8

Wireless PAN (WPAN) Communications with Bluetooth

Overview

Dolphin terminals are available with a Bluetooth radio for WPAN (Wireless Personal Area Network) usage. When the Dolphin is first initialized, the *.cab file and module for Bluetooth are installed.

Enabling the Bluetooth Radio

Before using the radio, make sure that the Bluetooth radio is enabled. When the radio is enabled, the Bluetooth icon appears in the task tray on the Today screen.


Note: Radios are enabled in the Radio Manager; tap Start > Settings > Connections tab > Radio Manager.

Setting Up Your Bluetooth Card

Note: If you use the Get Connected! Wizard, which is recommended for normal usage, then this step is not necessary. This step would be used to change the friendly name of your device.

1. Tap the Bluetooth icon that appears in the task tray on the Today screen.

2. In the pop-up menu, select **Advanced Feature**s, then **My Bluetooth Device**. (If you installed OBEX, the menu also lists Transfer via Bluetooth.)
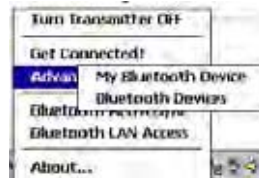
3. In the **My Bluetooth Device** screen, you can modify the **Friendly Name** and make any desired configuration changes. When done, tap **OK**.


*   In normal phone connect operation, **Discoverable** mode is not needed and should be disabled.
*   If you do enable **Discoverable** mode (e.g., for ActiveSync), note that it does not shut off by itself. To save power, remember to disable it when not needed.
*   **Connectable**, **Use Authentication**, and **Use Encryption** are also not required for printing or dial-up networking applications.
*   Check Use **Authentication** to enable the **Use Encryption** option.

Assign COM Ports

Follow these steps to view and/or modify the Bluetooth COM ports.

1. Tap on the Bluetooth icon on the Today screen. Select **Advanced Features** then **My Bluetooth Device**.
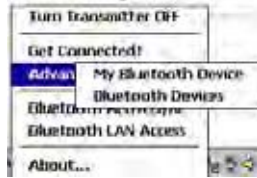
Note: If you installed OBEX, the menu also lists Transfer via Bluetooth.

2. The **My Bluetooth Device** screen appears. Tap on the **COM Ports** tab.

3. As needed, view and/or enable/disable the Bluetooth COM port assignments. Tap **OK**.

You can also disable the IrDA port to free up a port for Bluetooth devices. Tap **Start** > **Settings** > **Connections** tab > **IrDA** and select **Disable IrDA Port**.

Note: The Bluetooth Phone port cannot be disabled.

Discover Bluetooth Device(s)

Follow these steps to discover other Bluetooth devices nearby, including non-phone devices. The Device Discovery Wizard is a more detailed alternative to using the Bluetooth "Get Connected!" Wizard or Bluetooth ActiveSync or Bluetooth LAN Access options. The Device Discovery Wizard allows you to discover any type of Bluetooth device.

1. If not open, launch the **Bluetooth Devices** folder. Tap on the Bluetooth icon on the **Today** screen. Select **Advanced Features** then **Bluetooth Devices**.

2. In the **Bluetooth Devices Folder**, tap on the **Device Discovery** icon. Or you can tap on **Tools**. In the pop-up menu, select Device Discovery.

3. Follow the Bluetooth Device Discovery Wizard to search for Bluetooth devices nearby. When prompted, select the device type you seek.
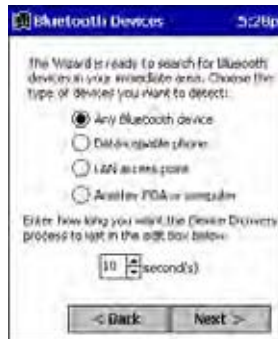
4. When the search is complete, a screen reports the discovered Bluetooth devices. Check the box next to any device you wish to save information about, (i.e., any devices you wish to connect to). Tap **Next**.

5. A service discovery phase begins, 5-10 seconds per chosen device.

6. In the next screen, tap **Finish**.

Bond With Discovered Device(s)

Follow these steps to bond with an already discovered Bluetooth device. In most cases, bonding is for establishing secure communications with a Bluetooth-enabled phone. This is a more detailed alternative to using the Bluetooth "Get Connected! Wizard."

Important!

• Do not try to bond with a Motorola Timeport 270C or Nokia 6310!
• Do not use this method to bond with a printer! The third-party printing software included on the installation CD also handles bonding.

1. If not open, launch the **Bluetooth Devices** folder. Tap on the Bluetooth icon in the Today screen. Select **Advanced Features,** then **Bluetooth Devices**.

2. Tap and hold your stylus on the Bluetooth device you want to bond with. In the pop-up menu, select **Bond**.

3. Alternatively, after selecting a device, tap on the **Bond** icon. Or tap on **Device**, then select **Bond**.
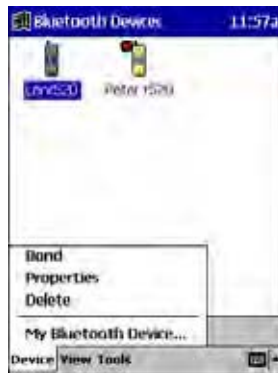
4. The **Bluetooth Device Bonding Wizard** launches. Follow the wizard to bond with your selected device.

5. As prompted, make sure the Bluetooth device that you want to bond with is in *Bondable* mode.

6. If the remote device is set up to accept bonding, a **Bluetooth Passkey** screen appears. To continue bonding, enter the correct passkey and tap **Reply**.

7. When you have successfully bonded with the other device, tap **Finish**.

View Device Properties

Follow these steps to view the properties of an already discovered device.

1. If not open, launch the **Bluetooth Devices** folder. Tap on the Bluetooth icon on the Today screen. Select **Advanced Features** then **Bluetooth Devices**.

2. Select a device. Tap on the **Properties** icon, or tap on **Device** then select **Properties**. Alternatively, you can tap and hold your stylus on the Bluetooth device you want to view information about. In the pop-up menu, select **Properties**.

3. Use the **General** and **Services** screens to research device properties. If needed, assign a new device type icon by tapping on the arrow buttons in the **General** screen. You can also use the **Device name** field to rename the device. When done, tap **OK** for the setting to take effect.

Set Up Your Favorite Device

Follow these steps to set up default devices in the **Bluetooth Devices** folder. Please note that the Get Connected! Wizard automatically assigns the favorite phone.

1. Tap **Tools** > **My Favorites**.

2. Tap on the tab for the type of device you would like to set a favorite for. If needed, use the arrow buttons to scroll and find the tab you need.


Note: Tabs appears only for COM ports you have enabled. To enable a port, refer to the "Assign COM Ports" section earlier in this chapter.

3. To select a favorite device, select **Use the favorite selected above**. In the drop-down list, select your device. Tap **OK**.

4. After setting a device as your favorite, its icon appears in the Bluetooth Devices folder with a heart next to it.

Change Views

You can switch between the **Large Icons** or **Details** views for the **Bluetooth Devices** folder.

1. In Bluetooth Devices, tap on **View**.

2. In the pop-up menu, choose between **Large Icons** or **Details**.
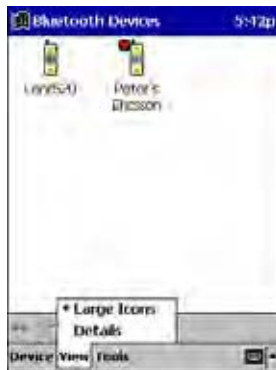
Large Icons   Details

Note: In Details view, you can see the Device Class and scroll right to see the current Bonded status.

Delete a Device From the Folder

If you no longer plan to connect with it, you can delete a device from the **Bluetooth Devices** folder.

1. If not open, launch the **Bluetooth Devices** folder.

2. Tap and hold your stylus on the device you wish to delete. In the pop-up menu, select **Delete**.

Turn Radio Transmitter ON/OFF

You may want to turn off the radio transmitter to save power or if you are entering an area with radio restrictions (e.g., an airplane).

1. Tap on the Bluetooth icon in the task tray on the **Today** screen.

2. In the pop-up menu, select **Turn Transmitter OFF**.

3. The Bluetooth Card radio transmitter shuts off. The Bluetooth icon and menu options becomes gray.

4. To turn the radio transmitter back on, tap on the gray **Bluetooth** icon. In the pop-up-menu, select **Turn Transmitter ON.**
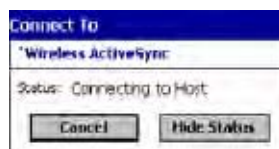
Bluetooth ActiveSync

This section explains how to quickly and easily ActiveSync to a notebook or desktop computer with Microsoft ActiveSync.

1. Tap on the **Bluetooth** icon. In the pop-up menu, select **Bluetooth ActiveSync**.

2. The next screens varies depending on if your Bluetooth Devices folder contains any computers, and if one is chosen as your favorite. Please refer to the appropriate scenario:

SCENARIO #1: Your Bluetooth Devices folder contains a favorite desktop computer.

   (a) When you tap **Bluetooth ActiveSync**, your device automatically tries to connect to your favorite computer.

   (b) The Connect To screen appears, reporting that it is trying to connect to Wireless ActiveSync.

   (c) After a successful connection is made, the status screen reports Connected. Now you are ready to synchronize files, if desired.

SCENARIO #2: Your Bluetooth Devices folder contains no favorite desktop computer.

(a) When you tap on **Bluetooth ActiveSync**, a screen appears that allows you to choose which computer to connect to in your Bluetooth Devices folder. Choose a computer from the list and tap Select, or tap **Find** to search for another computer.

Note: *If the computer you want to connect to is not listed, tap* **Find** *to begin a search. Proceed as described in Scenario #3 on page* *.*

(b) Your device attempts to connect to your selected computer.

(c) After a successful connection is made, the status screen reports Connected. Now you are ready to synchronize files, if desired.

SCENARIO #3: Your Bluetooth Devices folder contains no computers.

(a) When you tap on **Bluetooth ActiveSync**, a Bluetooth Device Search automatically begins.

*Note:* *You can also start the device search by tapping Find in the Bluetooth Devices screen.*

(b) After the search is complete, select the computer you wish to ActiveSync with and tap **Select**. If the computer is not listed, make sure the computer is discoverable and tap **Refresh** to search again.

(c) After you tap **Select**, a service discovery phase begins.

(d) The Connect To screen appears, reporting that it is trying to connect to Wireless ActiveSync.
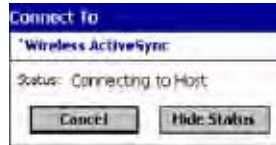
(e) After a successful connection is made, the status screen reports Connected. Now you are ready to synchronize, if desired.

Bluetooth LAN Access

This section explains how to use the Bluetooth LAN Access feature to quickly and easily connect to a Bluetooth-enabled LAN access point.

1. Tap on the **Bluetooth** icon. In the pop-up menu, select **Bluetooth LAN Access**.

2. The next screens varies depending on if your Bluetooth Devices folder contains any access points, and if one is chosen as your favorite. Please refer to the appropriate scenario:

SCENARIO #1: Your Bluetooth Devices folder contains no favorite access point.

(a) When you tap Bluetooth LAN Access, a screen appears that allows you to choose which access point to connect to in your Bluetooth Devices folder. Choose an access point from the list and tap **Select**.

Note: If your access point is not listed, tap Find and proceed as described in Scenario #3.

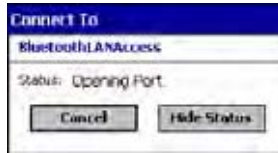(b) Your device tries to connect to the selected access point.

(c) If your LAN requires a passkey, a screen appears asking for the passkey. Enter the passkey, then tap **OK**.

(d) After a successful connection is made, the status screen reports Connected.

(e) Now you are ready to access your LAN for Internet access, files, etc.

SCENARIO #2: Your Bluetooth Devices folder contains a favorite access point.

(a) When you tap **Bluetooth LAN Access**, the device automatically tries to connect with your favorite access point.

(b) If your LAN requires a passkey, a screen appears, asking for the passkey. Enter the passkey, then tap **OK**.

(c) After a successful connection is made, the status screen reports Connected.

(d) Now you are ready to access your LAN for Internet access, files, etc.

SCENARIO #3: Your Bluetooth Devices folder has no access points.

(a) When you tap **Bluetooth LAN Access**, the device automatically begins to search for new Bluetooth devices.

Note: You can also start the device search by tapping Find in the Bluetooth Devices screen. See Scenario #2.

(b) After the search is complete, select the access point you wish to connect to. Tap **Select**. If the access point is not listed, tap **Refresh** to search again.

(c) After you tap **Select**, a service discovery phase begins.

(d) If the LAN requires a Passkey, a screen appears, asking for the Passkey. Enter the passkey, then tap **OK**.

(e) After a successful connection is made, the screen reports Connected.

(f) Now you are ready to access your LAN for Internet access, files, etc.

OBEX

This section explains how to use the OBEX (object exchange) application to trade business cards, contacts or files with another Bluetooth device that supports OBEX.

Bluetooth OBEX application supports five operations:

• Exchange Business Cards
• Send a Contact
• Send a File
• Browse Remote Device
• Receive Contact or File
• Enable File Sharing

The first four operations - exchange business cards, send a contact, send a file, and browse remote device - are client-oriented. They involve initiating an object exchange.

The last two operations - receive contact or file and enable file sharing - are server-oriented. They involve accepting objects in an exchange initiated by another Bluetooth device.

Exchange Business Cards

1. Make sure both Bluetooth devices have a business card assigned to them.
   If each device does not have a business card assigned to it, you cannot exchange business cards.

To assign a business card to your device, do the following:

• Tap on the **Bluetooth** icon. In the pop-up menu, tap **Advanced Features** > **My Bluetooth Device**.
• Tap on the **Object Sharing** tab. Under My business card, tap **Assign**

• In the next screen, select your business card and tap **OK**. If your business card is not listed, tap **Contacts** to create one.
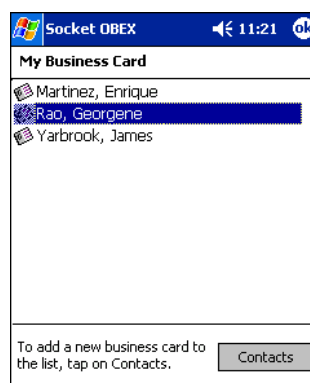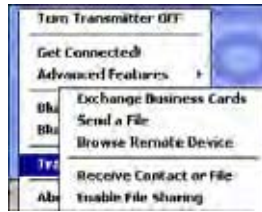

When you return to the Object Sharing screen, tap **OK**.

2. Make sure the other Bluetooth device is set up to receive a contact. The device must support the OBEX Object Push profile.

Note: If the other device is also using the Bluetooth Connection Kit, you can set it up to receive a contact by tapping the Bluetooth icon. In the pop-up menu, tap Transfer via Bluetooth > Receive Contact or File.
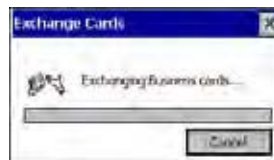
3. Now you are ready to exchange business cards. Tap on the **Bluetooth** icon. In the pop-up menu, tap **Transfer via Bluetooth** > **Exchange Business Cards**.

4. If your device has no devices in the Bluetooth Devices Folder, then it begins to search for Bluetooth devices nearby.

5. Select the Bluetooth device you wish to exchange business cards with. If the device is not listed, tap **Find**.

6. Your device begins exchanging business cards. After the exchange, the new business card should appear in your Contacts


Send a Contact

1. Make sure the other Bluetooth device is set up to receive a contact. It must support the OBEX Object Push server profile. Refer to the documentation that came with the device for instructions.

Note: If the other device is also using the Bluetooth Connection Kit, you can set it up to receive a contact by tapping the Bluetooth icon. In the pop-up menu, tap Transfer via Bluetooth > Receive Contact or File.

2. Now you are ready to send a contact. Go to your Contacts folder.

3. Tap and hold your stylus on the contact(s) you would like to send. In the pop-up menu, select **Send Via Bluetooth**.
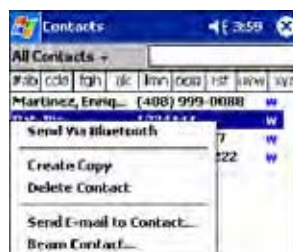
4. If your device has no devices in the Bluetooth Devices Folder, then it begins to search for Bluetooth devices nearby.

5. Select the Bluetooth device you wish to send the contact(s) to. If the desired device is not listed, tap **Find**.

6. Your device processes and sends the contact(s).

Send a File

1. Make sure the other Bluetooth device can receive a file; that device must support the OBEX Object Push server profile.

Note: If the other device is also using the Bluetooth Connection Kit, you can set it up to receive a file by tapping the Bluetooth icon. In the pop-up menu, tap Transfer via Bluetooth > Receive Contact or File.

2. Now you are ready to send a file. Tap the **Bluetooth** icon. In the pop-up menu, tap **Transfer via Bluetooth** > **Send a File**.
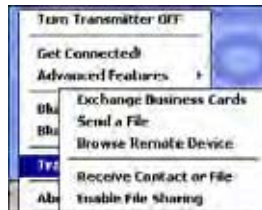
3. If your device has no devices in the Bluetooth Devices Folder, then it begins to search for Bluetooth devices nearby.
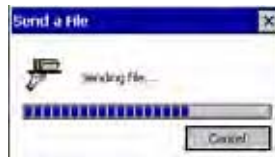
4. Select the Bluetooth device you wish to send a file. If the desired device is not listed, tap **Find**.

5. In the next screen, tap on the file you wish to send. You can use the **Folder** and **Type** drop-down menus to search for your file. Also, you can scroll horizontally to view the folder, date, size, type, and location of each file.

6. Your device sends the file.

Browse Remote Device

The Bluetooth File Explorer lets your device share files with another Bluetooth device. The other device must support the OBEX File Transfer server profile.

This section covers the following file transfer operations:

*   Prepare for file transfer
*   Send/receive file(s) or folder(s)
*   Create a folder
*   Delete file(s) or folder(s)
*   Refresh remote view
*   Connect/disconnect
*   Exit the program

Note: "Local device" refers to the device you are running the OBEX from. "Remote device" refers to the Bluetooth device you are trying to transfer files with.

Prepare for File Transfer

1. Make sure the remote device has file sharing enabled. It must support the OBEX File Transfer server profile.

Note: If the other device is also using the Bluetooth Connection Kit, you can enable file sharing by tapping the Bluetooth icon. In the pop-up menu, tap Transfer via Bluetooth > Enable File Sharing.

2. Now you are ready to browse the remote device. Tap on the **Bluetooth** icon. In the pop-up menu, tap **Transfer via Bluetooth** > **Browse Remote Device**.
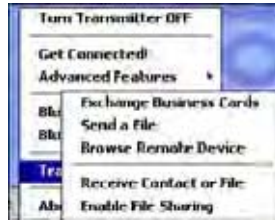
3. If your device has no devices in the Bluetooth Devices Folder that supports OBEX File Transfer, then it begins to search for Bluetooth devices nearby.


4. Select the Bluetooth device you wish to browse. If the desired device is not listed, tap **Find**.

5. Your device begins to establish a file sharing connection.

6. After the devices successfully connect, the Bluetooth File Explorer appears. Half of the screen shows contents of the remote device, while the other half shows contents of your device (the local device). The very bottom of the screen reports the connection status.
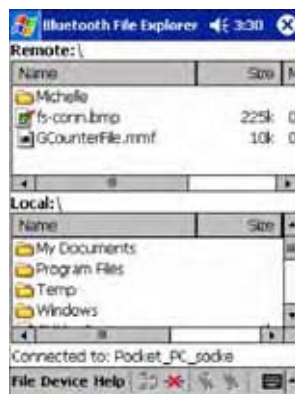
Send/Receive File(s) or Folder(s)

• Single-tap items to select them for transfer.
• Double-tap on a folders to open it and see its contents.
1. Select the file(s) or folder(s) that you wish to transfer. You can select items from only one device per transfer session.
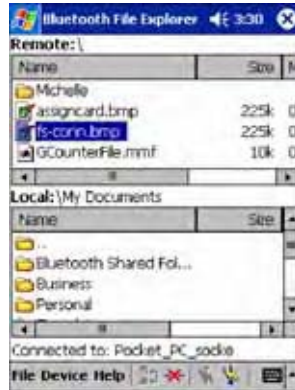

2. There are two different ways to initiate the transfer:

   • Tap **File** > **Send to remote** or **Get from remote**, as applicable. The inappropriate option should be gray.
   • Tap on the **Send to remote** icon or **Get from remote** icon, as applicable. The inappropriate icon should be gray.
3. A screen reports the status of the transfer.

4. After the transfer, a copy of each selected item should appear in the other device.

Create a Folder

1. Tap on the **File** menu. Select **Remote device** or **Local device**, wherever you want to create a folder, then tap **Create remote folder** or **Create local folder**, as applicable.
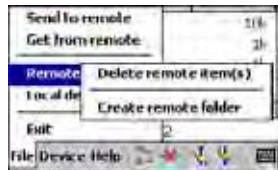
2. You can also tap and hold your stylus on an item in either the remote or local device that you wish to put in a new folder. In the pop-up menu, select **Create folder**.
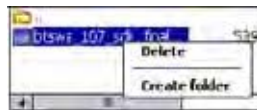
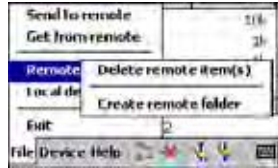3. In the next screen, enter a name for your new folder. Tap **OK**.

4. The new folder should be listed under the appropriate device.

Delete File(s) or Folder(s)

1. Select the items you wish to delete. You can only delete items from one device at a time.

2. Tap on the **File** menu. Select **Remote device** or **Local device**, wherever the items are located, then tap **Delete remote item(s)** or **Delete local item(s)**, as applicable.

3. Tap and hold your stylus an item in either the remote or local device that you wish to put in a new folder. In the pop-up menu, select **Delete folder**.
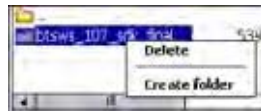
4. In the Confirm screen, tap **Yes**.

Refresh Remote View

1. Tap on the **Device** menu. Select **Refresh** remote view.

2. Your local device begins to read the contents of the remote device.

3. After a few seconds, the contents view of the remote device is refreshed.

Connect/Disconnect

To connect to the remote device, do the following:

1. Make sure the remote device has file sharing enabled.

2. Start the connection process by either of two methods:

    *   Tap **Device** > **Connect**.
    *   Tap the **Connect** icon.
3. On the next screen, select the device you wish to connect to and tap **Select**. Your device attempts to connect to the selected device.

To disconnect from the remote device, do the following:

1. Start the disconnection process by either of two methods:

    *   Tap **Device** > **Disconnect**.
    *   Tap the **Connect** icon.
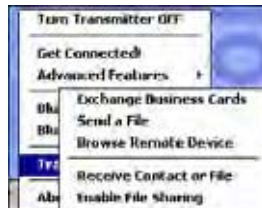2. Your device disconnects from the remote device. Afterwards, no contents are listed for the remote device.

Exit Bluetooth File Explorer

To exit the Bluetooth File Explorer, tap **File** > **Exit**.

Receive Contact or File

1. Tap on the **Bluetooth** icon. In the pop-up menu, tap **Transfer via Bluetooth** > **Receive Contact or File**.

2. The Receive Contact or File status screen appears. Your device waits two minutes for the contact or file.

3. After successfully connecting to the remote device, the screen reports Connected then disappear. The new contact or file should now be on your device.

4. If two minutes passes before you receive the item, tap **Wait Again**.

5. After you receive the file or contact, the "Receive Contact or File" feature is automatically disabled.

Enable File Sharing

1. Tap on the **Bluetooth** icon. In the pop-up menu, tap Transfer via **Bluetooth** > **Enable File Sharing**.

2. The Enable File Sharing status screen appears. Your device waits two minutes for the remote device to connect.

3. After successfully connecting to the remote device, the screen reports that you are connected.

4. If two minutes passes before you connect, tap **Wait Again**.

5. File sharing is enabled until you end it by tapping **Cancel**.

Using the Dialer

This section explains how to assign a dialing prefix and use the Dialer to dial a number directly from your Contacts list. The Dialer makes it quick and easy to perform dial-up networking.

Note: The Dialer has been verified to work with Nokia and Ericcson phones and is known not to work with the Motorola 270c, NTT Docomo Paldio 633S or Sony au C413S phone. Results may vary with other phones that are not listed as being supported by the Bluetooth system.
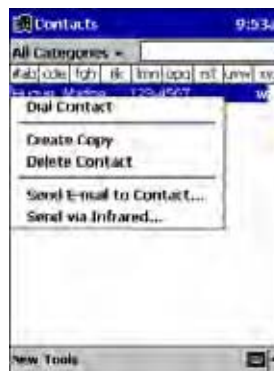
Assign a Dialing Prefix

If you have not already assigned a dialing prefix during the install process, you can do so by following these steps:

1. Tap **Start** > **Settings** > **System** tab > **Dialer**.

2. Select the appropriate Dialing Prefix, then tap **OK**.

Using the Dialer

1. To use the dialer, the device must already be connected to the Bluetooth phone. You can use the Get Connected! Wizard to do this. Also, the Bluetooth phone must be selected as your favorite.

2. Tap **Start** > **Contacts**.

3. Tap and hold your stylus on the contact you wish to dial to. In the pop-up menu, select **Dial Contact**. Alternatively, you can tap on **Tools** and select **Dial Contact**.

4. If you have multiple phone numbers for a contact, a screen appears listing them, including any dialing prefix you may have assigned. Select the phone number you wish to dial.

5. Your device connects to your phone and begins dialing.

The Dialer can dial a phone number containing any of the following non-numeric characters:

*   #   +   .   /   !   @   -   \   space   A   B   C   D   T   P   W

The following string can also be included in a phone number: (',')

The Dialer cannot dial a phone number containing non-numeric characters other than those listed above. Hand Held Products recommends that you follow the standard Microsoft Outlook format for phone numbers.

Get Connected Wizard

The Get Connected! Wizard guides you through a one-time setup process that prepares the device and phone for Bluetooth connections. The wizard varies depending on what phone you want to connect to.

Ericcson, Nokia 6210, NTT DoCoMo, Sony Phones

1. Tap on the **Bluetooth** task tray icon. In the pop-up menu, select **Get Connected!**

2. Follow the Bluetooth "Get Connected!" Wizard. In the second screen, use the drop-down list to select your Bluetooth phone. The wizard provides tailored instructions based on your selection.

3. Follow the next screen(s) to prepare your specific phone for Bluetooth connections. You may need to do 1, 2 or all of the following steps:

   (a) Naming your Bluetooth phone
   (b) Setting your Bluetooth phone in Discoverable mode

(c) Preparing your Bluetooth passkey.
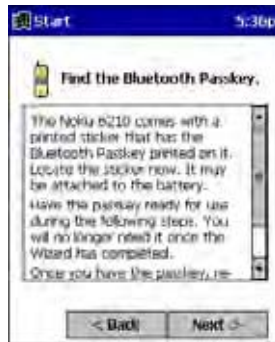
4. When the search is complete, a list of the discovered Bluetooth phones appears. Choose the phone you wish to connect to, and tap **Select**. A service discovery phase begins, about 5-10 seconds.

5. As prompted in the next screen, prepare your phone for bonding. For instructions on setting your phone to "Bondable" or "Pairable" mode, refer to your phone manual. Have your passkey ready, then tap **Next>**.

6. In the next screen, enter the passkey. Tap **Reply**.

7. The mobile phone may then either automatically accept the passkey or ask you to enter one. If prompted for a passkey, use the same one you entered on the mobile computer.

Note: Ericsson T68/T68i only: When the phone asks you if you want to bond, select 2: Add to paired devices. Do not tap ACCEPT.

8. Tap **Finish**. After successfully connecting, the phone appears in the Bluetooth Devices folder. On the Today screen, the Bluetooth icon blinks. You do not need to run the Get Connected! Wizard again unless you plan to switch between different phones.

Note: You may also switch between different phones by assigning a new "favorite phone" in the Bluetooth Devices folder.

Motorola Timeport 270C, Nokia 3650/6310/7650/8910/8910i

1. Tap on the **Bluetooth** task tray icon. In the pop-up menu, select **Get Connected!**

2. Follow the Bluetooth "Get Connected!" Wizard. In the second screen, use the drop-down list to select your Bluetooth phone. The wizard provides tailored instructions for your phone.

Note: The screens below are for the Nokia 7650.

3. As directed on the next two screens, assign the phone a unique name, set the phone to Discoverable mode, and tap **Next**.

4. The device searches for the phone. When the search is over, a list of the discovered Bluetooth phones appears.

5. Choose the phone you want to connect to, and tap **Select**. A service discovery phase begins, about 5-10 seconds.

6. The next two screens describe procedures you complete outside of the wizard. Read through each screen but do not complete the described procedures until you exit the wizard.

> **Bonding with your phone** - This must be completed to establish the Bluetooth connection and involves dial-up networking.

> **Automatic Connections** - This procedure is optional but makes future Bluetooth connections more convenient.

7. Continue to the last screen of the wizard and tap **Finish**. Now proceed to STEP 6 to complete the bonding process and, if desired, set up automatic connections.

Dial Up Connection

Complete the following steps to create a new Bluetooth internet connection via an ISP. Before setting up dial-up networking, prepare yourself with dial-up information and other necessary settings from your office network or isp. Also, refer to Microsoft's connection manager for additional information.

1. Tap **Start** > **Settings** > **Connections** tab **> Connections**.

2. In the top field, select **Internet Settings** and tap **Modify**. Then, tap **New**.

3. Name=A name that you will remember for future connections.
   Modem=**Bluetooth Phone**.
   Baud Rate=**115200**.

4. Tap **Next**.

5. In the Phone number field, enter the dial-up number. Tap **Next**.

6. Uncheck **Wait for dial tone before dialing**. Tap **Finish**.

7. Now you are ready to start the connection. In the Connections screen, under Internet Settings, tap **Connect**. In Network Log On, verify the dialing settings. Tap **OK**.
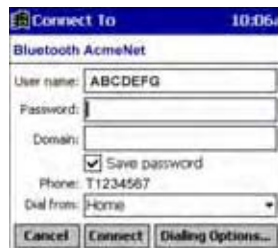
Automatic Connections for Motorola Timeport 270C:

- On the phone, press MENU.
- Scroll to Settings, then press SELECT.
- Scroll to Connection, then press ON.
- On Bluetooth Link, press SELECT.
- Scroll to Devices, then press SELECT.
- Choose your mobile computer, then press EDIT.
- Scroll to Access:Ask, then press CHANGE.
- Scroll to Automatic, then press SELECT. Press DONE.

Automatic Connections for Nokia 3650/7650:

- On the phone, press MENU.
- Scroll to Connectivity, then press OPTIONS.
- The Open option should be highlighted. Press SELECT.
- The Bluetooth option should be highlighted. Press OPTIONS.
- The Open option should be highlighted. Press SELECT.

- Scroll to the right tab to access the Paired devices list. Highlight your mobile computer, then press OPTIONS.
- Scroll to Set as authorized, then press SELECT.
- In the confirmation screen, press YES.

Automatic Connections for Nokia 6310/8910/8910i:

- On the phone, press MENU.
- Scroll to 10 Bluetooth, then press SELECT.
- Scroll to 4 View Paired Devices, then press SELECT.
- Highlight the Dolphin terminal, then press OPTIONS.
- Scroll to 3 Request Connection Authorization, then press NO.

To use a different Bluetooth phone for dial-up networking, you can use the same connection setup, but you must make the new phone your favorite. Just run the Get Connected! Wizard again, select the new phone, and make it your new Favorite when prompted.

9

Wireless WAN (WWAN) Communications with GSM/GPRS

Note: The Dolphin 9500 is the only terminal in the Dolphin 9500 Series that can be configured with an integrated Siemens[®] GSM/GPRS tri-band radio module for WWAN communications.

Overview

GSM Short for Global System for Mobile communications, GSM is an open, non-proprietary wireless WAN system that is constantly evolving and growing. One of its great strengths is international roaming capability, which provides standardized dialing in more than 170 countries.

GPRS Short for General Packet Radio Service, GPRS is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks.

Enabling the GSM/GPRS Radio

The radio driver for GSM is installed and enabled by default after each hard reset. Before using the radio, make sure that the GSM radio is enabled. For details, see Using the Radio Manager on page 4-15.

Tri-Band Antenna

Dolphin terminals configured with a GSM/GPRS radio feature a tri-band antenna that supports 900, 1800 and 1900 MHz frequencies for worldwide mobile applications.
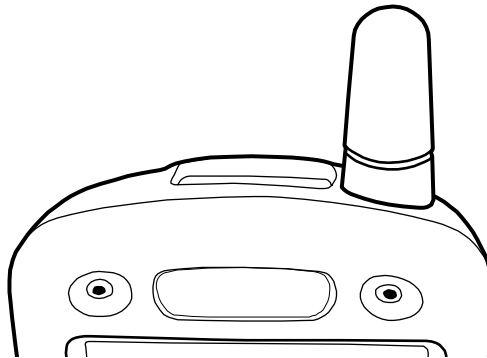
Requirements

Using GMS/GPRS on a Dolphin terminal requires a:

• Network subscription to a GSM/GPRS network (you need to know what service providers are in your geographic area), and
• SIM card that has been activated by the network service provider installed on the terminal.

Capabilities

Dolphin terminals with integrated GSM/GPRS radios are optimized for the following two-way voice and data communications:

• GSM voice data ("dial-up")
• SMS (Short Message Service) text messages
• GPRS Class 10 - data transmissions average 40-60 Kbps (wireless network carrier dependent)

SIM Card Installation

Short for Subscriber Information Module, a SIM card stores the subscriber's personal information, GSM/GPRS radio settings, security keys, contacts, etc. SIM cards are installed in compatible mobile devices, enabling you to switch devices without losing personal and setup information.

### SIM Card Requirements

Before installing the SIM card:

• The SIM card **must** be activated by the service provider.
• The terminal **must** be powered down.
Note: If no SIM card is installed, you can still make emergency phone calls such as 9-1-1, for example.

To Install a SIM Card

On the Dolphin 9500 terminal, access to the SIM card is located under the battery well, which enables easy access to the SIM card while securing it under an installed battery.

1. Turn off your terminal and lay it face-down on a flat surface.

2. Remove the battery pack; see
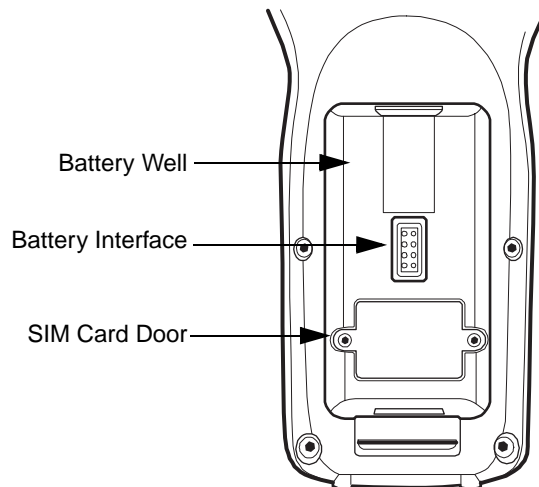
3. Unscrew the faceplate of the SIM card door. You **must** use a Torx T6 wrench. You can purchase this wrench from Hand Held Products, part number 100001700.

4. Insert your SIM card. Make sure the interface on the card is connected to the SIM Card interface in the slot; the beveled corner is in the upper right corner.

5. Place the SIM card door over the secured SIM card and fasten the screws.

Screws

SIM Card Door

SIM Card

SIM Card Interface
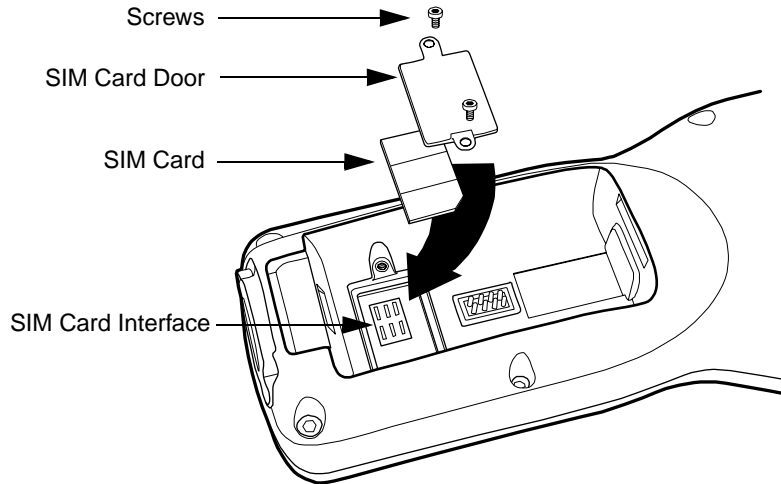
6. Install the battery pack and turn on the terminal.

Audio Modes

The back panel of the Dolphin 9500 contains both a speaker and a microphone that you can use to send and receive audio signals over the GSM network; see Back Panel Features on page 3-4.

There are three audio modes:

Handset	Handset mode is when you use the use the back panel of the terminal just as you would a cell phone, holding the speaker to your ear to receive audio information and the your mouth over the microphone to send audio information. This is the default audio mode.
Headset	Headset mode is when you plug a headset into the audio jack and speak into the microphone. You must use a 2.5mm plug; no other audio plug will fit.
Hands-Free	Hands-free mode is when you use the back panel of the Dolphin 9500 as a speakerphone. To switch the back panel to speakerphone, in the Dialler, tap **Settings** > **Speakerphone**. The audio levels adjust appropriately for speakerphone use.

Keyboard Combinations for Calls

Each keyboard option contains a key combination to send and end a call using the Red modifier key.

Keyboard	To Send, Press…	To End (reject), Press…
35-key keyboard	Red + SP	Red + DEL
43-key keyboard	Red + D	Red + H
56-key keyboard	Red + 3	Red + 6

Volume Control

Use the Dolphin keyboard to manually adjust the volume.

To raise the volume, press the Blue modifier key + up arrow

To lower the volume, press the Blue modifier key + down arrow

Using uPhone

The uPhone Application Suite contains three programs that function together to provide a complete voice, data, and text messaging solution for a mobile device fitted with a radio modem:

- **Dialler** emulates a mobile phone and is used to make and receive telephone calls.
- **Call Log** displays a list of the most recent calls.
- **SMS Manager** is a text messaging program.

Accessing uPhone

Tap **Start** > **Programs** > **uPhone**. Tap one of the icons to launch the program.
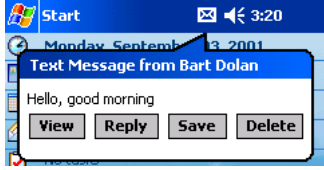

Navigation Bar Icons
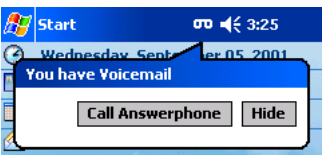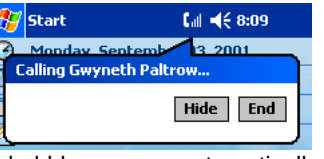
When the Dialler or SMS Manager applications are not open, the icons in the Navigation bar at the top of the screen indicates the status of the phone and messaging system. Each icon indicates s specific action and, when tapped, displays a bubble window that lets you know what is happening.
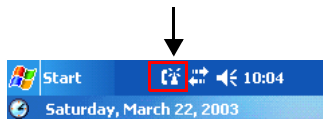
Icons and Bubble Messages

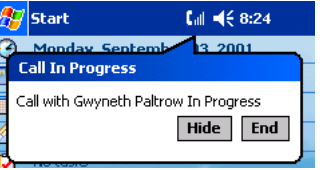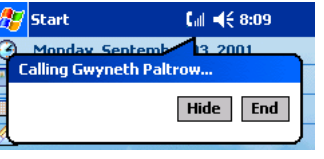| Icon	Description	Tap this icon to display:	Bubble Options
	The phone is off.		Tap **Power Phone On** to turn the phone on and close the bubble. Tap **Hide** to leave the phone off and close the bubble.
	The phone can only make emergency calls. This usually means there is no SIM card installed or PIN number established.		Tap **Hide** to dismiss the bubble. This icon will appear in the Navigation bar until a SIM card is installed or a PIN is entered.
	The phone is registering on the network.		Tap **Hide** to dismiss the bubble. This is a temporary state. This icon appears only until the phone is registered on the network.
	The phone is on and registered. To the right of the phone is a bar that indicates signal strength.		Tap **Hide** to dismiss the bubble. Tap **Power Phone Off** to turn off the phone. The icon in the Navigation bar changes to indicate the phone is now off.
	Medium signal strength.		

Icons and Bubble Messages
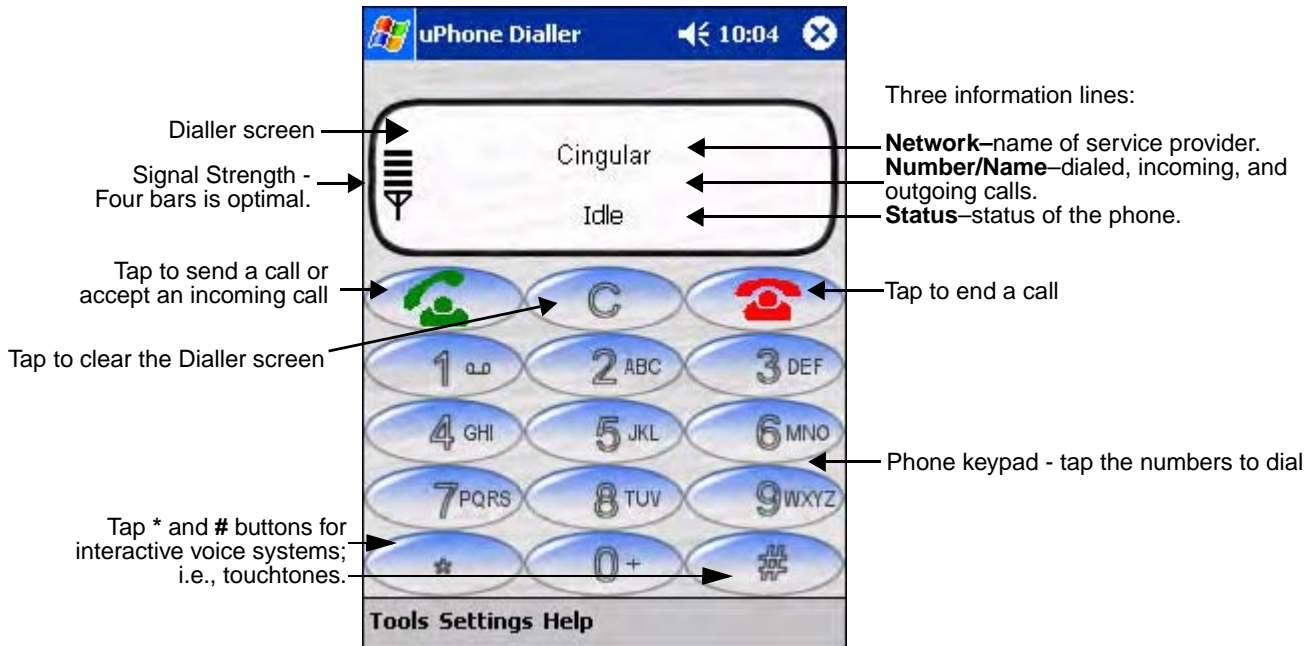
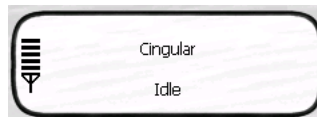| Icon	Description	Tap this icon to display:	Bubble Options
	Good signal strength.		
	Full signal strength.		
	Incoming SMS message available.	This bubble appears automatically when a new SMS message is received. It contains the sender's information and the first line of the text message.	Tap **View** to display the full message in SMS Manager. Tap **Reply** to switch to the SMS Manager Compose screen. The 'To:' field is auto-filled with the sender's address. Tap **Save** to put the message in the SMS Manager Inbox. Tap **Delete** to delete the message. Tapping each button closes the bubble.
	A new voicemail message is available.	This bubble appears automatically when a voicemail notification is received.	Tap **Call Answerphone** to dial the Answerphone service and retrieve voicemail messages. Tap **Hide** to close the bubble.
	There is a call in progress to the name or number shown in the bubble.		Tap **Hide** to close the bubble. Tap **End** to end the call.
	This icon appears when there is a call coming in or going out. A different bubble displays for each circumstance. If the incoming call is a conference call, a different bubble displays.	For a call going out	Tap **Hide** to close the bubble. Tap **End** to end the call.
		This bubble appears automatically when a call comes in and while the ringtone sounds.	If the caller is in the Phonebook, the name displays. If not in the Phonebook, the caller's number displays; if the number can't be read, "no number" displays. Tap **Answer** to answer the call; this places any current call on hold. Tap **Reject** to reject the call.

Using the Dialler

The Dialler is the is the program that manages your GSM/GPRS cell phone calls.

To launch the Dialler, tap **Start** > **Programs** > **uPhone** > **Dialler**. The program launches and the uPhone Dialler screen opens:

Dialler screen →

Signal Strength - Four bars is optimal. →

Tap to send a call or accept an incoming call →

Tap to clear the Dialler screen →

Tap * and # buttons for interactive voice systems; i.e., touchtones. →

Three information lines:

Network–name of service provider.
Number/Name–dialed, incoming, and outgoing calls.
Status–status of the phone.

Tap to end a call

Phone keypad - tap the numbers to dial

Making a Call
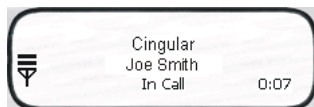
Entering a Phone Number

You can:

- **Enter the numbers manually** using the phone keypad on the Dialler screen, the SIP, or the Dolphin keyboard.
    - As you enter each number, the digits appears on the Dialler screen in the **Name/Number** line. If a contact matching the entered number is found in the Phonebook, the name of the contact appears in the **Name/Number** line as you type; tapping on the name enters the rest of the number automatically.
- **Use the Phonebook** to
    - Select an existing contact.
      Tap **Tools** > **Phonebook**, select a name or number in the list, and tap **OK** (you can also tap and hold on the entry). The number is automatically entered in the Dialler and appears on the screen.
    - Use speed dial.
      Tap and hold on the list to see a popup menu of speed dial numbers.
- **Use the Call Log**
    - When the phone is in Idle status, you can tap the **Send** button on the screen , press the ENTER key, or tap **Tools** > **Call Log** to see a list of the last 20 calls made or received. Tap and hold on an entry in the list and select **Dial**. Pressing the **Send** button or ENTER key performs this function only when the phone is in an Idle Status.

Sending a Call

You can:

- Tap the **Send** button .
- Press the ENTER key on the keyboard.
- Press the appropriate key combination on the keyboard.

When the call is connected, the three information lines display the following:
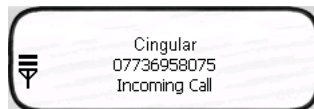

Network Operator	Displays the name of the service provider you are using.
Name/Number	Displays the name and/or number you called. If the number is from your Phonebook, that entry displays.
Status	The status of the call. **Idle** - means no calls are incoming or outgoing. **In Call** - means a phone call is in progress. **Incoming Call** - means that a a call is coming in.
0:00	The numbers in the lower, right corner display the minutes:seconds that have elapsed.

Receiving a Call

When the Dialler screen is open and an incoming call is detected, text is displayed on the Dialler screen. If the Dialler is not visible at the time of the incoming call, a Navigation Bar notification appears.

When a call is coming in, the ringtone sounds and the three information lines on the Dialler screen display the following:

Network Operator	Displays the name of the service provider you are using.
Name/Number	Displays the name and/or number calling in. If the number is in your Phonebook, that entry displays.
Status	Incoming Call.

Answering a Call

You can:

- Tap the **Send** button .
- Press the ENTER key on the keyboard.
- Press the appropriate key combination on the keyboard.

Rejecting a Call

You can:

- Tap the **End** button .
- Press the appropriate key combination on the keyboard.

Call Waiting

If call waiting is enabled, a second incoming call can be received while a first call is in progress. The second incoming call uses a different ringtone but displays the same incoming call notification.

If a second call is coming in, answering it automatically places the first call on hold. You can also reject the second call by tapping the **End** button.

Ending a Call

To end or reject a call, you can:

- Tap the **End** button [icon].
- Press the appropriate key combination on the keyboard.

Call Waiting	If two calls are in progress, the above options end the active call and place the other on hold. To activate the call on hold, tap **Send** or press ENTER or the key combination to send calls. To end the call on hold, tap **End** or press the key combination to end calls on the keyboard.
Conference Call	If a conference call is in progress, tap **End** or the key combination to end calls.

Call Waiting

The uPhone Dialler supports call waiting functionality. This means that you can receive a second call while on a first call.

Placing the Current Call on Hold

When a second call is coming in, to place the current call on hold

- Tap the **Send** button [icon].
- Press the ENTER key on the keyboard.
- Press the key combination for sending calls on the keyboard.

The Status line of the first call changes to **Call on Hold**. Tapping **Send** [icon] again restores the call on hold.

Making a Second Call	To make a second call, place the current call on hold, then dial the second number. When there are two calls (one active and one held) the status line displays **In Call, Call on Hold**.
Switching Between Calls	To switch between the active and held call, tap **Send**, press ENTER, or the appropriate key combination to send calls. The display is updated to show the active call details, and that the other call is on hold.

Making Conference Calls

In addition to supporting call waiting functionality, the uPhone Dialler enables you to join two calls into a conference call. When two calls are in progress, tap the phone icon on the Navigation bar. This opens a bubble dialog that enables you to conference both calls into one.

Button	Tapping this button…
Hold Active and Accept Held	Swaps between the currently held and active calls. Tapping **Send** or pressing ENTER performs the same function without opening this bubble dialog.
End Active and Accept Held	Drops the current active call and connects the held call.
Join Held in Conference Call	Connects the held call and the currently active call in a three-way conference call. More than three parties can join a conference call via networking; each of the other parties can add another call to the conference, and so on.

Button	Tapping this button…
End Held	Drops the held call, and continues with the currently active call.
Hide	Closes the bubble.

Touchtones

To transmit touchtones for interactive voice systems while in a call, you can
- Tap the **0-9**, *****, and **#** buttons on the uPhone Dialler screen.
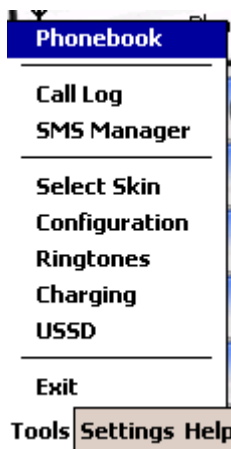- Press 0-9 keys on the Dolphin keyboard; use the uPhone Dialler screen buttons for * and #.

Dialler Menus

There are three menus in the Dialler application:
1. **Tools** - Accesses application tools.
2. **Settings** - Opens application settings.
3. **Help** - Opens the About screen.

Tools Menu

The Tools menu provides the following options:

Menu Item	Description	See Page
Phonebook	Displays the Phonebook	9-10
Call Log	Opens the Call Log	9-14
SMS Manager	Opens the SMS Manager Inbox	9-20
Select Skin	Selects a new skin for the uPhone Dialler application.	N/A
Configuration	Opens the uPhone Configuration control panel.	9-15
Ringtones	Opens the ring tone selection control panel.	9-11

Menu Item	Description	See Page
Charging	Displays call meter values.	9-12
USSD	Sends text messages via USSD as opposed to SMS.	9-13
Exit	Exit the uPhone Dialler.	

Settings Menu

Speakerphone Toggles speakerphone mode on and off. When an audio plug (for a headset) is inserted into the audio jack (2.5mm), Speakerphone is inactive on this menu.

Mic mute Toggles microphone mute on and off (the other party cannot hear a private conversation when the microphone is muted). This mode is active only during a call and automatically cancelled at the end of a call.

A checkmark to the left of the menu item indicates that the mode is active. When the menu item is grayed-out, it is unavailable and cannot be selected.

Phonebook

The Phonebook contains the contacts from the SIM card and Pocket Contacts. If fixed dialing is set in the SIM, then only those numbers in the fixed dialing list are shown in the Phonebook, and only these numbers can be called from the Dialler.

You can access the Phonebook manually by opening the Dialler and going to **Tools** > **Phonebook**. When you tap and hold on an entry, a popup menu displays.
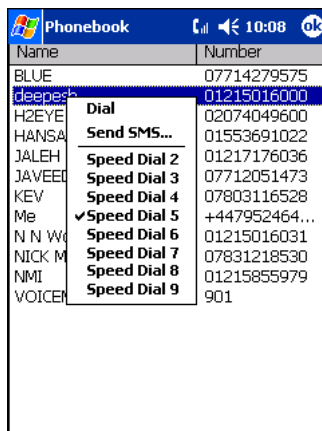
Dial Opens the Dialler with the number entered ready for dialing.

Send SMS Opens the SMS Manager in the Compose screen with the 'To:' field populated with the number.

Speed Dial 2-9 These eight slots are used to assign the Dialler Speed Dial keys. To assign a number to a Speed Dial slot, tap on an entry to assign the number. Tapping and holding the associated button when in Dialler will automatically dial the assigned contact.

Ringtone Configuration

Different ringtones, with individual volume settings, can be set for the following:

Ring Tone	Sounds on an incoming call.
Message Tone	Sounds on an incoming SMS or Voicemail notification.
Call Waiting Tone	Sounds to indicate an incoming call while you are already on a voice call.

You can access Ringtones two ways:

1. Tap **Start** > **Settings** > **Personal** tab > **Ringtones** icon OR

2. Open the Dialler (tap **Start** > **Programs** > **uPhone** > **Dialler**) and tap **Tools** > **Ringtones**. The Ringtones screen opens displaying the current settings.
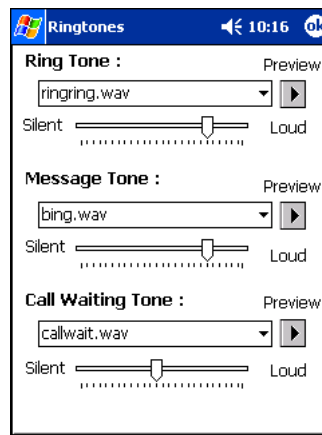
Select the desired ringtone for each type of tone in the drop-down lists. Tapping **OK** saves any changes. Opening another screen without tapping **OK** discards any changes.

WAV Files

You can customize your ringtones with *.wav files installed on your terminal. To appear here, *.wav files must be stored in the **Programs Files** > **uPhone** >**Ring Tones** folder.
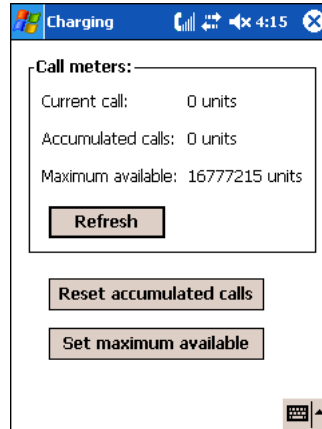
Previewing Tones

You can preview each tone by selecting the *.wav file in the drop-down list and tapping the **Preview** button. Use the slider to set the volume for each tone.

While the tone is playing, the Preview button changes to a **Stop** button; tap it to stop the preview.

Charging

Accessed from the Tools menu, the Charging tool displays call meter values from the network service provider. Tap **Tools** > **Charging** and the Charging window opens displaying the current values for the phone.

| Field	Description
Call meters	
Current call	Displays the number of charge units used on the current call.
Accumulated calls	Displays the number of charge units used to date.
Maximum available	Displays the maximum number of units available from the subscriber.
Refresh	Updates the Current call and Accumulated calls fields with the number of charge units used, read from the SIM card.
Reset accumulated calls	Display a window for the subscriber to enter a PIN number–"PIN2"–from the subscriber. When the correct PIN is entered, the accumulated call units are reset to 0 on the SIM card.
Set maximum available	Display a window for the subscriber to enter a PIN number–"PIN2"–from the subscriber. When the correct PIN is entered, the maximum available charge units for the user is set on the SIM card.

USSD

Short for Unstructured Supplementary Service Data, (USSD) is a technology unique to GSM that enables session-based text-messaging as opposed to SMS, which is store-and-send text-messaging. Turnaround response times for interactive applications are generally shorter for USSD than SMS. USSD is not currently available on all carrier networks.

USSD communicates with a USSD application portal, a news portal or a chat session with a co-worker.

Tap **Tools** > **USSD**.
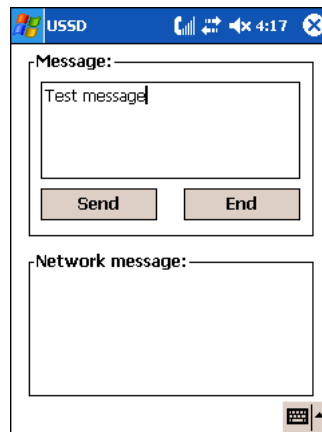
|	
Send	Sends the text entered in the Message section and begins the USSD session.
End	Ends the USSD session.
Message	Enter text to a USSD portal.
Network message	Displays the USSD message received from the network, allowing a session-based interaction.

Call Log

The Call Log maintains a list of the last 20 calls made or received in each of the following categories:

* Voice Calls In (Default)
* Voice Calls Out
* Voice Calls Missed
* GPRS Data

You can access the Call Log two ways:

1. Tap **Start** > **Programs** > **uPhone** > **Call Log** OR

2. Open the Dialler and tap **Tools** > **Call Log**.

The Call Log opens displaying the last few Voice Calls In; the most recent call always appears at the top.
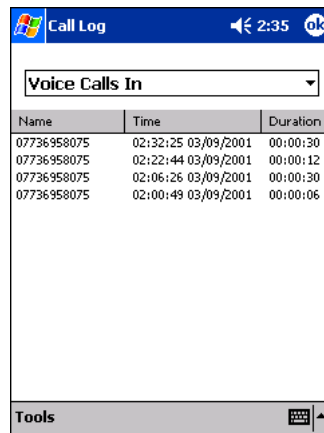
Name	The phone number or the name if the call was from or to a matching entry in the Phonebook.
Time	Time and date the call started. This is the local time and date.
Duration	Duration of the call (hours:minutes:seconds). The clock starts when the call connects, not when dialed.

From the drop-down list, select the option you want to view.
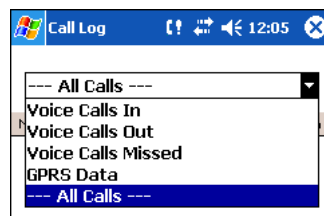
To see everything, select **All Calls**.

Tools Menu

Clear	Deletes the entire Call Log.
Exit	Closes the Call Log.

uPhone Configuration

uPhone Settings enable you to establish the normal operating parameters for uPhone applications.

Requirements

To open the uPhone configuration tools, the GSM radio **must** be enabled and an active SIM must be installed. The configuration tools access the network directly. If you are not connected, settings cannot be configured and you will receive an error notification when you attempt to open the configuration tools.

Accessing uPhone Configuration

You can access uPhone Settings two ways:

1. Tap **Start** > **Settings** > **System** tab > **uPhone** icon .

2. In the Dialler application, selecting **Tools** > **Configuration**.

An animated wait icon displays the following message while the system accesses the network.

If there is no response from the network within 60 seconds, this message times-out and the control panel closes.
If the network responds, the uPhone Settings screen displays; the General tab appears first by default.

Tab Windows

uPhone Configuration consists of five tabs: General, Network, Divert, Bar, and Messaging.
Tapping **OK** accepts any changes and exits the uPhone Configuration.

General Tab

*(screenshot: uPhone Settings — General tab)*

Field	Description
Phone Number	This is the phone number stored on the SIM. It is displayed here for information only.
Answerphone	This is the number to dial to retrieve voicemail messages. To enter a new number, tap on this field and enter the digits.
Call waiting	Select **On** or **Off** to enable or disable call waiting functionality. Call waiting must be set to On for conference calls.
PIN protection	Select **On** or **Off** to enable or disable PIN protection. If enabled, a PIN number is requested when the phone is switched on.
Change PIN	This button is active only if PIN protection is set to **On**. Otherwise, the button is grayed-out. If you tap **Change PIN**, a dialog box appears enabling you to change the PIN. *(screenshot: uPhone Settings — Please enter PIN dialog)* Enter the PIN. Tap **OK** to save the change. While typing, the numbers appear as asterisks to hide the number from observation by third parties.

Network Tab

The Network tab provides the ability to choose between **Automatic** and **Manual** network selection.
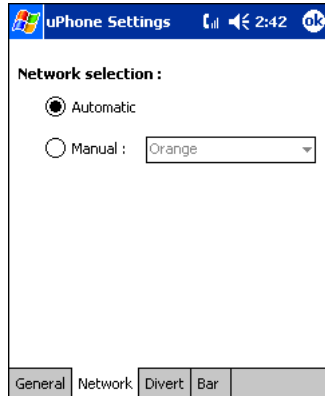
If you choose **Manual** network selection, the drop-down list of available networks activates. Choose a network from this list and tap **OK**. A wait icon appears while the system accesses the selected network.

Divert Tab

The divert tab enables you to select divert options for incoming calls when you are unavailable to answer; e.g., when the phone is off, you are out of network coverage, busy, or not able to answer.

All Calls diverts all incoming calls automatically.

Unavailable diverts incoming calls when you are unavailable.

The options in both lists are as follows:

Not Diverted   Select this option to not divert calls. This is the default setting for both All Calls and Unavailable lists.

Answerphone   Select this option to divert calls to voicemail.

To number   Select this option to forward incoming calls to another number.

Bar Tab

The Bar tab sets enables you to bar both incoming and outgoing calls.
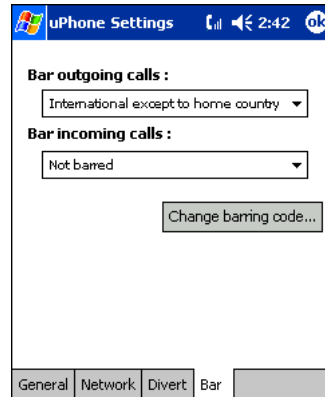
Bar outgoing calls Select one of the following options from the drop-down list:

| Not barred	No restrictions on outgoing calls.
International calls	Bar international calls.
International except…	Only international calls to the home country designated on the SIM card can be made.
All outgoing calls	Bar all outgoing calls.

Bar incoming calls Select one of the following options from the drop-down list:

Not barred	No restrictions on incoming calls.
Incoming calls when…	Bar incoming calls when the network coverage is in roaming status.
All incoming calls	Bar all incoming calls.

Change barring code Tap this button to change the barring code.
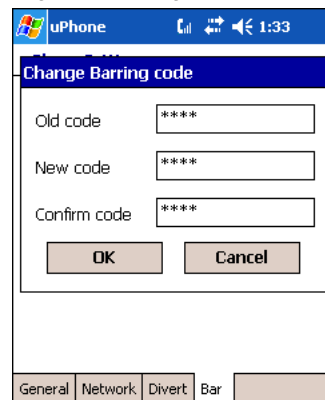
In the **Old code** field, enter the current code, and enter the new code in the **New code** and the **Confirm code** fields. While typing, the numbers appear as asterisks to hide the number from observation by third parties.

To save the barring options, tap **OK**. The system displays a dialog requesting the barring password before sending the updated settings to the network. Type in the password and tap **OK**.

Messaging Tab

The Messaging tab enables you to adjust the default SMS settings.
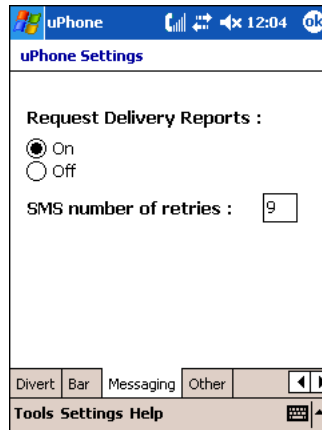
Request Delivery Reports

By default, the SMS manager receives a confirmation report that each SMS message has been sent. These confirmation reports can take up valuable space and memory. Therefore, you can cancel these reports on this tab by selecting Off and tapping **OK**.

SMS number of retries   This setting enables you to control the number of times the system will try to send an SMS message until the message is sent. Nine is the default number. To change the default, enter the number in the field and tap **OK**.

SMS Manager

Abbreviated for Short Message Service, SMS enables the transmission of short messages (140-160 characters) to and from a cell phone. SMS messages travel over the system's control channel, which is separate from the voice channel.

SMS Manager supports creation, sending, receiving, and storing of SMS text messages. Text messages sent or received can be up to 160 characters long.

Opening the SMS Manager

You can access the SMS Manager two ways:

1. Tap **Start** > **Programs** > **uPhone** > **SMS Manager**, OR

2. Open the Dialler (**Start** > **Programs** > **uPhone** > **Dialler**) and tap **Tools** > **SMS Manager**. The SMS Manager opens to the Inbox, which displays a list of your most recent text messages.
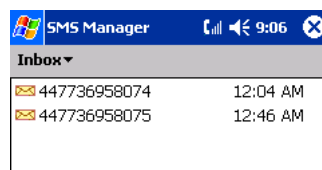
There are three folders: Inbox, Sent, and Outbox. Tap the **Inbox** folder to see all three folders. The name of the folder appears in the gray bar just under the title bar.
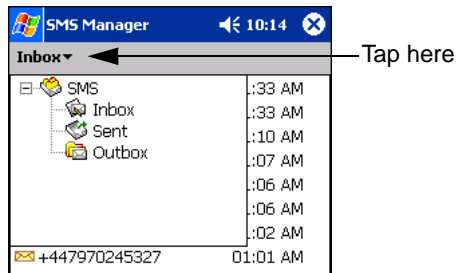
Note: Click the SMS box to expand and collapse the folders.

Inbox

The Inbox folder displays received text messages. Received messages have an envelope icon to the left. The Inbox folder also receives error messages from text messages that could not transmit successfully.

When the Inbox folder is selected, received messages appear in the list.

To	Do this…
Open a message	Tap on the message and the content of the message appears.
Delete a message	Tap and hold on the message. Tap **Delete** on the popup menu that appears.
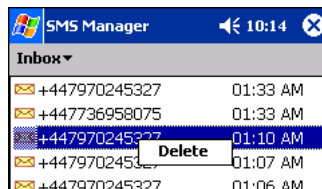
Sent Folder

The Sent folder displays sent messages.

Outbox Folder

The Outbox folder displays text messages waiting to be sent.

Sending an SMS Message

1. In the task tray at the bottom of the screen, tap **New**. The new message screen opens with the cursor active in the text area.

2. Tap inside the **To:** field. To add the number, you can type it in or tap **To:** to select an entry from your Phonebook.

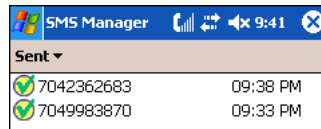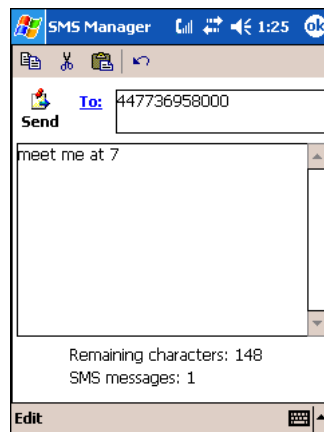   - You must type a number that is in the appropriate international ISDN format for the country you are dialing. However, you can dial a local number without the country code.
    - Destination numbers *can* start with a "+" sign.

3. Tap inside the text area. To write a message, you can use the SIP or the terminal keyboard.

The **Remaining characters** field displays how many characters you can type in a message. Because 160 is the maximum number of characters per message, the number portion of the field counts backwards from160 as you type.

4. When finished typing, tap the **Send** icon to transmit the message **Send** .
    *If you tap **OK** before tapping Send, the program requests confirmation before discarding the message.*

5. The **Sending message** box appears over the message.

6. When the message has been sent, the **Message sent** box appears.

Icons at the Top of the Message Screen

Icon	Description
At the top of the window:	
	Copy selected text.
	Cut selected text.
	Paste text.
	Undo the previous action.
	This icon appears only in a message that has been sent. Tapping this button will re-send the message.
In the task tray at the bottom of the window:	
	Send all messages in the Outbox.

Edit Menu

The Edit menu provides the same options as the icons at the top of the screen, with the following additional options:

Select All   Selects all text in the active message section.

Clear Selection   De-selects all text in the active message section.

GPRS Settings

uPhone includes pre-configured GPRS connection profiles to connect to a GPRS network. When the GSM driver is enabled uPhone selects the appropriate pre-configured profile based on the service provider information on the installed SIM card.

Before connecting to GPRS, you need to confirm and save the selected uPhone GPRS profile (or create one) in uPhone GPRS Settings, then enter the ISP information in Microsoft's connection manager.

The default profiles are for a modem connection. However, you can also configure GPRS for VPN or Proxy Server connections by creating a GPRS connection profile for that connection type in Microsoft's connection manager.

Requirements

No ActiveSync   Make sure that you are **not** connected to a host PC via ActiveSync when configuring the connection settings!

Service Provider Information
You need the **APN Number**, and **User name** and **Password** from your network service provider.

Configuring the GPRS Connection

The GSM driver installs pre-configured GPRS connection profiles. When enabled, the GSM driver reads the installed SIM card and selects the matching pre-configured connection profile.

1. Tap **Start** > **System** > **Connections** tab > **uPhone GPRS**. The GPRS Settings screen appears with the selected profile in the Current Profile drop-down list. .
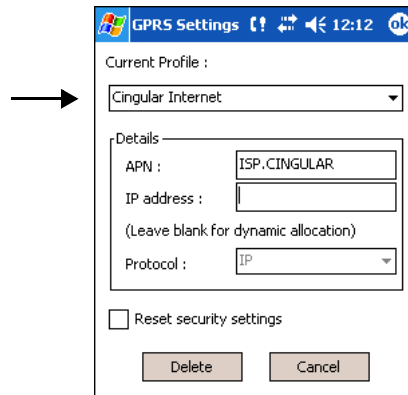
2. In the **Current Profile** drop-down list, select the profile associated with your account.
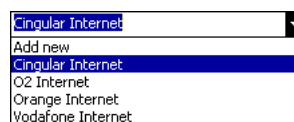
    The Details section is already complete. A default GPRS profile (for a modem connection) is created in Microsoft's connection manager based on the profile selected here.

    If your profile does not appear in the Current Profile list, select **Add new** and complete the Details section.

3. In the **Details** section

    *   Type in the **APN** number
    *   Type in the **IP address** (Leave blank to use DHCP.)
    *   Select the **Protocol**

4. Tap **OK**. You return to the Connections tab.

5. Because GPRS is ISP technology, you need to complete the connection profile in Microsoft's connection manager with information from your ISP. On the **Connections** tab, tap **Connections**. The connections manager opens.
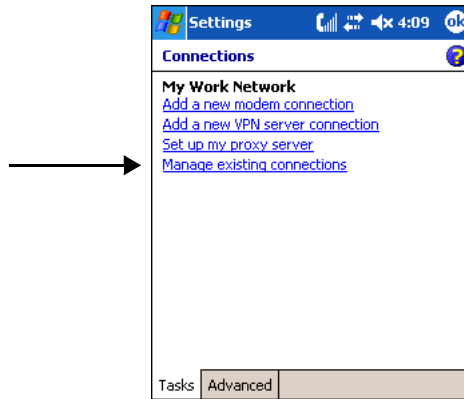
6. Tap **Manage existing connections**.

This default GPRS profile loads into the connection manager based on the service provider profile selected in uPhone's GPRS Settings; see Step 2 above.
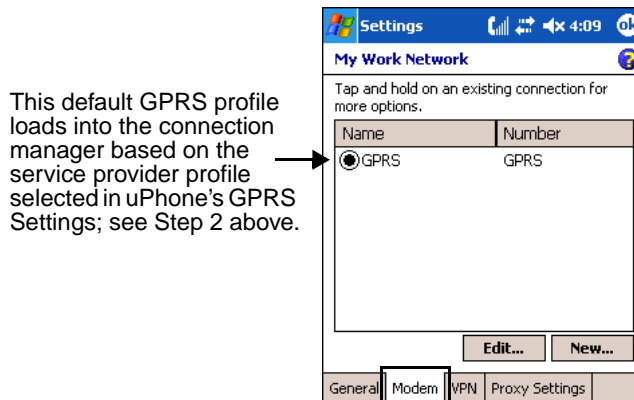
Note: A modem connection is the default connection type. If you want to create a VPN connection, for example, you need to create a GPRS profile on the VPN tab using the parameters in the following steps.

7. Make sure that **GPRS** is selected and tap **Edit**.
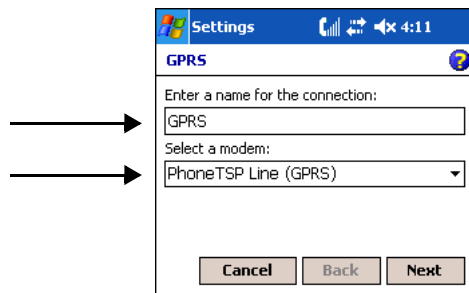
8. You can enter a custom name for the connection but leave **PhoneTSP Line (GPRS)** as the selected modem.

9. Tap **Next**.
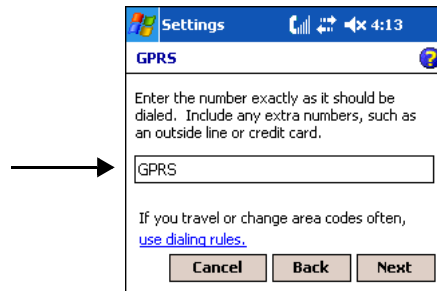
10. Enter the number provided by your ISP or leave the default "GPRS" if no number has been provided. If you leave "GPRS," the GSM radio uses the APN Number entered in the uPhone profile (see Step 2 above). Tap **Next**.
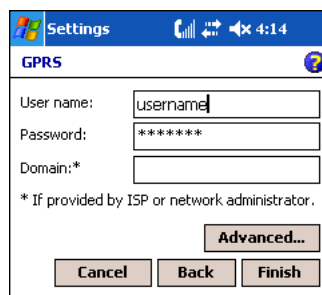
11. Enter the **User name** and **Password** provided by your ISP. Tap **Finish**.
    Entering your user name and password here in the connection manager profile means that you don't have to enter them every time you try to connect via GPRS.

12. Tap and hold on the **GPRS** connection and select **Connect** on the popup menu.
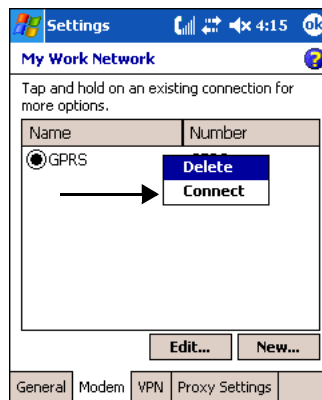
13. You terminal attempts to connect to the GPRS network. When the connection is established, the double arrows appear in the Navigation bar .

14. To verify your connection, tap **Start** > **Programs** > **Internet Explorer**. Your homepage should appear.

Applications

Dolphin terminals ship with the following Microsoft applications installed:

• Calendar
• Contacts
• Tasks
• Notes
• Inbox
• Pocket Internet Explorer
• Pocket Word
• Pocket Excel
• Windows Media Player for Pocket PC
• MSN Messenger
• Pictures

Note: Microsoft® Money, Microsoft® Reader are NOT installed on Dolphin terminals when shipped but may be installed from the Microsoft Companion CD.

Calendar

Use Calendar to schedule appointments, including meetings and other events. You can check your appointments in one of several views (Agenda, Day, Week, Month, and Year) and easily switch views by using the **View** menu.
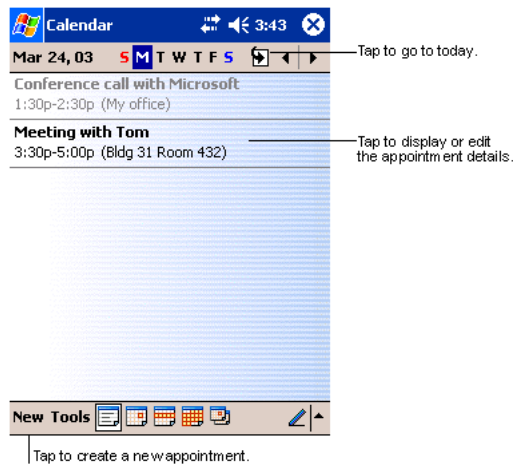
*Note: You can customize the Calendar display, such as changing the first day of the week, by tapping **Options** on the **Tools** menu.*

To Create an Appointment

1. If you are in Day or Week view, tap the desired date and time for the appointment.

2. Tap **New**.

3. Using the input panel, enter a description and a location. Tap first to select the field.

Tap to return to the calendar
(the appointment is saved
automatically).

Tap to choose from
predefined text.

Tap to choose from
previously entered locations.

Tap to select a time.

Tap to select a date.

Notes is a good place
for maps and directions.
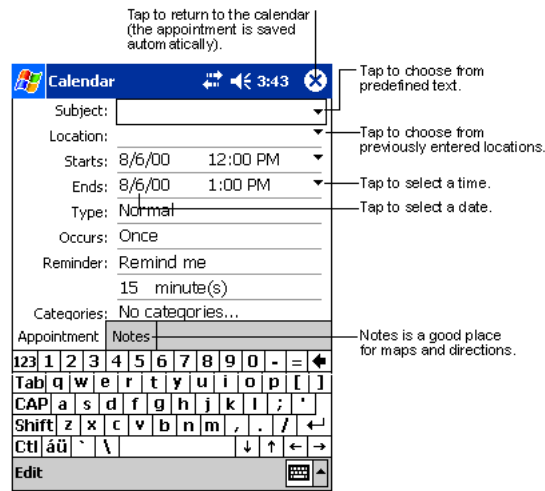
4. If needed, tap the date and time to change them.

5. Enter other desired information. To see all available fields, hide the input panel.

6. To add notes, tap the **Notes** tab. You can enter text, draw, or create a recording. For more information on creating notes, refer to Notes on page 10-6.

7. When finished, tap **OK** to return to the calendar.

*Note: If you select **Remind me** in an appointment, you will be reminded according to the options set in* **Start** *>* **Settings** *>* **Personal** *tab >* **Sounds & Reminders***.*

Using the Summary Screen

When you tap an appointment in Calendar, a summary screen displays the details of the appointment.

View appointment details.

View.

Tap to change
appointment.
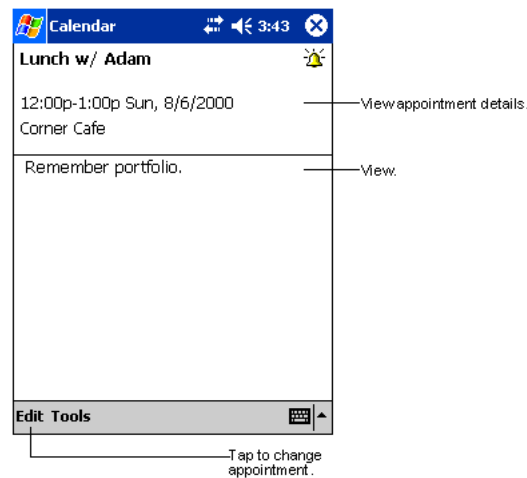
Creating Meeting Requests

You can use Calendar to set up meetings with users of Outlook or Pocket Outlook. The meeting request is created automatically and sent either when you synchronize Inbox or when you connect to your e-mail server. Indicate how you want meeting requests sent by tapping **Tools** and then **Options**. If you send and receive e-mail messages through ActiveSync, select **ActiveSync**.

To Schedule a Meeting

1. Create an appointment.

2. In the appointment details, hide the input panel, and then tap **Attendees**.

3. From the list of e-mail addresses you've entered in Contacts, select the meeting attendees. The meeting notice is created automatically and placed in the Outbox folder.

For more information on sending and receiving meeting requests, see Calendar Help and Inbox Help.

Contacts

Contacts maintains the contact information - phone numbers, e-mails, addresses, etc. - you need on your terminal.
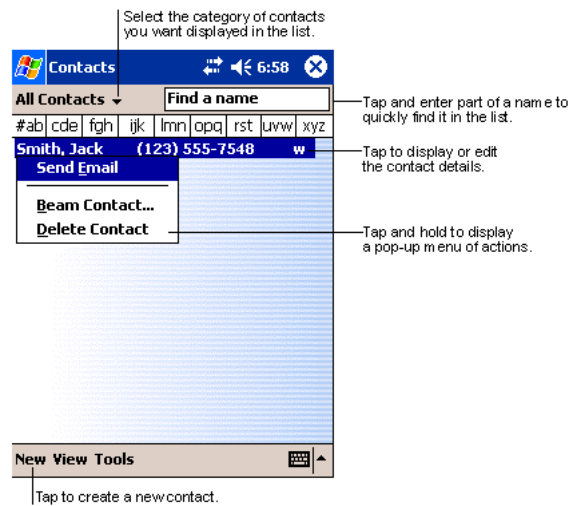
*Note: To change the way information is displayed in the list, tap **Tools** > **Options**.*

To Create a Contact

1. On the Contacts screen, tap **New**.
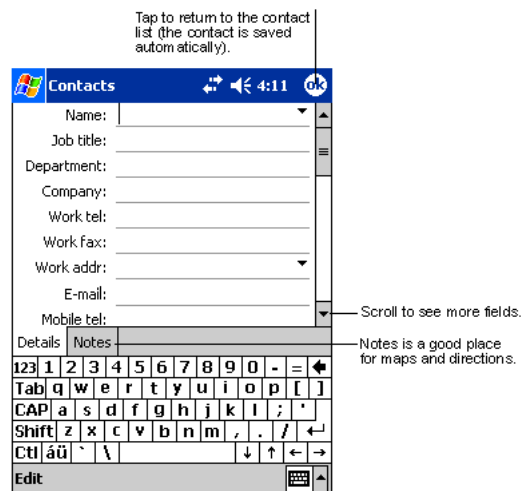
2. Using the SIP or Dolphin keyboard, enter the contact's information. Scroll down to see all available fields.

3. To assign the contact to a category, scroll to and tap **Categories,** then select a category from the list.
    (In the contact list, you can display contacts by category.)

4. To add notes about this contact, tap the **Notes** tab.
    For more information on creating notes, refer to Notes on page 10-6.

5. When finished, tap **OK** to return to the contact list.

To Search for Contacts

There are four ways to find a contact:

*   In the contact list, enter a contact name in the box under the navigation bar. To show all contacts again, clear text from the box or tap the button to the right of the box.
*   In the contact list, tap the category list (labeled **All Contacts** by default) and select the type of contact that you want displayed. To show all contacts again, select **All Contacts**. To view a contact not assigned to a category, select **None**.
*   To view the names of companies your contacts work for, in the contact list, tap **View** > **By Company**. The number of contacts that work for that company are displayed to the right of the company name.
*   Tap **Start** > **Find**, enter the contact name, select **Contacts** for the type, and then tap **Go**.

Using the Summary Screen

When you tap a contact in the contact list, a summary screen displays their information.
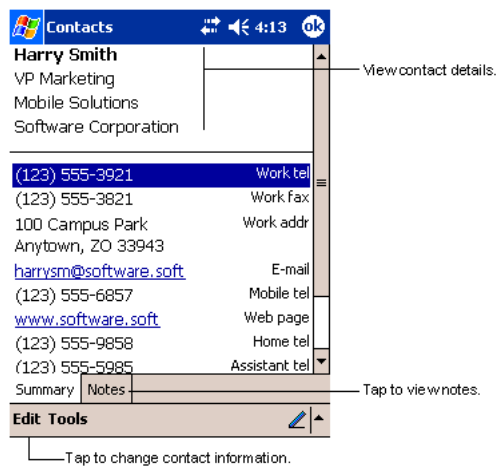
Tasks

Use Tasks to keep track of what you have to do.
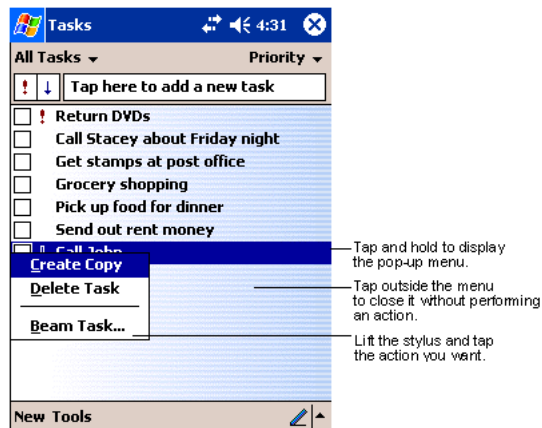
*Note: To change the way information is displayed in the list, tap **Tools** > **Options**.*

To Create a Task

1. Tap **New**.

Tap to return to the task list (the task is saved automatically).

Tap to choose from predefined subjects.

Notes is a good place for maps and drawings.
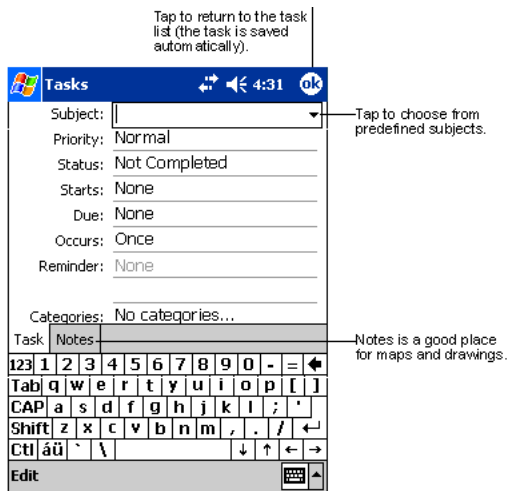
2. Using the SIP or Dolphin keyboard, enter the task information.
   If the input panel is open, you need to hide it to see all available fields.

3. Tap Starts to enter a start date and/or Due to enter a due date for the task.

4. To assign the task to a category, tap **Categories** and select a category from the list.
   In the task list, you can display tasks by category.

5. To add notes, tap the **Notes** tab.
   For more information on creating notes, refer to Notes on page 10-6.

6. When finished, tap **OK** to return to the task list.

*Note: To quickly create a task with only a subject, tap **Entry Bar** on the **Tools** menu. Then, tap Tap here to add a new task and enter your task information.*

Using the Summary Screen

When you tap a task in the task list, a summary screen displays the task information.

A reminder has been set for this task

View task details.

Tap to show and hide additional summary information.

View notes.

Tap to change task.
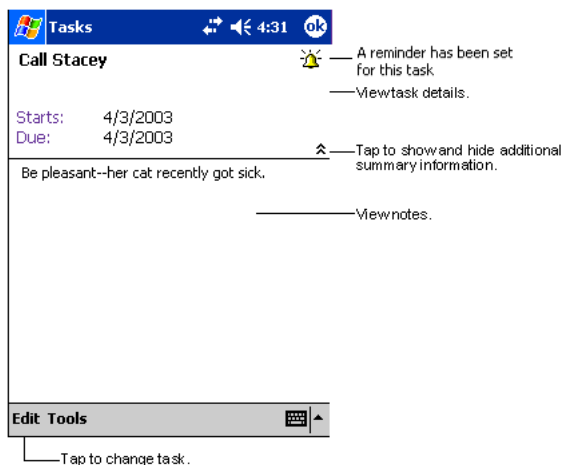
Notes

Quickly capture thoughts, reminders, ideas, drawings, and phone numbers with Notes. If a note is open when you create the recording, it will be included in the note as an icon.
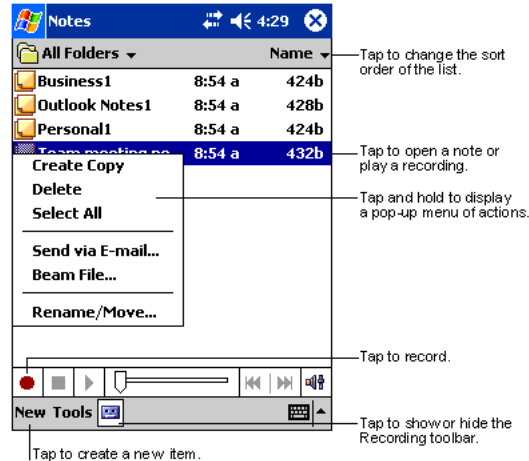
To Create a Note

1. Tap **New**.
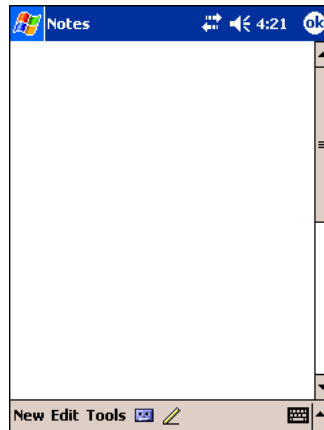
2. Type your note using the SIP or the Dolphin keyboard.

Inbox

Use Inbox to send and receive e-mail messages in either of these ways:

*   Synchronize e-mail messages with Microsoft Exchange or Microsoft Outlook on your desktop computer.
*   Send and receive e-mail messages by connecting directly to an e-mail server through an ISP or a network.

Synchronizing E-mail Messages

E-mail messages can be synchronized as part of the general synchronization process. You need to enable Inbox synchronization in ActiveSync. For information on enabling Inbox synchronization, see ActiveSync Help on the desktop computer.

During synchronization:

*   Messages are copied from the mail folders of Exchange or Outlook on your desktop computer to the ActiveSync folder in Inbox on the terminal. By default, you will receive messages from the past three days only, the first 100 lines of each message, and file attachments of less than 100 KB in size.

- E-mail messages in subfolders must be selected in ActiveSync on your desktop computer to be transferred.
- E-mail messages in the Outbox folder on the terminal are transferred to Exchange or Outlook, and then sent from those programs.

Note: You can also synchronize e-mail messages with your desktop computer from a remote location. For more information, see Chapter 7.

Connecting Directly to an E-mail Server

In addition to synchronizing e-mail messages with your desktop computer, you can send and receive e-mail messages by connecting to an e-mail server. When you connect the terminal to the e-mail server, new messages are downloaded to the Inbox folder, messages in the Outbox folder are sent, and messages that have been deleted on the e-mail server are removed from the Inbox folder.

Messages received directly from an e-mail server are linked to your e-mail server rather than your desktop computer. When you delete a message on the terminal, it is also deleted from the e-mail server the next time you connect the terminal to the e-mail server according to the settings selected in ActiveSync.

You can work online or offline. When working online, you read and respond to messages while connected to the e-mail server. Messages are sent as soon as you tap **Send**, which saves space on the terminal. When working offline, after you've downloaded new message headers or partial messages, you can disconnect from the e-mail server and then decide which messages to download completely. The next time you connect, Inbox downloads the complete messages you've marked for retrieval and sends the messages you've composed.

Receiving Messages

When you connect to your e-mail server or synchronize with your desktop computer, by default, you'll receive messages from the last five days only, the first 100 lines of each new message, and file attachments of less than 100 KB in size. The original messages remain on the e-mail server or your desktop computer.

You can mark the messages that you want to retrieve in full during your next synchronization or e-mail server connection. In the message list, tap and hold the message you want to retrieve. On the pop-up menu, tap **Mark for Download**. The icons in the Inbox message list give you visual indications of message status.

You specify your downloading preferences when you set up the service or select your synchronization options. You can change them at any time:

- Change options for Inbox synchronization using ActiveSync options. For more information, see ActiveSync Help.
- Change options for direct e-mail server connections in Inbox on the terminal. Tap **Tools** and then tap **Options**. On the **Service** tab, tap the service you want to change. Tap and hold the service and select **Delete** to remove a service.

Using the Message List

Messages you receive are displayed in the message list. By default, the most recently received messages are displayed first in the list and unread messages are displayed in bold type.
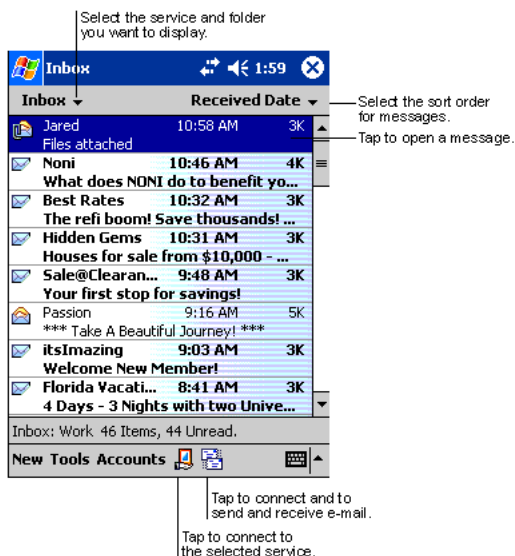
When you tap on a message to open it, the following screen appears:
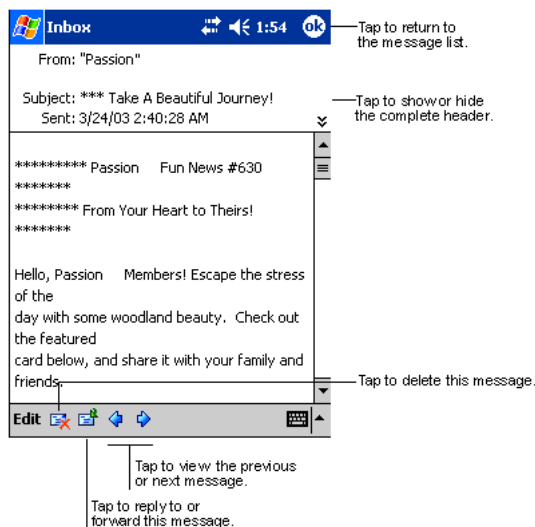
Composing Messages

1. Tap **New**.

2. In the **To** field, enter the e-mail or SMS address of one or more recipients, separating them with a semicolon (;), or select a name from the contact list by tapping the **Address Book** button.
   All e-mail addresses entered in the e-mail fields in Contacts appear in the Address Book.

3. Compose your message. To enter preset or frequently used messages, tap **My Text** and select a message.

4. Tap **Send** when you've finished the message.
   If you are working offline, the message is moved to the Outbox folder and will be sent the next time you connect.

5. If you are sending an SMS message and want to know if it was received, tap **Edit, Options**, and select **Request SMS text message delivery notification** before sending the message.

Managing E-mail Messages and Folders

Messages are displayed in one of five folders for each service you have created: Inbox, Deleted Items, Drafts, Outbox, and Sent Items.

The Deleted Items folder contains messages that have been deleted on the device. The behavior of the Deleted and Sent Items folders depends on the selected options. To select these options, tap **Tools** > **Options** > **Message** tab.

To move a message to another folder, in the message list, tap and hold the message, tap **Move to** on the pop-up menu, and select the desired folder.

To create additional folders, tap **Tools** > **Manage Folders**.

Folder Behavior with a Direct Connection to an E-mail Server

The behavior of the folders you create depends on whether you are using ActiveSync, SMS, POP3, or IMAP4.

ActiveSync

If you use ActiveSync, e-mail messages in the Inbox folder in Outlook on your desktop computer are automatically synchronized with the terminal. You can select to synchronize additional folders by designating them for ActiveSync. The folders you create and the messages you move will then be mirrored on the server.
For example, if you move two messages from the Inbox folder to a folder named Family, and you have designated Family for synchronization, the server creates a copy of the Family folder and copies the messages into that folder. You can then read the messages while away from your desktop computer.

SMS

If you use SMS, messages are stored in the Inbox folder.

POP3

If you use POP3 and you move e-mail messages to a folder you created, the link is broken between the messages on the terminal and their copies on the mail server. The next time you connect, the mail server will see that the messages are missing from the terminal Inbox and delete them from the server. This prevents you from having duplicate copies of a message, but it also means that you will no longer have access to messages that you move to folders created from anywhere except the terminal.

IMAP4

If you use IMAP4, the folders you create and the e-mail messages you move are mirrored on the server. Therefore, messages are available to you anytime you connect to your mail server, whether it is from the terminal or desktop computer. This synchronization of folders occurs whenever you connect to your mail server, create new folders, or rename/delete folders when connected.

Pocket Internet Explorer

Use Microsoft Pocket Internet Explorer to view Web or WAP pages in either of these ways:

• During synchronization with your desktop computer, download your favorite links and mobile favorites that are stored in the Mobile Favorites subfolder in Internet Explorer on the desktop computer.
• Connect to an ISP or network and browse the Web.

When connected to an ISP or network, you can also download files and programs from the Internet or intranet.

Accessing Pocket Internet Explorer

To switch to Pocket Internet Explorer, tap **Start** and then Internet Explorer.

You can use Pocket Internet Explorer to browse Mobile Favorites and channels that have been downloaded without connecting to the Internet. You can also connect to the Internet through an ISP or a network connection and browse the Web.

Browse the Internet on Your Terminal

You must set up a connection to your ISP or corporate network using Connections before browsing; see Using an ISP on page 6-8. If you select Pocket Internet Explorer before setting up the network connections, a screen may appear allowing you to proceed to the connection settings screen.

After you select the settings, return to Pocket Internet Explorer.

1. Open Internet Explorer (**Start** > **Internet Explorer**).

2. To connect and start browsing, tap **View** and then **Address Bar**.

3. In the address bar that appears at the top of the screen, enter the Web address you want to visit and then tap **Go**.

4. Tap the arrow to choose from previously entered addresses.

If Mobile Favorites have been set up, you can tap one of them to start browsing. See The Mobile Favorites Folder on page 10-10.

To add a favorite link while browsing, navigate to the page you want to add, tap and hold on the page, and tap **Add to Favorites** on the pop-up menu.

View Options

You can switch to a One Column view, which condenses web content into a single column so that you do not have to scroll right to see the entire page. Tap **View** > **Layout** > **One Column**.

Default View	One Column View
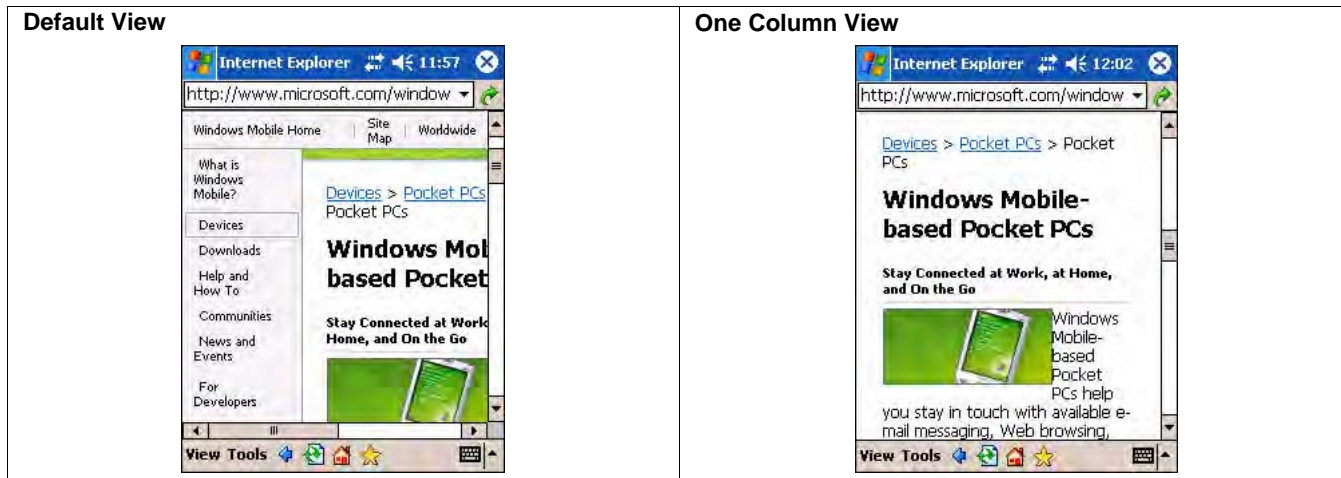
The Mobile Favorites Folder

Purpose

The Mobile Favorites folder was created on your desktop computer when you installed ActiveSync. It enables you to create Favorite Links on your desktop computer that you can transfer to your Dolphin terminal. Those Favorite Links are then available for selection when browsing the internet on your terminal.

Process

First, you create your Favorite Links in the Mobile Favorites folder on your desktop computer. Then, the next time you sync your desktop computer with your terminal, those Mobile Favorites are transferred to the Mobile Favorites folder on to your terminal.

Only items stored in the Mobile Favorites subfolder in the Favorites folder in Internet Explorer on your desktop computer are synchronized with the Mobile Favorites folder on your terminal.

Note: Unless you mark a Favorite Link as a mobile favorite, only the link downloads to your terminal, and you will need to connect to your ISP or network to view the content. For more information on synchronization, see ActiveSync Help on the desktop computer.

Creating and Synchronizing Mobile Favorites

If you are using Microsoft Internet Explorer 5.0 or later on your desktop computer, you can download Mobile Favorites to the terminal. Synchronizing mobile favorites downloads Web content to your device so that you can view pages while you are disconnected from your ISP and desktop computer.

Use the Internet Explorer plug-in installed with ActiveSync to create mobile favorites

1.   On your desktop computer, open Internet Explorer, click **Tools** > **Create Mobile Favorite**.
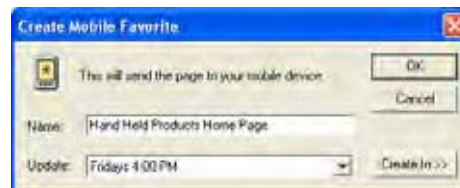
2.   To change the link name, enter a new name in the **Name** box.

3.   Optionally, in **Update**, select a desired update schedule.

4.   Tap **OK**. Internet Explorer downloads the latest version of the page to your desktop computer.

5. If you want to download the pages that are linked to this mobile favorite, in Internet Explorer on the desktop computer, right-click the mobile favorite and then click **Properties**. On the **Download** tab, specify the number of links down that you want to download. To conserve memory, go only one level down.

6. Synchronize the terminal and desktop computer. Mobile favorites that are stored in the Mobile Favorites folder in Internet Explorer are downloaded to the terminal.

If you did not specify an update schedule in Step 3, you will need to manually download content to keep the information updated on your desktop computer and terminal. Before synchronizing, in Internet Explorer on your desktop computer, click **Tools** and then **Synchronize**. You will see the last time content was downloaded to the desktop computer, and you can manually download content if needed.

You can add a button to the Internet Explorer toolbar for creating mobile favorites. In Internet Explorer on your desktop computer, click **View**, **Toolbars**, and then **Customize**.

View Mobile Favorites and Channels on the Terminal

1. Access Pocket Internet Explorer.

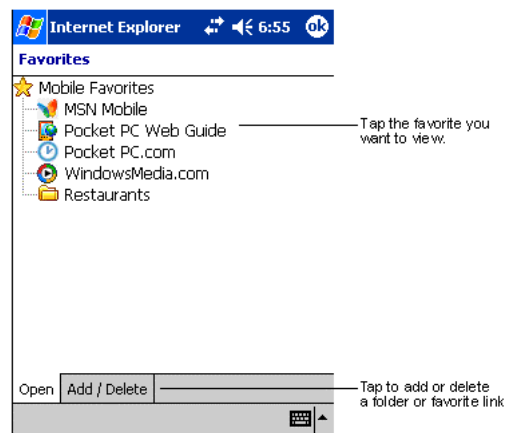2. Tap the Favorites button to display your list of favorites .

3. Tap the page you want to view.

You'll see the page that was downloaded the last time you synchronized with your desktop computer. If the page is not on the terminal, the favorite will be dimmed. You will need to synchronize with your desktop computer again to download the page to the terminal, or connect to the Internet to view the page.

Mobile favorites take up storage memory on the terminal. To minimize the amount of memory used:
- In the settings for the Favorites information type in ActiveSync options, turn off pictures and sounds, or stop specific mobile favorites from being downloaded to the terminal. For more information, see **ActiveSync Help**.
- Limit the number of downloaded linked pages. In Internet Explorer on the desktop computer, right-click the mobile favorite you want to change and then Properties. On the Download tab, specify 0 or 1 for the number of linked pages you want to download.

Using AvantGo® Channels

AvantGo is a free interactive service that provides access to personalized content and thousands of popular web sites. Subscribe to AvantGo channels directly from the terminal. For more information, visit: http://avantgo.com/frontdoor/index.html.

To Sign Up for AvantGo

1. In ActiveSync options on the desktop computer, turn on synchronization for the AvantGo information type.

2. In Pocket Internet Explorer, tap the **Favorites** button to display your list of favorites .

3. Tap the **AvantGo Channels** link.

4. Tap **Activate** and follow the directions on the screen. Synchronize the terminal with your desktop computer and then tap the **My Channels** button to complete the AvantGo setup.

5. When synchronization is complete, tap the **AvantGo Channels** link in your list of favorites to see a few of the most popular channels. To add or remove channels, tap the **Add** or **Remove** link.

Pocket Word

Pocket Word works with Microsoft Word on your desktop computer to give you easy access to copies of your documents. You can create new documents on the terminal, or you can copy and paste documents from your desktop computer. Synchronize documents between your desktop computer and your device so that you have the most up-to-date content in both locations.

You can open only one document at a time; when you open a second document, you'll be asked to save the first. You can save a document you create or edit in a variety of formats, including Word (.doc), Pocket Word (.psw), Rich Text Format (.rtf), and Plain Text (.txt).

Using Pocket Word

Pocket Word contains a list of the files stored on the terminal. Tap a file in the list to open it. To delete, make copies of, and send files, tap and hold a file in the list. Then, select the appropriate action on the pop-up menu.
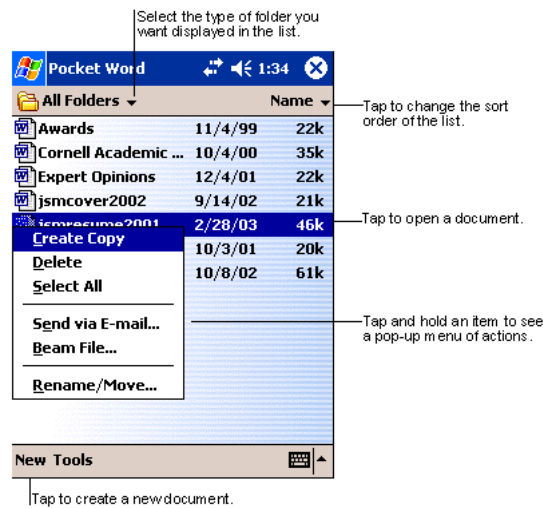
You can change the zoom magnification by tapping **View > Zoom**, and then selecting the percentage you want. Select a higher percentage to enter text and a lower one to see more of your document.

If you're opening a Word document created on a desktop computer, select **Wrap to Window** on the **View** menu so that you can see the entire document.

Creating a Word File

To create a new file, tap **Start** > **Programs** > **Pocket Word** > **New**. A blank document appears. If you've selected a template for new documents in the Options dialog box, that template appears with appropriate text and formatting already provided.

You can enter information in Pocket Word in one of two modes (typing on the SIP or keyboard and drawing), which are displayed on the **View** menu.

Typing Mode

Using the SIP or Dolphin keypad, enter typed text into the document.
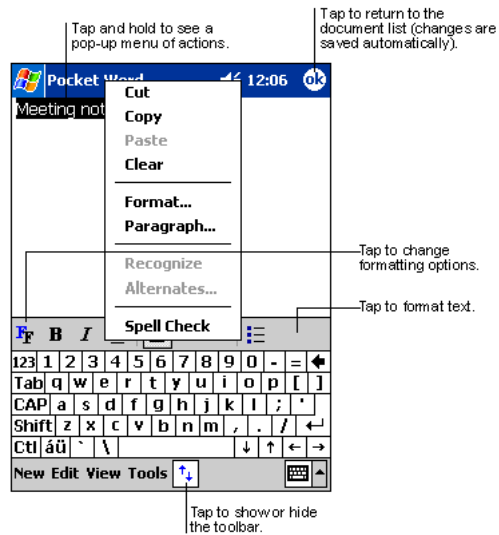
To format existing text and to edit text, first select the text. You can select text as you do in a Word document, using your stylus instead of the mouse to drag through the text you want to select. You can search a document to find text by tapping **Edit** and then **Find/Replace**.

Drawing Mode

In drawing mode, use your stylus to draw on the screen. Gridlines appear as a guide. When you lift your stylus off the screen after the first stroke, you'll see a drawing box indicating the boundaries of the drawing. Every subsequent stroke within or touching the drawing box becomes part of the drawing.

For more information on using Pocket Word, tap **Start** and then **Help**.

Pocket Excel

Pocket Excel works with Microsoft Excel on your desktop computer to give you easy access to copies of your workbooks. You can create new workbooks on the terminal, or you can copy and paste workbooks from your desktop computer. Synchronize workbooks between your desktop computer and the terminal so that you have the most up-to-date content in both locations.

You can open only one workbook at a time; when you open a second workbook, you'll be asked to save the first. You can save a workbook you create or edit in a variety of formats, including Pocket Excel (.pxl) and Excel (.xls).

Pocket Excel contains a list of the files stored on your device. Tap a file in the list to open it. To delete, make copies of, and send files, tap and hold a file in the list. Then select the appropriate action from the pop-up menu. Pocket Excel provides fundamental spreadsheet tools, such as formulas, functions, sorting, and filtering. To display the toolbar, tap **View** > **Toolbar**.

Creating an Excel File

To create a new file, tap **Start** > **Programs** > **Pocket Excel** > **New**. A blank workbook appears. If you've selected a template for new workbooks in the Options dialog box, that template appears with appropriate text and formatting already provided.
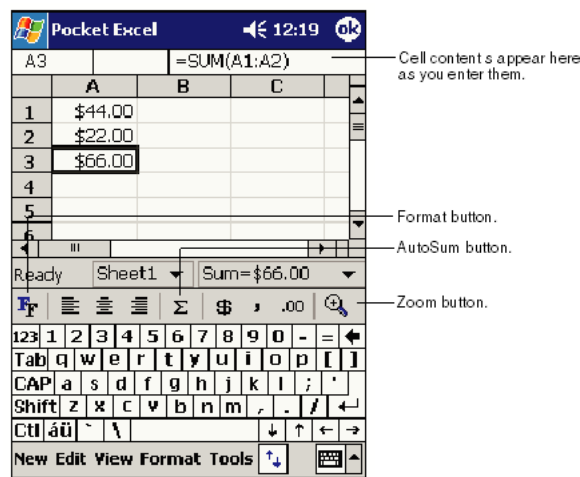
If your workbook contains sensitive information, you can protect it with a password. To do so, open the workbook, tap **Edit**, and then **Password**. Every time you open the workbook, you will need to enter the password, so choose one that is easy for you to remember but hard for others to guess.

Tips for Working in Pocket Excel

- View in full-screen mode to see as much of your worksheet as possible. Tap **View** and then **Full Screen**. To exit full-screen mode, tap **Restore**.
- Show and hide window elements. Tap **View** and then tap the elements you want to show or hide.
- Freeze panes on a worksheet. First select the cell where you want to freeze panes. Tap **View** > **Freeze Panes**. You might want to freeze the top and left-most panes in a worksheet to keep row and column labels visible as you scroll through a sheet.
- Split panes to view different areas of a large worksheet. Tap **View** > **Split**. Then drag the split bar to where you want it. To remove the split, tap **View** > **Remove Split.**
- Show and hide rows and columns. To hide a hidden row or column, select a cell in the row or column you want to hide. Then tap **Format**,> **Row or Column** > **Hide**. To show a hidden row or column, tap **Tools** > **Go To**, and then type a reference that is in the hidden row or column. Then tap **Format** > **Row or Column** > **Unhide**.

For more information on using Pocket Excel, tap **Start** > **Help**.

Windows Media Player for Pocket PC

Use Microsoft Windows Media Player (WMP) for Pocket PC to play digital audio and video files stored on the terminal. To switch to Windows Media Player for Pocket PC, tap **Start** > **Windows Media**.
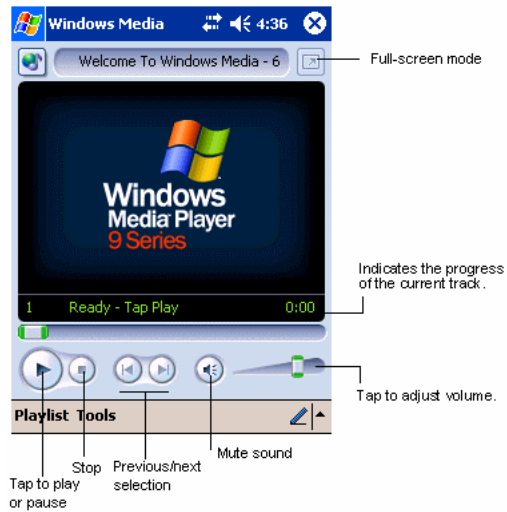
After a media file has been loaded, you can play, pause, stop, song advance/reverse, mute sound, or adjust volume.
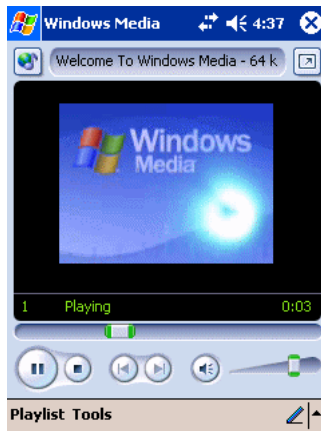
Tools Menu

The tools menu allows you to perform several important functions.
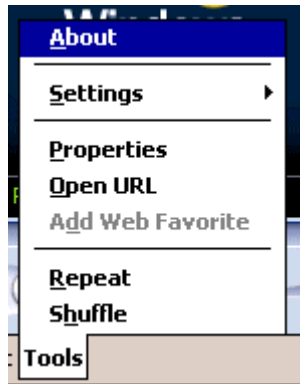
About gives you information about the codecs used in your version of WMP.

Settings allows you to configure several important aspects of WMP.

Properties gives a detailed listing of a media file's attributes.

Open URL allows you to open WMP-compliant media from a network or Internet resource.

Add Web Favorite adds a streaming media file that is currently playing to web favorites.

Repeat plays a playlist repeatedly.

Shuffle plays items in a playlist in a random order.

MSN Messenger

MSN Messenger is an instant messaging program that lets you:

- See who is online.
- Send and receive instant messages.
- Have instant message conversations with groups of contacts.

Note: To use MSN Messenger, you must have a Microsoft Passport™ account or a Microsoft Exchange e-mail account. You must have a Passport to use MSN Messenger Service. If you have a Hotmail or MSN account, you already have a Passport account. Sign up for a Microsoft Passport account at www.passport.com.

Setting Up an Account

Before you can connect for the first time, you must enter the information from your Passport or Exchange account. After you set up your account information on the terminal for the first time, you will go directly to login when you access MSN Messenger.

Note: Ensure that you are connected to the Internet (see Connections Tab on page 5-16).

1. Tap **Start** > **Programs** > **MSN Messenger**

2. Tap **Tools** > **Options** > **Account** tab.

3. In the Accounts tab, enter your Passport or Exchange account information.
    Be sure to indicate the service you're using to connect - Messenger or Exchange.

4. When complete, tap **OK**. You are returned to the sign-in screen.

5. To sign in, tap the sign-in screen and enter your e-mail address and password.

Note: If you already use MSN Messenger, your contacts will show up on your device without being added again.

Pictures

Use Pictures to view JPEG pictures stored on the terminal or storage card.

To begin, tap **Start** > **Programs** > **Pictures**.
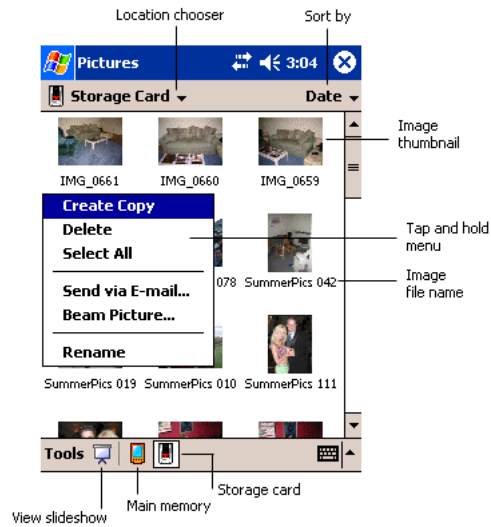
Choose to view main memory or storage card contents. By tapping and holding on an image, you can create a clone of that file, delete that file, select all files, send file via e-mail, beam picture, or rename the image.

11

Dolphin 9501 and Dolphin 9551

Overview

Dolphin 9550/9551 terminals contain the same robust features of the Dolphin 9500 Series, such as the Windows Mobile platform and rugged ergonomics. In addition, the Dolphin 9550/9551 terminal offer laser engine support, which enables you to scan and decode linear bar codes from greater distances.

The expanded scanning and decoding capabilities combined with the terminal's durability make Dolphin 9501/9551 terminals ideal for in-premise mobile application environments.

Laser Engine Specifications

Dolphin 9550/9551 terminals may be equipped with one of the following SE1200 non decoded laser engines:

Name	Bar Code Type	Decodes from …
SE1200HP (High Performance)	5 mil	2.75 to 7 in (0.07 to 0.17 m)
	55 mil reflective	5 to 50 in (.13 to 1.27 m)
SE1200LR (Long Range)	10 mil	10 to 24 in (0.25 to .6 m)
	100 mil reflective	66 to 232 in (1.67 to 5.9 m)
SE1200ALR (Advanced Long Range)	13 mil	18 to 39 in (0.45 to 1 m)
	100 mil reflective	102 to 363 in (2.6 to 9.2 m)

Note: Dolphin 9501/9551 terminals do not support image capture.

Supported Bar Code Symbologies

Laser engines support only the decoding of linear bar codes; see 1D Symbologies on page 2-6.

Aiming Options

Laser engines do **not** support omni-directional scanning.

To achieve an optimal scan, center the red aiming beam across the bar code horizontally as shown below.

Laser Engine Location

The laser engine points straight out of the contoured casing on the back panel of Dolphin 9501/9551 terminals.

Image Engine Window
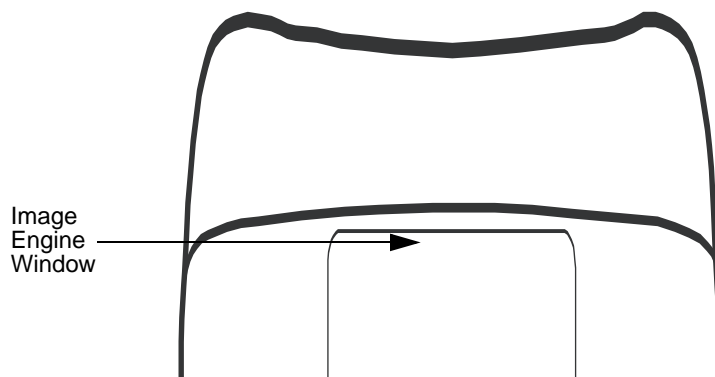
Radio Options

Dolphin 9501/9551 terminals can be configured with one or a combination of 802.11b and Bluetooth radios. For more information about radio operations, see Using the Radio Manager on page 4-15.

Keyboard Options

Dolphin 9501/9551 terminals can be configured with any of the Dolphin keyboards. For more information, see Using the Keyboards on page 4-7.

Peripherals and Accessories

Because Dolphin 9501/9551 terminals have the same Mechanical Connector (see page 3-9), they are compatible with all Dolphin 9500 Series Peripherals (see page 2-3) and Dolphin 9500 Series Accessories (see page 2-4). However, due to their different shape, both the Dolphin 9501/9551 terminals have their own enclosures.

Note: The Dolphin 9551 requires the Dolphin 9550 Mobile Base to accommodate the pistol-grip handle.

Front Panel Features

Dolphin 9501/9551 terminals contain the same front panel features; see Front Panel Features on page 3-2.

Bottom Panel Features

All Dolphin 9500 series terminals contain the same industrial-grade, mechanical connector on the bottom panel; see Bottom Panel Features on page 3-9.

Dolphin 9501 Hardware

Dolphin 9501 Side Panel

The Dolphin 9501 contains a powerful laser engine inside a solid, flashlight form factor.

Laser
Engine →
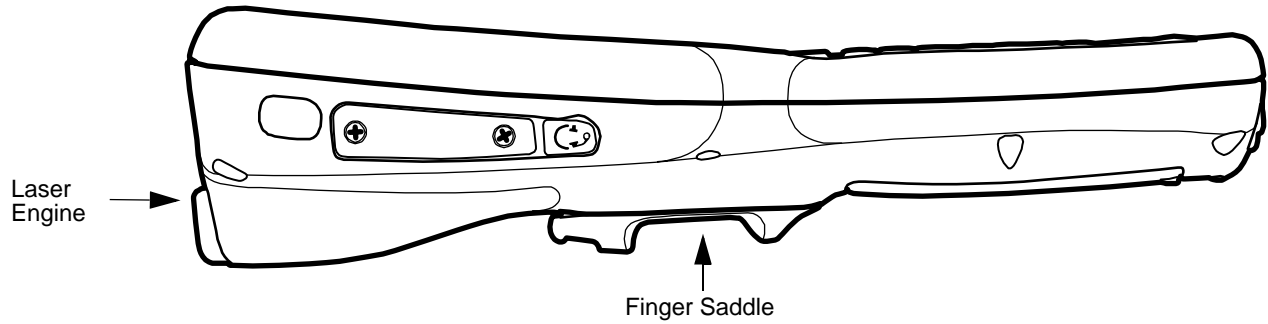
Finger Saddle

Like the Dolphin 9551, the front end of the bottom housing accommodates the laser engine

Dolphin 9501 Back Panel

For secure handling in the field, the back panel of the Dolphin 9501 contains a finger saddle.

Laser Engine

Speaker

Microphone
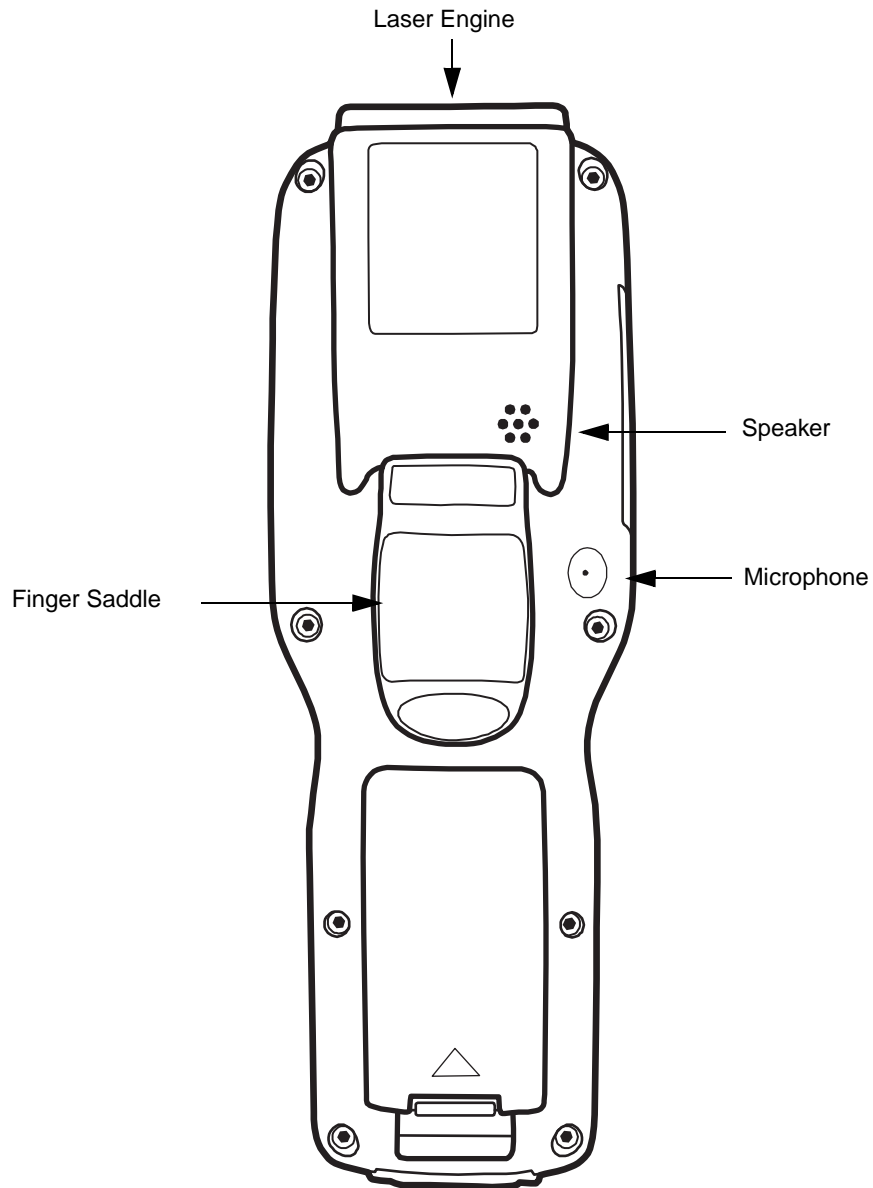
Finger Saddle

Dolphin 9501 Hand Strap and Stylus

The hand strap is attached to the finger saddle and contains two stylus loops on either side.

Stylus
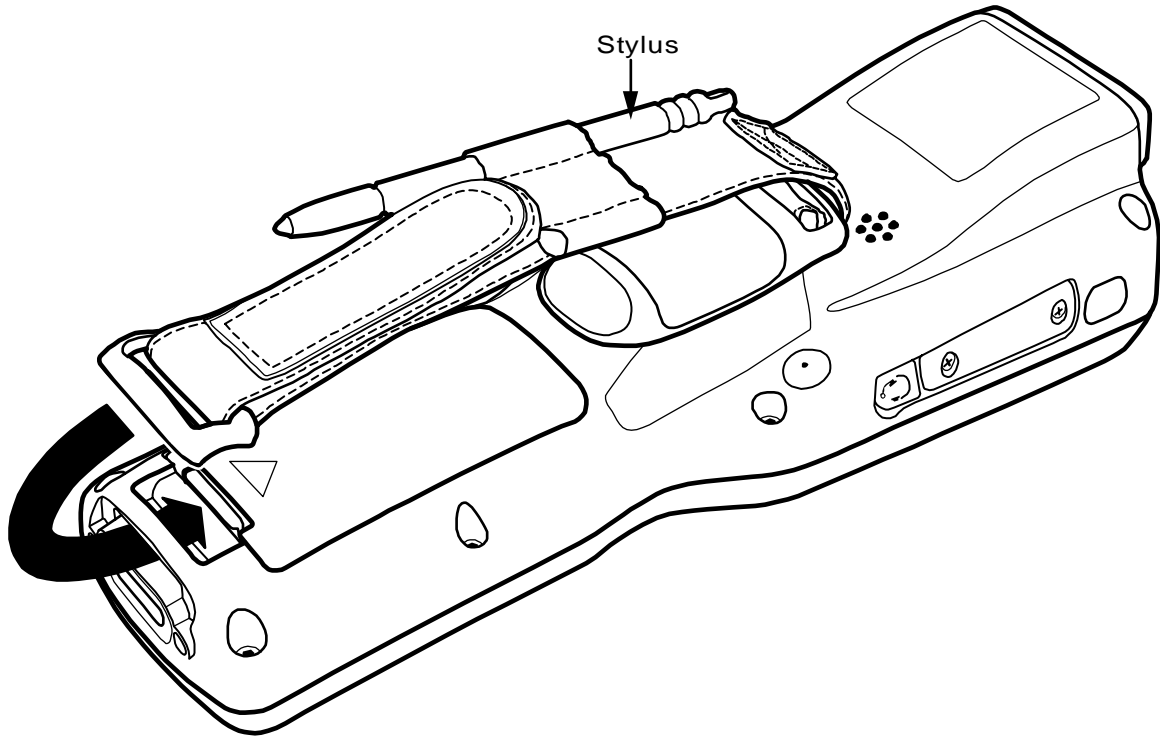
Dolphin 9551 Hardware

The Dolphin 9551 terminal features the same integrated pistol grip as the Dolphin 9550 for secure and versatile handling in scan-intensive applications. The front end of the bottom housing accommodates the laser engine.

Dolphin 9551 Side Panel

The following graphic shows the left, side panel of the Dolphin 9551.
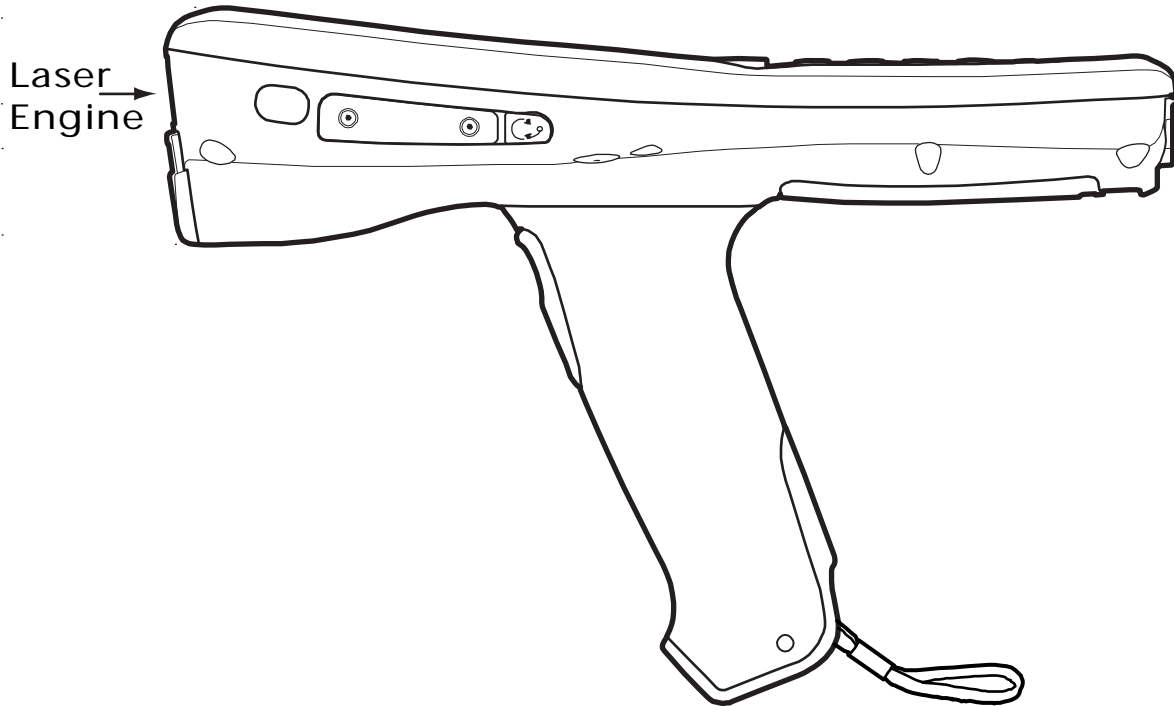
Just like the Dolphin 9550, the stylus is stored in the pistol-grip handle.

Dolphin 9551 Back Panel

Laser Engine

Speaker

Pistol-Grip Handle

Microphone

12
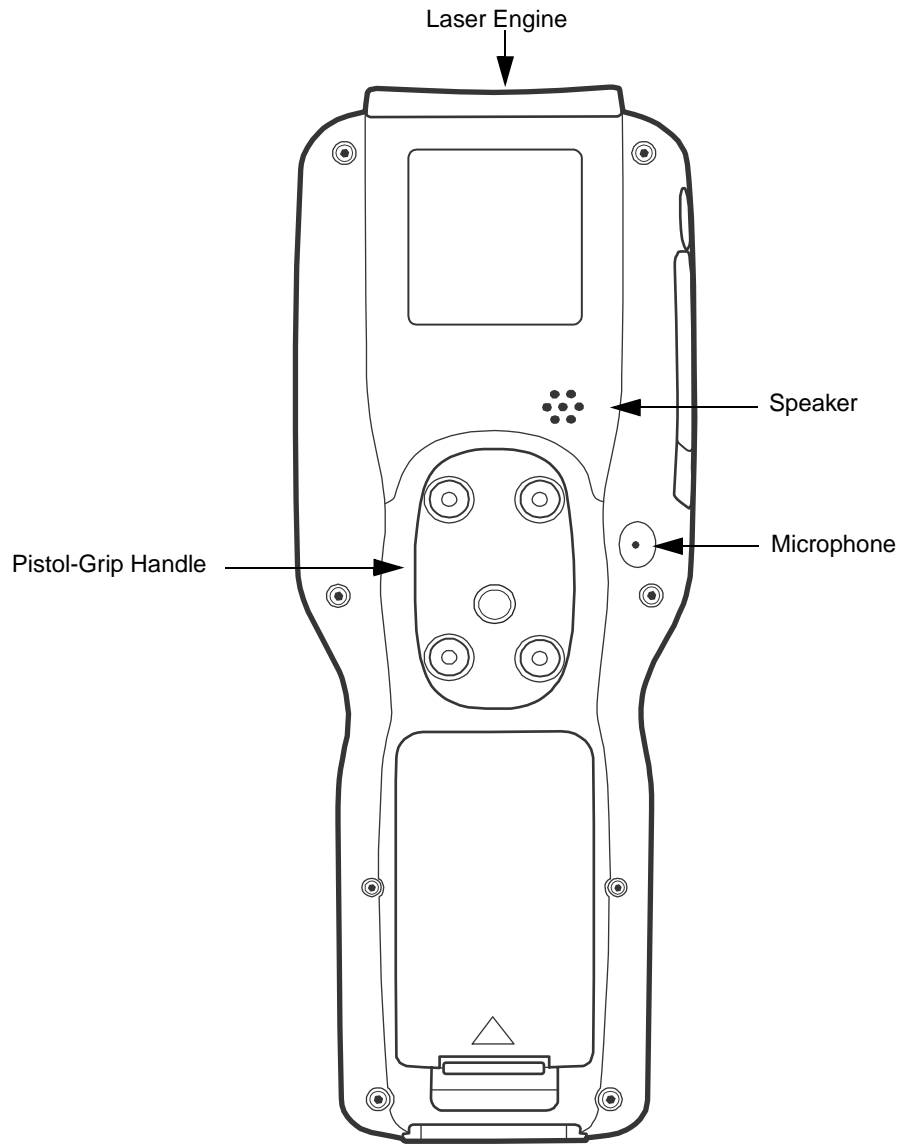
Dolphin HomeBase

Overview

As the hub of your Dolphin system, the Dolphin HomeBase charging and communication cradle supports both RS-232 and USB communications, which make it able to interface with the majority of PC-based enterprise systems. When a terminal is seated in the HomeBase, its main battery pack charges in less than four hours.

Power

The HomeBase completes a full charge of the main battery pack in less than four hours. The HomeBase also provides power to the intelligent battery charging system in all Dolphin terminals that senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge.

Communications

Reliable data communications at speeds of up to 115k baud can be transmitted by the HomeBase through the RS-232 serial port. Using the full-speed USB port, the data transmission rate goes up to 12 Mbps.

HomeBases cannot be physically connected to each other - sometimes referred to as "daisy-chained" - but can be networked together via a serial or USB hub.

Convenient Storage

Intelligent battery charging makes the Dolphin HomeBase a safe and convenient storage receptacle for your Dolphin terminal.

Capacity

The Dolphin HomeBase holds one terminal and features an auxiliary battery well behind the terminal well that can charges a battery pack independently of the terminal well. This means that one HomeBase can charge two battery packs: the one installed in the terminal and a spare.

⚠️ *Use only Dolphin 9500 Series peripherals, power cables, and power adapters. Use of peripherals, cables, or power adapters not sold/manufactured by Hand Held Products will void the warranty and may damage the terminal.*

⚠️ *Use only the Li-ion battery packs provided by Hand Held Products. The use of any battery pack not sold/manufactured by Hand Held Products in the Dolphin 9500 Series terminals will void your warranty and may result in damage to the Dolphin terminal or battery.*

Dolphin HomeBase Parts and Functions

Front Panel

Terminal Well

Auxiliary Battery Well

DOCK LED

AUX Battery LED

COMM LED
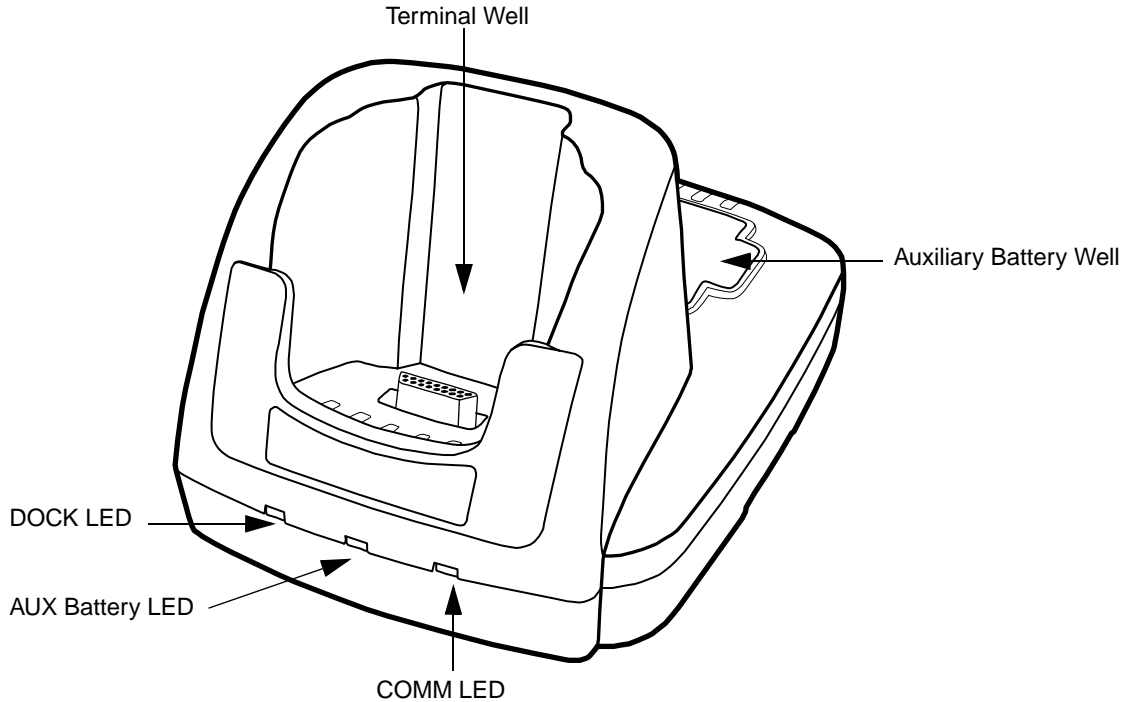
Terminal Well

Place the Dolphin terminal in this well to communicate with a host device, power the terminal, and charge its battery pack. If the host device is a desktop computer that uses ActiveSync, synchronization begins immediately. While seated in the terminal well, the main battery installed in the terminal charges. The HomeBase completely charges a battery pack in less than four hours.

Auxiliary Battery Well

See Auxiliary Battery Well on page 12-3.

DOCK LED

Turns solid green when the Dolphin terminal is properly seated in the Dolphin HomeBase. When this light is on, the terminal is connected to the base.

AUX Battery LED

Indicates status of the battery charging in the auxiliary battery well.

This color	means…
Orange	The auxiliary battery is charging.
Green	The auxiliary battery has completed charging and is ready for use.

To see the auxiliary battery well, see Rear Panel on page 12-3.
For information about charging a battery in the auxiliary battery well, see page 12-5.

COMM LED

This is the communication LED. It indicates the status of data transfer between the Dolphin terminal and the host device. The color of this LED differs if the HomeBase is using the serial or USB port connection.

If using the serial port

This color	means…
Red	Serial data is being sent from the Host Device to the Dolphin HomeBase.
Green	Serial data is being sent from the Dolphin HomeBase to the Host Device.
Orange	Serial data is being sent at high data rates.

If using the USB port

This color	means…
Green LED	A USB Connection is established with the host computer.

Rear Panel

Auxiliary Battery Well

USB Port   RS-232 Port   DC Power Jack
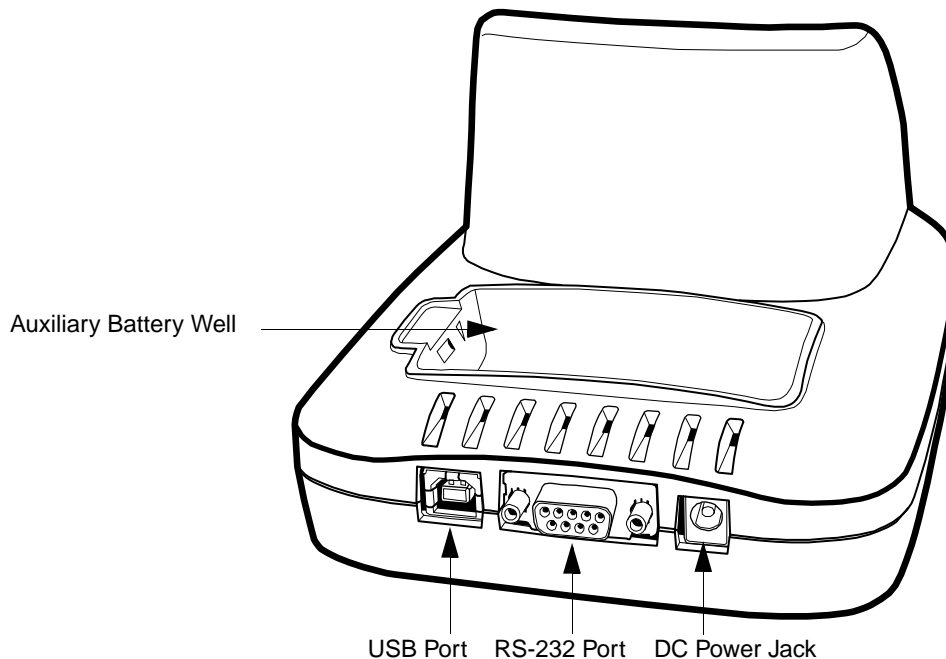
Auxiliary Battery Well

The HomeBase enables you to charge an additional Li-ion battery pack independently of the terminal well. This feature ensures that you can always have a fully-charged battery for your Dolphin terminal. See Charging a Spare Battery in the Auxiliary Battery Well on page 12-5.

USB Port

This USB Port is full-speed and 2.0 compliant. Using a USB cable, you can connect the HomeBase to a peripheral device, such as a desktop computer or printer. When the Dolphin terminal is seated in the terminal well, it is connected to the peripheral device via the HomeBase. The USB port on the HomeBase requires that you use ActiveSync 3.7 or higher.

RS-232 Port

Use a 9-pin, RS-232 cable from Hand Held Products to connect this port to a peripheral device for RS-232 data communication. For more information, see HomeBase Serial Connector on page 12-4.

DC Power Jack

Use a power cable from Hand Held Products to supply power to this power jack. For more information, see Powering the HomeBase on page 12-4.

Powering the HomeBase

The terminal requires 9.5 Volts DC input for communications and battery charging; the Hand Held Products' power cable contains a power adapter that converts the power source voltage accordingly. **Only** the power adapter cable from Hand Held Products converts the voltage appropriately.

Hand Held Products recommends that you leave the Dolphin HomeBase connected to its power source at all times, so that it is always ready to use.

1. Connect the Hand Held Products' power cable to the DC jack on the rear panel of the HomeBase.

2. Connect the Hand Held Products' power cable to the power adapter.

3. Plug the power adapter cable into the power source. The HomeBase is now powered.

HomeBase Serial Connector

The following diagram displays the pin diagram of the serial connector of the HomeBase.
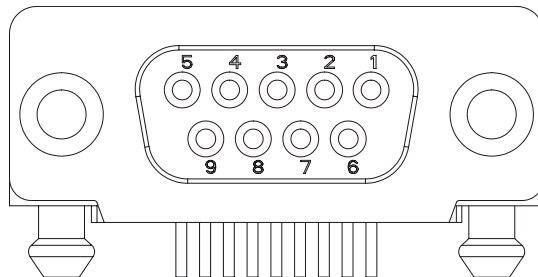
Pin #   Description

1	Internal Jumper to Pin 6
2	TXD
3	RXD
4	DSR
5	GND
6	DTR
7	CTS
8	RTS
9	RI

Note: Signals referenced are for a DTE device. The HomeBase is at a right-angle to the printed circuit board (PCB). The ninth pin has a ring indicator (RI).

Charging the Main Battery

The Dolphin HomeBase powers the terminal and fully charges its main battery pack in less than four hours.

The HomeBase contains an intelligent battery charging system that protects the battery from being damaged by overcharging. The unit senses when a battery pack is fully charged and automatically switches to a trickle charge that maintains the battery at full capacity. Therefore, Dolphin terminals may be stored in the HomeBase without damage to the terminals, battery packs, or peripherals.

To check battery power, use the Power system setting; see Power on page 5-10.

For more information about Hand Held Products Li-ion batteries, see Batteries on page 3-10.

To Power a Terminal and Charge its Main Battery

1. Install the battery pack in the terminal; see Install the Main Battery Pack on page 2-7.

1. Connect the HomeBase to the power supply provided by Hand Held Products.

2. Slide the terminal into the terminal well until the Dock LED lights green to indicate that the terminal is properly seated.

3. The battery pack begins charging.

Charging a Spare Battery in the Auxiliary Battery Well

The auxiliary battery well located on the back of the HomeBase charges a spare battery independently of the terminal well. The Aux Battery LED on the front panel indicates the status of the battery in this well.

Charge time is less than four hours; see Auxiliary Battery Well on page 12-3.

1. Insert the end of the battery without the locking tab into the bottom of the auxiliary well opening.

2. Snap the battery into place with a hinging motion. The Aux Battery LED lights orange.

3. Use the AUX Battery LED to monitor charging progress.
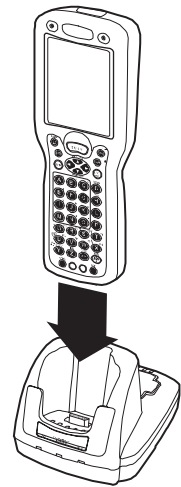
Communications

USB

> The HomeBase also supports USB communications via the USB port located on the back. The HomeBase acts as a USB device by interfacing the USB signals of the Dolphin terminal to the USB of the host computer. Using a standard USB cable, the HomeBase's USB interface allows the Dolphin terminal to communicate with a personal computer or to be networked through a USB hub.

RS-232

> The HomeBase supports RS-232 communications via the RS-232 Communications Port located on the back of the device. This port enables the Dolphin terminal to communicate to a personal computer, modem, or any RS-232 device using a standard serial cable and communications software.

Note: The HomeBase should have only one type of interface cable connected at a time, either USB or RS-232.

Equipment Requirements

To use the HomeBase for communications, you need the following equipment:

- A HomeBase powered by a power cable and power adapter cable from Hand Held Products
- For RS-232 communications, a Serial cable
- For USB communications, a USB cable

Setting up the HomeBase for USB Communication

Dolphin terminals support USB communications out of the box.

Required Equipment:

- HomeBase with power supply
- USB Cable
- ActiveSync v3.7 or above
- Windows® 98 Second Edition*, Windows® Me, Windows® 2000, or Windows® XP computer.
  The HomeBase does not support Windows NT® when using a USB connection because Windows NT does not support USB.

*Windows® 98 second edition provides full USB support.

To Install the HomeBase Using USB

Note: You must be using ActiveSync 3.7 or higher.

1. Plug in the power supply and connect it to the back of the HomeBase.

2. Plug the USB cable into the back of the HomeBase.

3. At this point, the hardware is installed and operating.
   You may need to reboot your PC to complete the installation process.

Setting up the Terminal for ActiveSync Communications

1. On the terminal, tap **Start** > **ActiveSync** > **Tools** > **Options**. Activesync opens displaying the PC tab.
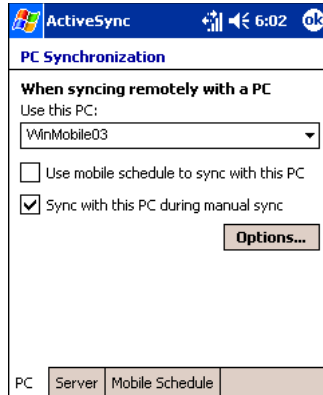
2. In the **Use this PC** drop-down list, select the name of the host PC.

3. Select **Sync with this PC during manual sync** to indicate that the terminal syncs with the selected host PC when synchronization is run from the terminal.

4. Tap **Options**.
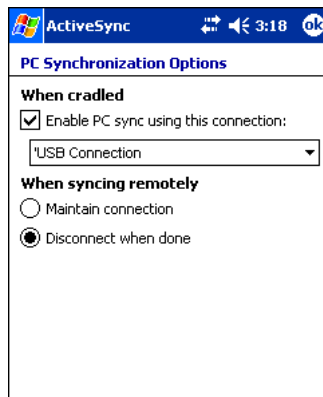
5. Select **Enable PC sync using this connection**, then select **'USB Connection** from the drop-down list.

6. Tap **OK**.

7. Place the Dolphin terminal in the HomeBase. The Dolphin terminal attempts to start an ActiveSync connection with the desktop computer automatically.

Setting up the Desktop Computer for ActiveSync Communications

After the USB HomeBase is installed, you can use ActiveSync to connect to a Dolphin terminal that is properly seated in the HomeBase. These instructions assume that ActiveSync v3.7 is installed on your PC.

The ActiveSync Connection Settings must be set as the following graphic indicates.
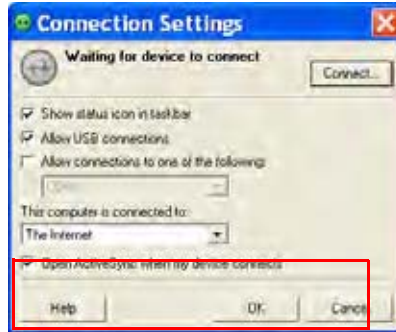
The **Allow USB connection with this desktop computer** box must be checked. Do *not* check the serial cable box*.*

Setting up the HomeBase for RS-232 Communications

Connecting the Cables

Connect the HomeBase to the host computer or other device by plugging an RS-232 serial cable into the RS-232 Communications Port on the rear of the HomeBase. The wiring of your cable depends on whether the other device is set up as a Data Communications Equipment (DCE) or Data Terminal Equipment (DTE) device.

The HomeBase Communication Port is configured as a DCE device. To communicate with a DCE device, use either a null modem adapter in line with a standard RS-232 cable, or a null-modem serial cable. To communicate with a DTE device such as a computer, use a standard (or straight-through) RS-232 cable.

You can make your own cables by following the pin configuration in the chart below. To do so, you must determine if your host RS-232 device is 9-pin or 25-pin, and whether it is configured as a DCE or DTE device.

RS-232 Pin Configuration

HomeBase /Host Port (DCE)	IBM AT DB9 (DTE)	IBM XT DB25 (DTE)	Modem DB25 (DCE)
Pin / Input Signal			
2 / (RD)	2	3	2
3 / (TD)	3	2	3
5 / (SG)	5	7	7
4 / (DTR)	4	20	6
6 / (DSR)	6	6	20
7 / (RTS)	7	4	5
8 / (CTS)	8	5	4

*Note: The Dolphin 9500 Series HomeBase cannot be daisy-chained.*

Setting up the Terminal for ActiveSync Communications

1. On the terminal, tap **Start** > **ActiveSync** > **Tools** > **Options**. Activesync opens displaying the PC tab.
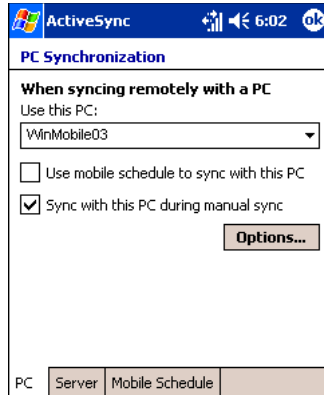
2. In the **Use this PC** drop-down list, select the name of the host PC.

3. Select **Sync with this PC during manual sync** to indicate that the terminal syncs with the selected host PC when synchronization is run from the terminal.

4. Tap **Options**.
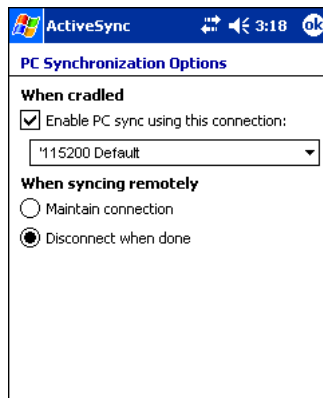
5. Under **When cradled**, select **Enable PC sync using this connection**, and select '**115200 Default** from the drop-down list. '115200 baud is recommended for RS-232 communication.

6. Tap **OK**.

7. Place the Dolphin in the HomeBase. The terminal attempts to start an ActiveSync connection with the desktop computer automatically.

Setting up the Desktop Computer for ActiveSync Communications

ActiveSync must be installed and configured for RS-232 on the desktop computer to sync successfully with a Dolphin terminal configured for RS-232 communication.

The following graphic displays the correct ActiveSync Connection Settings on the desktop computer for an RS-232 connection.

Note: You can have the USB connection box checked in addition to the serial cable box without affecting processing. However, you would most likely use one or the other.

Communicating with the Dolphin Terminal

To initiate communications between the Dolphin terminal and peripheral, complete these steps:

1.   Insert the Dolphin terminal into the terminal well of the HomeBase.

 • The DOCK LED illuminates green. If the DOCK LED does not illuminate, make sure that the terminal is properly seated. You may need to remove and re-insert the terminal.

 • The Dolphin terminal activates; if the power is off, the terminal automatically powers on. If the terminal does not power on, verify that the Hand Held Products power supply is properly connected to the cradle and plugged into a functioning outlet.

 • The Dolphin terminal automatically opens ActiveSync to establish a connection.

The HomeBase can now transfer data between the terminal and the host device. If communication does not occur, check the port connections to ensure that the cradle is correctly configured.

Verifying Communication

You can verify that the USB driver is functioning by watching the COMM LED on the USB HomeBase. When the COMM LED illuminates solid green, the HomeBase is communicating with the host device.

Verifying Data Transfer

The COMM LED flashes when data is being transferred via the HomeBase. For an RS-232 connection, the COMM LED flashes red and green. For a USB connection, the COMM LED flashes green.

Mounting the HomeBase

Set the Dolphin HomeBase on a dry, stable surface, such as a desktop or workbench near an electrical outlet. Be sure to provide enough workspace with good lighting for the user to view and operate the Dolphin terminal while it is in the HomeBase.

When choosing a location, bear in mind that:

• the mounting location must allow users easy access to the Auxiliary Battery Well, and
• the serial and USB ports as well as the power jack face straight out of the rear panel, and you will most likely want easy access to them in the future.

Desk Mounting

Dolphin charging/communication cradles have a DIN rail (7.5 X 35 mm) slot on the bottom to allow for secure desk attachment of the unit if desired.

Serial and USB port location (not in view)

Auxiliary Battery Well

DIN Rail (7.5 X 35 mm)
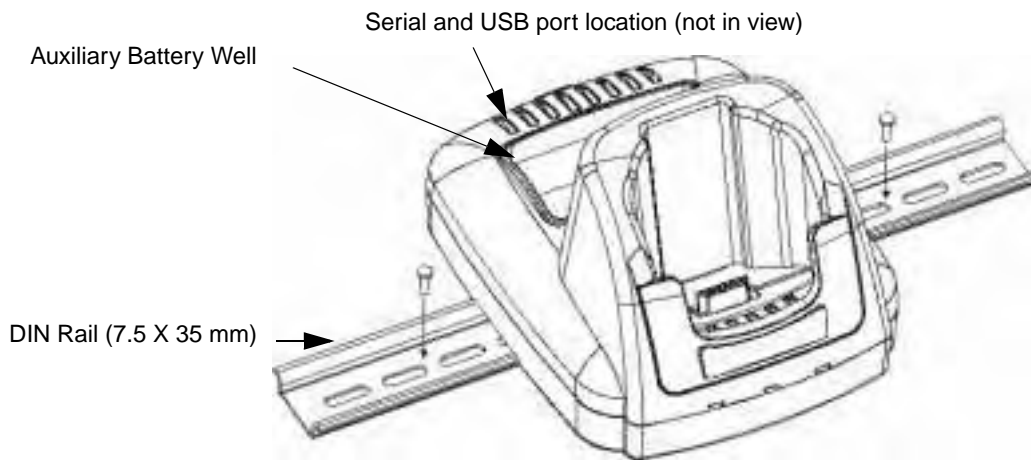
To mount the HomeBase, you slide the DIN rail slot along the bottom panel and secure it. Then, using the appropriate nuts and bolts, secure the DIN rail to the desk or flat surface.

Wall Mounting

You can purchase a wall mount kit that contains

• a mounting bracket,
• three screws, and
• six washer/nut sets.

1. Insert a screw into the round end of each screw slot on the bottom panel. Slide each screw towards the narrow end of the slot. Then, use a washer/nut set on each screw to secure the screw in the slot.
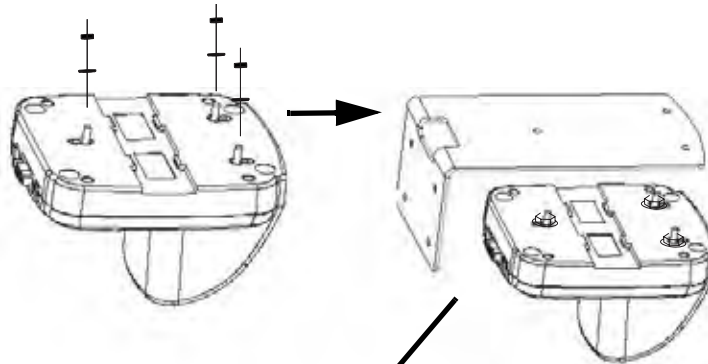
2. Attach the bottom panel to the mounting bracket; match the holes to the secured screws.

3. Use the remaining washer/nut sets to secure the mounting brackets to the bottom panel.
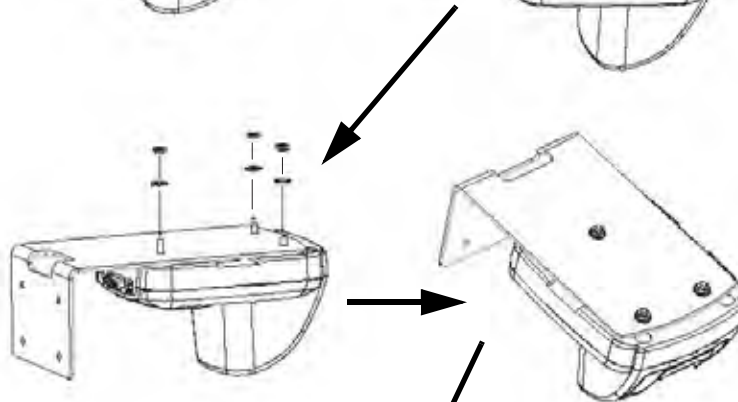
4. Turn the secured HomeBase right side up.

5. Secure the back wedge of the mounting brackets to a stable vertical surface.

Back wedge   Open slot for cords
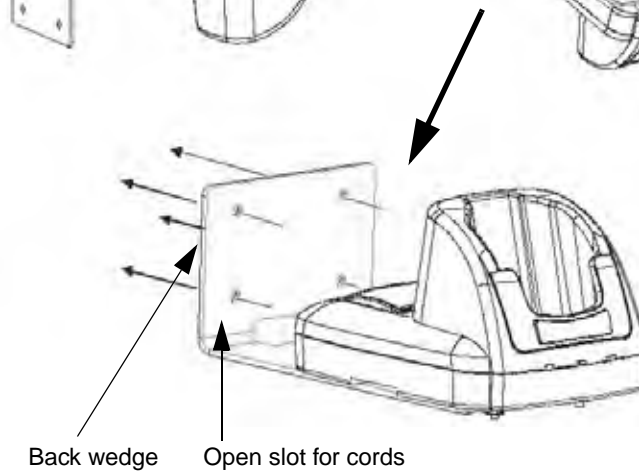
The back wedge of the mounting bracket contains an open slot for the power and communications cables. There is an extra space between this slot and the rear panel of the HomeBase to allow easy access to the power and communications ports. For more details on both ports, see Rear Panel on page 12-3.

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Dolphin Mobile Base

Overview

The Dolphin Mobile Base charging and communication cradle is designed specifically for in-premise and in-transit data collection applications. It features a flexible mounting bracket, a cigarette lighter adapter, and a power cable to adapt it to your environment.

When a terminal is seated in the Mobile Base, its main battery pack charges in less than four hours. The serial connector supports RS-232 communication and power out to peripheral devices, such as hand held scanners.

As the hub of your Dolphin mobile data collection system, the Mobile Base performs three important functions: charging, communications, and storage.

Charging

The Dolphin Mobile Base completes a full charge of the main battery pack in less than four hours. The Mobile Base also provides power to the intelligent battery charging system in all Dolphin terminals that senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge.

Communications

The Mobile Base transmits data to other devices at speeds of up to 115K baud via its RS-232 serial port.

Convenient Storage

Intelligent battery charging makes the Mobile Base a safe and convenient storage receptacle for your Dolphin terminal.

Capacity

The Mobile Base holds one terminal.

⚠️ *Use only Dolphin 9500 Series peripherals, power cables, and power adapters. Use of peripherals, cables, or power adapters not sold/manufactured by Hand Held Products will void the warranty and may damage the terminal.*

⚠️ *Use only the Li-ion battery packs provided by Hand Held Products. The use of any battery pack not sold/manufactured by Hand Held Products in Dolphin 9500 Series terminals will void your warranty and may result in damage to the Dolphin terminal or battery.*

Mobile Base Parts and Functions

Front Panel

The front panel of the Mobile Base has one slot. The following graphic features the Mobile Base with the Dolphin 9500 inserted into the terminal well.
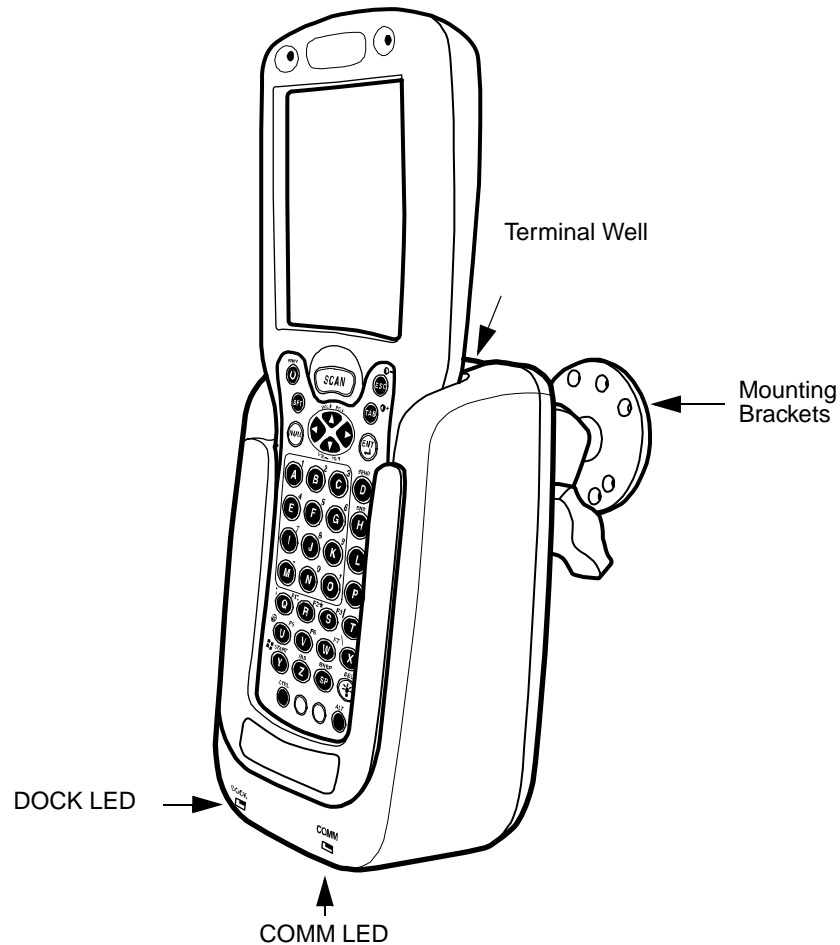
Terminal Well	Place the terminal in this well to communicate with a host device and charge the main battery pack.
Mounting Brackets	Use these to mount the Mobile Base to a fixed location.
DOCK LED	Illuminates solid green when the Dolphin terminal is properly seated in the terminal well.
COMM LED	Indicates the status of data transfer between the host device and the Dolphin terminal

COMM LED color	Indicates that…
Red	Data is being sent from the Host Device to the Dolphin Mobile Base.
Green	Data is being sent from the Dolphin Mobile Base to the Host Device.
Orange	Data is being sent at high data rates.

Bottom Panel

The power supply and RS-232 connectors are located on the bottom of the unit.

Power Supply Connector

RS-232 Communications Port
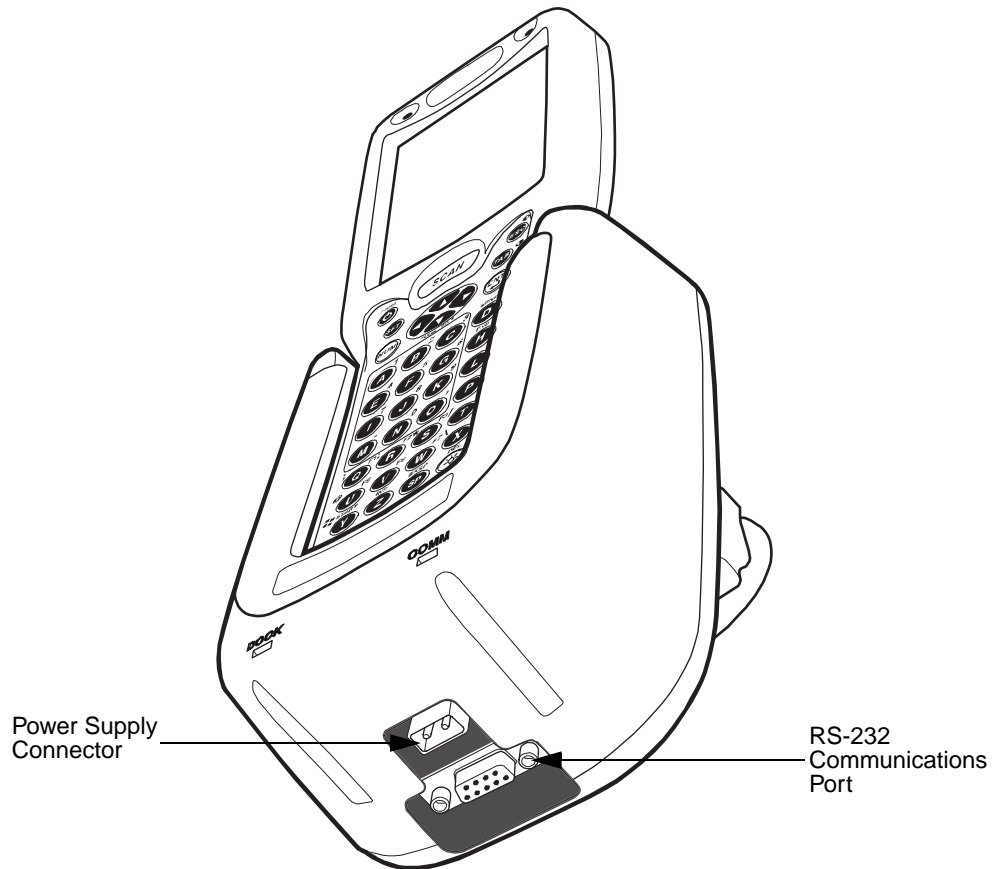
Power Supply Connector

Use this connector to attach a Hand Held Products power cable to the Dolphin Mobile Base. The Mobile Base can be powered by an external DC power source of between 11 VDC to 48 VDC.

To run on vehicle power, you can use the 12 VDC cable or 24 VDC cable option. The appropriate cable comes with the kit you ordered. The 12 VDC cable can be used with a cigarette lighter outlet. The 24 VDC, pigtail cable can be used to "hard-wire" into the vehicle power bus.

⚠️ *Verify that the power source is always within the specified range and observe correct input voltage polarity. An improper input voltage range (above the 48 VDC maximum) or reverse polarity could damage the power conversion circuitry.*

RS-232 Communications Port

Use a standard serial cable to connect the unit to a host device via RS-232; see Mobile Base Serial Connector on page 13-8.

Powering the Dolphin Terminal

When seated in a Mobile Base that is connected to the appropriate power source, the Dolphin terminal receives the power to charge its main battery and run its internal circuitry. Keep the Mobile Base plugged into the power source so that the Dolphin terminal battery pack stays fully charged.

For more information about powering the Mobile Base, see Powering the Dolphin Mobile Base on page 13-6.

Charging the Dolphin Terminal

The Mobile Base supplies charging power to the Dolphin terminal so that the terminal can monitor the charging of its battery pack. This charging method protects the battery from being damaged by overcharging. Therefore, the Dolphin terminal may be stored indefinitely in the Mobile Base without damage to the terminal, the battery pack, or the Mobile Base.

To charge a Dolphin terminal, complete these steps:

1. Insert a battery pack into the Dolphin terminal.

2. Slide the terminal, imager window up and the LCD visible, into the terminal well of the Mobile Base until it stops.

3. When the Dolphin terminal is properly seated, the DOCK LED on the Mobile Base illuminates solid green. The terminal begins charging automatically.

Installing the Dolphin Mobile Base

To install the Dolphin Mobile Base, you need to mount it securely to an appropriate location and supply it with power.

Mounting the Mobile Base

The adjustable mounting bracket holds the terminal securely in place and gives the user a variety of options for mounting the Mobile Base. When selecting a location, keep in mind that the power supply and serial connectors point straight out the bottom panel.

Back Panel and Brackets
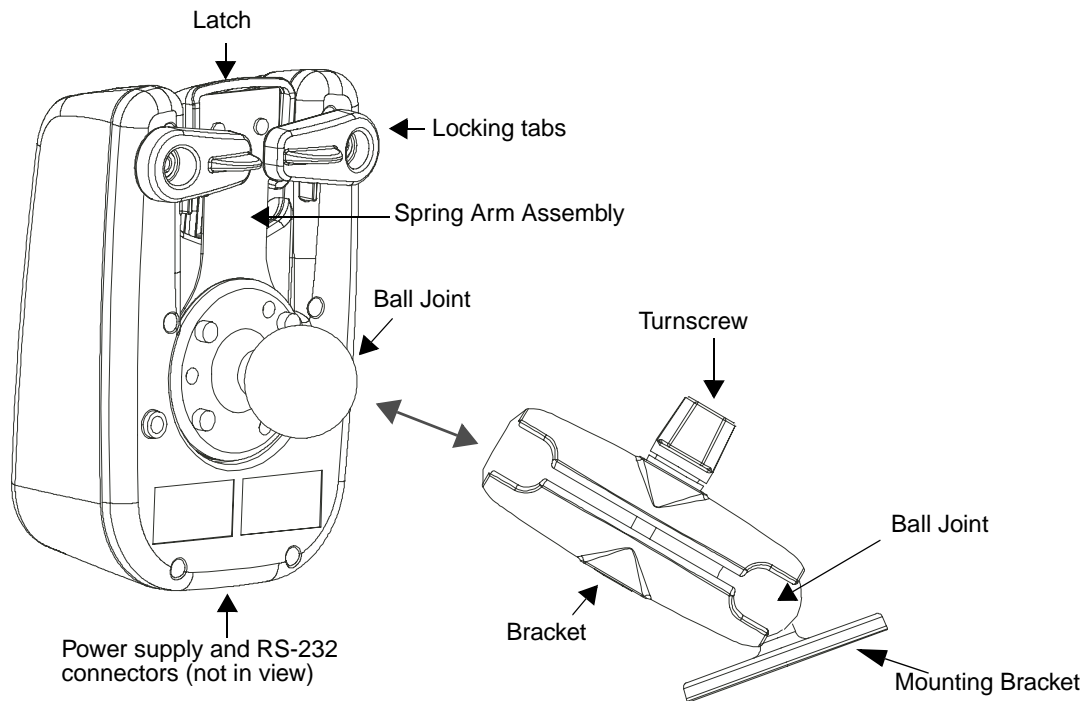
1. Loosen the turnscrew.

2. Insert the ball joint of the mounting bracket to the back of the bracket.

3. Insert the ball joint on the back of the Mobile Base into the other side of the bracket.

4. Tighten the turnscrew to secure both ball joints.

5. Secure the mounting bracket to the appropriate location.

Back Panel

Latch

> The latch sits on top of the spring arm assembly and holds the back of the terminal securely in place. The graphic above displays the mounting of a Dolphin 9500 terminal. There is another Dolphin Mobile Base that contains a special latch to accommodate the pistol-grip handle on the Dolphin 9550.

Locking Tabs

> When positioned as shown in the above graphic, the locking tabs secure the spring arm assembly, latch, and terminal in place. When seating a terminal, turn both arms up to allow the spring arm to move as necessary while the terminal is being inserted. After the terminal is seated, turn both arms toward the center to lock them.

> The both locking tabs must be pointing up to insert or remove a terminal in the Mobile Base.

Spring Arm Assembly

The spring arm assembly is the column that connects the latch to the back of the Mobile Base.

Ball Joints

There are two ball joints: one on the back of the Mobile Base and one on the mounting bracket. Both ball joints are inserted into the bracket and secured to mount the Mobile Base.

Connectors

The power and RS-232 connectors are located on the bottom panel. For more information, see Bottom Panel on page 13-3.

Brackets

Bracket

The bracket contains the turnscrew and two slots. Ball joints are inserted into each slot and secured with the turnscrew.

Turnscrew

The turnscrew is located on the top of the bracket. Rotate the turnscrew to secure or loosen the ball joint slots.

Mounting Bracket

The mounting bracket is what you attach to the mounting surface. It is comprised of a ball joint and flat disk. The disk contains drill holes you use to secure the Mobile Base to the mounting surface.

Powering the Dolphin Mobile Base

Note: Hand Held Products recommends that you leave the Mobile Base connected to its power source at all times.

The Mobile Base is powered via the power connector on the bottom panel; see Bottom Panel on page 13-3. Both the power and serial connectors are straight out, not at an angle. The Mobile Base must be powered by a 12 to 48 volt DC source.

Setting the Mobile Base Up for Communications

The Mobile Base RS-232 interface allows the Dolphin terminal to communicate to a personal computer, modem, or any standard RS-232 device using a standard serial cable and communications software.

Connecting the Cables

Connect the Mobile Base to the host computer or other device by plugging an RS-232 serial cable into the RS-232 Communications Port on the bottom of the Mobile Base. Plug the other end of the RS-232 serial cable into the correct port on the host RS-232 device.

The wiring of your cable depends on whether the other device is set up as a Data Communications Equipment (DCE) or Data Terminal Equipment (DTE) device.

The Mobile Base Communication Port is configured as a DCE device. To communicate with a DTE device such as a computer, use a standard (or straight-through) RS-232 cable. To communicate with a DCE device, use either a null modem adapter in line with a standard RS-232 cable, or a null-modem serial cable.

RS-232 Pin Configuration

Mobile Base /Host Port (DCE)	IBM AT DB9 (DTE)	IBM XT DB25 (DTE)	Modem DB25 (DCE)
Pin / Input Signal			
2 / (RD)	2	3	2
3 / (TD)	3	2	3
5 / (SG)	5	7	7
4 / (DTR)	4	20	6
6 / (DSR)	6	6	20
7 / (RTS)	7	4	5
8 / (CTS)	8	5	4

Refer to this table if you want to make your own cables. To do so, you must determine if your host RS-232 device is

- 9-pin or 25-pin and
- configured as a DCE or DTE device.

Mobile Base Serial Connector

The following diagram displays the pin diagram of the serial connector of the bottom panel of the Mobile Base.
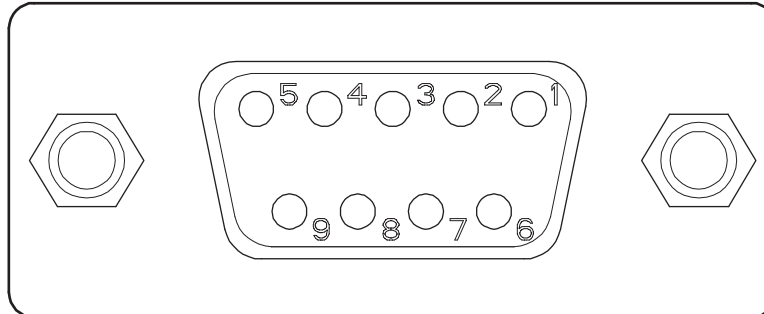
Pin #	Description
1	Internal Jumper to Pin 6
2	TXD
3	RXD
4	DSR
5	GND
6	DTR
7	CTS
8	RTS
9	5 VOLT OUT

Note: Signals referenced are for a DTE device.

The Mobile Base connector is straight to the printed circuit board (PCB). The ninth pin sends 500mA at 5V power out. This can power a peripheral device, such as a mobile printer, as long as that peripheral device can accept 500mA at 5V.

Configuring the Terminal for ActiveSync Communications

1. On the terminal, tap **Start** > **ActiveSync** > **Tools** > **Options**. ActiveSync opens displaying the PC tab.
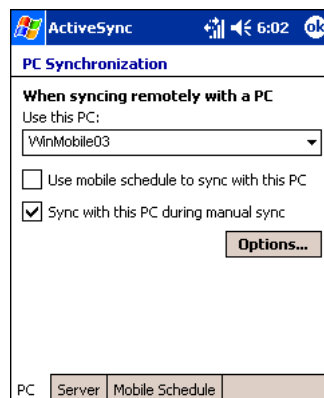
2. In the **Use this PC** drop-down list, select the name of the host PC.

3. Select **Sync with this PC during manual sync** to indicate that the terminal syncs with the selected host PC when synchronization is run from the terminal.

4. Tap **Options**.
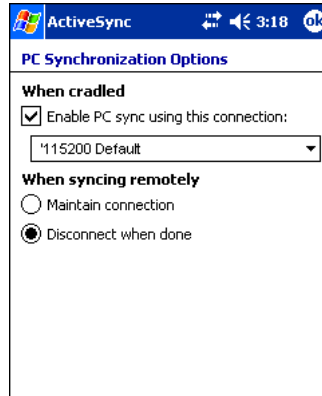
5. Select **Enable PC sync using this connection**, then select '**115200 Default** from the drop-down list.
   '115200 baud is recommended for RS-232 communication.

6. Tap **OK**.

7. Place the Dolphin terminal in the Mobile Base. The Dolphin terminal attempts to start an ActiveSync connection with the desktop computer automatically.

14

Dolphin ChargeBase

Overview

The Dolphin ChargeBase is a four-slot charging cradle that can power four Dolphin terminals, and charge their main batteries in less than four hours.

Charging

The Dolphin ChargeBase completes a full charge of the main battery pack in less than four hours. The ChargeBase also provides power to the intelligent battery charging system in all Dolphin terminals that senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge.

As battery packs charge, the charging circuitry follows the two-step charging process (CC-CV) that is recommended for Li-Ion batteries. The process monitors changes in temperature, current, and voltage.

Convenient Storage

Intelligent battery charging makes the Dolphin ChargeBase a safe and convenient storage receptacle for your Dolphin terminal.

Capacity

The ChargeBase can hold up to four Dolphin terminals. Each charging slot charges each terminal independently of the other slots.

⚠️ *Use only Dolphin 9500 Series peripherals, power cables, and power adapters. Use of peripherals, cables, or power adapters not sold/manufactured by Hand Held Products will void the warranty and may damage the terminal.*

⚠️ *Use only the Li-ion battery packs provided by Hand Held Products. The use of any battery pack not sold/manufactured by Hand Held Products in Dolphin 9500 Series terminals will void your warranty and may result in damage to the Dolphin terminal or battery.*

Dolphin ChargeBase Parts and Functions

Front Panel

Terminal Wells

Dock LED   Charge LED
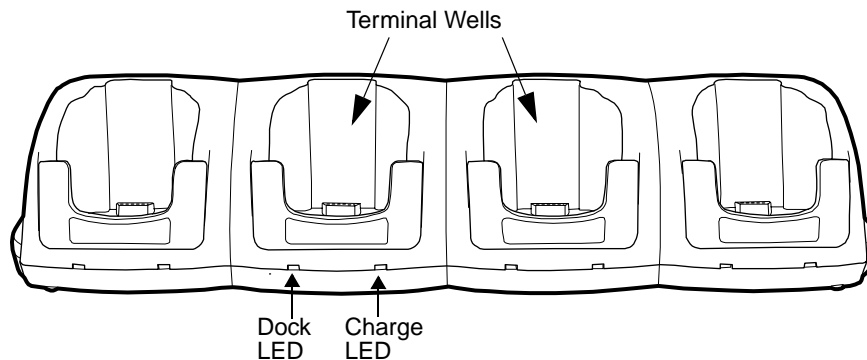
Terminal Wells

The ChargeBase contains four terminals wells. Each well

• Holds and charges the main battery pack of one Dolphin terminal.
• Contains the companion to the industrial-grade, 17-pin connector on the bottom panel of Dolphin terminals.
• Has two LEDs on the front: the Dock LED and the Charge LED.

Dock LED

Each terminal well displays a Dock LED on the front that lights solid green when a terminal is properly seated, which means that the terminal and the base are connected.

Charge LEDs

Each terminal well displays a Charge LED on the front that lights green to indicate charging. For details, see Charging Terminals in the ChargeBase on page 14-4.

Back Panel

Power Supply Connector
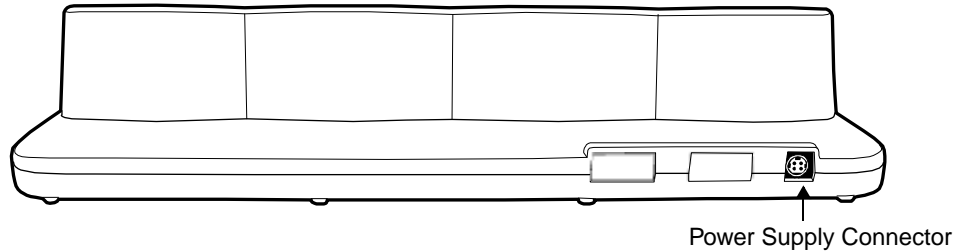
Power Supply Connector

This connector receives input from the power adapter. Plug the power connector cable from the power adapter into this connector. There is no ON/OFF switch on the back panel of the ChargeBase. The power switch is on the power adapter.

Power Supply

The ChargeBase includes a power supply that contains a power adapter to ensure the proper voltage. The power adapter is plugged into standard AC/DC outlets.

Power Adapter

Power Connector Cable

ON/OFF Switch

Power Cord   ON Position
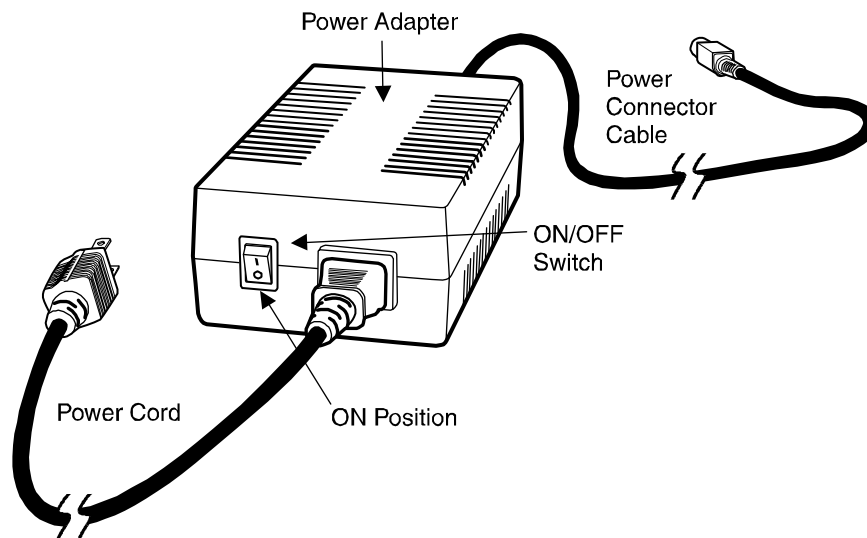
Supplying Power to the ChargeBase

⚠️ *Using a non-Hand Held Products power adapter voids your warranty and could result in serious damage to the circuitry of the Dolphin ChargeBase.*

1. Be sure the power switch on the power adapter is in the OFF position.

2. Plug the power cord into the power adapter.

3. Plug the power connector cable into the power connector on the back panel of the ChargeBase.

4. Plug the power cord into a standard wall outlet.

5. On the power adapter, turn the power switch to the ON position. The LEDs illuminate as the ChargeBase powers up.

6. The ChargeBase is ready to begin charging terminals.

Inserting and Removing Terminals

1. To insert the terminal, hold the terminal with the bottom panel perpendicular to the base.
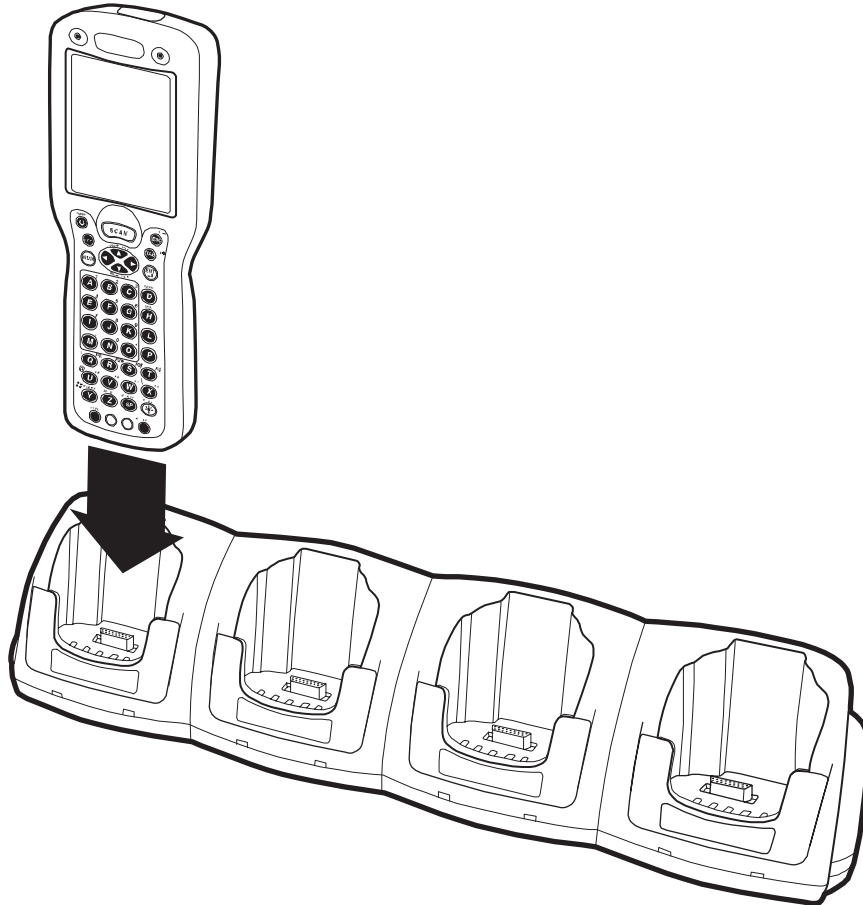
2. Slide the terminal into the well until the Dock LED lights solid green.

3. Charging begins immediately.

Note: *To remove a terminal, grasp it firmly in your hand and lift it up and out of the terminal well. The LEDs for the terminal well turns off.*

Charging Terminals in the ChargeBase

The Dolphin ChargeBase charges the main battery of each terminal in less than four hours. The ChargeBase uses the intelligent battery charging system incorporated into all Dolphin terminals that prevents overcharging. This means that Dolphin terminals may be stored in the ChargeBase indefinitely without damage to the terminals, battery packs, or the ChargeBase.

1. Power the ChargeBase; see Supplying Power to the ChargeBase on page 14-3.

2. Insert a terminal into a terminal well; see Inserting and Removing Terminals on page 14-3.

3. The Charge LED lights green to indicate that the terminal is powered and charging.

Mounting the ChargeBase

The Dolphin ChargeBase should be mounted to a dry, stable surface. When choosing a location, always bear in mind that
- The mounting location must allow users easy access to the power connector.
- The ChargeBase should be oriented so that users can easily read the labels.

Bottom Panel

The bottom panel of the Dolphin ChargeBase offers two mounting options: insert a DIN Rail for desk mounting or use mounting brackets with the available screw slots for wall mounting.

Screw Slots

Rubber Feet
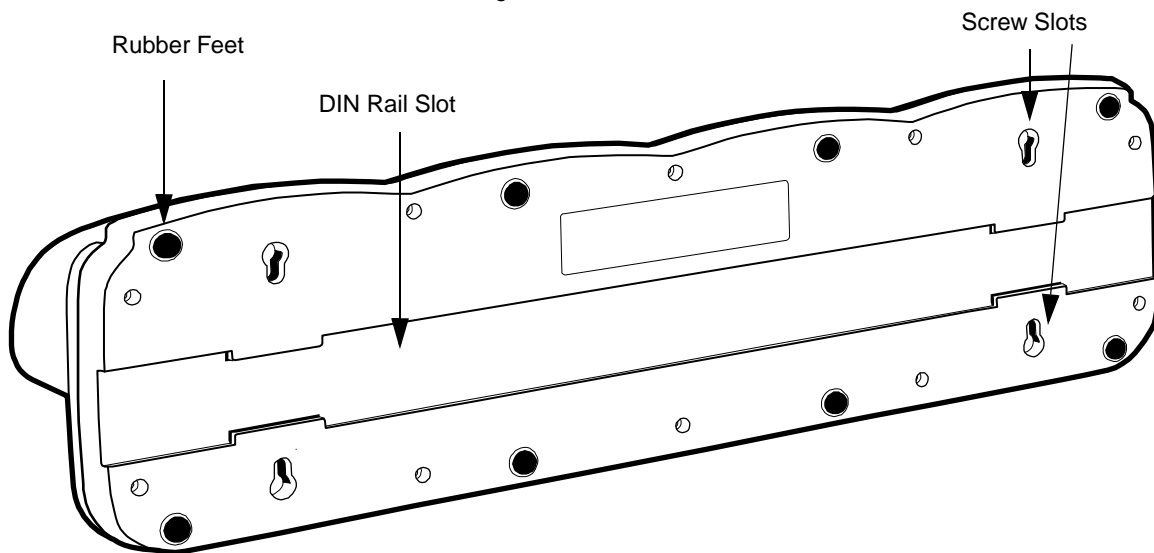
DIN Rail Slot

Using the DIN Rail

All Dolphin charging/communication cradles have a DIN rail (7.5 X 35 mm) slot on the bottom panel to enable secure mounting.

1. Slide the DIN Rail into the DIN Rail slot on the bottom panel.
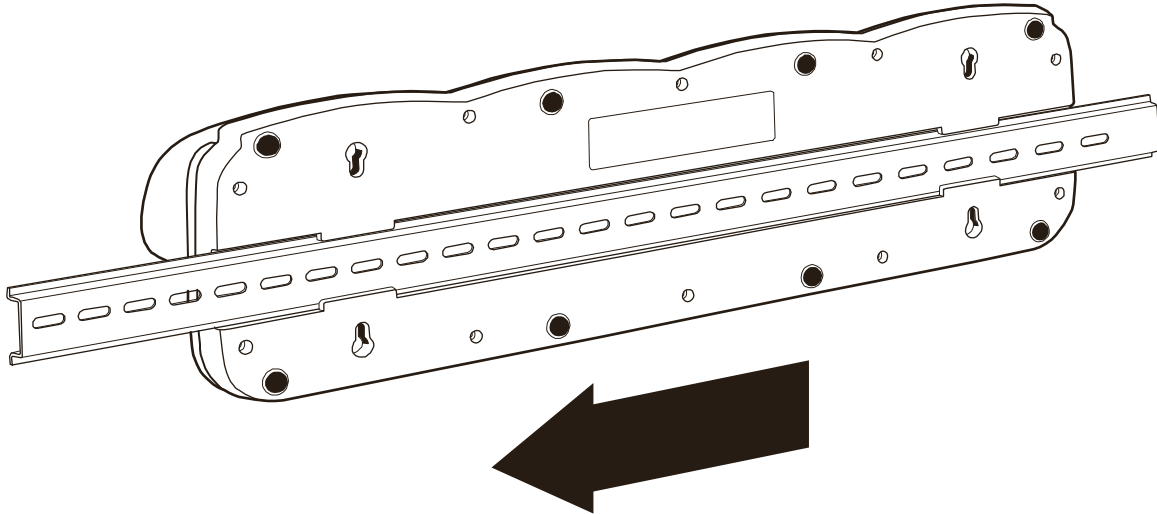
2. Turn the ChargeBase and DIN Rail right side up.
3. Secure the DIN Rail to a stable, flat horizontal surface.
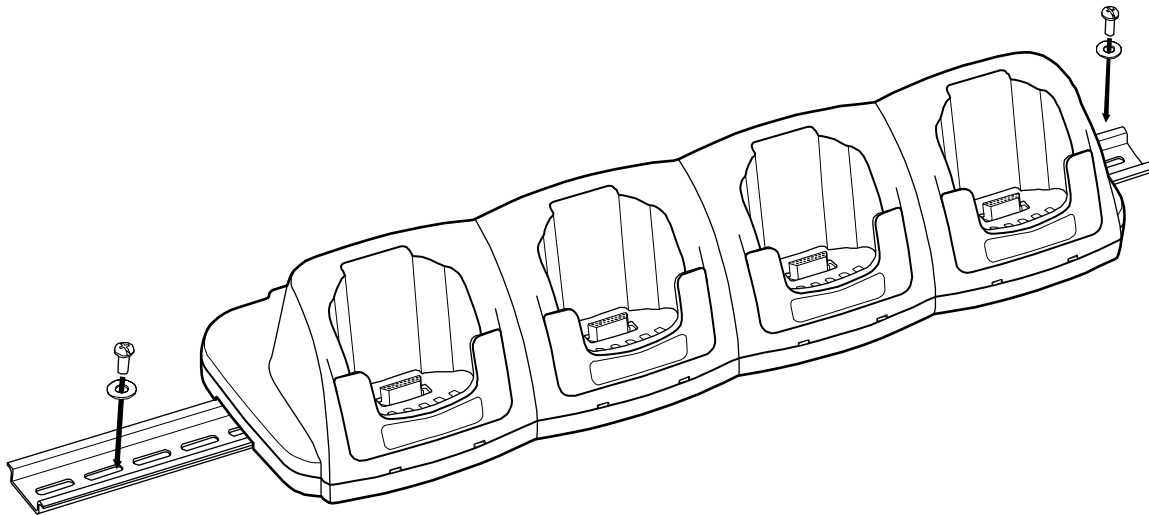
Using the Wall Mount Kit

Wall mount kits can be purchased separately to secure the ChargeBase to a wall or other vertical surface. For the ChargeBase, you need to purchase two kits so that you have two mounting brackets, one for each end of the ChargeBase. Each mounting bracket contains an open slot in the back to accommodate the connector cables.

Each mounting bracket contains an open slot in the back to accommodate the connector cables.

1. Insert the head of each screw into the round end of each of the four screw slots on the bottom panel. Slide each screw towards the narrow end of the screw slot.

Screws in the narrow end of each slot
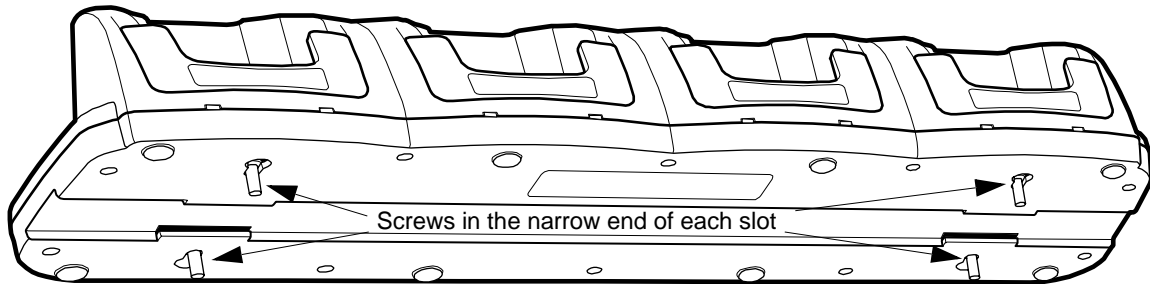
2. Use a washer/nut set on each screw to secure the screw in each slot.

3. Attach the bottom panel to the two mounting brackets.

Open Slot for Connector Cables   Mounting Brackets   Washer/Nut
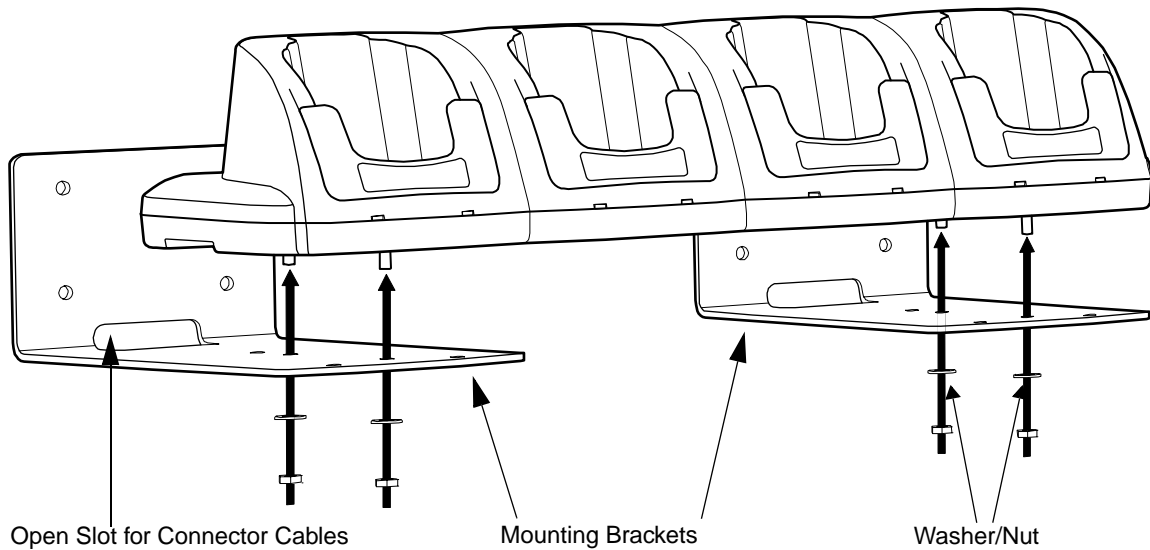
4. Using the remaining washer and nut sets, secure the mounting brackets to the bottom panel.
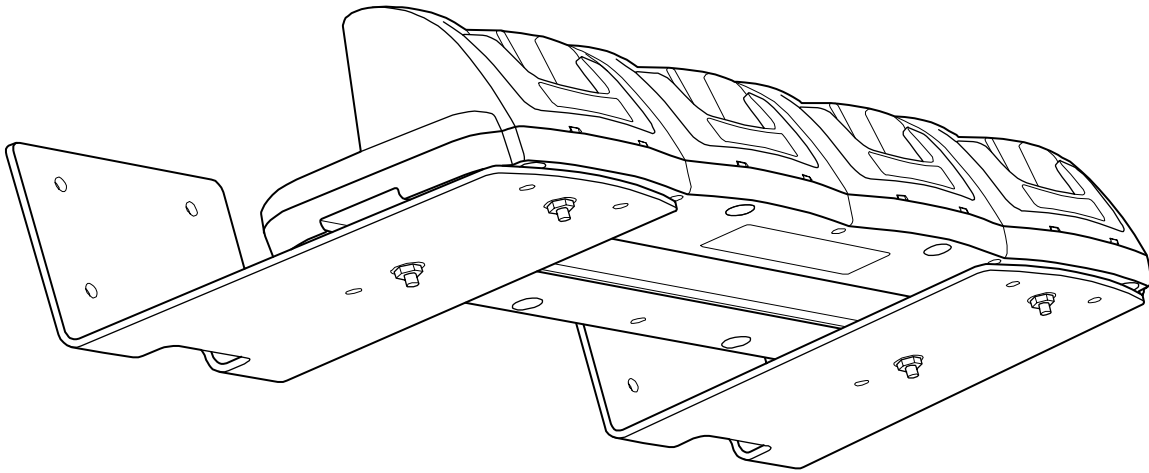
5. Secure the mounting brackets to an appropriate vertical surface.

15

Dolphin QuadCharger
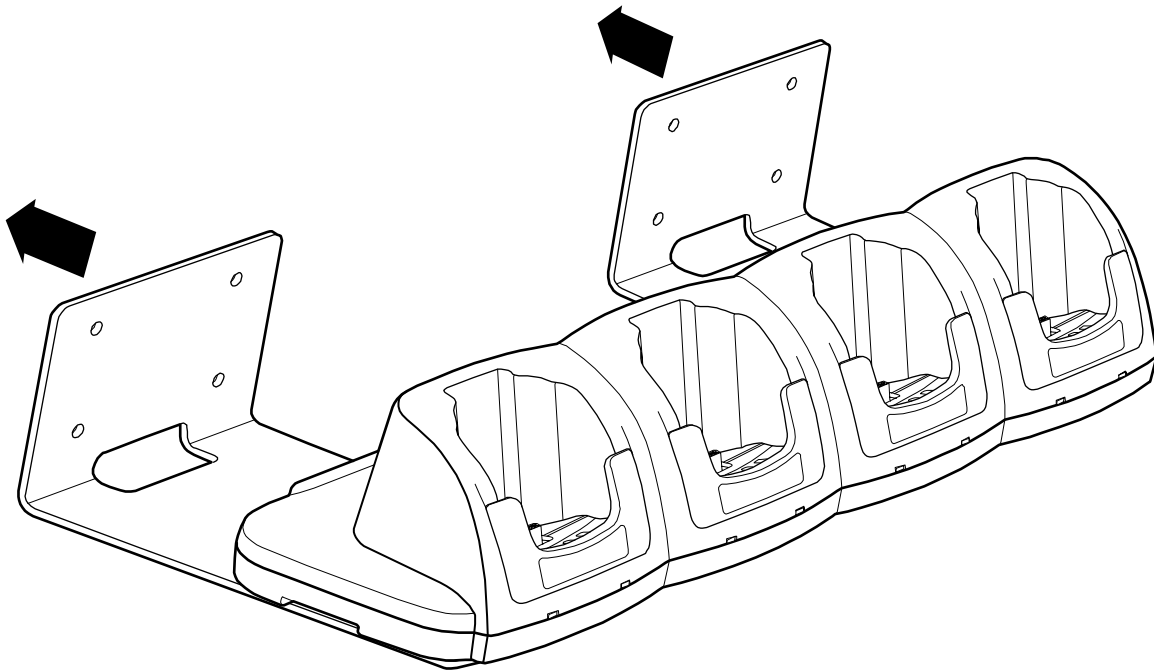
Overview

The Dolphin QuadCharger is a four-slot charging station that provides intelligent battery management for the Li-ion battery packs used in Dolphin terminals. Batteries charge in less than four hours. The fourth slot features a battery analyzer that completely resets a battery, then displays its remaining capacity.

Compatibility

The QuadCharger is compatible with the Li-ion batteries that power the Dolphin terminals.

Charging Process

Each charging slot works independently of the other three. As battery packs charge, the charging circuitry follows the two-step charging process (CC-CV) that is recommended for Li-Ion batteries. The process monitors changes in temperature, current, and voltage and resets the battery pack.

Capacity

The Dolphin QuadCharger holds four Li-ion batteries.

⚠ *Use only Dolphin 9500 Series peripherals, power cables, and power adapters. Use of peripherals, cables, or power adapters not sold/manufactured by Hand Held Products will void the warranty and may damage the terminal.*

⚠ *Use only the Li-ion battery packs provided by Hand Held Products. The use of any battery pack not sold/manufactured by Hand Held Products in Dolphin 9500 Series terminals will void your warranty and may result in damage to the Dolphin terminal or battery.*

Dolphin QuadCharger Parts and Functions

Top Panel
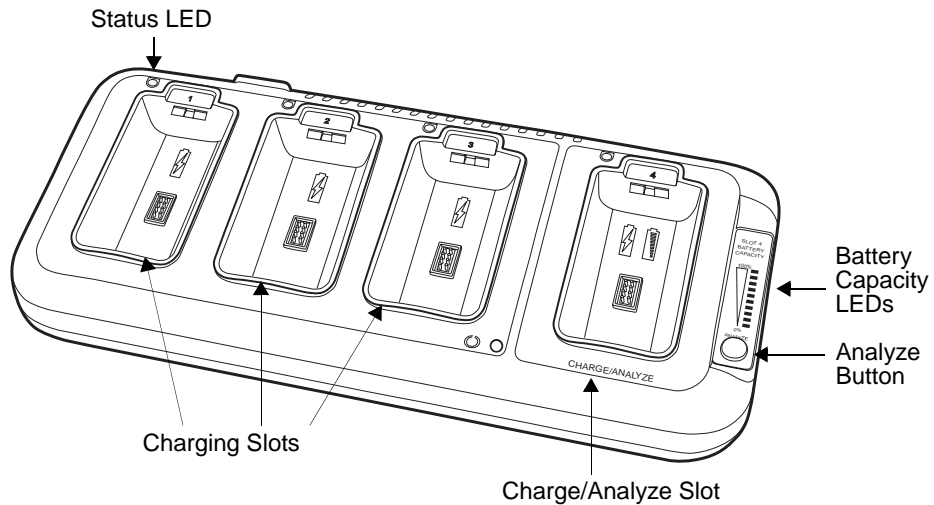
Charging Slots

The QuadCharger contains four charging slots. Each slot holds one Li-ion battery and charges it independently of the other slots. When a battery is placed in each slot, it immediately begins charging.

Charge/Analyze Slot

This is the fourth slot and the only one that can be used to analyze a battery. When a battery is placed in this slot, it begins charging just as it does in the other three slots. However, if you press the ANALYZE button, it runs the battery in this slot through the complete Analyze cycle. For more information, see Using the Battery Analyzer on page 15-5.

Battery Capacity Indicator LEDs

These LEDs give a readout of the remaining battery capacity after it has run through a complete analyze cycle. For more information, see Battery Capacity Indicator LEDs on page 15-2.

Analyze Button

Press this button to start a battery analyze cycle; see Using the Battery Analyzer on page 15-5.

Status LEDs

A status LED is located above each of the four battery slots. The color of the LED indicates the charge status of the batteries in its slot.

Status LED color	This color indicates that the battery in the slot…
Green	Has completed its charge cycle and is ready for use.
Orange	Is being charged at a maximum charge rate.
Red	Encountered an error during the most recent charge cycle.

Back Panel

Status LED   Power Switch   Power Supply Connector
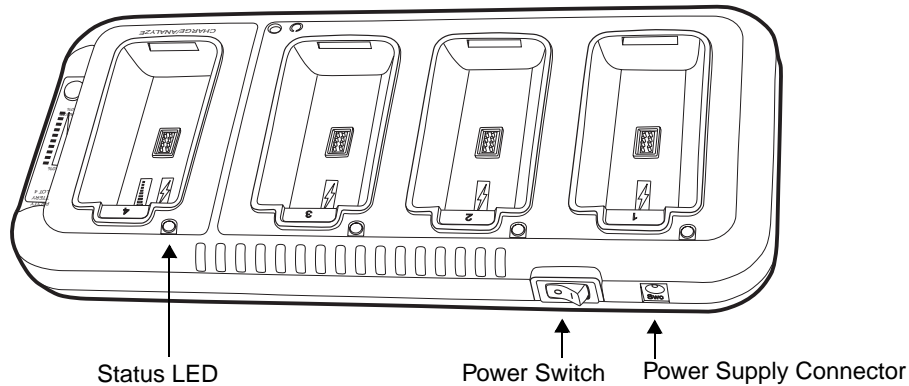
Power Switch

> Toggle the power switch to turn the QuadCharger on and off.

Power Supply Connector

> Use this connector to attach the power supply to the QuadCharger. The universal power supply accepts input voltages between 90-265 volts.

Supplying Power to the QuadCharger

The QuadCharger must be connected to a power source via the Hand Held Products power adapter cable so that voltage is adjusted appropriately.

1. Locate the AC power adapter cable and plug it into the power source.

2. Connect the power cable to the power adapter.

3. Connect the power cable to the supply connector on the back of the QuadCharger.
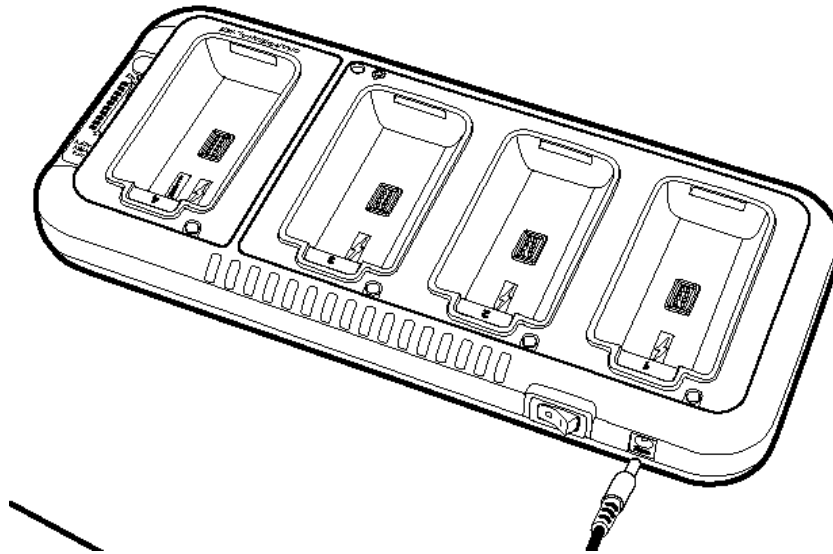
4. Press the power switch to the ON position.
   The power LED illuminates green, and the charger performs a self-diagnostic test that lasts approximately five seconds.

Inserting and Removing Battery Packs

To insert a battery pack, place the end of the battery without the locking tab into the bottom of the charging pocket and snap the battery into place with a hinging motion. The Status LED for that particular slot illuminates orange when the battery has been properly inserted.

To remove a battery pack, push the locking tab down and pull the battery out from the charging slot with a hinging motion.

Storing Batteries

Recommendations

To maintain top performance from batteries, follow these storage guidelines:

- Avoid storing batteries outside of the specified temperature range of -4 to 104° F (-20 to 40°C) or in extremely high humidity.
- For prolonged storage, do not keep batteries stored in a charger that is connected to a power source.

Charging Batteries in the QuadCharger

For best results, battery packs should be at room temperature before recharging them; temperature has a marked effect on charging. The recommended temperature range is 50° to 95° F (10° to 35° C).

1. Set up the QuadCharger.

2. Supply the QuadCharger with power and turn the power switch on.

3. Insert batteries into the appropriate slots.
   The Status LED for each slot turns orange to indicate that the battery has begun a charge cycle.

4. When the Status LED turns green, the battery in the slot has completed charging.

Using the Battery Analyzer

Purpose

Using the Charge/Analyze slot helps you monitor the charge capacity of Li-ion batteries over time.

Location

The battery analyzer is located in the fourth slot - named the Charge/Analyze slot - of the ChargeBase. Only a battery placed in this slot can be run through an Analyze cycle. This slot contains Battery Capacity LEDs along the right side.

Analyze Cycle

The Analyze cycle is initiated when a battery is placed in the Charge/Analyze slot and the ANALYZE button is pressed. In an Analyze cycle, batteries are completely discharged, then recharged to capacity. The length of time it takes for a battery to complete the Analyze cycle varies depending on the initial state of the battery's charge. Minimum time is 8 hours, maximum time is 12 hours.

Battery Capacity LEDs

The Battery Capacity LEDs are located along the right side of the Charge/Analyze slot. Each LED equates to 10% battery capacity. These LEDs display the capacity of the battery at the end of the Analyze cycle. Battery capacity is displayed as a percentage of measured capacity/rated capacity.

Status LED

The Charge/Analyze slot also contains a standard status LED in the upper, left corner of the slot. When this slot is used for regular charging, this LED operates in the usual manner; see Status LEDs on page 15-2.

When this slot is being used to analyze a battery, the Status LED functions as follows:

Status LED color	Indicates that the battery in the slot…
Solid Green	Has completed the Analyze cycle.
Flashing Orange	Is being analyzed.
Solid Red	Encountered an error during the Analyze cycle.

To Analyze a Battery

1. Insert the battery into the Charge/Analyze slot (the fourth).

2. Press the ANALYZE button. The Status LED flashes orange to indicate that the analyzing cycle has begun.

> ⚠ *The Dolphin QuadCharger is accumulating battery pack information during the entire Analyze cycle. Do NOT remove the battery until the cycle has been completed.*

3. Upon completion of the Analyze cycle, the Status LED lights solid green, and the Battery Capacity Indicator LEDs display the battery's capacity.

You can verify a battery's capacity by installing the battery in a terminal and checking the power; see Power on page 5-10.

Mounting the QuadCharger

The Dolphin QuadCharger should be on a dry, stable surface. To easily adapt the QuadCharger to your environment, it can be mounted on a flat, horizontal surface such as a desktop or workbench, or a flat, vertical surface such as a wall.

When choosing a location, always bear in mind that

- the mounting location must allow users easy access to power switch and power connector.
- the QuadCharger should be oriented so that users can easily insert and remove battery packs and read the labels, especially for the Battery Analyzer.

Desk Mounting

All Dolphin charging/communication cradles have a DIN rail (7.5 X 35 mm) slot on the bottom panel to enable secure mounting.

To mount the QuadCharger, you slide the DIN rail slot along the bottom panel and secure it. Then, using the appropriate nuts and bolts, secure the DIN rail to the desk or wall.

The following graphic displays how to mount the QuadCharger to a desk:
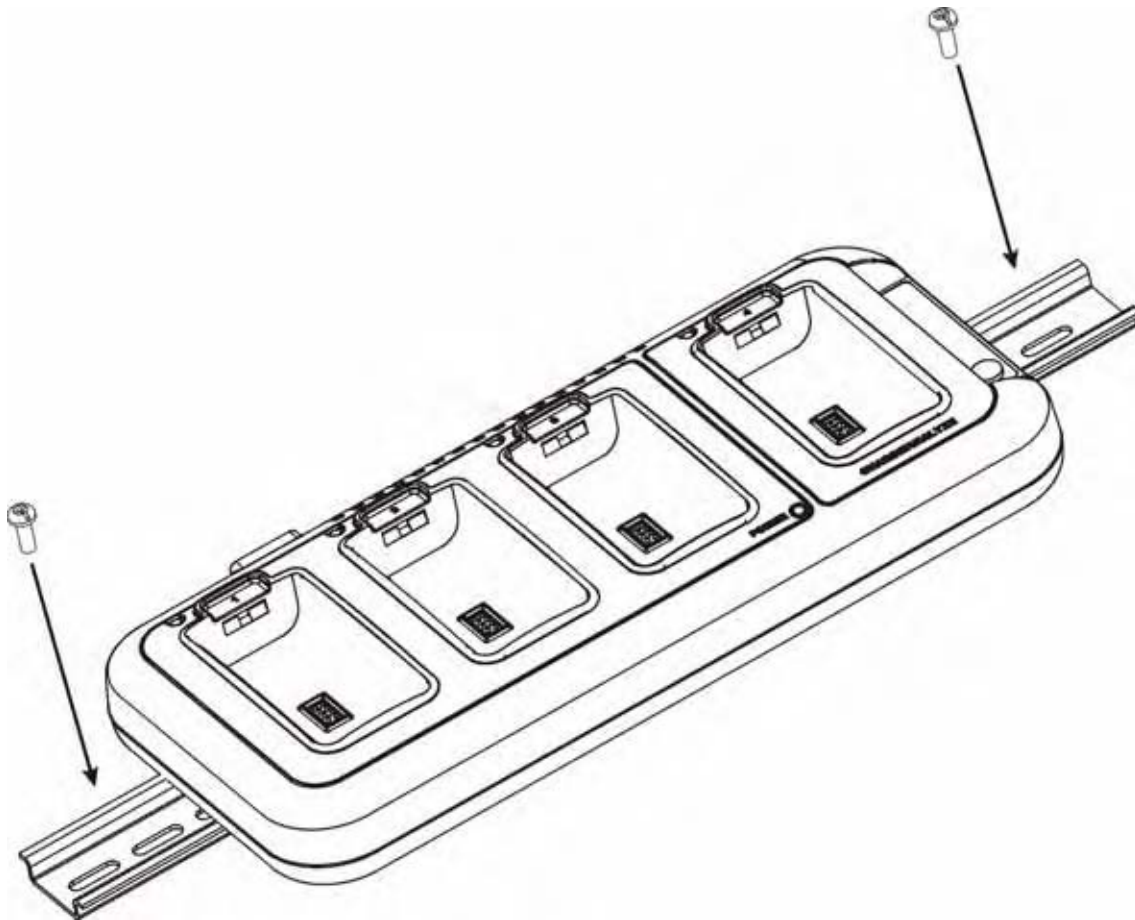
Wall Mounting

The following graphic displays how mount a QuadCharger to a wall:
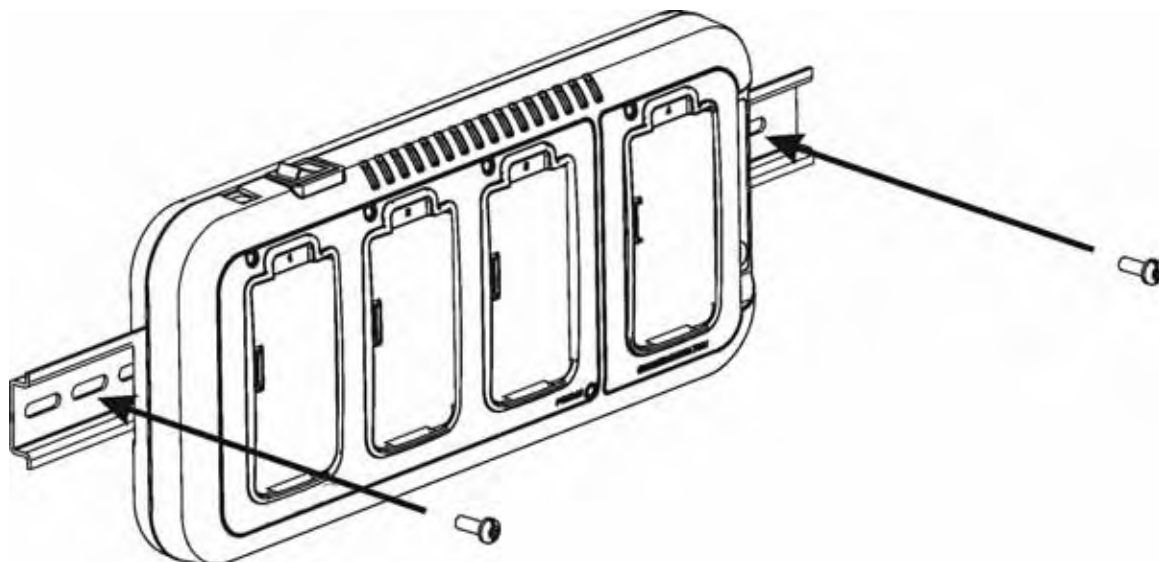
Troubleshooting

If you encounter problems with your Dolphin QuadCharger, refer to chart below for possible solutions. If problems persist, please contact Hand Held Products Technical Support.

Problem	Issue
The Status LED does not come on when I insert a battery pack into the Dolphin QuadCharger	Check the power connections on the Dolphin QuadCharger; make sure the POWER switch is ON and the battery pack is properly seated.
The Status LED lights red during charging.	Try to charge the battery in one of the other charging slots. If the red Status LED comes on again, then the problem is associated with the battery pack. If the red status stays with the charging slot, the problem is associated with the charging circuity.
The Status LED lights red and stays on without a battery in the charging slot.	An error occurred during the self-diagnostic test for that particular charging pocket. Call Hand Held Products Product Service and request an RMA. For additional warranty and return information, see Customer Support on page 16-1.

Customer Support

Product Service and Repair

Hand Held Products provides service for all its products through service centers throughout the world. To obtain warranty or non-warranty service, return the unit to Hand Held Products (postage paid) with a copy of the dated purchase record attached. Contact the appropriate location below to obtain a Return Material Authorization number (RMA #) before returning the product.

North America

Hand Held Products Corporate Offices
Telephone:(800) 782-4263, option 3
Fax: (704) 566-6015
E-mail: naservice@handheld.com

América Latina

Hand Held Products América Latina
Teléfono: (800) 782-4263, opción 8, opción 4
Teléfono: (704) 998-3998, opción 8, opción 4
Fax: (239) 263-9689
E-mail: laservice@handheld.com

Brasil

Hand Held Products São Paulo
Teléfono: Int+55 (11) 2178-0500
Fax: Int+55 (11) 2178-0502

Hand Held Products Rio de Janeiro
Teléfono: Int+55 (21) 2178-0500
Fax: Int+55 (21) 2178-0505

São Paulo and Rio de Janeiro
E-mail: brservice@handheld.com

México

Hand Held Products México
Teléfono: Intl+52 (55) 5203-2100
Fax: Intl+52 (55) 5531-3672
E-mail: mxservice@handheld.com

Europe, Middle East, and Africa

Hand Held Products Europe
Telephone:+31 (0) 40 29 01 633
Fax: +31 (0) 40 2901631
E-mail: euservice@handheld.com

Asia Pacific

Hand Held Products Asia/Pacific
Telephone:+852-2511-3050
Fax: +852-2511-3557
E-mail: apservice@handheld.com

Japan

Hand Held Products Japan
Telephone:+81-3-5770-6312
Fax: +81-3-5770-6313
E-mail: apservice@handheld.com

Online Product Service and Repair Assistance

You can also access product service and repair assistance online at www.handheld.com.

Technical Assistance

If you need assistance installing or troubleshooting, please call your Distributor or the nearest Hand Held Products technical support office:

North America/Canada:

Telephone: (800) 782-4263, option 4 (8 a.m. to 6 p.m. EST)
Fax number: (315) 685-4960
E-mail: *natechsupport@handheld.com*

América Latina:

Teléfono: (800) 782-4263, opción 8, opción 3
Teléfono: (704) 998-3998, opción 8, opción 3
E-mail: *latechsupport@handheld.com*

Brasil

São Paulo
Teléfono: Int+55 (11) 2178-0500
Fax: Int+55 (11) 2178-0502

Rio de Janeiro
Teléfono: Int+55 (21) 2178-0500
Fax: Int+55 (21) 2178-0505

São Paulo and Rio de Janeiro
E-mail: *brtechsupport@handheld.com*

México

Teléfono: (800) 782-4263, opción 8, opción 3
Teléfono: (704) 998-3998, opción 8, opción 3
E-mail: *latechsupport@handheld.com*

Europe, Middle East, and Africa:

Telephone-
European Ofc: Int+31 (0) 40 79 99 393
U.K. Ofc: Int+44 1925 240055
E-mail: *eutechsupport@handheld.com*

Asia Pacific:

Telephone: Int+852-3188-3485 *or* 2511-3050
E-mail: *aptechsupport@handheld.com*

Online Technical Assistance

You can also access technical assistance online at www.handheld.com.

Limited Warranty

Hand Held Products, Inc. ("Hand Held Products") warrants its products to be free from defects in materials and workmanship and to conform to Hand Held Products's published specifications applicable to the products purchased at the time of shipment. This warranty does not cover any Hand Held Products product which is (i) improperly installed or used; (ii) damaged by accident or negligence, including failure to follow the proper maintenance, service, and cleaning schedule; or (iii) damaged as a result of (A) modification or alteration by the purchaser or other party, (B) excessive voltage or current supplied to or drawn from the interface connections, (C) static electricity or electro-static discharge, (D) operation under conditions beyond the specified operating parameters, or (E) repair or service of the product by anyone other than Hand Held Products or its authorized representatives.

This warranty shall extend from the time of shipment for the duration published by Hand Held Products for the product at the time of purchase ("Warranty Period"). Any defective product must be returned (at purchaser's expense) during the Warranty Period to Hand Held Products' factory or authorized service center for inspection. No product will be accepted by Hand Held Products without a Return Materials Authorization, which may be obtained by contacting Hand Held Products. In the event that the product is returned to Hand Held Products or its authorized service center within the Warranty Period and Hand Held Products determines to its satisfaction that the product is defective due to defects in materials or workmanship, Hand Held Products, at its sole option, will either repair or replace the product without charge, except for return shipping to Hand Held Products.

EXCEPT AS MAY BE OTHERWISE PROVIDED BY APPLICABLE LAW, THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER COVENANTS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ORAL OR WRITTEN, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

HAND HELD PRODUCTS' RESPONSIBILITY AND PURCHASER'S EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT. IN NO EVENT SHALL HAND HELD PRODUCTS BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, AND, IN NO EVENT, SHALL ANY LIABILITY OF HAND HELD PRODUCTS ARISING IN CONNECTION WITH ANY PRODUCT SOLD HEREUNDER (WHETHER SUCH LIABILITY ARISES FROM A CLAIM BASED ON CONTRACT, WARRANTY, TORT, OR OTHERWISE) EXCEED THE ACTUAL AMOUNT PAID TO HAND HELD PRODUCTS FOR THE PRODUCT. THESE LIMITATIONS ON LIABILITY SHALL REMAIN IN FULL FORCE AND EFFECT EVEN WHEN HAND HELD PRODUCTS MAY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH INJURIES, LOSSES, OR DAMAGES. SOME STATES, PROVINCES, OR COUNTRIES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

All provisions of this Limited Warranty are separate and severable, which means that if any provision is held invalid and unenforceable, such determination shall not affect the validity of enforceability of the other provisions hereof.

The limited duration of the warranty for Dolphin 9500 Series is as follows:

- Dolphin 9500 and Dolphin 9550 terminals with an integrated imager are covered by a two-year limited warranty.
- Dolphin 9501 and Dolphin 9551 terminals with an integrated laser engine are covered by a one-year limited warranty.
- Touch screens are covered by a one-year limited warranty.
- Dolphin HomeBase, Mobile Base, ChargeBase, Net Base, Mobile Charger, and QuadCharger are covered by a one-year limited warranty.
- The limited duration of the warranty for batteries is one year. Use of any battery not sold/manufactured by Hand Held Products may damage the terminal and/or the battery and will void the warranty. Batteries returned to Hand Held Products in a reduced state may or may not be replaced under this warranty. Battery life will be greatly increased when following the battery instructions in this user's guide.
- Use of any peripheral with the Dolphin terminal not manufactured/sold by Hand Held Products will void the warranty. This includes but is not limited to: cables, power supplies, cradles, and docking stations.
- Use only power adapters approved for use by Hand Held Products. Failure to do so may result in improper operation or damage to the unit and will void the warranty.

Hand Held Products, Inc. extends these warranties only to the first end-users of the products. These warranties are non-transferable.

How to Extend Your Warranty

Hand Held Products offers a variety of service plans on our hardware products. These agreements offer continued coverage for your equipment after the initial warranty expires. For more information, contact your Hand Held Products Sales Representative, Customer Account Representative, the Product Service Marketing Manager, or your Authorized Reseller.

A

Keyboard Combinations

General Windows Keyboard Shortcuts

Press these keys,	To…
CTRL + C	Copy
CTRL + X	Cut
CTRL + V	Paste
CTRL + Z	Undo
DELETE	Delete
CTRL + RIGHT ARROW	Move the insertion point to the beginning of the next word.
CTRL + LEFT ARROW	Move the insertion point to the beginning of the previous word.
CTRL + DOWN ARROW	Move the insertion point to the beginning of the next paragraph.
CTRL + UP ARROW	Move the insertion point to the beginning of the previous paragraph.
SHIFT with any of the arrow keys	Select more than one item in a window or on the desktop, or select text within a document.
CTRL+ A	Select all.
ALT + ENTER	View properties for the selected item.
ALT + TAB	Switch between open items.
ALT + ESC	Cycle through items in the order they were opened.
ALT + Tap on Touch screen	Right-click
CTRL + ESC	Display the **Start** menu.
ALT + Underlined letter in a menu name	Display the corresponding menu.
Underlined letter in a command name on an open menu	Carry out the corresponding command.
BACKSPACE	View the folder one level up in My Computer or Windows Explorer.
ESC	Cancel the current task.

43-Key Alpha/Numeric Keyboard
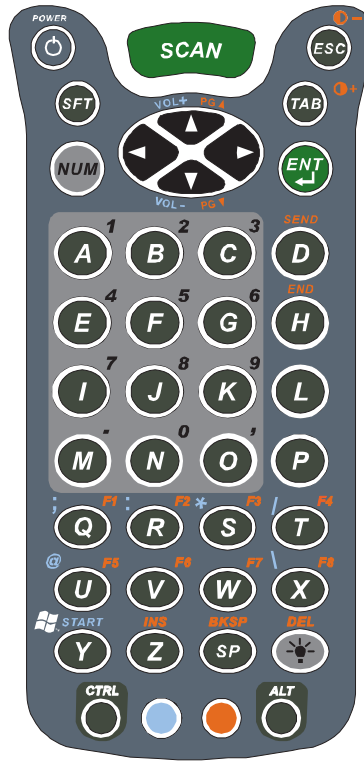
Blue Key Combinations

Key Combination	Function/Special Character
Blue key + D	-
Blue key + H	_
Blue key + L	=
Blue key + P	+
Blue key + Q	;
Blue key + R	:
Blue key + S	*
Blue key + T	/
Blue key + U	@
Blue key + X	\
Blue key + Y	START

Red Key Combinations

Key Combination	Function/Special Character
Red key + ESC	Lightens Contrast*
Red key + TAB	Darkens Contrast*
Red key + SFT	Toggles on Caps Lock
Red key + Q	F1
Red key + R	F2
Red key + S	F3
Red key + T	F4
Red key + U	F5
Red key + V	F6
Red key + W	F7
Red key + X	F8
Red key + Z	Insert
Red key + SP	Backspace
Red key + BKSP	Delete

Num Lock Key Combinations

The 43-key keyboard defaults to alpha mode. To switch to num lock mode, press the NUM key once. In Num Lock mode, when you press a letter key, you type the number indicated by the num lock indicators over the key.

Key/Key Combination	Function/Special Character
(NUM) Press the NUM key only once to switch to num lock mode.	
NUM + SFT + A	!
NUM + SFT + B	@
NUM + SFT + C	#
NUM + SFT + E	$
NUM + SFT + F	%
NUM + SFT + G	^
NUM + SFT + I	&
NUM + SFT + J	*
NUM + SFT + K	(
NUM + SFT + M	>
NUM + SFT + N	)
NUM + SFT + O	<

35-Key Numeric/Alpha Keyboard

Blue Key Combinations

Key Combination	Function/Special Character
Blue key + SP	+
Blue key + DEL	-
Blue key + F1	;
Blue key + F2	:
Blue key + F3	/
Blue key + F4	\
Blue key + BKSP	START
Blue key + F5	_
Blue key + F6	@

Alpha Mode Key Combinations

The 35-key keyboard defaults to numeric mode. To switch to alpha mode, press the ALPHA key once. In alpha mode, when you press a number key, you type the letter indicated by the alpha lock indicators over the key.

Key/Key Combination	Function/Special Character
Press the ALPA key **once** to switch to alpha mode.	
ALPHA + 1	When you the 1 key repeatedly, the following characters type in the following sequence: . , ' ? ! -
ALPHA + SFT + 1	! < >
ALPHA + SFT + 2	@
ALPHA + SFT + 3	#
ALPHA + SFT + 4	$
ALPHA + SFT + 5	%
ALPHA + SFT + 6	^
ALPHA + SFT + 7	&
ALPHA + SFT + 8	*
ALPHA + SFT + 9	(
ALPHA + SFT + 0	)

Please note that when typing in alpha mode, you must use the same multi-press method you would use when typing letters on a phone keypad. Each key press will type the next letter in the sequence as displayed by the alpha lock indicators over the number keys.

56-Key Full Alpha/Numeric

Blue Key Combinations

Key Combination	Function/Special Character
Blue key + .	+
Blue key + ,	-
Blue key + A	;
Blue key + B	@
Blue key + E	_
Blue key + F	:

Red Key Combinations

Key Combination	Function/Special Character
Red key + ESC	Lightens Contrast*
Red key + TAB	Darkens Contrast*
Red key + SFT	Toggles on Caps Lock
Red key + A	F1
Red key + B	F2
Red key + C	F3
Red key + D	F4
Red key + E	F5
Red key + F	F6
Red key + G	F7
Red key + H	F8
Red key + I	F9
Red key + J	F10
Red key + K	F11
Red key + L	F12
Red key + M	F13
Red key + N	F14
Red key + O	F15
Red key + P	F16
Red key + Q	F17
Red key + R	F18
Red key + S	F19
Red key + T	F20
Red key + U	F21
Red key + V	F22
Red key + W	F23
Red key + X	F24
Red key + Y	Z

SFT Key Combinations

Key Combination	Function/Special Character
SFT + 1	!
SFT + 2	@
SFT + 3	#
SFT + 4	$
SFT + 5	%
SFT + 6	^
SFT + 7	&
SFT + 8	*
SFT + 9	(
SFT + 0	)
SFT +.	>
SFT +,	<

Com Port Assignment Table

Com Port	Assignment
Com Port 1	Serial port. This is the 17-pin connector on the bottom panel of Dolphin terminals.
Com Port 2	Bluetooth Module If there is no Bluetooth hardware installed on the terminal, this com port is unassigned.
Com Port 3	Raw Infrared
Com Port 4	
Com Port 5	USB virtual serial port
Com Port 6	IrDA, if IrDA is enabled. If IrDA is disabled, this com port becomes available. See Verify That the IrDA Port is Enabled on page 6-5.
Com Ports 7-9	Unassigned. These are available for selection only when connecting to devices that use virtual com ports, such as Bluetooth.