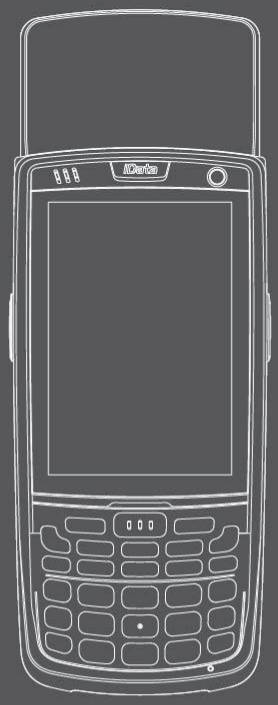
iData®

User Manual

iData 90UHF



www.idatachina.com

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1.1 Appearance of iData 90UHF

Figure 1-1 Front view of iData 90UHF

Figure 1-2 Rear view of iData 90UHF

1.2 Installing an SD Card

To install an SD card, do as follows:

1. Push the card cover along the direction marked on the cover and open the cover.
2. Insert an SD card.
3. Press the SD card downward and lock the card along the IN direction marked on the cover.

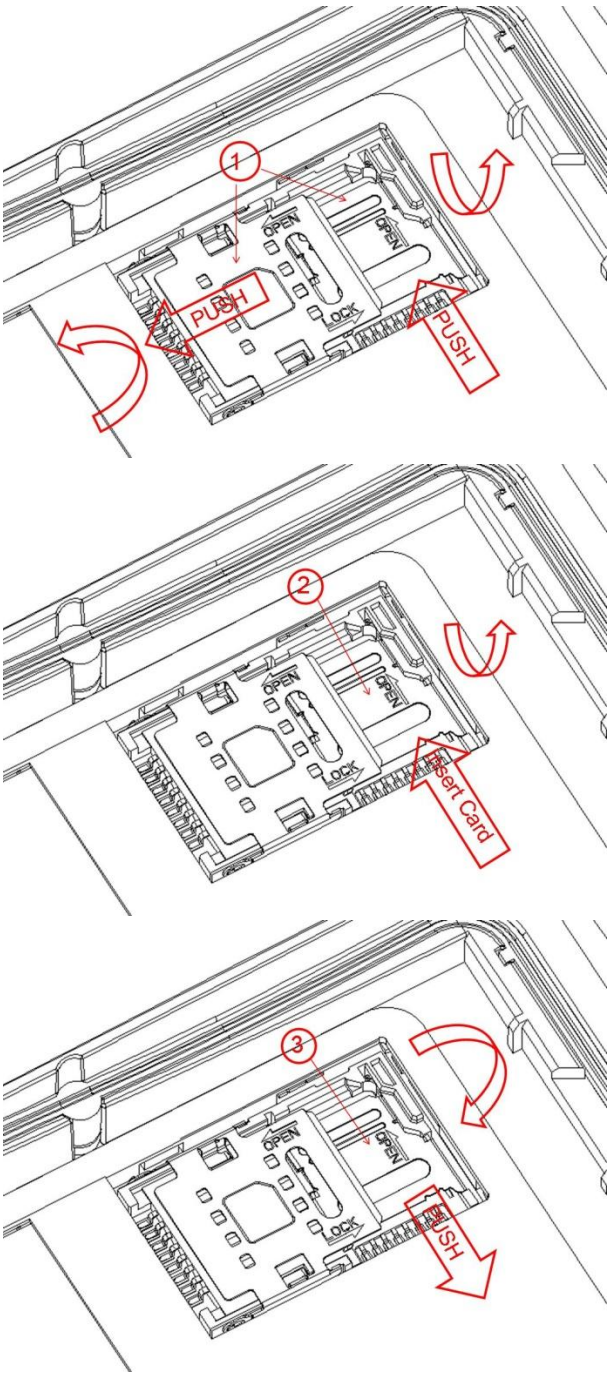


Figure 1-3 Inserting an SD card

1.4 Installing a Battery

To install a battery, do as follows:

1. Push the battery to the bottom of the battery compartment.
2. Press the top of the battery downward to tighten the battery.
3. Push the joint at the bottom of the battery cover into the back shell.

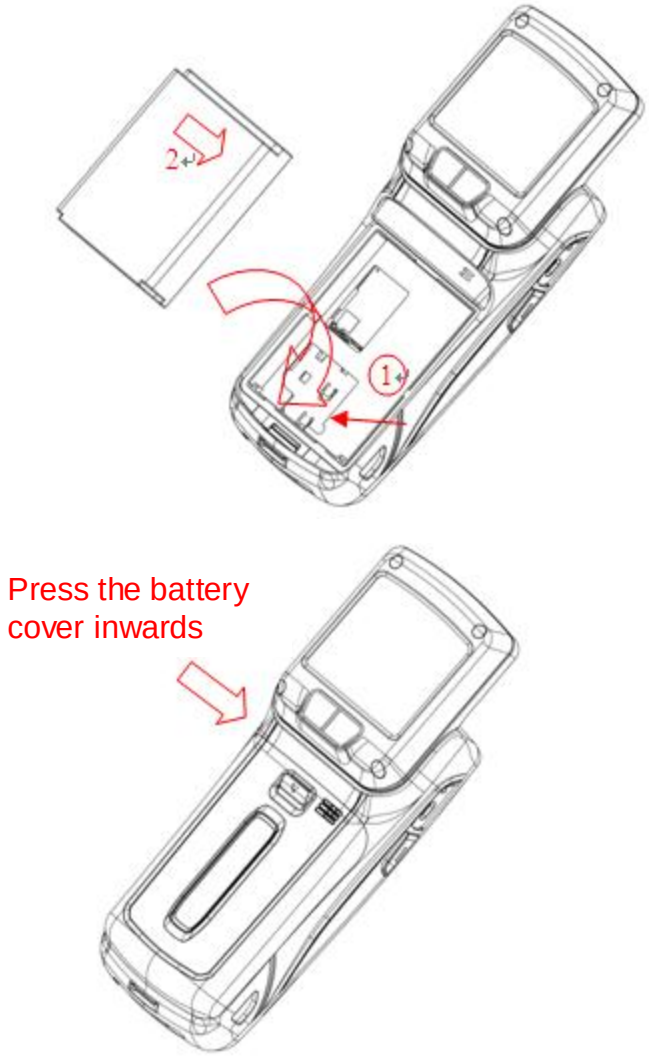


Figure 1-5 Installing a battery

1.5 Disassembling the Battery Cover

To disassemble the battery cover, do as follows:

1. Hold the rear button of the battery cover by using your thumb.
2. Pull out the battery cover.

Figure 1-6 Disassembling the battery cover

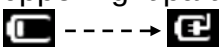
1.6 Charging

You can charge a battery in the following ways:

1. Charge the iData 90UHF by using a charger.
2. Connect the iData 90UHF to a PC by using a USB cable to charge the iData 90UHF.

In the charging status, the LED is red. When the LED becomes blue, charging is complete.

If you charge the battery when the iData 90UHF is powered on, the battery icon on the upper right part of the screen changes, indicating that charging starts.



When the battery volume is low, an alarm is generated on the screen of the iData 90UHF and the battery volume becomes  .

When the battery volume is too low, the iData 90UHF is automatically powered off.

★ Caution

The battery can be charged for more than or less than three hours. The battery will not be damaged if charging is interrupted. The duration of the battery depends on different applications of the iData 90UHF, for example, selected functions of iData 90UHF, usage mode, and data transmission.

Tips

To ensure a longer standby time of the iData 90UHF, follow the following tips:

- Always connect the iData 90UHF to the AC power supply when you do not use it.
- In the power supply setting, set the iData 90UHF to make it automatically closed after being idle for a short time.

- Set the backlight to make it automatically closed after being idle for a short time.
- Stop all wireless activities when you do not use the iData 90UHF.

1.7 Power-on

After installing a SIM card and a battery and charging the iData 90UHF completely, you can use the iData 90UHF.

1. Press and hold the On/Off key for several seconds.
2. The power-on page is displayed, and the iData 90UHF enters the Windows Mobile operating system after the boot process is complete.

When you power on the iData 90UHF for the first time, the iData 90UHF initializes the file system of the flash memory. During the period, the initial page remains for about one minute. Then some basic settings such as screen calibration, date and time, and Email setting appear. If you do not want to set these items, directly skip them.

2 Instructions on iData 90UHF

2.1 Home

Home is the start page of the iData 90UHF and displays important information such as upcoming appointments and tasks. At **Home**, you can add items or change the background by selecting **Start** > **Settings** > **Home**. Click a program at **Home** to open it.
The default page of the iData 90UHF is **Home**. If the iData 90UHF is not at **Home**, select **Start** > **Home** to switch to **Home**.

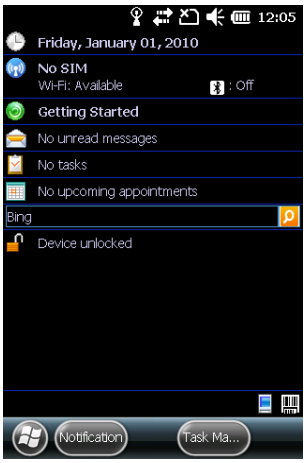


Figure 2-1 Home

★ Caution

When the iData 90UHF is switched to **Home**, some applications may still run in the background. If you do not wish the applications to run in the background, close the opened applications through the task manager.

2.2 Status Icons

Status icons are in the status bar at the upper part of the screen and show device status and notifications.

Table 2-1 Status icons

	Sound on
	Sound off
	Vibration mode
	Charging battery
	Battery volume
	The battery volume is low or too low.
	Current time

	Notification that one or more emails or short messages are received
	There are multiple notification icons, which are beyond the scope of display. Click it to display remaining icons.
	Reminder that one calendar event will happen
	Valid connection
	Invalid connection
	Synchronizing
	Detected that Wi-Fi network is available
	Using Wi-Fi

2.3 Applications Window

Click **Start**. The applications window is displayed, where icons of applications are placed. You can drag the icons of applications to sequence applications according to your habits. Click the icon of an application to open the application.

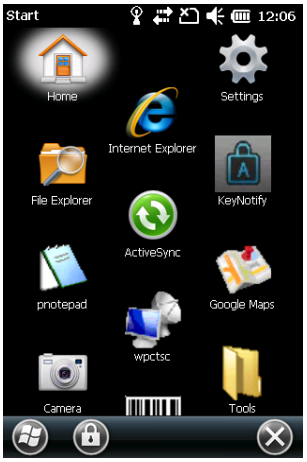


Figure 2-2 Applications window

2.4 Icons of Applications

Icons of Applications

Table 2-2 Icons in the applications window

Icon	Name	Description
	Home	Turns to the start page of the iData 90UHF.
	Settings	Manages the iData 90UHF.
	File Explorer	Organizes and manages files on the iData 90UHF.
	iScan	Scans and reads barcodes.

Icon	Name	Description
	Notepad	Creates, views and edits files.
	Internet Explorer	Browses web pages and WAP websites and downloads new programs and files from the Internet.
	ActiveSync	Synchronizes information between the iData 90UHF and the host or Exchange Server.
	Camera	Shoots photos or videos.
	wpctsc	Logs in to a remote computer and uses available programs in the remote computer through the iData 90UHF after starting the remote desktop.
	Google Maps	Views the geographical location of a target, obtains the satellite map and life information, and performs GPS-based positioning and vehicle navigation.
	E-mail	Sends or receives emails and text messages.
	Calendar	Views dates, tracks appointments and creates appointments.
	Alarms	Views and sets time/date and sets alarms.
	Pictures & Videos	Views and manages pictures, cartoons and video files.
	Calculator	Performs basic arithmetic operations such as add, subtract, multiply and divide.
	Windows Media	Plays audio and video files.
	Notes	Creates notes, drawings and recordings by writing or typing.
	Tasks	Tracks execution of tasks.
	Internet	Connects a laptop computer to the Internet through the data connection of the iData 90UHF.
	Task Manager	Views ongoing processes and allocation of the memory and CPU and stops processes.
	Help	Views the help information about the current screen or program.

Setting Icons

Table 2-3 lists the control applications that are preinstalled on the iData 90UHF. Select **Start** > **Settings**. The **Settings** window is displayed.

Table 2-3 Setting icons in the Settings window

Icon	Name	Description
Personal tab		
	Buttons	Allocates keys to a program.
	Owner Information	Enters personal information onto the iData 90UHF.
	Phone	Sets call security, services, network, band and ringtone.
System tab		
	GPS Setting	Sets GPS and views GPS logs and satellite status.
	About	Views the basic information about the iData 90UHF, for example, operating system version, processor type, memory, and device information.
	Encryption	Encrypts files on the memory. You can read encrypted files only on your device.
	Customer Feedback	Submits a feedback about Windows Mobile.
	Task Manager	Views the memory and CPU allocation and stops processes.
	Memory	Checks memory allocation and information about the memory card.
	Regional Settings	Sets the zone configurations to be used, including numbers, currencies, date and time formats displayed on the iData 90UHF.
	Full screen Mode	Sets the screen display mode.
	Remove Programs	Removes programs installed on the iData 90UHF.
	External GPS	Sets an appropriate GPS communication port if required. If a program needs to access GPS data or you have connected the GPS receiver to the iData 90UHF, this operation is needed.
	Restore Factory Defaults	Restores factory settings.
	Managed Programs	Lists the programs installed by the system administrator remotely.

Icon	Name	Description
	Device Information	Displays the device version, hardware and features.
	Error Reporting	Enables or disables the error report function of the iData 90UHF.
	Screen	Changes the screen direction, recalibrates the screen, and changes the text size and font.
	Power	Views the battery volume and sets the interval for closing the display after the iData 90UHF becomes idle in different cases.
	Alarm Setting	Sets the automatic power-on and power-off time every day.
	Certificates	Views the certificates installed on the iData 90UHF.
	KeyLock	Selects the mode for locking the keypad when the iData 90UHF is closed.
	Backlight	Sets the duration for closing the backlight when the iData 90UHF is powered by a battery or external power supply and the iData 90UHF is idle and adjusts the screen brightness.
	Phone Record	Sets the storage location of call recordings.
Connections tab		
	Wi-Fi	Sets wireless network connections and customizes settings.
	Wireless Manager	Enables or disables wireless communication of the iData 90UHF and customizes the WLAN and phone settings.
	Domain Enroll	Registers the iData 90UHF as a member in the AD domain for device management and security purposes.
	USB to PC	Enables or disables enhanced network connection.
	Beam	Sets the IrDA light beam received by the iData 90UHF.
	Connections	Sets one or more modem connections such as dial-up, GPRS so that the iData 90UHF can be connected to the Internet or a dedicated local network.

2.5 Keypad Operations

The iData 90UHF provides two keypads: screen keypad and physical keypad.

Using Screen Keypad

When you start an application or choose to enter text or numbers, the screen keypad is displayed.

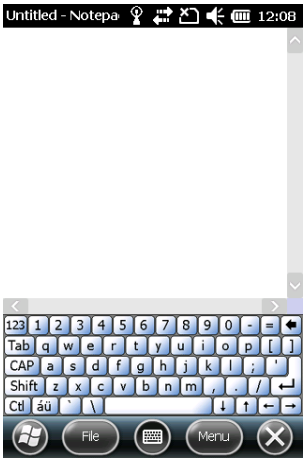


Figure 2-3 Screen keypad

Displaying Screen Keypad

Click any place where text can be entered. The screen keypad is displayed.

Hiding Screen Keypad

In the text state, click  to hide the screen keypad.

To display the hidden screen keypad again, click  again.

Using Physical Keypad

Figure 2-4 shows the physical keypad, which has 26 keys in total. In terms of function, the keys are divided into numeric/letter/symbolic keys, direction keys, and scan keys.

Figure 2-4 Key layout on the physical keypad

Installing the Notification Program of Physical Keypad

MC90UHFKEY_Notify.CAB is the notification program of the physical keypad provided by Wuxi iData Technology Company Ltd.

1. Copy **MC90UHFKEY_Notify.CAB** to **My Device\Program Files\SetupNotify** (if the **SetupNotify** directory does not exist, create the directory).
2. Run **MC90UHFKEY_Notify.CAB**.
3. After the **MC90UHFKEY_Notify.CAB** program is installed, the iData 90UHF automatically restarts.
4. Select **Start** > **Tools** and click  to run the program.

After the program is run, you can see the new icon  in the status bar on the screen.

★ Note

When you press **Shift** on the physical keypad to switch the input mode, the icon of the physical keypad mode in the status bar also changes.

 : The physical keypad is in the numeric input mode.
 : The physical keypad is in the lowercase input mode.
 : The physical keypad is in the uppercase input mode.

2.6 Adjusting Volume

Adjust the system volume or phone volume by clicking the icon of speaker in the status bar.

1. Click the status bar. A drop-down list box is displayed.
2. Click the icon of speaker. The volume dialog box is displayed.
3. Click and move the scroll bar to adjust the system volume and phone volume.

Select **On**, **Off**, or **Vibrate** to open or close volume or enter the vibration mode.

You can set the system volume in the **Sounds & Notifications** window by selecting **Start** > **Settings** > **Sounds & Notifications**.

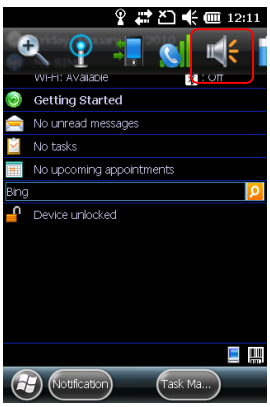


Figure 2-5 Speaker

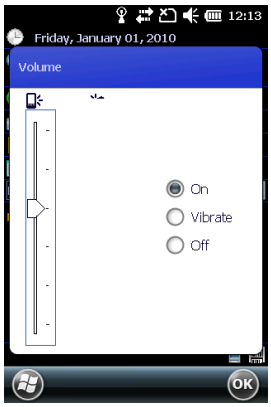


Figure 2-6 Volume dialog box

2.7 Date and Time

To change the date and time in the iData 90UHF, do as follows:

1. Select **Start** > **Settings** > **Clock & Alarm**. The **Clock & Alarm** window is displayed.
2. Click **Time Zone**, **Date**, and **Time** to set the items.
3. Click **OK** to exit the window.

You can also click the icon of clock at **Home** or the icon of alarm in the applications window.

2.8 Setting Ringtone

To change the ringtone of the iData 90UHF, do as follows:

1. Select **Start** > **Settings** > **Sounds & Notifications**. The **Sounds & Notifications** window is displayed.
2. In the **Sounds** tab, enable or disable sound for an event. You can also click **Screen taps** and **Hardware buttons** to enable or disable sound.
3. In the **Notifications** tab, select an event, a ringtone type, and a ringtone.

2.9 Setting Screen

To set the screen, do as follows:

1. Select **Start** > **Settings** > **System** > **Screen**.
2. In the **General** tab, set the screen direction to adjust the screen.
3. In the **ClearType** tab, set the screen font.
4. In the **Text Size** tab, adjust the font size.
5. Click **OK** to exit the window.

To adjust the screen brightness, do as follows:

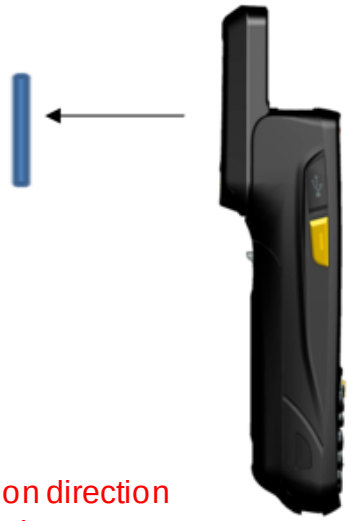
1. Select **Start** > **Settings** > **System** > **Backlight**.
2. In the **Battery Power** tab, move the sliding block to adjust the screen brightness and select the **Turn off backlight** check box to set the duration for closing the screen when the screen is idle.
3. In the **External Power** tab, move the sliding block to adjust the screen brightness and select the **Turn off backlight** check box to set the duration for closing the screen when the screen is idle.
4. Click **OK** to exit the window.

2.10 Label Reading Direction

1. Ceramic Antenna

To read a label from a long distance, try to make the screen of the device parallel to the

polarization direction of the label.



Handheld direction: vertical

Polarization direction
of the label

2. PCB Antenna

To read a label from a long distance, try to make the polarization direction of the device parallel to the polarization direction of the label.

Polarization direction
of the label

Handheld direction: horizontal

3 E-mail

You can send and receive Emails through the Email account your often use by using the iData 90UHF.

Setting Email Account

1. Select **Start** > **Tools** > **Email**.
2. Click **Setup E-mail** and enter your Email account and password.
3. Select **Try to get e-mail settings automatically from the Internet** and click **Next**.
4. Click **Next** to complete the setting and download Emails.
5. Enter your name and click **Next**.
6. Enter a user name and click **Next**.
7. Select the time for **Automatic Send&Receive** and click **Finish**.

★ Caution

Before setting an Email connection, ensure that the network connection is correct. If the setting of your Email account cannot be completed automatically, you can enter your Email account setting manually. Before entering the Email account setting, contact your Email service provider to obtain the correct Email account setting. For example, you need to know whether the type of your Email account is POP3 or IMAP.

Deleting an Email Account

1. Select **Start** > **Tools** > **Email**.
2. Select an Email account.
3. Select **Menu** > **Delete**.
4. Click **Yes**.

Creating and Sending an Email

1. Select **Start** > **Tools** > **Email**.
2. Select an Email account and click it to open the account.
3. Select **Menu** > **New**.
4. Enter the address of the recipient and the subject and edit the content.
5. Click **Send**.

Receiving and Opening Email

1. Select **Start** > **Tools** > **Email**.
2. Select an Email account and open the Email box.
3. Click ▼ in the upper left corner and select **Inbox**.
4. Click **Email** to open and read the Email.

Deleting an Email

1. Select **Start** > **Tools** > **Email**.
2. Select an Email account and open the Email box.
3. Click ▼ in the upper left corner and select **Inbox**.
4. Select the Email to be deleted.
5. Click  in the lower left part.
6. Click **Yes**.

4 Connection and Synchronization

4.1.1 Wi-Fi Network Connection

You can access the Internet on the iData 90UHF by using Wi-Fi.
When you connect to the Internet using Wi-Fi, you need to search and connect to an available Wi-Fi network before you can access the Internet.

Enabling and Setting Wi-Fi

1. At **Home**, click **Wireless Manager**.
2. Click **Wi-Fi** to enable Wi-Fi.
3. Select **Menu** > **Wi-Fi Settings**.
4. Confirm the IP address. In the **Network Adapters** tab, select **Marvell SDIO8686 Wireless Card** and click **Edit**. The **IP Address** setting page is displayed. Ask your network administrator which IP address should be entered. If IP addresses are assigned over DHCP, select **Use server-assigned IP address**.

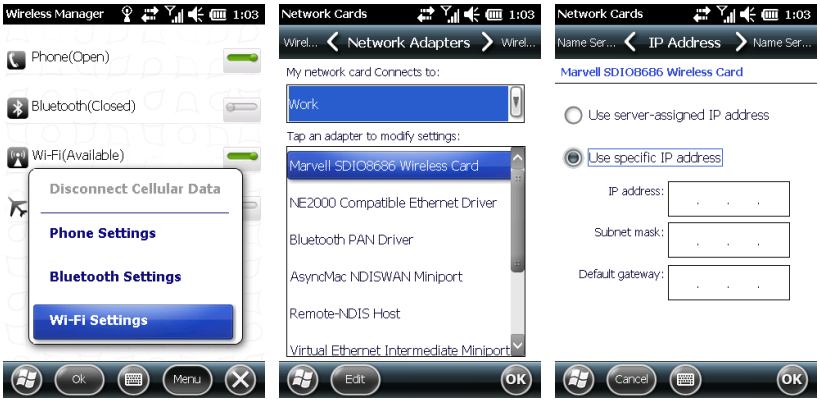


Figure 4-3 Wi-Fi connection setting

5. After setting the IP address, click the **Wireless** tab. The iData 90UHF searches for and displays available Wi-Fi networks, which are open or secure networks.
6. Select one Wi-Fi network to connect to the network. If you intend to connect to a secure Wi-Fi network, you are required to enter the password of the network. After you connect to the network, the network displays **Connected**.

★ **Caution**

The iData 90UHF memorizes the connected Wi-Fi network. Next time when you need to access and connect to the Wi-Fi network, the iData 90UHF automatically connects to the network.

4.1.2 iData Wi-Fi Optimization

The Wi-Fi optimization tool helps users adjust different values based on the usage environment to achieve the optimal setting.

To open the iData Wi-Fi optimization tool iDataWiFiConfig, do as follows:

1. Install the iScan of the latest version.
2. Select **Program Files** -> **iData**, open the **Addons** folder, and open the iDataWiFiConfig tool.

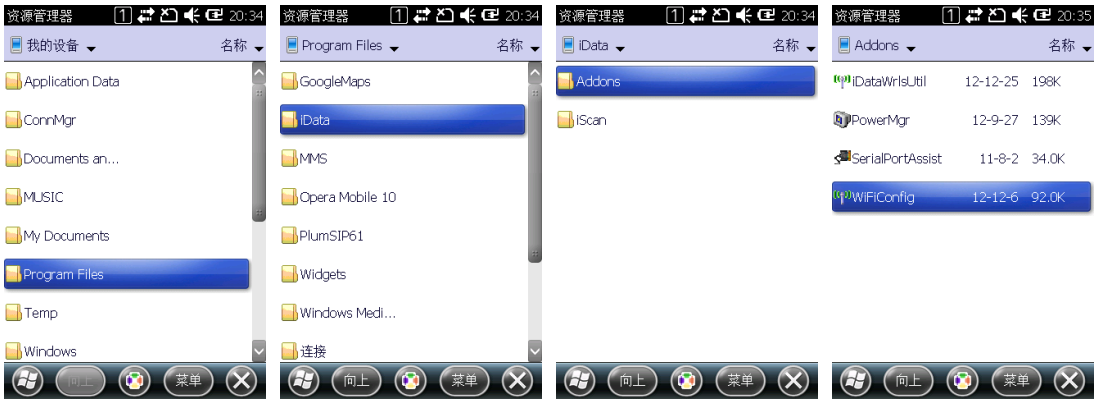


Figure 4-4 Path for storing the iDataWiFiConfig tool

Parameter settings

1. It is recommended to retain the value of **Associate Retry Times**.
2. It is recommended to retain the value of **Power mode**.
3. The value of **Roaming mode** ranges from 1 to 4. **Roaming mode** must be set to **4**.
4. The value of **RoamSignalStrengthThreshold** ranges from -100 to 0. According to the actual usage environment, set the optimal value. The empirical value ranges from -80 to -60 (dB).
5. The value of **Roam Diff RSSI Threshold** ranges from 1 to 50. According to the actual usage environment, set the optimal value. The empirical value ranges from 10 to 15 (dB).

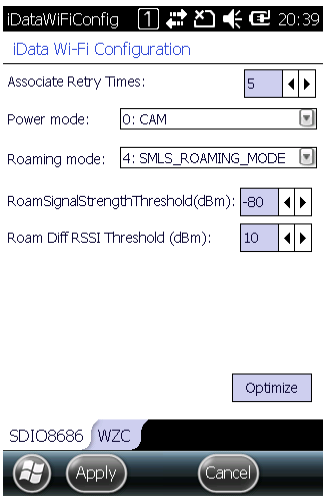


Figure 4-5 Parameter settings using the iDataWiFiConfig tool

4.2 Connecting to a PC through USB

Connect the iData 90UHF to a PC to transmit and process files such as picture and music files. You can connect the iData 90UHF to a PC by using a USB cable. When you connect to a PC for the first time, an option box is displayed on the iData 90UHF for you to select the connection mode. After selecting a connection mode, select the **No Longer Ask** check box. The option box does not appear the next time and a connection is established in the mode selected last time. To set the mode of connecting to a PC through USB, select **Start** > **Settings** > **Connect** > **USB to PC**.

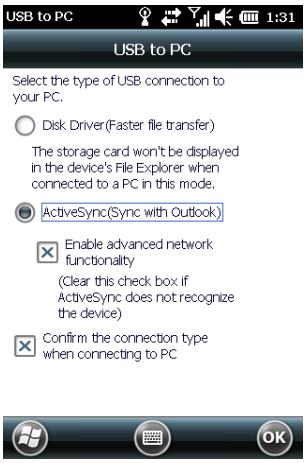


Figure 4-6 USB to PC window

For the USB connection mode, you can select **Disk Driver** or **ActiveSync**. If you select **Disk Driver**, file transfer is faster but the memory card is not displayed in the file explorer.

4.3 Synchronization

The synchronization function is used to synchronize information between the iData 90UHF and a PC to share the same directory, information or calendar events. To realize

synchronization, you need to install the synchronization software on the PC.

Installing Synchronization Software

1. Download the installation package of ActiveSync4.5 or above.
2. Run the software package and install the synchronization software according to the installation wizard.

★ Caution

- To synchronize contacts, calendar, emails, tasks, and notes, first ensure that Microsoft Office Outlook is installed on your PC. Otherwise, you cannot select the items.
- The ActiveSync can synchronize information with Microsoft Outlook rather than Microsoft Outlook Express.
- When the iData 90UHF synchronizes information with a PC through ActiveSync, ensure that the Internet sharing function is in the disconnected status. Otherwise, ActiveSync cannot establish a connection automatically.

Synchronizing with a PC

1. Connect the iData 90UHF to a PC by using a USB cable.
2. Microsoft ActiveSync starts automatically on the PC. After that, the task bar  in the lower right corner of the PC becomes  and keeps rolling. In this case, the synchronization wizard is displayed.
3. Select the options to be synchronized according to the synchronization wizard and establish partnership between the iData 90UHF and the PC.
4. Click **Finish**.

Changing the Type of Information to Be Synchronized and Setting

In the ActiveSync software on the PC, you can change the type of information to be synchronized and the setting. Select **Tools** > **Options** and select the type of information to be synchronized. When options are available, click **Set** and select the required option.

★ Caution

- The information that can be synchronized by ActiveSync includes contacts, calendar, emails, tasks, notes, favorites, files and media.
- Short messages and multimedia messages cannot be synchronized.

Canceling Synchronization

If synchronization is canceled, all synchronization and file conversion settings selected for the iData 90UHF are deleted.

1. Open ActiveSync on the PC.
2. Select **Files** > **Mobile Devices** and select the target device.
3. Select **Files** > **Delete Mobile Devices**.

5 Introduction to iScan

To collect data, you must install and start the scan application on the iData 90UHF. Wuxi iData Technology Company Ltd. provides the embedded system component iScan, which can send the data decoded by a barcode scanner to applications by simulating keypad input. The iData products that are equipped with RFID modules are supported. These products are used to detect compatibility of devices and demonstrate RFID applications.

5.1 Starting iScan

The iScan program is started by default after the system is started. You can also select **Start** > **iScan** to start iScan. After the iScan program is started, the iScan icon is displayed in the lower area of the iData 90UHF.

5.2 Using iScan

1. Click . A menu is displayed.
2. Select the functions to be enabled. After a function is enabled, √ is displayed in front of the function.

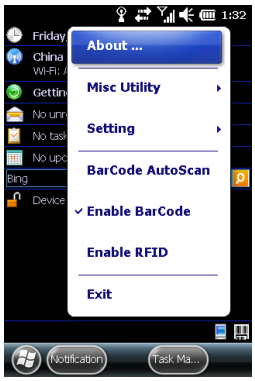


Figure 5-1 iScan menu

5.3 Description of iScan Menu

Enable BarCode

This function supports barcode scanning and identification. The scanned barcode can be simulated as keypad input and transmitted to the relevant application.

Enable RFID

This function supports reading IDs of RFID labels, decoding RFID labels and sending the decoding results to the relevant application.

2D Coding

ASCII and UTF-8 codes are supported:

- ASCII: Decoding involves digits, letters and some symbols, namely barcodes of ASCII characters.
- UFT-8: Decoding involves all barcodes containing ASCII characters as well as 2D codes of simplified Chinese.

Misc Utility

- **Auto 'ENT' suffix**: Simulate **Enter** as the acknowledgement for completion of input.
- **WiFi Conn. Keepon**: The built-in power management module in the Windows Mobile system disables Wi-Fi by default to save power when the iData 90UHF is in the standby status. After this function is enabled, the Wi-Fi connection can be always retained.
- **Disable Dial/Hangup**: Windows Mobile 6.5 supports dialing. By default, if you press the hang-up key, the system exits the current application and returns to **Home**. After this function is enabled, the default action of the system can be shielded.
- **Enable Keybd**: Through software, some keys on the keypad are replaced by some keys that are originally unavailable on the keypad of the iData 90UHF.

Simulate Mode

Analog input involves keypad message and key action:

- **Message(Fast)**: Analog input is faster.
- **Event(slow)**: Analog input is slower.

About

In the **About** window, you can view the version of the iScan program.

Exit

Click **Exit** to exit the iScan program.

6 Managing iData 90UHF

6.1 Installing Software

The iData 90UHF uses Microsoft Windows Mobile system, which provides infinite scalability. You can install software on the iData 90UHF. The software that can be installed is in the .cab and .exe formats.

Software in .cab Format

1. After the iData 90UHF is connected to a PC, open **My Computer** and find **Mobile Devices**. Copy the software package to the storage space of the iData 90UHF or a memory card.
2. In **File Explorer** of the iData 90UHF, find the .cab file copied to the iData 90UHF.
3. Click the file to start installation and complete installation according to the installation wizard.
4. After the software is installed successfully, the software icon is displayed in the applications window.

Software in .exe Format

After the iData 90UHF is synchronized with a PC, directly copy the .exe file to the storage space of the iData 90UHF or a memory card, open the file explorer on the iData 90UHF, and directly click the file to run it.

6.2 Removing Installed Programs

If too many programs are installed or some programs are unnecessary, select **Start** > **Settings** > **System** > **Remove Programs** to remove relevant programs.

6.3 Using Task Manager

When the iData 90UHF runs at a low speed, click **Task Manager** in the lower right part of **Home** or select **Start** > **Settings** > **System** > **Task Manager** to open the task manager, select the required programs, and click **End Task** to close the programs.

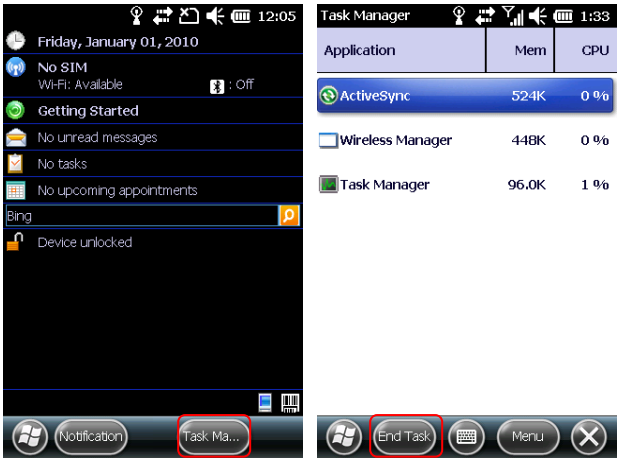


Figure 6-1 Task Manager

6.4 Using File Explorer

The file explorer can manage files in the iData 90UHF and a memory card. It can sequence and transfer the files. You can click **File Explorer** in the lower left part of **Home** or select **Start** > **File Explorer** to open the file explorer.

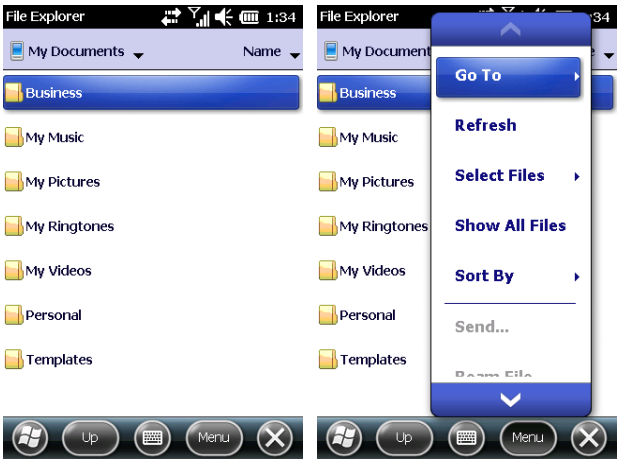


Figure 6-2 File Explorer

6.5 Restoring Factory Settings

By restoring factory settings, you can make the iData 90UHF return to the original state.

★ Caution

After the factory settings are restored, all data on the iData 90UHF will be deleted. Therefore, before performing the operation, back up important data on the iData 90UHF.

1. Select **Start** > **Settings** > **System** > **Restore Factory Defaults**. The **Restore Factory Defaults** window is displayed.
2. Enter **1234** and click **YES**.

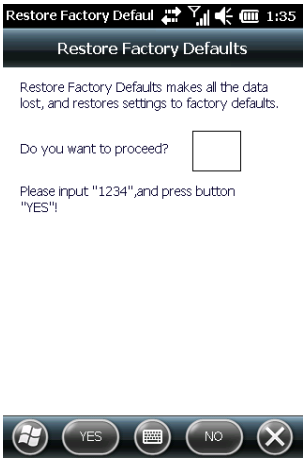


Figure 6-3 Restore Factory Defaults window

You can also press and hold the left function key + right function key + power-on/power-off key to restore factory settings.

7 Precautions and Troubleshooting

7.1 Precautions

To ensure that the iData 90UHF does not fail, follow the following precautions during use of the iData 90UHF:

- Put the iData 90UHF and its components and accessories in the places where children cannot reach.
- Keep the iData 90UHF dry. Rain, moisture and liquid contain acidic materials and will corrode the circuit board.
- Do not store or use the iData 90UHF in dusty or dirty places.
- Do not store the iData 90UHF in a place that is too hot. High temperature will shorten the service life of electronic components.
- Do not store the iData 90UHF in a place that is too cold. When the temperature inside the iData 90UHF rises, moisture is generated inside the iData 90UHF, which may damage the circuit board.
- Do not try to disassemble the iData 90UHF. Otherwise, the iData 90UHF may be damaged.
- Do not touch the screen surface of the iData 90UHF by using a pen, a pencil or other sharp articles in case the screen may be scratched.
- Do not throw, beat or violently collide the iData 90UHF. Otherwise, the components of the iData 90UHF may be damaged and the iData 90UHF may be faulty.
- Do not use strong chemical products or strong detergent to clean the iData 90UHF. If the iData 90UHF become dirty, clean the surface of the iData 90UHF by using a soft cloth soaked with dilute glass detergent.
- Please use the protective film to reduce wear as much as possible. The screen protective film can improve the availability and durability of the screen.

Pay attention to the following during use of the battery.

- The area where the iData 90UHF is charged must keep away from scraps, inflammables or chemical substances.
- When you charge the battery of a mobile device, the temperature on the battery and charger must be in the range 0°C to 40°C.
- Do not use incompatible batteries or chargers, which may cause fire, explosion, leakage or other hazards.
- Do not disassemble, press, twist, pierce or cut the battery.
- Do not make the battery short-circuited or contact the connecting terminal of the battery by using metal or other conductive objects.

- Do not insert other materials into the battery, contact the battery with water or other liquid, or expose the battery in an open fire, explosive source or other sources of danger.
- Do not put or store the battery in the environment where the temperature is too high.
- Do not put the battery in a microwave oven or a drying machine.
- Do not put the battery into a fire.
- If the battery leaks, do not let the liquid stain your skin or eyes. Otherwise, wash your skin or eyes with lots of water and go to see the doctor immediately.

Cleaning iData 90UHF

- Shell

Clean the shell by using a cloth soaked with alcohol, including keys and space between keys.

- Display screen

You can clean the display screen by using a cloth soaked with alcohol. Do not let the liquid gather around the screen. Otherwise, dry the screen by using a soft non-woven cloth in case strip marks are left on the screen.

- Scan lens

Clean the scan lens regularly by using lens paper or other articles suitable for cleaning optical materials.

7.2 Troubleshooting

Table 7-1 iData 90UHF troubleshooting

Fault	Cause	Solution
After the power key is pressed, the iData 90UHF is not powered on.	The battery volume is too low or the battery is not charged.	Charge the battery or replace the battery.
	The battery is incorrectly installed.	Correctly install the battery.
	The system breaks down.	Restore factory settings.
Battery charging fails.	The battery fails.	Replace the battery.
	The temperature of the battery is too high or low.	Put the battery in normal temperature.
During data communication, data is not transmitted or transmitted data is incomplete.	An incorrect data cable is used.	Contact the system administrator.
	The communication software is incorrectly installed or configured.	Install or reinstall the ActiveSync software to update the driver.
The relevant function is not activated after a user	The screen is incorrectly calibrated.	Recalibrate the screen.

Fault	Cause	Solution
clicks a button or icon.	The system does not respond.	Restart the system.
No sound can be heard.	The volume is too low or is disabled.	Adjust the volume.
The iData 90UHF is closed.	The iData 90UHF is in the inactive state.	After being inactive for a period of time, the iData 90UHF is closed. If the iData 90UHF is powered by a battery, set the time segment to a value in the range from 1 to 5 minutes and the interval to 1 minute. If the iData 90UHF is powered by external power supply, set the time segment to 1, 2, 10, 15, or 30 minutes.
	The battery is used up.	Replace the battery.
A message indicating that the memory of the iData 90UHF is full is displayed.	Too many files are stored in the iData 90UHF.	Remove unused memos and records. If necessary, save the records on the host or increase the storage capacity by using an SD card.
	Too many applications are installed on the iData 90UHF.	Remove applications installed on the iData 90UHF.
The iData 90UHF fails to decode a barcode when reading it.	The scan application is not loaded.	Load the iScan program in the iData 90UHF.
	The barcode is defective and the scanner cannot read it.	Check that the barcode is not defective.
	The battery volume is low.	If the scanner stops sending out laser beam after you turn on the switch, check the battery volume.

Table 7-2 Cable faults

Fault	Cause	Solution
Charging fails.	The cable is in poor contact.	Replace the cable.
The ActiveSync software cannot be connected.	The cable is in poor contact.	Replace the cable.

Table 7-3 Wi-Fi faults

Fault	Cause	Solution
An AP cannot be connected.	A message is displayed, showing that the AP is	Start the WLAN device.

Fault	Cause	Solution
	unavailable.	
	A message is displayed, showing that the AP is being connected.	The DHCP function is not enabled on the AP/router and the IP address cannot be set. In this case, set the IP address manually.
		The password of the WLAN device is incorrect.
		Too many devices access the AP at the same time. In this case, restart the AP.
		When WLAN is in Adhoc mode, modify the advanced setting of WLAN to **Access Point only**.
		The password mode of the AP is incorrect. In this case, change the password authentication mode.

Appendix

Table 1 Accessories of iData 90UHF

Component	Description
iData 90UHF	
Thick battery	
Power adapter	Used to charge the battery.
Straps	
Package	
USB data cable	Used to communicate with the host or charge the iData 90UHF.
Instructions	
Warranty card	
Four-slot battery charger	Optional
Smart pen	Optional
Bottom charging cable	Optional
Industrial-grade capacitive touch panel	Optional

Table 2 Technical specifications of iData 90UHF

Item	Description
System Configuration	
CPU	600 MHz high-performance ARM processor
Operating System	Microsoft® Windows Mobile 6.5
Memory	512 MB ROM+256 MB RAM
Expansion Slot	Mini SD card, up to 32 GB (PSAM card optional)
Display	3.5-inch HVGA (320x480), high brightness TFT LCD, LED backlight
Touch Panel	Resistive touch panel (Industrial-grade capacitive touch panel optional)
Camera (Optional)	5 Mega pixel, autofocus lens, LED flash
Exit Window	Corning® Gorilla® glass
Keypad	28-key durable industrial keypad with interior transmission light
Battery	3.7 V 6000 mAh rechargeable lithium polymer battery
Audio	Built-in microphone
Notification	Vibrator alerts/LED/Audio notification
Vibration Motor	Built-in programmable vibration motor
Operating Environment	
Development Tools	Visual Studio 2005/2008, with Software Development Kit (SDK)
Programming Language	C++, C#, .NET
Management Tools	iData Service
Operating Temp.	-10℃ to 50℃ (14℉ to 122℉)

Storage Temp.	-20℃ to 60℃ (-4℉ to 140℉)
Relative Humidity	0 to 95% (non-condensing)
Sealing	IP65
Electrostatic Discharge	Conforms to ± 15 kV air discharge, ± 8 kV direct discharge
Structural Parameters	
Dimensions (LxWxD)	189 mm x 70 mm x 43.5 mm
Weight	380 g (standard battery included)
Communication Transmission	
Wireless LAN	Wi-Fi 802.11b/g
GPS (Optional)	SiRF Star III (with A-GPS) GPS navigation chip available
Input/Output Ports	
USB Port	1 (Micro USB port)
Charger Port	1 (DC port)
RS232 Port	1
Data Collection Specification	
RFID(UHF)	
Protocol	ISO18000-6C (EPC C1G2)
Frequency	902-928 MHz
Antenna	Circularly polarized 2 dBi / Linearly polarized 1.4 dBi
Max Output Power	1 W (<30 dBm)
Data Capture Range	Within 2.5 m (3.5 m for special tags)
1D Laser Scanner	
Optical Resolution	≥ 4 mil
Scan Depth of Field	3.81 cm - 60.98 cm
Scan Angle	47°± 3° (Standard)
Scan Speed	102 ± 12 scans/sec. (Bidirectional)
1D Linear Imager	
Reading Mode	CCD
Reading Accuracy	≥ 4 mil
Decoding Speed	300 times/sec. (Max.)
2D Area Imager	
Optical Resolution	≥ 3 mil
Scan Angle	Omnidirectional
Scan Speed	300 scans/sec.
Infrared Communication Module	
Built-in Infrared Communication Module	Structure with two emitting tubes, meter reading distance of up to 5 meters, fully supporting DL/T645 protocol and communication protocols of worldwide mainstream meter manufacturers
Interface	Initial rate: 1200 bps, supported rates: 1200, 2400, 4800, and 9600 bps

This guide is prepared by Wuxi iData Technology Company Ltd. according to the existing information. The content in this document is subject to update without notice.

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