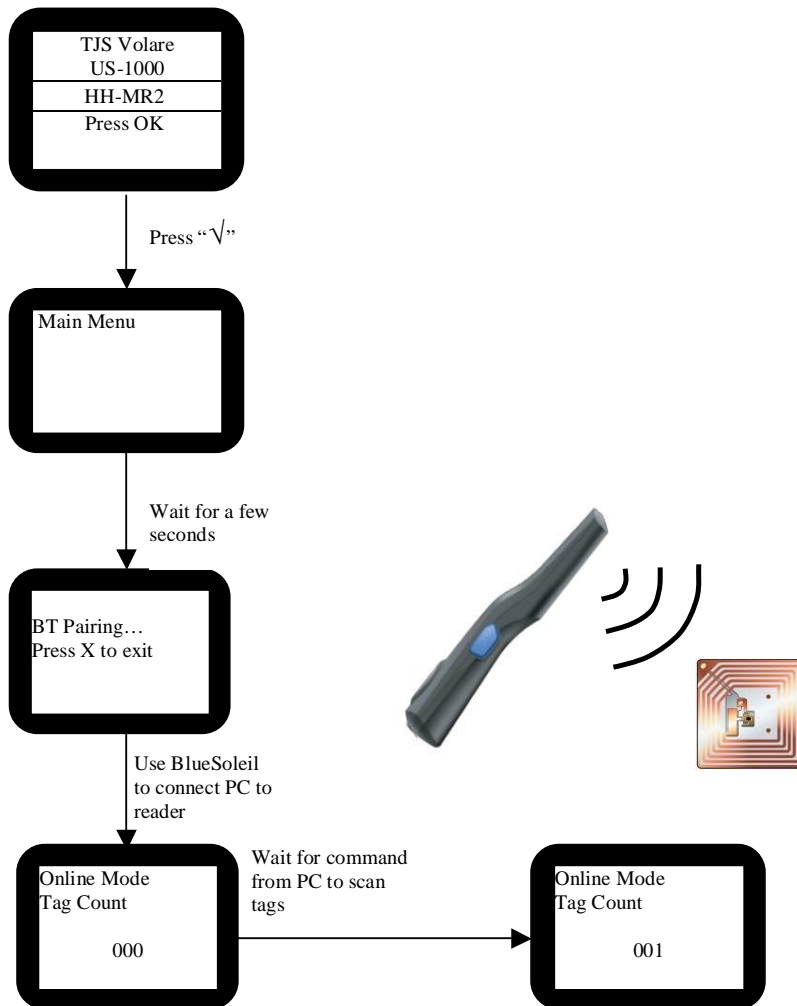


Send command "B0 00" to scan tags.



The reader will scan tags and return "D0 15"

### 3.3 Scan Functions with Bluetooth Connection

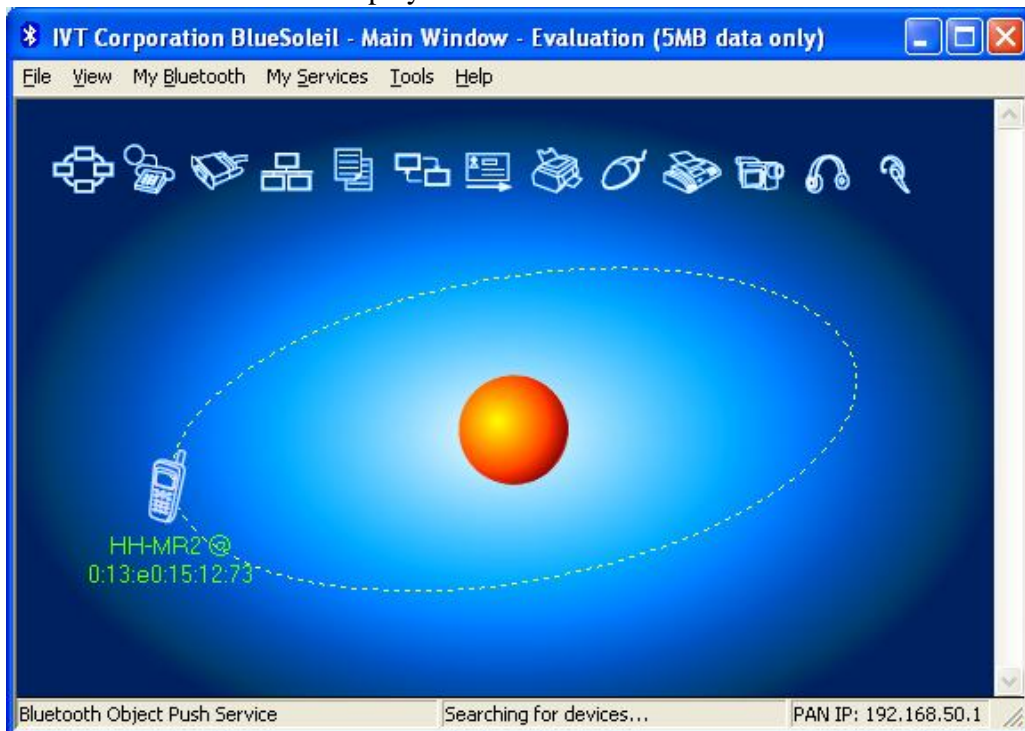


Please install the BlueSoleil program before using the reader.

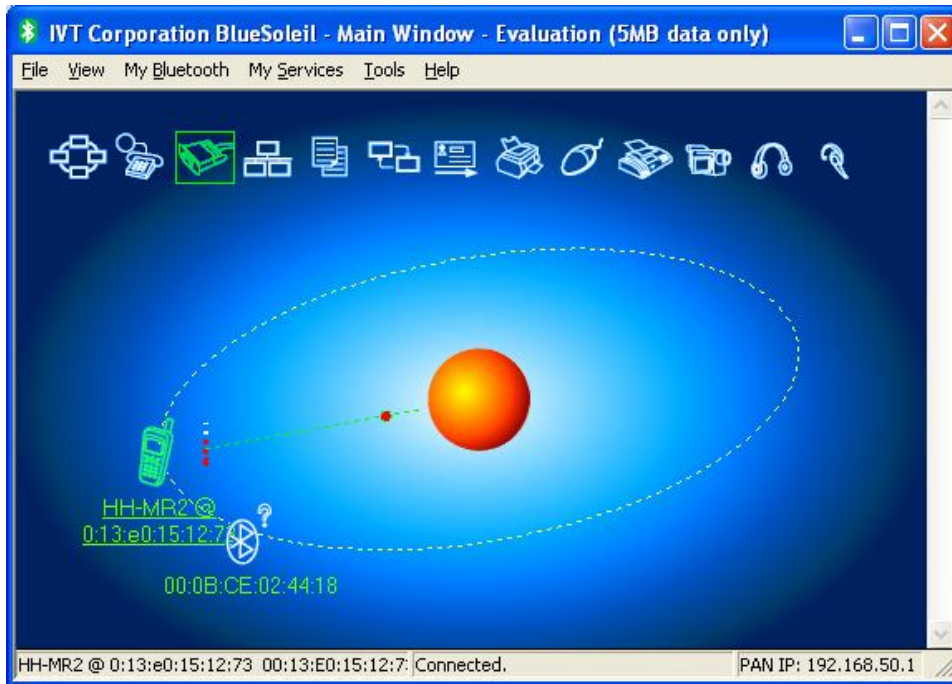
Bluetooth 1.1 Serial Port Profile is supported on Windows XP.

Bluetooth Device Name used by the reader is “HH-MR2” followed by the Bluetooth Address.

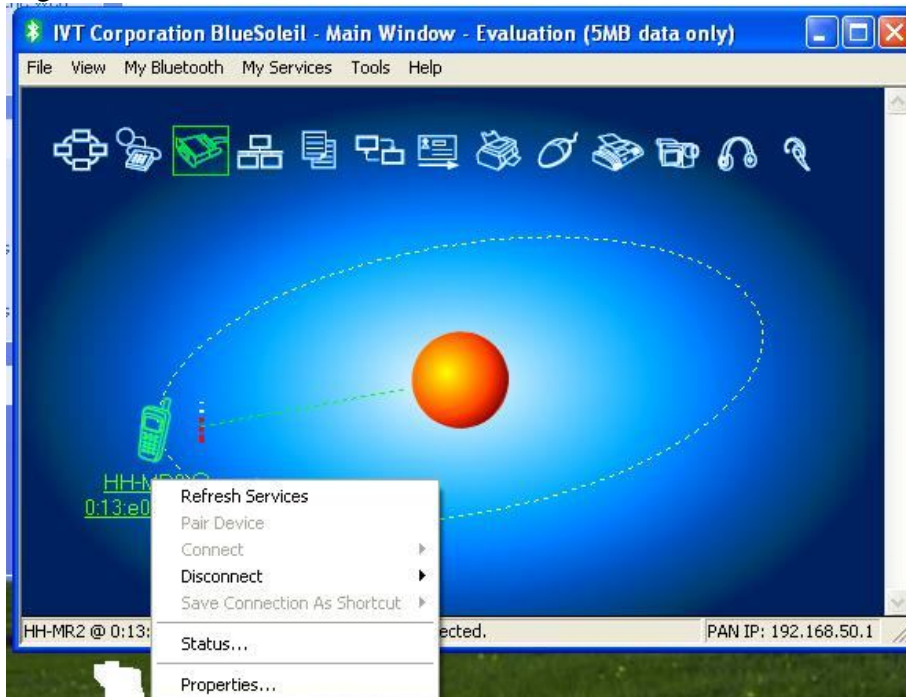
Double click the Blue-Soleil icon to open the window below. Wait for HH-MR2 reader screen to display “BT pairing”, then press “F5” on PC. Then the HH-MR2 icon with its Bluetooth address will be displayed in the BlueSoleil window.



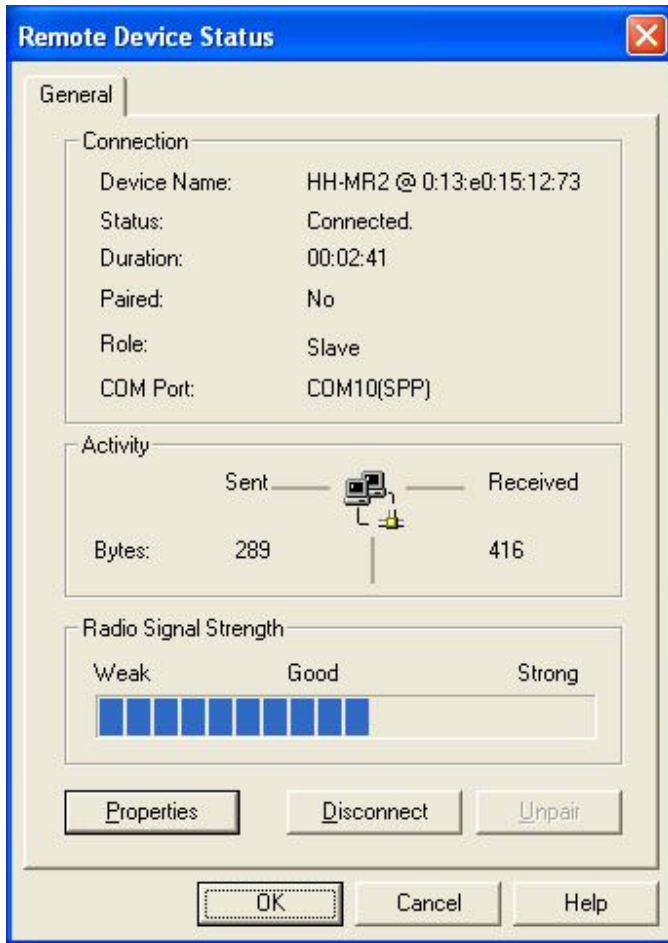
Double click the HH-MR2 icon, and then the COM Port service icon will turn yellow. Double click the COM Port service icon to connect PC to HH-MR2.



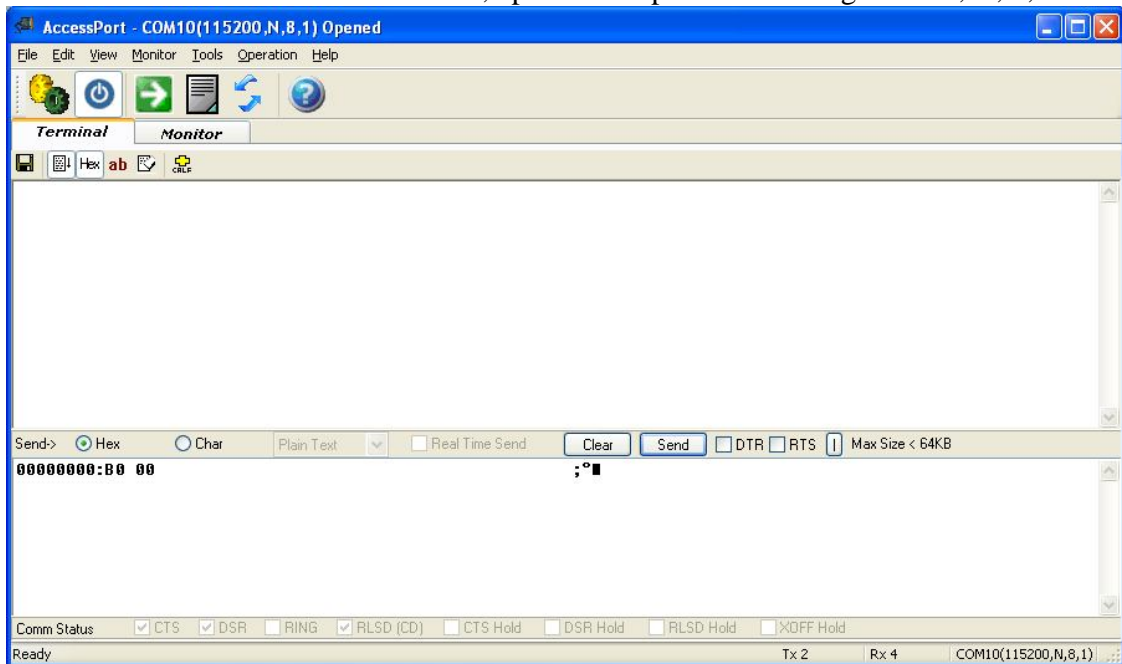
Right click the HH-MR2 icon and then click "Status" to show COM Port number.



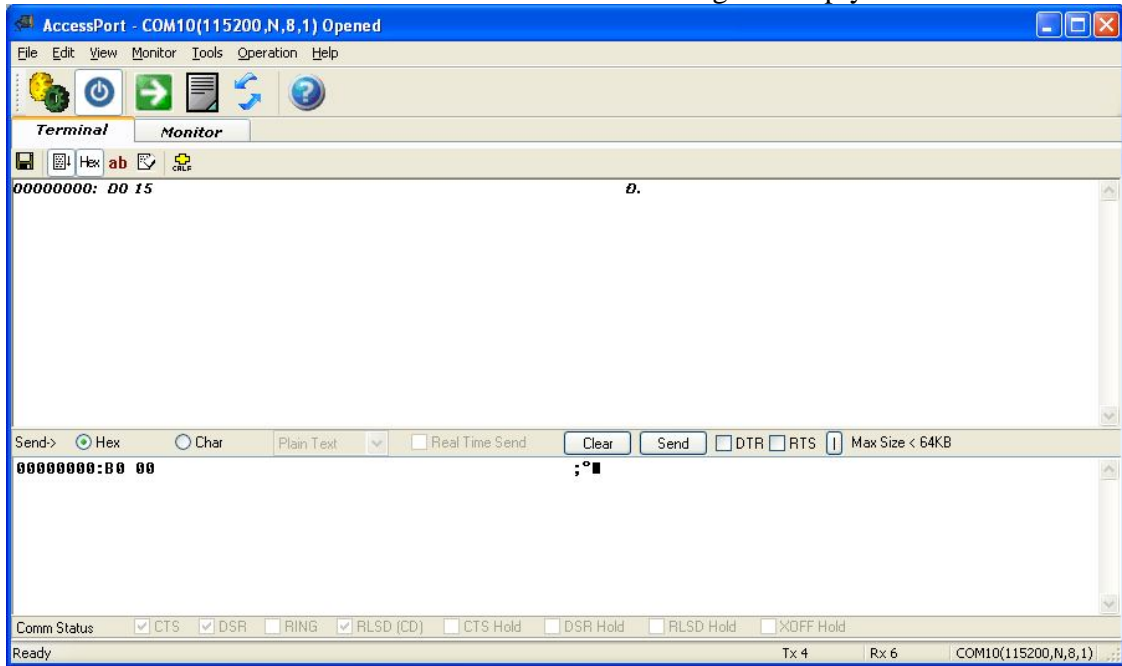
The COM Port number is displayed in the "Remote Device Status" window.



Once the COM Port number is known, open access port with setting 115200, N, 8, 1



Send command "B0 00". Then the HH-MR2 will scan tags and reply "D0 15"



## **4 Compliance Statement**

### **Regulatory Notes**

An RFID system comprises an RF transmission device, and is therefore subject to national and international regulations. Prior to the powering and operation of the HH-MR2 reader, relevant compliance certificate should be obtained from the associated watchdog agency. Sale, lease or operation in some countries may be subject to prior approval by the respective government body or other international compliance organization.

For countries requiring FCC certification, a typical system configuration containing the HH-MR2 reader has been tested and found to be compliant with the limits for a FCC Part 15C (intentional radiator) device. Nonetheless, it is still the responsibility of the customers to have their complete system tested and approved for use from the appropriate compliance agencies/authorities before operating or selling the system. As part of FCC part 15 compliance requirements, it should be noted that:

- Modifications not expressly approved by this company could void the user's authority to operate the HH-MR2 reader.
- The HH-MR2 reader complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) The HH-MR2 reader may not cause harmful interference, and (2) must accept any interference received, including interference that may cause undesired operation.

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 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.