H35B Handheld Device

User Manual

About This Manual

This manual explains how to install, operate and maintain the H35B Handheld Device.

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Regulatory Compliance Statements

FCC Statement

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.

CAUTION! Exposure to Radio Frequency Radiation. The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized. When connecting an external antenna to the device, the antenna shall be placed in such a manner to minimize the potential for human contact during normal operation. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm (8 inches) during normal operation.

Federal Communications Commission Notice

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. 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 and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to 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.

The maximum SAR value reported is 0.119. => the SAR value to be define after SAR test

Canada-Industry Canada (IC)

The wireless radio of this device complies with RSS 139 & RSS 210 Industry Canada. This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B conforme á la norme NMB-003 du Canada.

Europe-European Union Notice

Radio products with the CE alert marking comply with the R&TTE Directive (1999/5/EC) issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European Norms (in brackets are the equivalent international standards).

- EN 60950-1 (IEC60950-1) - Product Safety
- EN 300 328 Technical requirement for radio equipment
- ETS 301 489 General EMC requirements for radio equipment.

Products that contain the radio transmitter are labeled with CE alert marking and may also carry the CE logo.

Safety

Use the following safety guidelines to help protect yourself and the H35B.

- Do not attempt to service the H35B yourself. Always follow installation instructions closely.
- Be sure that nothing rests on the AC adapter's power cable and that the cable is not located where it can be tripped over or stepped on.
- Do not cover the AC adapter with papers or other items that will reduce cooling; also, do not use the AC adapter while it is inside a carrying case.
- Use only the AC adapter, power cord, and batteries that are approved for use with this H35B. Use of another type of battery or AC adapter may cause risk of fire or explosion.
- If you use an extension cable with the AC adapter, ensure that the total ampere rating of the products plugged in to the extension cable does not exceed the ampere rating of the extension cable.
- When you move the H35B between environments with very different temperature and/or humidity ranges, condensation may form on or within the H35B. To avoid damaging the H35B, allow sufficient time for the moisture to evaporate before using the H35B.
- When you disconnect a cable, pull on its connector or on its strain relief loop, not on the cable itself. As you pull out the connector, keep it evenly aligned to avoid bending any connector pins. Also, before you connect a cable make sure both connectors are correctly oriented and aligned.

Battery Safety

- There is a risk of explosion if the battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.
- Do not dispose of batteries in a fire. They may explode. Check with local authorities for disposal instructions.

Notices

This unit is equipped with a battery pack and backup battery. It is possible that the H35B may not power-on due to battery discharge as a result of storage.

In the above situation, insert the H35B into the cradle and connect the AC adapter to the cradle. Recharge the unit for 3 hours in order to fully charge its battery.

The backup battery will recharge from external power when the AC adapter is connected.

Battery charge notice

It is important to consider the environment temperature whenever you are charging the Lithium-Ion battery pack. The process is most efficient at normal room temperature or slightly cooler. It is essential that you charge batteries within the stated range of 0°C to 50°C. Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

Storage and safety notice

Although charged Lithium-Ion batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens they will require recharging prior to use. Lithium-Ion batteries may be stored at temperatures between-20°C to 50°C, however they may be depleted more rapidly at the high end of this range. It is recommended to store batteries within normal room temperature ranges.

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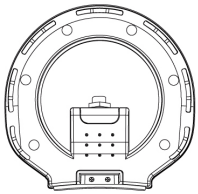
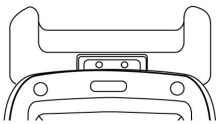
Chapter 1
Introducing the H35B

Thank you for purchasing the H35B Handheld Device.

The H35B is an ultra rugged and compact handheld computer with a powerful Intel PXA270 624MHz CPU and Microsoft Windows CE 5.0, this handy terminal creates the most performance and reliability to save your TCO (Total Cost of Ownership). The H35B incorporates a transflective LCD with touchscreen, keypad, Wifi, and Bluetooth communication capability. Options provide extra functions ,and those options are GPRS, GPS, Barcode and an LF (Low Frequency) / HF (High Frequency) RFID module with an antenna for Scanning RFID codes.

To reduce TCO and enhance industrial applications, the H35B is sealed to meet IP65 standards and has undergone multiple 5 feet drop tests to prevent downtime.

<table>
<tr><th>H35B</th><th colspan="2">Options</th></tr>
<tr><td rowspan="2">
• BT
• WLAN
• Barcode (optional)</td><td>RFID Antenna
  </td><td>• RFID (L)
• GPRS
• GPS
• BT
• WLAN</td></tr>
<tr><td>GPS Cover
  </td><td>• BT
• WLAN
• RFID (L&H with external antenna only)
• Barcode
• GPRS
• GPS</td></tr>
</table>

Features

With powerful wireless communication and data capture functionality, the H35B is a smart configurable handheld terminal with applications in several target markets including:

- Military & Law Enforcement
- Transportation & Logistics
- Industrial & Manufacturing
- Emergency services and construction
- Pet control

The H35B comes with the following features:

Powerful system
- Microsoft Windows CE 5.0 operating system
- Marvell PXA270 at 624MHz

System memory
- 128MB SDRAM on board
- 128MB Flash ROM on board

Display
- 3.5-inch transflective TFT LCD, QVGA resolution (240 X 320)
- 3.5-inch transflective TFT LCD, VGA resolution (480 X 640) (Option)

Communication
- 802.11b/g WLAN module built-in
- Bluetooth class 2, V1.2 built-in
- GPS ET316 (Option)
- GPRS (Option)

Data capture
- BARCODE
- LF RFID reader (ISO11784, ISO11785) & antenna built-in (reading distance 10cm±1.5cm)
- HF RFID reader (ISO14443A, ISO14443B, ISO15693) & antenna built-in (reading distance 4~6cm)

Audio
- AC-97 codec
- Internal speaker
- Internal microphone
- External microphone connector
- External stereo headphone jack

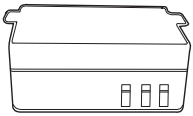
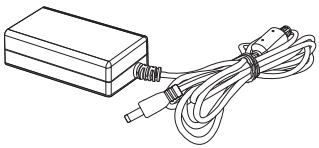
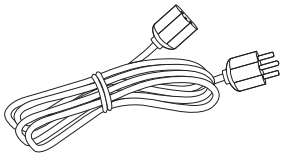
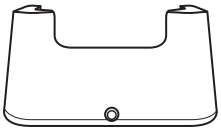
Expansion slot
- SD
- PCMCIA/ CF slot

Battery life
- Normal usage: 8 hours continuous use
- Charging time: 3 hours

User-friendly interface
- Resistive touch panel
- Power on/suspend button x 1
- Navigation Key+ Function Key + Numeric
- RFID scan button (left & right side) x 2
- Software reset switch (left side) x 1

Package Contents

After opening the box, ensure the following accessories for the H35B are present:

<table>
<tr><td colspan="2"> (Option) (Option)</td></tr>
<tr><td colspan="2">H35B Terminal</td></tr>
<tr><td> </td><td>  </td></tr>
<tr><td>Stylus</td><td>Rechargeable Li-Ion Smart battery (1900mAh and 2400mAh available)</td></tr>
<tr><td colspan="2">   </td></tr>
<tr><td colspan="2">AC adapter and power cord</td></tr>
<tr><td>  </td><td> </td></tr>
<tr><td>Cradle (option)
NOTE: The cradle option is for 1900mAh only.</td><td>External Battery Charger (option)</td></tr>
</table>

Optional Accessories

The following optional accessories can be used to add to the functionality of the H35B.

- Sleeve with hand strap & shoulder strap
- Vehicle cradle
- RFID external antenna

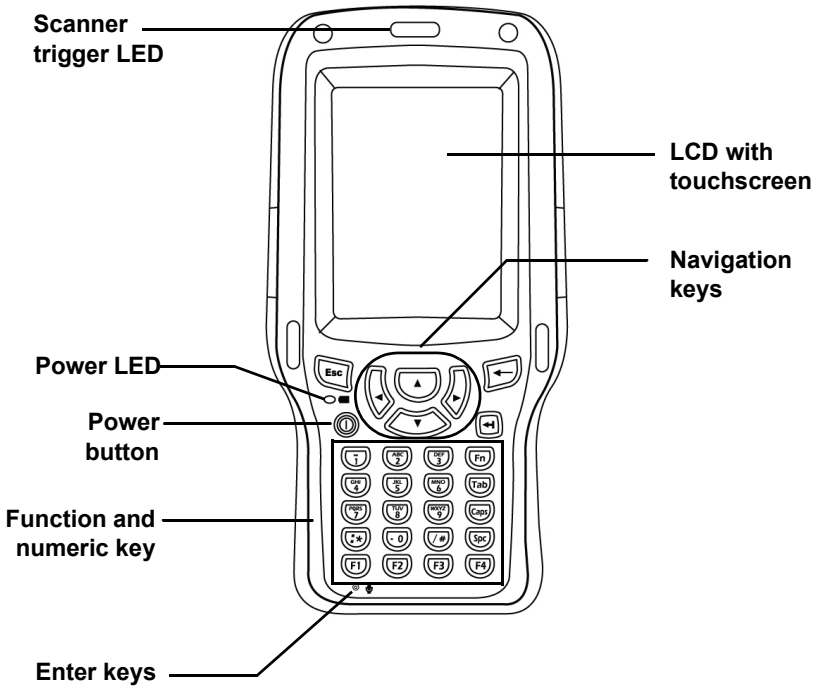
If anything is missing or appear damaged in any way, contact your dealer.

A Tour of the H35B

The following sections describe the main components and features of the H35B.

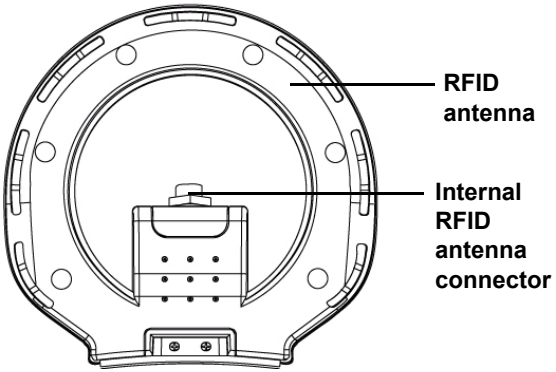
Front View

H35B



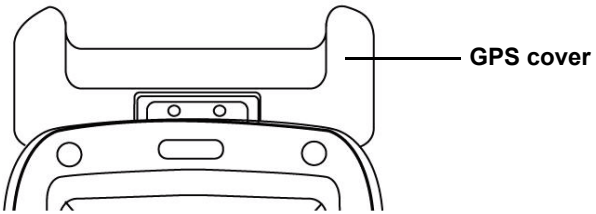
Component	Description
LCD touch screen	Displays the applications and data stored on your device. It is touch-sensitive and responds to the stylus or finger.
Navigation Keys	Press these keys to navigate in the H35B interface.
Function and numeric key	Keypad interface for controlling the H35B. See *Keypads and Function Buttons* on page 22. for more information.
Power button	• If the device is off, press this button to turn it on. • When the unit is on, press this button for 3 seconds to turn the H35B off.
Power LED	Indicates the battery charging power status. **Green** - Battery is fully charged or the device is running on battery power. When LED flashes, the battery charge is at 13%. Recharge the battery immediately. **Red** - Battery is charging.
Scanner trigger LED	Lights when the scanner reads the RFID code.

RFID Antenna



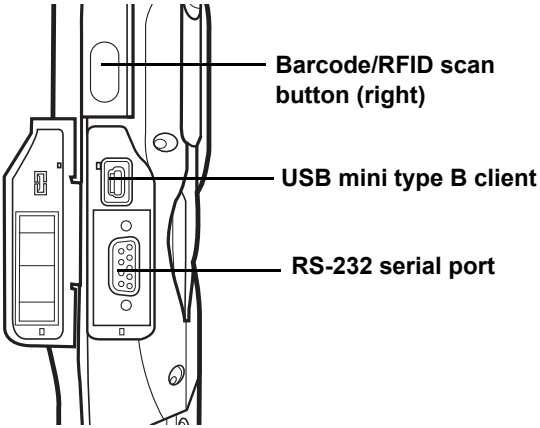
Component	Description
RFID antenna	Reads RFID codes
Internal RFID antenna connector	Attach an external RFID antenna (Accessory) to this connector to provide longer range identification of RFID codes.

GPS Cover



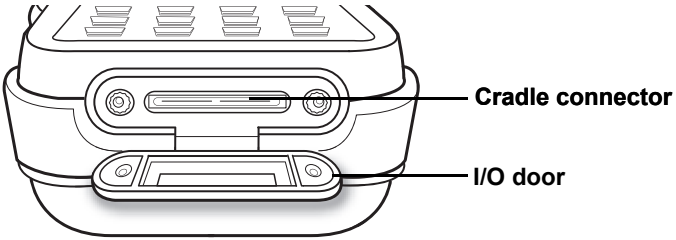
Component	Description
GPS cover	Adds functionality to the H35B.

Right View



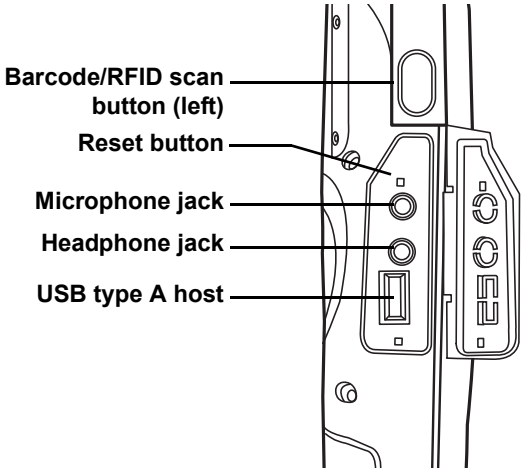
Component	Description
Right barcode scan button	Press to activate the barcode scanner.
USB mini type B port (client)	Connect a USB mini type B connector to this port.
RS232 port	Connect a serial connector to this port for serial communications.

Bottom View



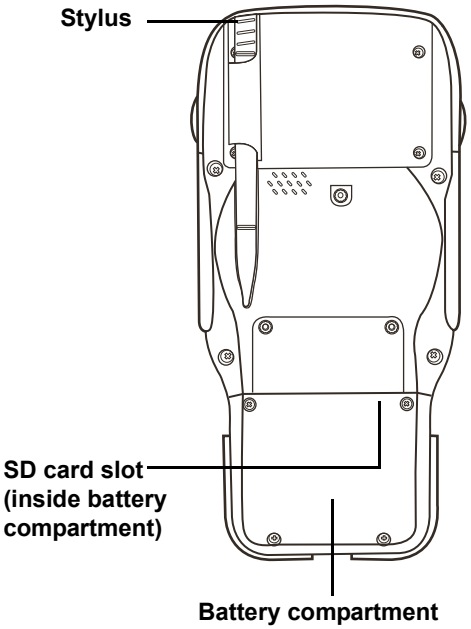
Component	Description
Cradle connector	Connects the H35B to cradle, enabling you to charge the battery, connect the H35B to a computer to synchronize data, connect to a LAN, and connect USB devices.

Left View



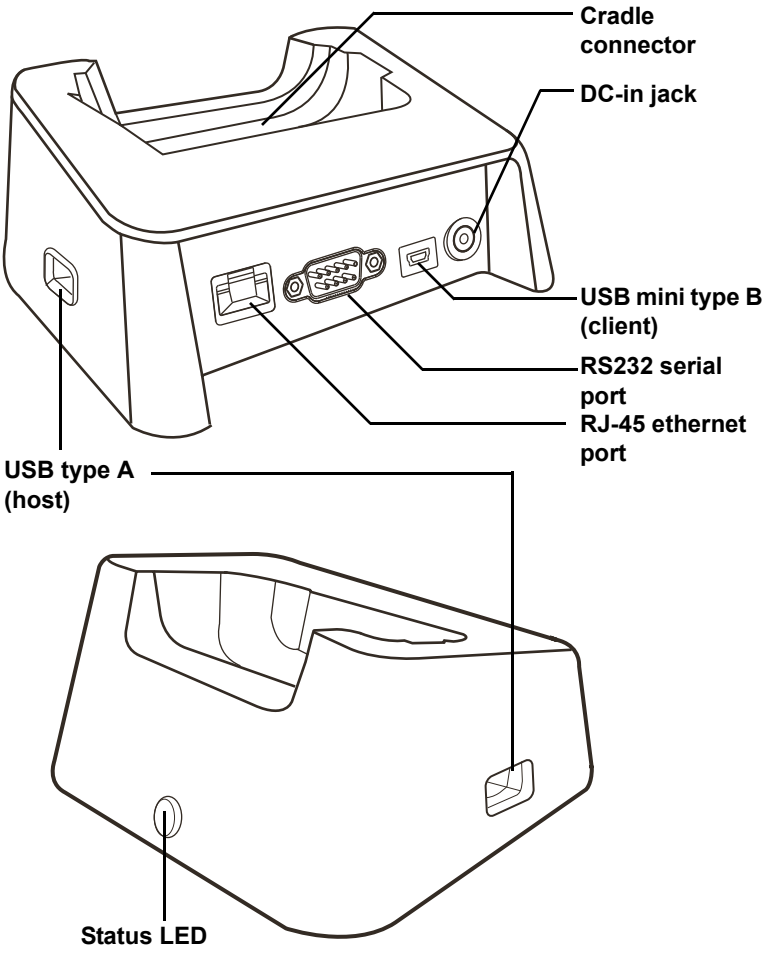
Component	Description
Left barcode scan button	Press to activate the barcode scanner.
Microphone jack	Enables you to record voice audio with an external microphone.
Earphone jack	Connects to audio line-out devices (earphones or headphones) for use in noisy environments.
USB type A port (host)	Connect a USB type A connector to this port.
Reset button	Press the end of the stylus into the button to reset your device. Refer to *Performing a Reset* on page 62.

Back View



Component	Description
Stylus	Enables you to interact with the operating system. Remove the stylus from the holder and hold and use it the same way you would a pen or pencil.
Speaker	Enables you to hear audio from the H35B.
Memory card slot (internal)	Accommodates Secure Digital memory cards. See *Inserting an SD Memory Card* on page 28.
Battery pack compartment	Houses the removable and rechargeable battery pack. See *Installing the Battery* on page 13.

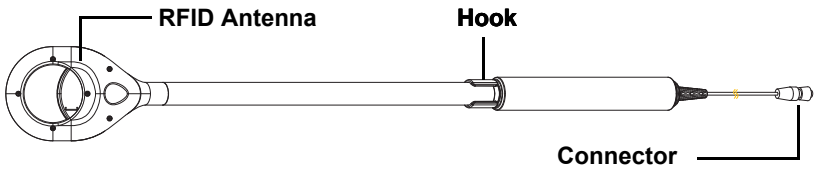
Cradle (Optional)



NOTE: The cradle option is for 1900mAh only.

Component	Description
Cradle connector	Insert the H35B to this connector to charge the battery, synchronize data with a PC, connect to the internet, connect serial devices, or connect USB devices.
DC-in jack	Connect the AC adapter to this jack to supply power to the cradle and charge the H35B battery.
USB mini type B port (client)	Connect a USB mini type B connector to this port.
RS232 port	Connect a serial connector to this port for serial communications.
RJ-45 connector	Connect this jack to the LAN.
USB type A port (host)	Connect a USB type A connector to this port.
Status LED	Indicates that power and the H35B are connected.

RFID External Antenna (Accessory)



Component	Description
RFID Antenna	Provides longer range identification of RFID codes.
Hook	Use to attach the antenna to a waist belt.
Connector	Connect this antenna to the H35B.

Chapter 2
Getting Started

This chapter explains how to install and charge the battery, how to check battery status, how to turn on the H35B, and how to calibrate the screen.

Connecting the H35B

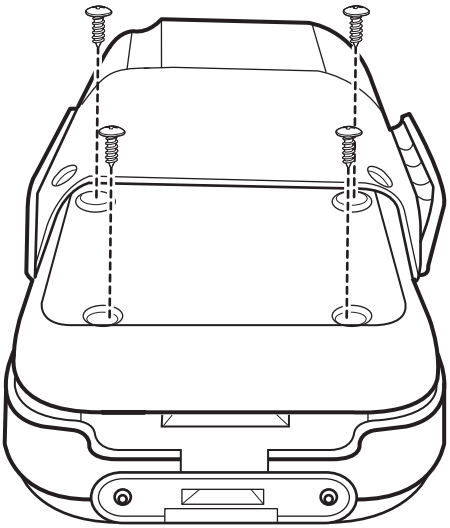
Installing the Battery

This section explains how to install the battery.

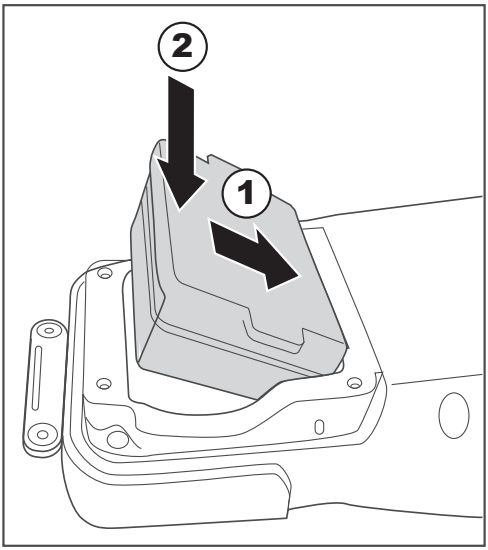
WARNING!There is a risk of fire and burns if the battery pack is handled improperly. DO NOT disassemble, crush, puncture, short external contacts, or dispose the battery pack in fire or water. DO NOT attempt to open or service the battery pack. Dispose of used batteries according to local recycling guidelines in your area.

A backup battery cell is embedded into your device to prevent data loss in instances when the removable battery pack is removed or completely discharged. This backup battery cell will only support the system for a maximum of 3 minutes.

1. Remove the screws that secure the battery compartment cover to the chassis.



2. Align the battery contacts with the contacts in the compartment and place the battery in the compartment as shown in the following illustration.



3. Replace the battery compartment cover.

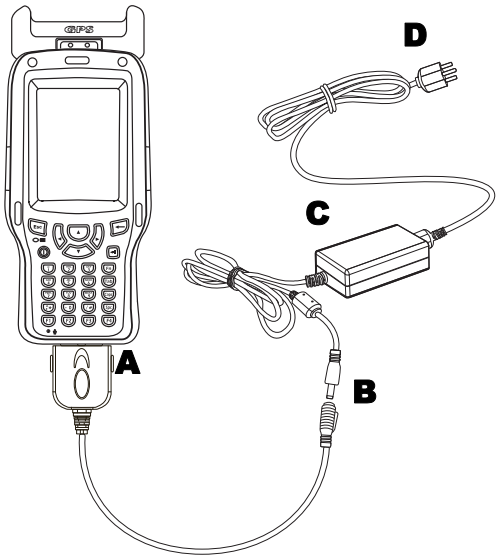
Charging the Battery

Before using the H35B for the first time, you need to charge it for about 3 hours. Charge the H35B using the charger or the docking station.

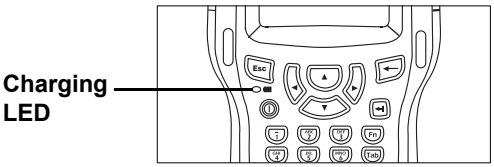
NOTE: When the battery power is below 10%, the H35B will enter suspend mode.

Charging the Battery with the External Battery Charger

1. Flip open the docking I/O door on the bottom of the H35B.

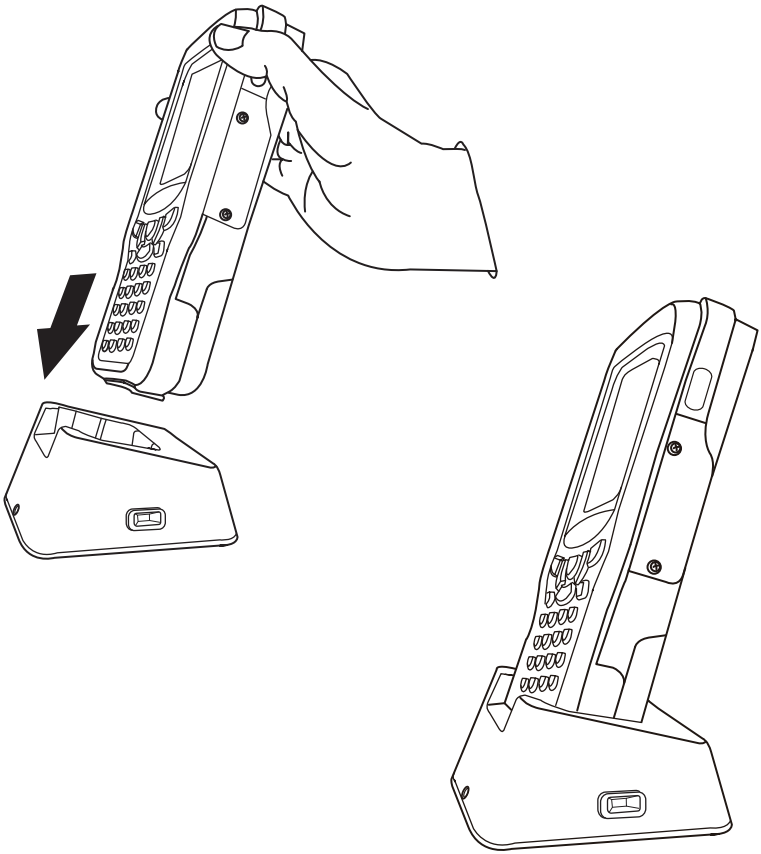


2. Plug the external battery charger into the I/O door (**A**).
3. Plug the AC adapter cable into the the other end of the external battery charger (**B**).
4. Plug the power cable connector into the AC adapter (**C**).
5. Plug the AC adapter into an electrical outlet (**D**).
   The charging LED flashes on the H35B.

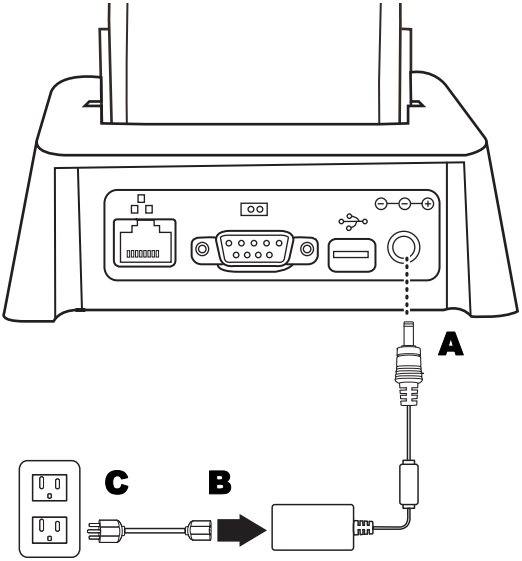


Charging the Battery with the Cradle

1. Flip open the I/O door on the bottom of the H35B.
2. Slide the device into the cradle until it clicks into place.



3. Plug the AC adapter cable into the power jack on the cradle (**A**).



4. Plug the power cable connector into the AC adapter (**B**)
5. Plug the AC adapter into an electrical outlet (**C**).
   The LED indicator on the cradle lights up green.

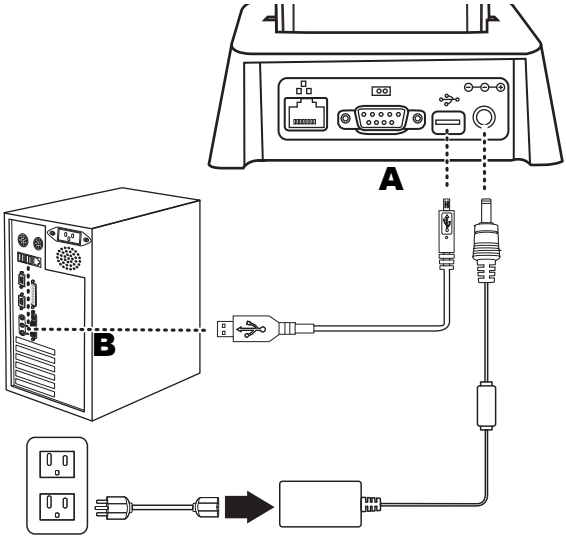
LED Status

	LED	**Meaning**
H35B	Off	Power off
	Solid Green	Power on
	Blinking Green	Battery very low (<13%)
	Blinking Amber	Charging
	Solid Amber	Charging complete
Cradle	Solid Green	H35B is inserted
	Off	H35B is not inserted

Connecting the H35B to a PC

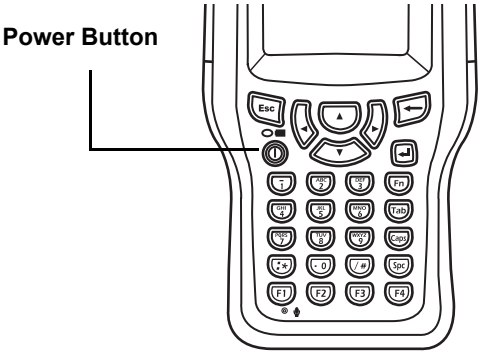
Use the USB cable to connect the H35B to a PC to use with Active-Sync. Refer to See *Installing Microsoft ActiveSync* on page 35.

1. Connect the USB mini type B connector to the mini port on the cradle (**A**).
2. Plug the other end of the USB cable into the USB port on the PC (**B**).



Turning on for the First Time

After you have initially charged your device for about 3 hours the device is ready to be used. You can now start up your device where you'll calibrate the display, learn some basic stylus usage, and set up the system time zone, date and time.

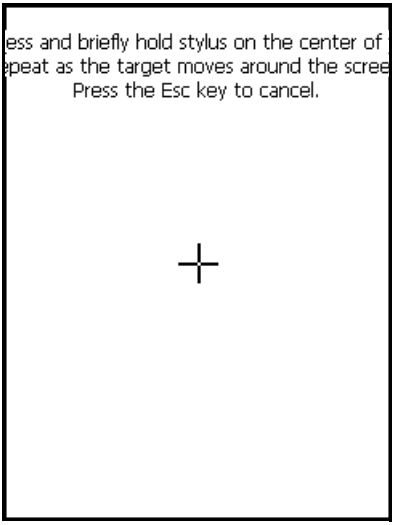


Turn on your device by pressing the power button on the front panel.

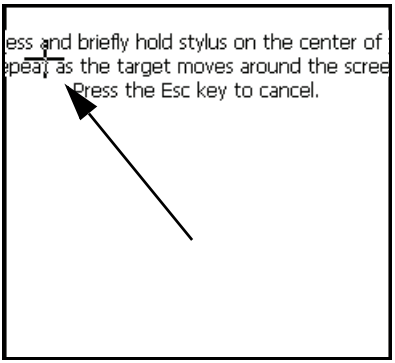
Calibrating the H35B Screen

The calibrate screen automatically appears when the unit is powered-on for the first time or after the system is reset.

1. Tap the center cross hair firmly and accurately with the stylus.



   The cross hair moves to the next location.
2. Follow the cross hair and continue tapping until the screen has been calibrated.
3. After calibration is finished, press the Enter key to save the settings or press Esc to revert to the previous settings.

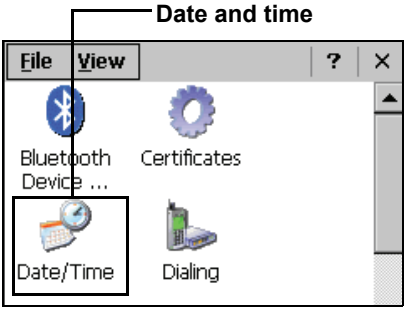


NOTE: To recalibrate the screen at any time, tap **Start** → **Settings**→ **Control Panel**. Then double-tap **Stylus**. Tap the Calibration tab, and tap **Recalibrate**.

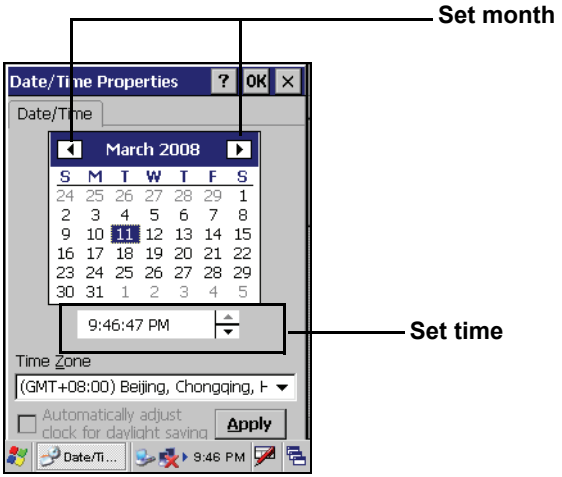
Setting the Time and Date

Follow these instructions to set the time and date.

1. Tap **Start**→ **Settings**→ **Control Panel**.



2. Double-tap Date/Time.
3. Tap the arrows next to the month to select the correct month.

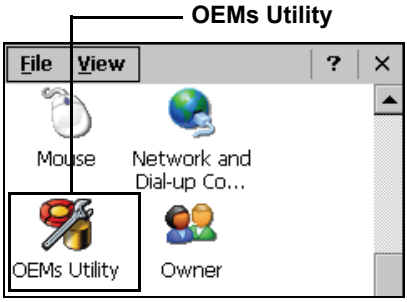


4. Select a field in the time box and tap the arrows next to the time to change the value of the field.
5. Tap the drop-down arrow next to Time Zone to select the correct time zone for your area.
6. Check the box next to **Automatically adjust...** to have the OS automatically adjust for daylight saving time.
7. Click **Apply** to save the settings.

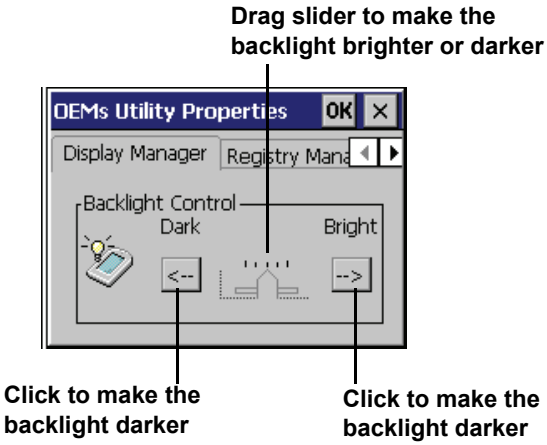
Adjusting the Screen Brightness

Follow these instructions to adjust the screen brightness.

1. Tap **Start**→ **Settings**→ **Control Panel**.
2. Double-tap **OEMs Utility**.



3. Click the **Display Manage**r tab.
4. Under Backlight Control, click the **Dark** arrow to make the screen darker, or click the **Bright** arrow to make the screen brighter.



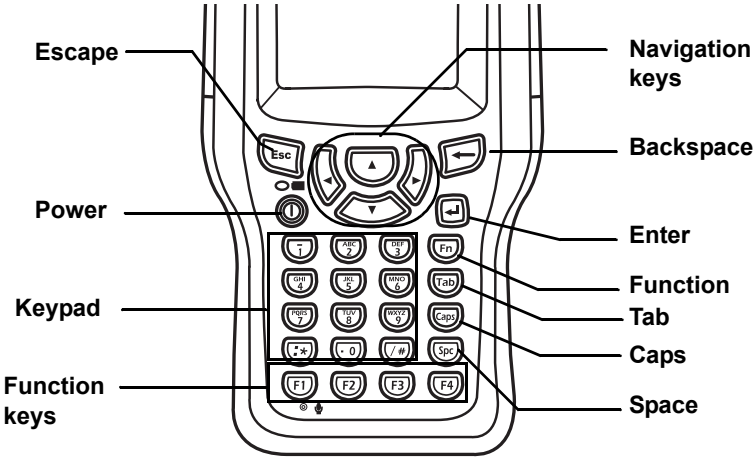
5. Click **OK** to exit the utility.

Chapter 3
Using the Hardware

Keypads and Function Buttons

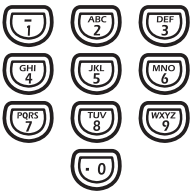
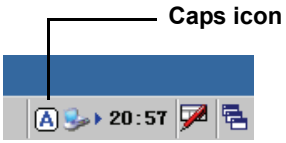
The keypad enables you to both enter information and interact with the H35B operating system, and also operate secondary functions using the function keys and Fn key.

The following illustration shows the keypad keys.



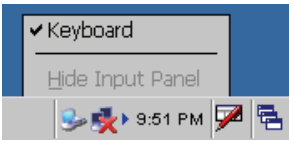
The following table describes the keypad keys.

Key	Main Function
	Escape key.
	Navigation keys enable you to move up and down in menus or dialog boxes.
	Back space deletes a previous character.
	Turns the H35B on and off.

Key	Main Function
	Press the Enter key to confirm a command or action.
	Press for Alphanumeric input.
	Press the Fn key to toggle between alphabetic and numeric mode. When the Fn icon is displayed in the system tray, the H35B is in alphabetic mode.
	Press to insert tab.
	Press to make alphabetic characters uppercase. When CAPs is on, an icon appears in the system tray. 
	Press to insert a space in text.
	When in numeric entry mode, press this key to enter an asterisk. When in alphabetic mode, press this key to enter a colon.
	When in numeric entry mode, press this key to enter an pound sign. When in alphabetic mode, press this key to enter a forward slash.
	You can assign function keys 1 to 4 to run applications.

Entering Characters with the Keypad

The operating system has a onscreen keyboard that enables you to enter alpha-numeric characters with the stylus.



Press the input panel icon in the system tray to view the input panel menu.

Tap **Keyboard** to view the onscreen keyboard.

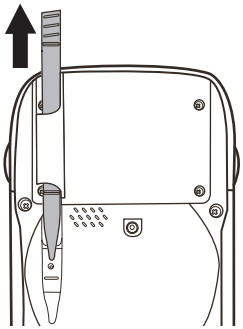
Tap **Hide Input Panel** to close the keyboard.

The keyboard emulates a standard computer keyboard. Tap the onscreen keyboard to enter, edit, and delete text.

Using the Stylus

CAUTION! Never use anything other than the H35B stylus on the screen. Using another object as a stylus could cause permanent damage. You can use your finger to interact with the screen as well.

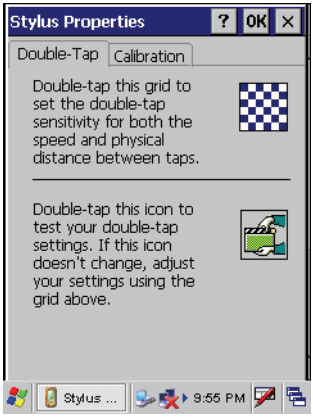
1. Remove the stylus from its holder.
2. Hold the stylus as you would a pencil.
3. To make a choice from a menu, lightly tap the tip of the stylus on that choice.



Adjusting the Double-Tap Rate

Set the stylus double-tap rate as follows.

1. Tap **Start** → **Settings**→ **Control Panel**.
2. Double-tap **Stylus**.
3. Tap the Double-Tap tab.



4. Double-tap on the checkerboard graphic to set your double tap rate.

Inserting a CF/PCMCIA Card

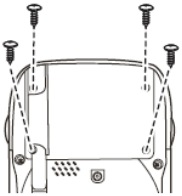
The H35B accommodates a Type II PCMCIA card/CF card. You can enhance the functionality of the H35B by installing CF/PCMCIA cards such as the following:

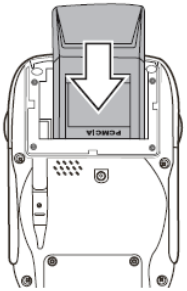
- GPRS card
- RFID card
- CF/PCMCIA storage card

NOTE: The above list is not exhaustive.

Perform the following steps to insert a CF/PCMCIA card into the CF/PCMCIA:

1. Removet the four screws securing the CF/PCMCIA cover to the chassis.



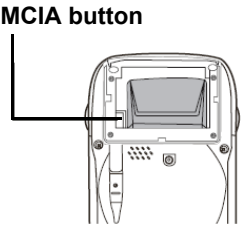


2. Remove the cover.
3. Insert the CF/PCMCIA card into the slot as shown, until the contacts are properly seated in the CF/PCMCIA connector.
4. Replace the cover.

Removing a CF/ PCMCIA Card

To remove the CF/PCMCIA card:

1. Press the black CF/PCMCIA button next to the slot. The button pops out.
2. Press the button again to push the CF/PCMCIA card out.

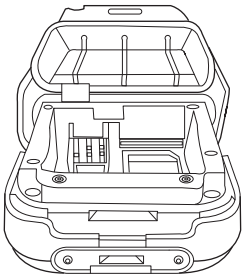


Inserting an SD Memory Card

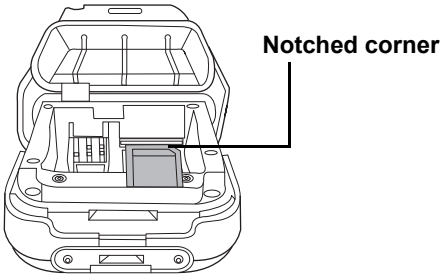
Your H35B has an expansion slot compatible with a range of SD cards, which are primarily used to back up or transfer files and data. The slot also supports SDIO cards for added connectivity options.

Follow these instructions to insert a SD card into the SD slot.

1. Remove the battery compartment cover and battery. See *Installing the Battery* on page 13.



2. Insert the SD card with the notched corner as oriented as shown in the following illustration



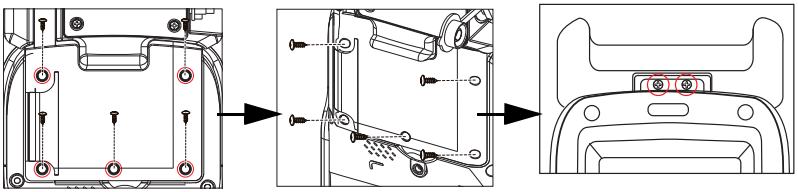
3. Push the card into the slot.
   The card is secure when it is not protruding from the slot.
4. Replace the cover.

Removing a Storage Card

1. Remove the battery compartment cover and battery. See *Installing the Battery* on page 13.
2. Press the card in and release.
   The card pops out.
3. Remove the card from the slot.

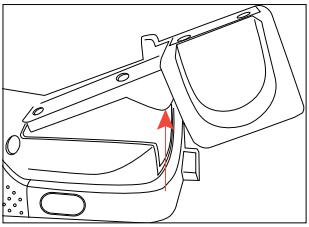
GPRS SIM Card Set Up

1. Unscrew the five screws on the rear of the H35B.
2. Unscrew the two screws on the front of the H35B.

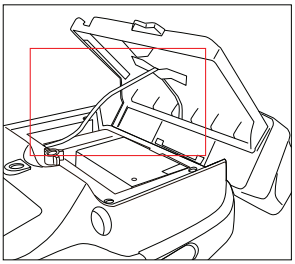


3. Ensure all seven screws are removed and lift the antenna 45° as shown.

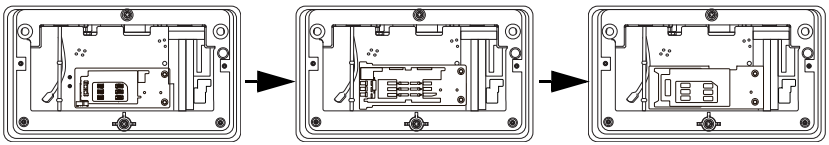
   CAUTION! Ensure that the antenna cable is not disconnected or the GPS function will be disabled.



4. Tilt the antenna as shown to expose the antenna cable and carefully place the antenna on one side of the chassis.



5. Insert the SIM Card into the SIM Card slot as shown.



6. Replace the Antenna, and replace the five screws at the rear of the H35B.
7. Screw the 2 screws at the front of the H35B.

Connecting Devices to the H35B

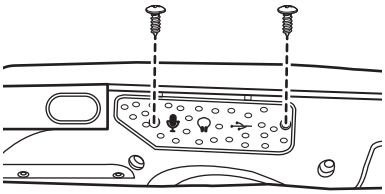
This section describes how to connect devices to the H35B. You can connect devices directly to the H35B or connect using the cradle.

Opening the Port Covers

The port covers protect the ports and connectors from rain, dust, and adverse environmental conditions.

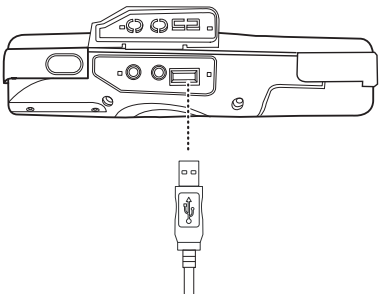
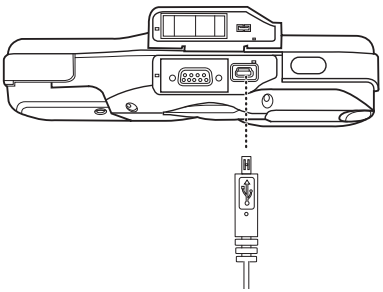
Remove the screws and open the port covers to access the ports.

Ensure that you close the covers tightly and replace the screws after disconnecting cables and connectors.



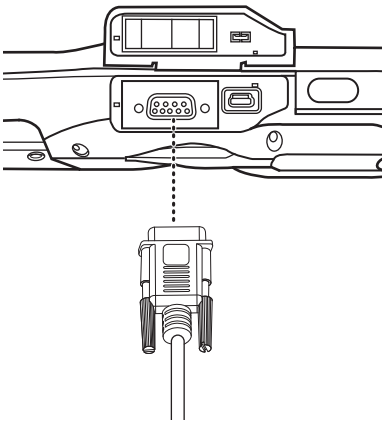
Connecting USB

The H35B accommodates one USB Type A connector and one USB mini Type B connector.

Connecting a USB Type A	**Connecting a MINI USB Type B**
The illustration displayed here shows how to connect a USB type A device to the H35B. The connector can only go in one way. If it does not go in smoothly, check the orientation and try again.	The illustration displayed here shows how to connect a mini USB type B cable to the H35B. The connector is keyed to only go in one way. If it does not go in smoothly, check the orientation and try again.
	

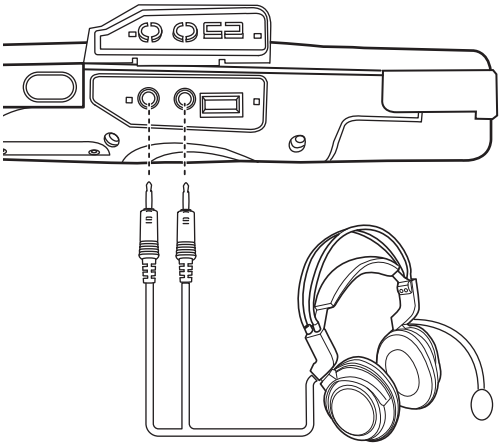
Connecting a Serial Device

Connect a serial device to the H35B to perform serial communications. Refer to the following illustration



Connecting Headphones and a Microphone

The H35B has an external jack microphone and speaker. You can connect a headset and microphone to the H35B for use in noisy environments. Refer to the following illustrations.

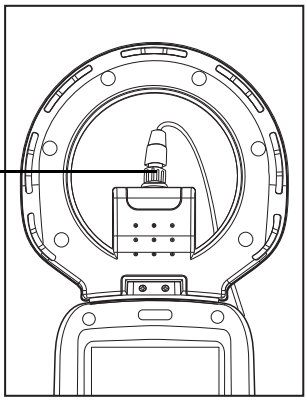


Connecting to the External Antenna (Optional)

You can connect an external antenna to extend the range of the RFID antenna or GPS cover.

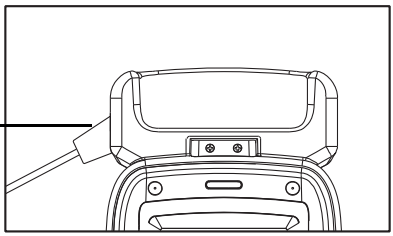
To connect the external antenna to the RFID antenna

Push the external antenna connector into the RFID antenna jack and turn in a clockwise direction.



To connect the external antenna to the GPS cover

Push the external antenna connector into the GPS cover jack and turn in a clockwise direction.

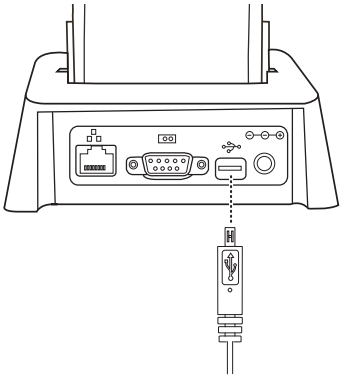
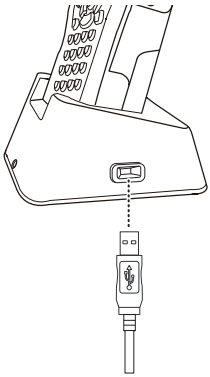


Connecting to the Cradle (Optional)

The cradle enables you not only to recharge the H35B's batteries, it also enables you to connect USB and serial devices, and connect to the LAN.

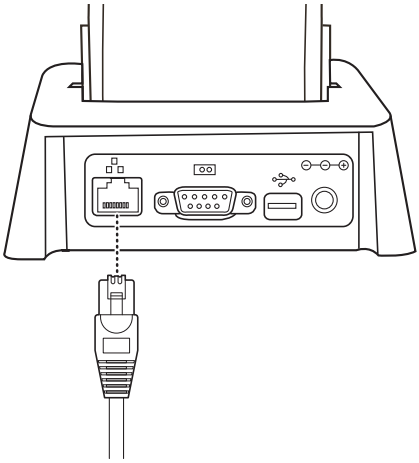
Connecting USB

There are two USB Type A connectors on both sides which support both USB keyboard and mouse. Additionally, there is one Mini Type B USB port at the rear of the cradle. Refer to the following:

	
Connecting a Mini Type B USB	**Connecting Type A USB**

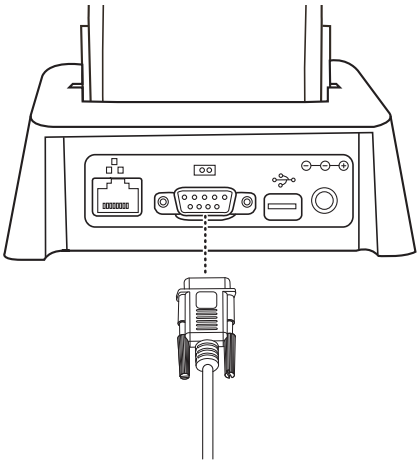
Connecting LAN

Connect the H35B to the Internet using the RJ-45 port at the rear of the cradle. Refer to the following illustration.



Connecting a Serial Cable

Connect a serial cable to the H35B cradle to perform serial communications. Refer to the following illustration



Chapter 4
Getting Connected

Installing Microsoft ActiveSync

In order to exchange data between your computer and the H35B and install extra applications or utilities to the H35B, Microsoft ActiveSync must be installed on your computer. Connect the H35B to a PC using a USB type B cable. Download the latest version of Microsoft ActiveSync from the Microsoft website.

NOTE: If you have a previous version of the Microsoft ActiveSync installed in your computer, uninstall it first before installing the latest version of Microsoft ActiveSync.

Connecting to Your Computer

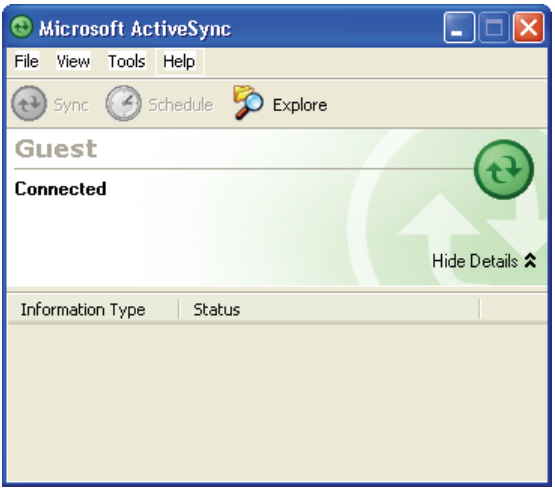
1. After ActiveSync has been installed, connect the USB B cable to the USB port on your H35B. Refer to *Connecting the H35B to a PC* on page 18.
2. Plug the other end of the USB cable into a USB port on your computer.
3. Turn the device on.
4. ActiveSync starts automatically and configure the USB port to work with the H35B. The New Partnership setup wizard will automatically start.

NOTE: If ActiveSync doesn't start automatically, click **Start** → **Programs** → **Microsoft ActiveSync**.

If a message appears indicating that it is unable to detect a connection, click the **Cancel** button and manually configure the communication settings.

5. Follow the onscreen instructions.

6. When the configuration process is complete, the ActiveSync window appears.



7. Synchronization will be initialized and will take place if you've chosen to synchronize periodically or upon connection.
8. ActiveSync detects the H35B and establishes a connection.

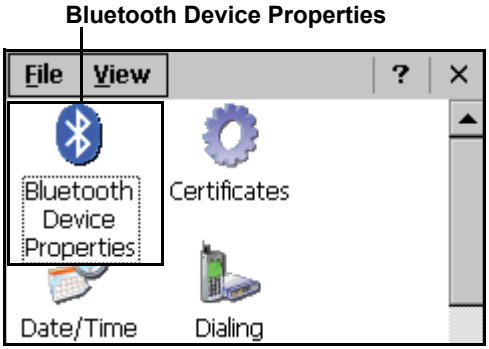
9. Click **No**, and then click **Next**.

Connecting with Bluetooth

Your device is equipped with Bluetooth wireless technology that you can use to synchronize information with a computer equipped with a Bluetooth adapter or access point. Bluetooth wireless technology allows you to communicate with the computer whenever it is within range.

Follow these instructions to set up a Bluetooth connection.

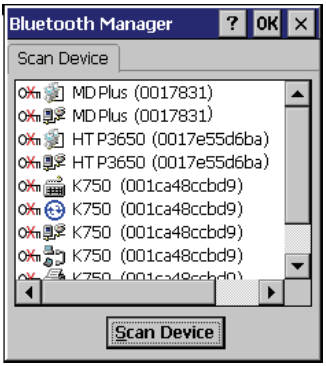
1. Tap **Start** → **Settings** → **Control Panel** and double-tap **Bluetooth Device Properties**.



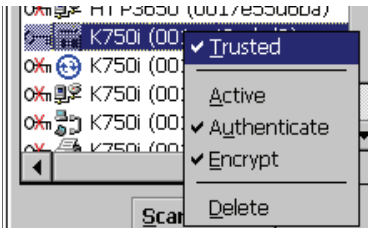
   The Bluetooth Manager opens.

2. Tap **Scan Device**.

   Bluetooth Manager scans for local Bluetooth devices and displays a list of all Bluetooth enabled devices within range.



3. Double tap a device in the list to display a context menu.

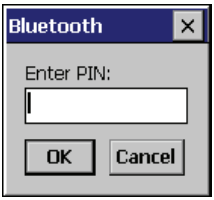


4. Tap **Trusted** to add the device to the trusted Bluetooth devices list.

   You are prompted to authenticate the device. If you want to authenticate the device now, go to step 5. Otherwise, go to step 7.

5. Tap **Yes** to authenticate the device.

   You are prompted for the device's pin code.



NOTE: Authenticating the device ensures that you are only enabling trusted devices to the Bluetooth manager's list. You can mark the device as trusted without authenticating the device by tapping No when prompted to authenticate the device.

6. Enter the pin code and tap **OK** to authenticate the device. Tap **No** to cancel authentication.

NOTE: If you enter the wrong pin code, an authentication fail message appears.

The red X disappears on the entry's key icon, and the context menu's additional options become available.

The additional options are described as follows:

Trusted: tap to add or remove the device from the trusted device list. When checked, the red X on the key next to the device is removed.

Active: tap to make the device active or inactive.

Authenticate: tap to authenticate the device and add the device to the trusted devices list.

Encrypt: tap to enable or disable encryption of data transferred between the H35B and a Bluetooth device.

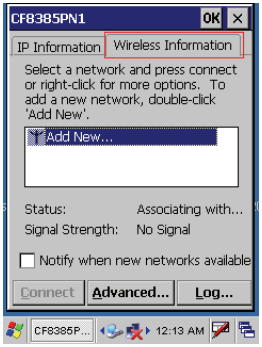
Delete: Deletes the device from the Bluetooth Manager list.

Connecting to a WLAN (WiFi)

Through a WiFi (wireless) connection you can add a new network, connect to an existing network, change the advanced wireless settings and view wireless networking log information. To establish a WiFi connection, follow the steps below:

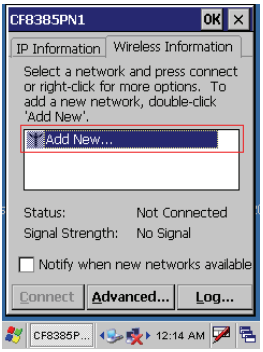
1. Click on the **CF8385PN1** icon.

2. Select the **Wireless Information** tab to display the available options.



Add a New Network

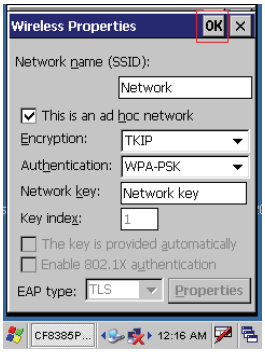
1. To add a new network, double-click **Add New**.



2. When the following screen displays, input the required parameters as explained in the following table:

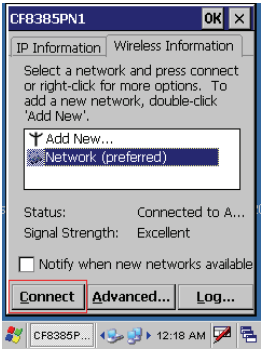
Parameter	Description
Network name (SSID)	Input the wireless network name.
This is an ad hoc network	Tick the box if required.
Encryption	Select from the drop-down list.
Authentication	Select from the drop-down list.
Network key	Input the network key (if required).
Key index	Input the key index (if required).
EAP type	Select the EAP type.

3. Click **OK** to connect.



Connect to an Existing Network

1. Select a network from the list and press **Connect** or right-click for more options.

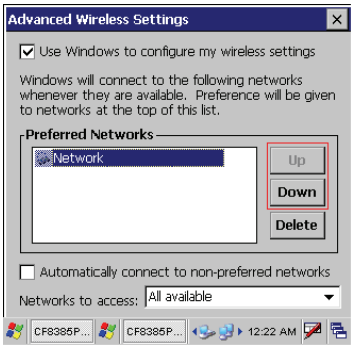


2. Click **OK** to connect.

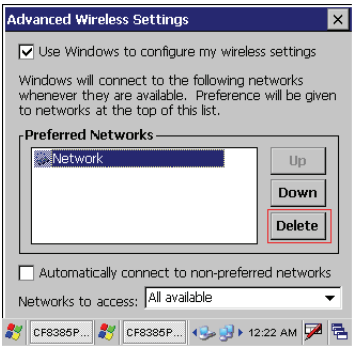
Changing the Advanced Settings

1. Tap the **Advanced** button to display the advanced wireless settings (the preferred networks will be listed and preference is given to networks at the top of the list).

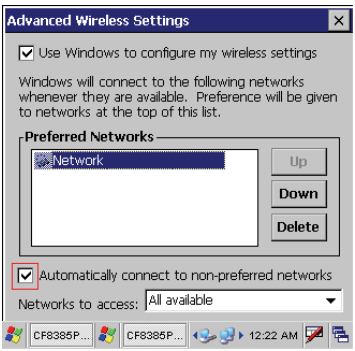
2. To move a network up or down in priority, tap the **Up** or **Down** buttons.



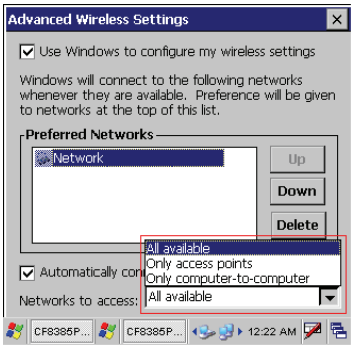
3. To delete a network from the list, tap the **Delete** button.



4. To automatically connect to non-preferred networks, click the box.

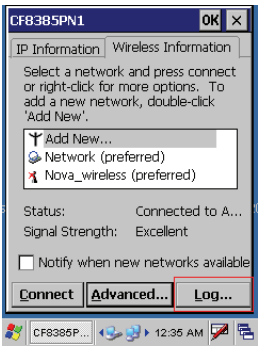


5. To select which networks to access, tap the drop down menu and choose the required option.



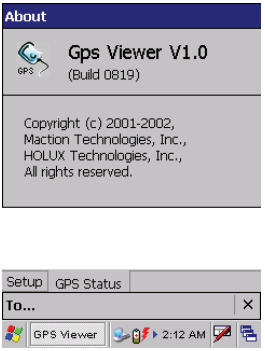
View Wireless Networking Log Information

Tap the **Log** button to display the log information.

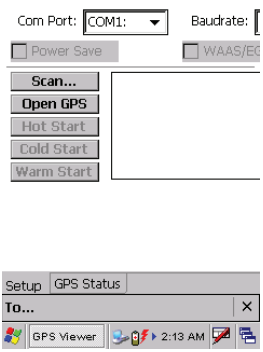


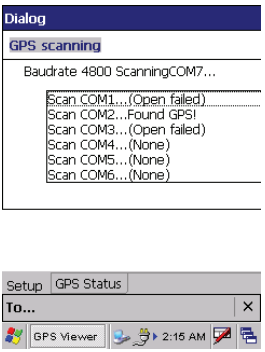
Connecting GPS

1. Run the GPS Viewer program (download available from the Internet).

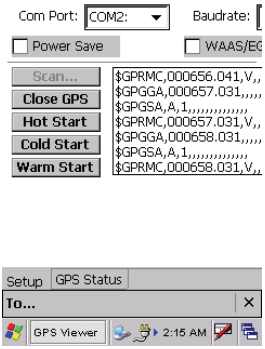


2. Click **Scan...** and **Scan COM2...** displays followed by **Found GPS**.

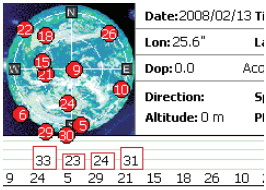




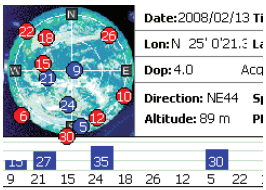
3. Select **COM2**, then click **Open GPS** to start the “GPS”.

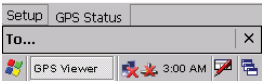


4. When GPS is active, click **GPS status** to display the satellite status.



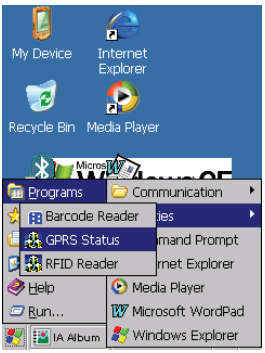
5. After approximately 60 seconds for GPS longitude and latitude display.



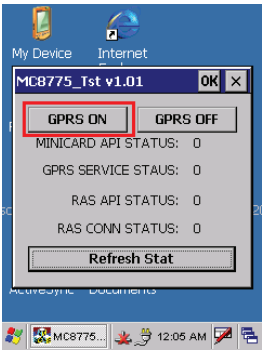


Connecting GPRS

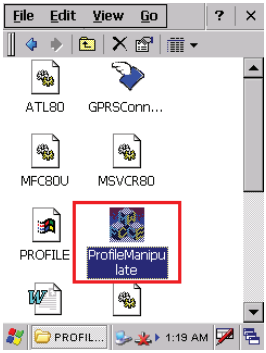
1. From **Utilities** select **GPRS Status**.



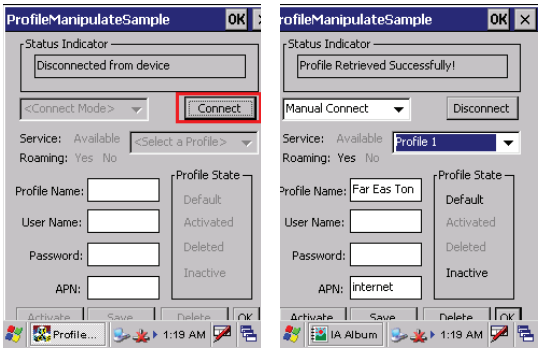
2. Tap **GPRS ON**.



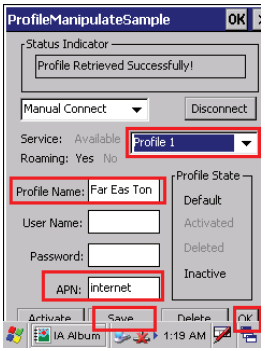
3. Click **ProfileManipulate**.



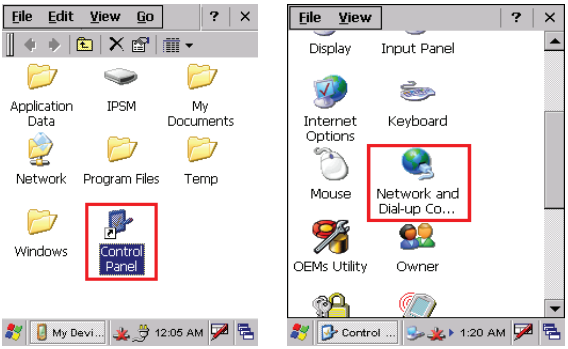
4. Click **Connect** and select “Profile1”.



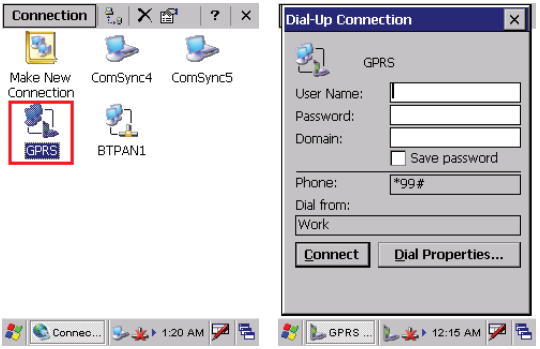
5. Input a Profile Name and enter **internet** in APN, then click **SAVE** followed by **OK**.



6. Click **Control Panel** then **Network and Dial-upConncetions**.



7. Click **GPRS** and **Connect**.



8. Connection is successful when the **Status** screen displays **Connected**.

Using the Barcode Scanner

The H35B integrated scanner reads all major barcode labels for maximum scanning coverage.

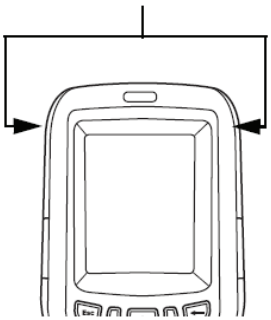
NOTE: The H35B has a testing utility for barcode reading on the desktop. Before performing a reading test, enable the testing utility in advance.

Activating the Barcode Scanner

Activate the barcode scanner by pressing either one of the trigger keys located on the left and right side of the unit.

Mode	Symbology
Decoded	Codabar, Codablock A and F, Code 11, Code 39, Code 93/ 93i, Code 128 /ISBT 128 /UCC EAN 128, Industrial and Standard 2 of 5, Interleaved 2 of 5, Matrix, MSI, PDF417/ MicroPDF417/ MacroPDF417 (unbuffered mode), Plessey, RSS, Telepen, UPC/EAN/ISBN
Emulated DBP	Codabar, Code 11, Code 39, Code93/ 93i, Code 128/ UCC EAN 128, Standard 2 of 5, Interleaved 2 of 5, Matrix, MSI, PDF417/ MacroPDF417 (unbuffered mode), Plessey, RSS, Telepen, UPC/ EAN/ISBN
Standard DBP	All symbologies supported by the host decoder

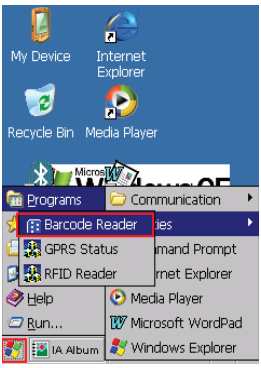
Scan buttons



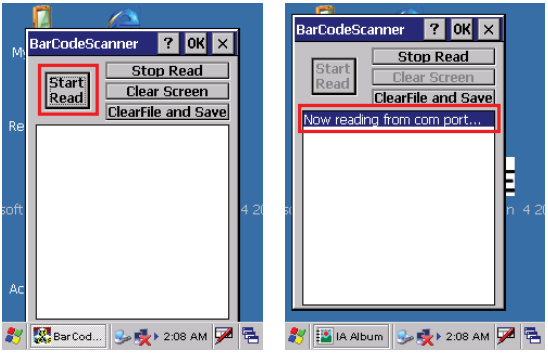
Scanning Performance

Light Source	617nm Highly visible LED
Scan Rate	Decoded operation = 500 scans/ s autoadaptive Undecoded operation = 200 scans/ s
Scan Angle	40°
Print Contrast	Down to 25%
Min. x. Dimension	0.1mm (4mils)
Reading Distance	Up to 90cm (35 inches)

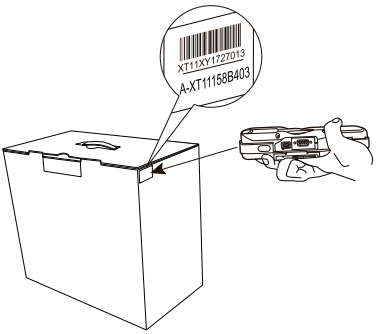
1. Click WIN CE START, and select **Programs** → **Utilites** → **BarcodeReader**.



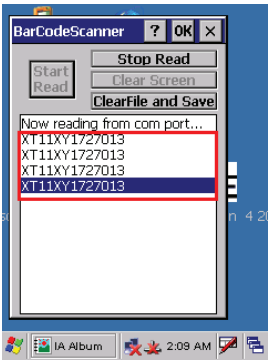
2. On the Barcode Scanner Window, select **Start Read** (Text Message shows “Now reading form com port”).



3. Press either side button to scan the barcode.



4. Text Message on the window displays the barcode value.



Using the RFID Scanner

The H35B has an RFID scanner which reads RFID code labels with excellent performance.

About RFID

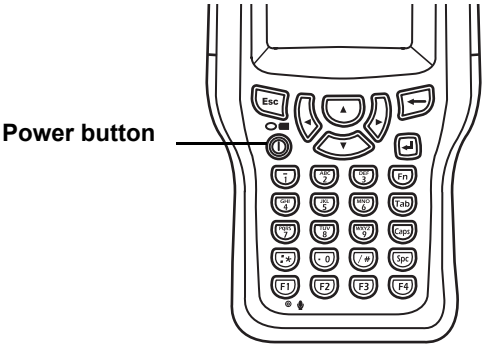
RFID (Radio Frequency IDentification) is a data collection technology that uses electronic tags for storing data. The tag is made up of an RFID chip attached to an antenna. Like bar codes, RFID tags identify items, but unlike bar codes, which must be in close proximity and line of sight to the scanner for reading, RFID tags do not require line of sight and can be embedded within packages. The H35B can read RFID tags at a distance of approximately 10 centimeters.

Selecting an IPSM Profile

Before using the RFID scanner, you must select an IPSM profile.

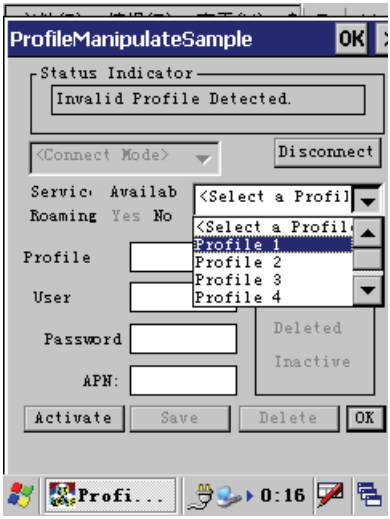
Follow these instructions.

1. Press the power button on the H35B to turn on the device.

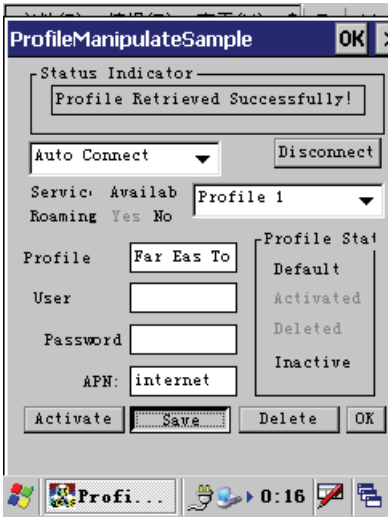


2. On the Microsoft Windows CE desktop, tap **My Device.**

3. Tap **IPSM > PROFILE > ProfileManipulate**.
4. Tap **Connect** and then select a profile from the Service Available drop-down list.



5. Enter a profile name (for example, the name of the service provider associated with the installed SIM card such as Chunghwa telecom) and enter the user name, password, and APN given to you by the service provider.

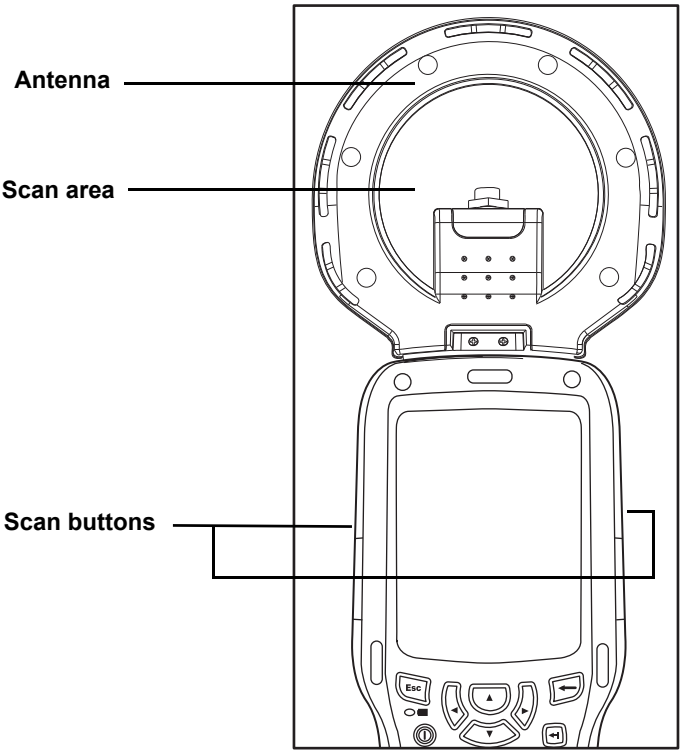


6. Tap **Save** and then tap **OK** to exit the profile settings screen.

Scanning an RFID Tag

Activate the RFID scanner by pressing either one of the trigger keys located on the left and right side of the unit.

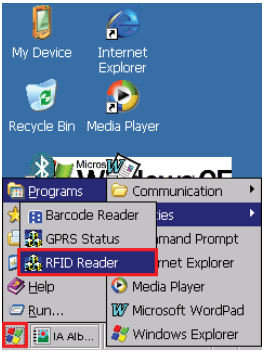
1. To scan an RFID tag, press either scan button or tap the scan icon on the scan application.



2. Place the tag within the antenna scan area. You must place the tag within 10 seconds.

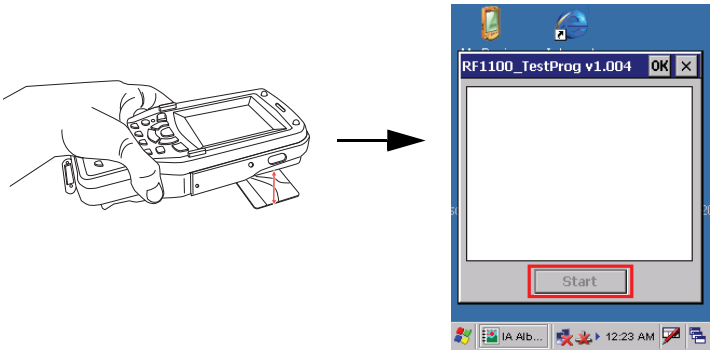
Scanning an HF (High Frequency) RF1100 Tag

1. Click **START** on **WIN CE**, and select **Programs** → **Utilites** → **RFID Reader**.



2. Run **RF1100_TestProg v1.004**, and the screen displays **Set COM7:OK**.

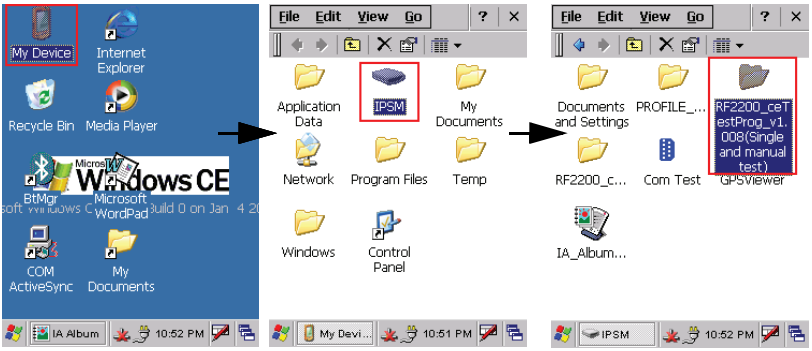
3. Scan the card from a distance of approximately 4cm ~ 6cm to begin reading.



4. The card value displays on the screen.

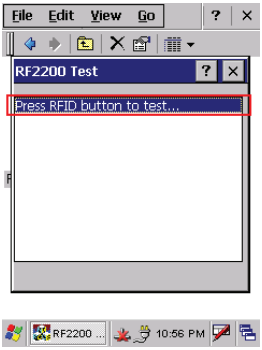
Scanning an LF (Low Frequency) RF2200 Tag

1. Click **My Device** → **IPSM** → **RF2200_ce TestProg**.

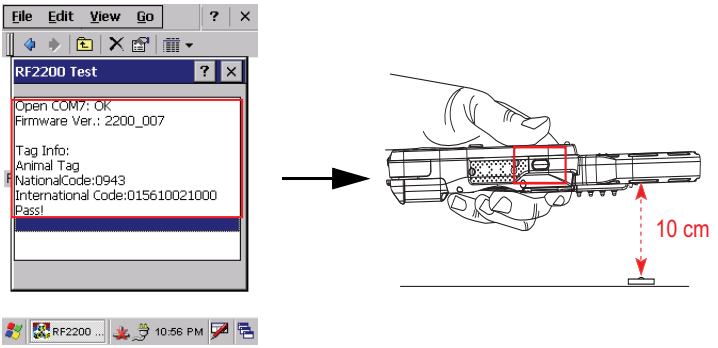


2. Run the **RF2200_ce TestProg_v1.008** program.

3. The screen displays **Press RFID Button to test**.

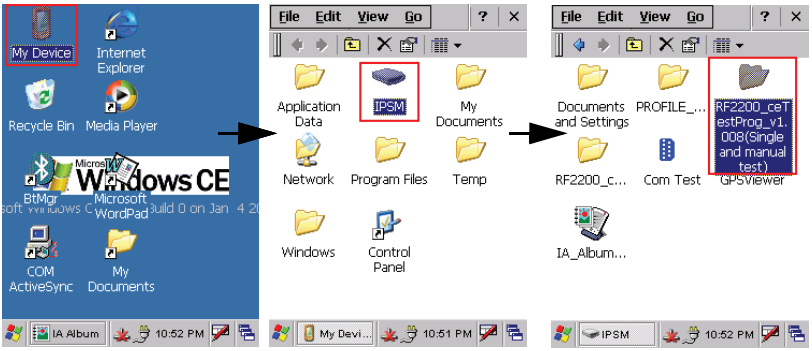


4. Press either side button to read RFID tag.



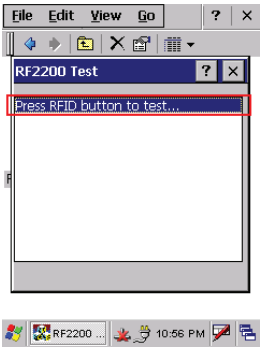
Scanning with the External Antenna (Optional)

1. Click **My Device** → **IPSM** → **RF2200_ce TestProg**.

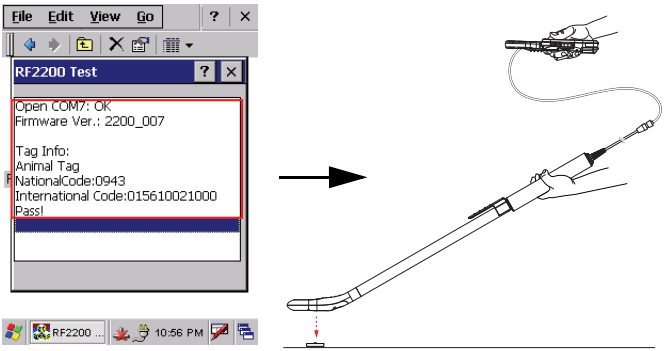


2. Run the **RF2200_ce TestProg_v1.008** program.

3. The screen displays **Press RFID Button to test**.



4. Press either side button to read RFID tag.



Chapter 5
Advance Settings

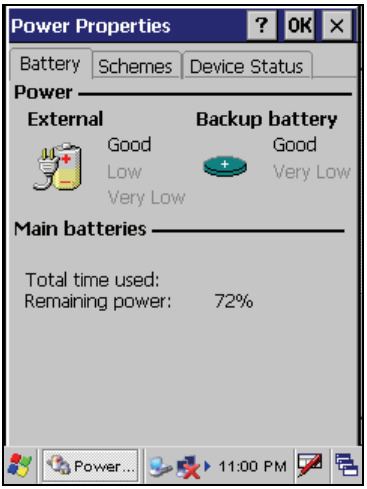
Checking the Battery Status

This section describes how to view the power level for both the main and backup battery and how to set power saving options.

To check the main and backup battery status:

1. Open Power Properties. Tap **Start** → **Settings** → **Control Panel**. Then double-tap **Power**.

   The Power screen appears.
2. The battery menu item displays the status of the main and backup batteries.



NOTE: It is necessary to charge the battery when the battery charge reaches below 13%. If the battery does not accept a charge, contact Technical Support.

Extending Battery Life

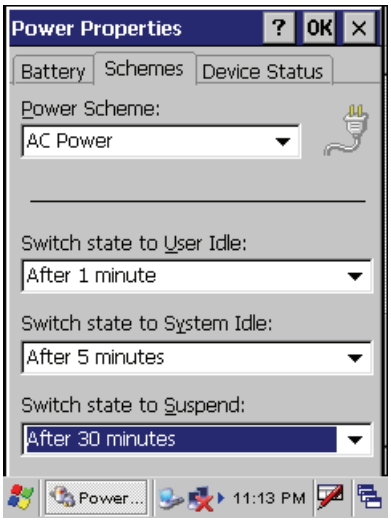
You can extend the H35B battery life by doing either of the following:

- Change the automatic power settings
- Minimize the use of the backlight

Changing the Automatic Power Settings

To change the automatic power settings:

1. In the Power Properties screen tap the **Schemes** tab.



2. Tap the arrow next to the Power Scheme and select Battery Power.
3. Tap the arrows next to the following three power saving scenarios and select the desired time out for each item.
   - **Switch state to User Idle:** H35B enters power saving mode when there is no user input after the selected timeout. The backlight brightness is reduced. The backlight resumes normal brightness when the LCD is touched.
   - **Switch state to System Idle:** H35B enters power saving mode when there is no system activity after the selected timeout. The backlight is turned off. The backlight turns on when the LCD is touched.
   - **Switch state to Suspend:** H35B enters suspend mode when there is no user input or system activity after the selected timeout.

   Time out values range from Never, and 4/5/10/30 minutes.

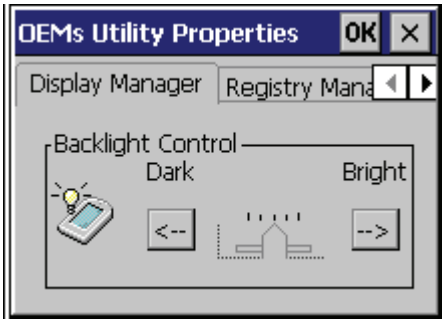
Adjusting Backlight Settings

The power consumption of the LCD backlight may be high, turn off the backlight function if it is not necessary.

If a backlight is required, set “automatically turn off the backlight” function.

To change backlight settings:

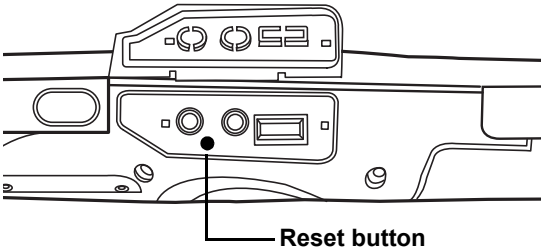
1. Tap **Start** → **Settings** → **Control Panel**.
2. Tap **OEMs Utility**.
3. Select Display Manager, and tap the arrow next to Dark or drag the slider to the left to reduce the screen brightness.



Performing a Reset

You may have to perform a reset if the device freezes (i.e., device no longer responds to the buttons on the screen).

A reset allows your device to get a fresh start, similar to rebooting a computer. This will restart your device and adjust memory allocation. All records and entries are retained after a reset. Unsaved data in open programs may in some cases be lost.

Performing a Warm Boot

1. Remove the stylus from its holder.
2. Lightly press the tip of the stylus to the reset button located on the H35B.