Coletor de Dados Honeywell 70e

O mais novo EDA (Enterprise Digital Assistant) da Honeywell, Dolphin 70e,
une estilo, sofisticação com robustez e longevidade.

bztech.com.br

Dolphin™ 70e Black

with Windows® Embedded Handheld 6.5

User's Guide

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Web Address: www.honeywellaidc.com

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Patents

For patent information, please refer to www.hsmpats.com.

Table of Contents

Chapter 1 - Dolphin 70e Black Terminal Agency Information

Chapter 2 - Getting Started

Chapter 3 - Hardware Overview

Chapter 4 - Using the Scan Image Engine

Chapter 5 - Using the Color Camera

Chapter 6 - System Settings

Chapter 7 - Communication

Chapter 8 - Working with Wireless Wide Area Networking (WWAN)

Chapter 9 - Working with the Bluetooth Radio and NFC

Chapter 10 - Working with GPS

Chapter 11 - Dolphin 70e Black HomeBase (Model 70e-HB)

Chapter 12 - Dolphin 70e Black eBase (Model 70e-EHB)

Chapter 13 - Dolphin 70e Black Mobile Base (Model 70e-MB)

Chapter 14 - Dolphin 70e Black ChargeBase (Model 70e-CB)

Chapter 15 - Dolphin 70e Black Net Base (Model 70e-NB)

Chapter 16 - Customer Support

Dolphin 70e Black Terminal Agency Information

Dolphin 70e Black mobile computers meet or exceed the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to operate them according to the agency guidelines that follow. Read these guidelines carefully before using your Dolphin terminal.

This documentation is relevant for the following Dolphin models: 70eL00, 70eLGN, 70eLG0, 70eLWN 70eLW0 and 70eL0N.

⚠️ **CAUTION** - *Read the* Guidelines for Battery Pack Use and Disposal *on page* 3-15 *and all cautionary markings on the battery, charging peripheral, or device using the battery before attempting to install, use, or charge the battery.* **Risk of fire and burns if improperly handled. Do not open, crush, heat above 60°C (140°F), or incinerate.**

Label Locations

Model Type: IP67, Locking Battery Door   **Model Type: IP54, Non-Locking Battery Door**

Compliance Labels and Marks   Compliance Labels and Marks

Back Panel of the terminal with the battery door and battery removed.
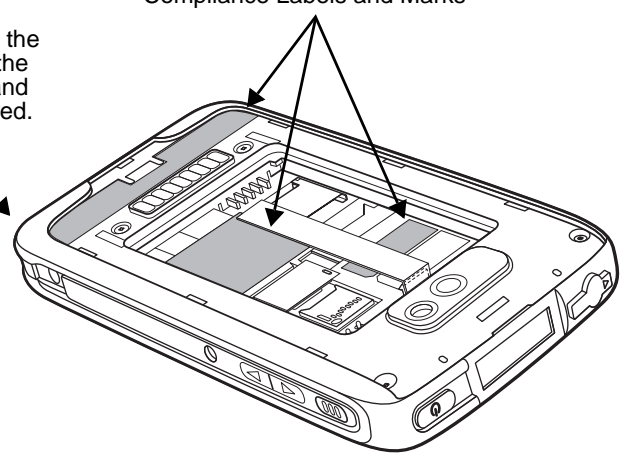
Model Number, Serial Number and IMEI Labels

The model (item) number, serial number, and international mobile equipment identity (IMEI) number for the terminal are located on labels affixed to the bottom of the battery well.

⚠️ **Warning!** *To prevent possible hearing damage, do not listen at high volume levels for long periods.*

LED Safety

LED Safety Statement

LEDs have been tested and classified as "EXEMPT RISK GROUP" to the Standard: IEC 62471:2006.

⚠️ **Caution!** *Do not view directly with optical instruments.*

UL and C-UL Statement

UL and C-UL listed: UL60950-1 2nd Edition, and CSA C22.2 No. 60950-1-07 2nd Edition.

Underwriters Laboratories Inc. (UL) has not tested the performance or reliability of the global positioning system (GPS) hardware, GPS operating software or other GPS-related aspects of this product. UL has only tested for the explosion, fire, shock, and casualty hazards required by the applicable hazardous locations standards. UL certification does not cover the performance or reliability of the GPS hardware, GPS operating software, or other GPS-related aspects of this product. UL makes no representations, warranties, or certifications whatsoever regarding the performance or reliability of any GPS-related functions of this product.

Approvals by Country

For a complete listing of all compliance approvals and certifications, please visit www.honeywellaidc.com/compliance.

R&TTE Compliance Statement—802.11a/b/g/n, Bluetooth, and/or GSM

CE The CE marking indicates compliance with the following directives:
- 1995/5/EC R&TTE
- 2011/65/EU RoHS (Recast)

In addition, this product complies to 2006/95/EC Low Voltage Directive when supplied with the recommended power supply. Honeywell shall not be liable for use of our product with equipment (i.e., power supplies, personal computers, etc.) that is not CE marked and does not comply with the Low Voltage Directive.

The equipment is intended for use throughout the European Community; PAN European Frequency Range: 2.400–2.4835 GHz.

5Ghz band: UNII (Unlicensed National Information Infrastructure) or band1 (5.150 to 5.350 GHz) is restricted to indoor use only. Any other use will make the operation of the device illegal.

High power radars are the primary users of 5250-5350 MHz and 5650-6850 MHZ bands. This may cause interference to Wireless Local Area Network devices.

European Contact:

Hand Held Products Europe B.V.
Nijverheidsweg 9-13
5627 BT Eindhoven
The Netherlands

FCC Requirements

Dolphin RF Terminal—802.11a/b/g/n, Bluetooth, and/or GSM

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet helpful: "Something About Interference." This is available at FCC local regional offices. Our company is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by our company. The correction is the responsibility of the user. Use only shielded data cables with this system.

5Ghz band: UNII (Unlicensed National Information Infrastructure) or band1 (5.150 to 5.250 GHz) is restricted to indoor use only. Any other use will make the operation of the device illegal.

Caution! - *Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.*

Canadian Compliance

This Class B digital apparatus complies with Canadian ICES-003. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

5Ghz band: UNII (Unlicensed National Information Infrastructure) or band1 (5.150 to 5.250 GHz) is restricted to indoor use only. Any other use will make the operation of the device illegal.

For body worn operation, this phone has been tested and meets the FCC RF exposure guidelines for use with the following body worn accessory: Holster-1. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Caution! - *Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.*

Conformité à la règlementation canadienne

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada. Son fonctionnement est assujetti aux conditions suivantes:

1. Cet appareil ne doit pas causer de brouillage préjudiciable.

2. Cet appareil doit pouvoir accepter tout brouillage reçu, y compris le brouillage pouvant causer un fonctionnement indésirable.

Bande 5 Ghz: UNII (Infrastructure Nationale d'Information Sans Permis) ou Bande1 (5.150 à 5.250 GHz) est limitée à l'usage intérieur seulement. Toute autre utilisation rendra l'opération de l'appareil illégal.

For body worn operation, ce téléphone a été testé et respecte les directives d'exposition RF de la FCC pour une utilisation avec l'accessoire body worn: Holster-1. L'utilisation de d'autres accessoires risque de ne pas assurer la conformité avec les directives d'exposition RF de la FCC.

Mise en garde! - *Tout changement ou modification non expressément approuvées par le bénéficiaire de cet appareil peut annuler l'autorisation d'utiliser l'équipement.*

RF Exposure Information (SAR)

This mobile phone meets the government's requirements for exposure to radio waves. This phone is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/Kg and for Europe 2W/Kg. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the poser required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

The highest reported SAR values for head, body-worn accessory and simultaneous transmission use conditions are: 0.45 W/kg (1g), 0.96 W/kg (1g) and 1.33 W/kg (1g).

The highest reported CE SAR values for head, body-worn accessory and simultaneous transmission use conditions are: 0.59 W/kg (10g), 1.0 W/kg (10g), 1.15 W/kg (10g).

While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid after searching on FCC ID: HD570eLGN, HD570eLG0 and HD570eL00.

For body worn operation, this phone has been tested and meets the FCC RF exposure guidelines for use with the following body worn accessory: Holster-1. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Honeywell Scanning & Mobility Product Environmental Information

Refer to www.honeywellaidc.com/environmental for the RoHS / REACH / WEEE information.

China RoHS

有毒有害物质名称及含量 (Names and Content of Hazardous Substances or Elements)						
部件名称 (Parts Name)	有毒有害物质或元素 (Toxic and Hazardous Substances or Elements)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr^{6+})	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
成像式条码阅读器 (Imager)	o	o	o	o	o	o
印刷电路板 (PCB)	o	o	o	o	o	o
主机及基座外壳 (Housing)	o	o	o	o	o	o
连线 (Cables)	o	o	o	o	o	o
液晶显示器 (LCD)	o	o	o	o	o	o
液晶显示器框架 (LCD Frame)	o	o	o	o	o	o
相机模组 (Camera)	o	o	o	o	o	o
按键 (Key)	o	o	o	o	o	o
电池 (Battery)	o	o	o	o	o	o
电源供应器 (Power Adapter)	o	o	o	o	o	o

o: 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006标准规定的限量要求以下 (Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in China's SJ/T11363-2006.)

x: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求 (Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials for this part is above the limit requirement in China's SJ/T11363-2006.)

Pacemakers, Hearing Aids and Other Electrically Powered Devices

Most manufacturers of medical devices adhere to the IEC 601-1-2 standard. This standard requires devices to operate properly in an EM Field with a strength of 3V/m over a frequency range of 26 to 1000MHz. The maximum allowable field strength emitted by the Dolphin terminal is 0.3V/m according to Subpart B of Part 1 of the FCC rules. Therefore, the RF from the Dolphin terminal has no effect on medical devices that meet the IEC specification.

Hearing Aid Compatibility (HAC)

Dolphin 70e Black models 70eLGN and 70eLG0 have been tested for hearing aid compatibility. These devices have an M4 and T4 rating. For additional HAC information, including the HAC rating for this product, please refer to www.honeywellaidc.com.

When some wireless devices are used near some hearing devices such as hearing aids and implants, users may detect a buzzing or humming noise. Some hearing devices are more immune than others to this interference noise. Wireless devices may also vary in the amount of interference they generate.

The ratings for compatibility of digital wireless devices with hearing aids are described in the American National Standards Institute (ANSI) C63.19 standard:

M-Rating: Phones rated M3 or M4 meet FCC requirements and are likely to generate less interference with hearing devices than phones that are not labeled. M4 is the superior/higher of the two ratings.

T-Rating: Phones rated T3 or T4 meet FCC requirements and are likely to be more usable with hearing devices' telecoil than unrated phones. T4 is the superior/higher of the two ratings.

The more immune the hearing aid device is, the less likely one is to experience interference noise from the wireless phone. Hearing aid devices may also be rated. Adding the ratings of the hearing aid and the phone would determine probable usability:

- Any combined rating equal to or greater than six offers the best use.
- Any combined rating equal to five is considered normal use.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use this device successfully. Trying out this device with your hearing device is the best way to evaluate it for your personal needs.

This device has been tested and rated for use with hearing aids for some of the wireless technologies that it utilizes. However, there may be some newer wireless technologies used in this phone that have not been tested yet for use with hearing aids. It is important to try the different features of this phone thoroughly and in different locations, using your hearing aid or cochlear implant, to determine if you hear any interfering noise. Consult your service provider or the manufacturer of this phone for information on hearing aid compatibility.

Microwaves

The radio in the Dolphin RF terminal operates on the same frequency band as a microwave oven. Therefore, if you use a microwave within range of the Dolphin RF terminal you may notice performance degradation in your wireless network. However, both your microwave and your wireless network will continue to function.

Informações ANATEL (Modelos: 70eLG0, e 70eL00)

Medida de SAR (distância mínima com relação ao corpo do usuário):
quando com os acessórios: 0 cm, quando sem os acessórios: 1,5 cm.

Este produto está homologado pela Anatel, de acordo com os procedimentos regulamentados pela Resolução No. 242/2000 e atende aos requisitos técnicos aplicados incluindo os limites de exposição da Taxa de Absorção Específica referente a campos elétricos, magnéticos e eletromagnéticos de radiof-reqüência, de acordo com a Resolução No. 303/2002 e nº 533/2009.

" Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário."

Modelo: 70eLG0 (Dolphin 70e Black)   **Modelo: 70eL00 (Dolphin 70e Black)**

2941-13-6583   2935-13-6583

(01)07898927490270   (01)07898927490263

Para maiores informações, consulte o site da ANATEL - www.anatel.gov.br.

Compatibilidade entre carregadores, baterias e acessórios:

Os modelos **70eLG0 e 70eL00 (Dolphin 70e Black)** serão fornecidos com baterias modelo **70e-BTEC**, n° de homologação 3936-13-0003 e modelo **70e-BTSC** n° de homologação 3935-13-0003.

Os modelos **70eLG0 e 70eL00 (Dolphin 70e Black)** serão fornecidos com os seguintes carregadores / fontes de alimentação:

Carregador modelo FRA036-S12-4: número de homologação ANATEL 1615-12-8020. Este carregador será comercializado com as seguintes bases/docas/periféricos: 70E-HB e 70E-EHB.

Carregador modelo DSA-5CU-05 050100: número de homologação ANATEL 2939-13-8022.

Os modelos **70eLG0 e 70eL00 (Dolphin 70e Black)** serão comercializados com os seguintes modelos de acessório: 70e-EHB, 70e-COVER.

2

Getting Started

Out of the Box

Verify that the carton contains the following items:

- Dolphin 70e Black mobile computer (terminal)
- 3.7V Li-ion rechargeable battery
- USB charge/communication cable
- Power adapter with regional plug adapters
- Quick start guide
- Compliance Regulatory Sheet

If you ordered accessories for your terminals, verify that they are also included with the order. Be sure to keep the original packaging in the event that the Dolphin terminal should need to be returned for service.

Note: Your Dolphin model may differ from the model illustrated in this guide; however, the features noted are standard for all Dolphin 70e Black models with Windows® Embedded Handheld unless otherwise indicated.

Initial Setup for Dolphin 70e Black Terminals

Step 1. Install the Battery

Note: Before installing the main battery, read the Guidelines for Battery Pack Use and Disposal on page 3-15.

The terminal is shipped with the battery packaged separate from the unit. To install the battery, first identify your model type, then follow the installation steps on the pages indicated below.

Identifying Your Model Type

Dolphin 70e Black model terminals **equipped with a battery door lock** are designed for use with battery part numbers BAT-STANDARD-**02** (Li-ion 3.7V, 6.179 watt hour) and BAT-EXTENDED-**02** (Li-ion 3.7V, 12.358 watt hour) manufactured for Honeywell International Inc. See page 2-2 for battery installation instructions.

Back panel of the terminal with standard battery door shown.
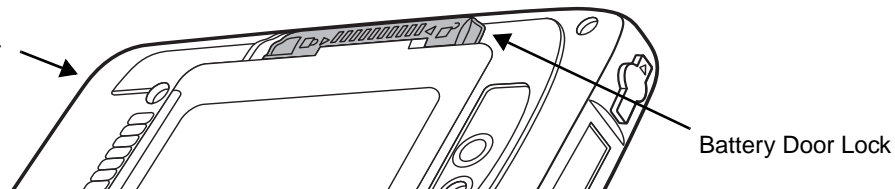
Battery Door Lock

Dolphin 70e Black model terminals **not equipped with a battery door lock** are designed for use with battery part numbers BAT-STANDARD-**01** (Li-ion 3.7V, 6.179 watt hour) and BAT-EXTENDED-**01** (Li-ion 3.7V, 12.358 watt hour) manufactured for Honeywell International Inc. See page 2-3 for battery installation instructions.

Back panel of the terminal with standard battery door shown.
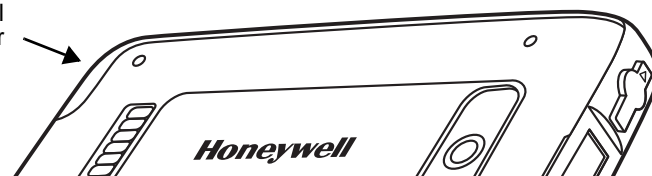
Installing the Battery in Terminals Equipped with a Battery Door Lock

The terminal is shipped with the battery packaged separate from the unit. Perform the steps illustrated below to install the battery.

Note: *If your Dolphin 70e Black model type does not have a battery door lock, refer to the battery installation instructions on page 2-3.*

⚠️ *Ensure all components are dry prior to placing the battery in the terminal. Mating wet components may cause damage not covered by the warranty.*

Note: Standard battery and standard battery door shown.
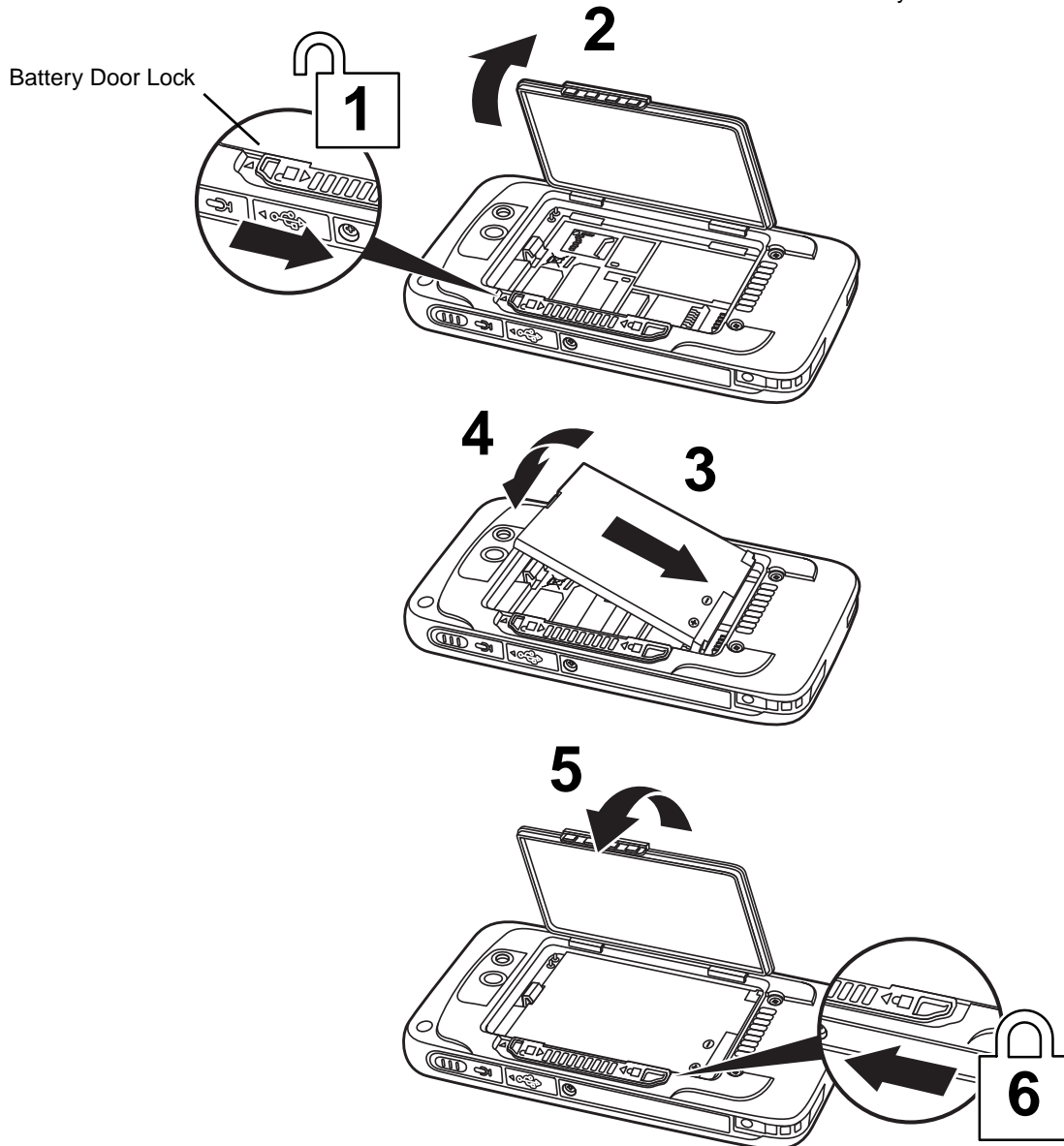
Battery Door Lock

For information on how to remove the battery, see Replacing the Battery on page 2-14.

Installing the Battery in Terminals without a Battery Door Lock

The terminal is shipped with the battery packaged separate from the unit. Perform the steps illustrated below to install the battery.

Note: If your Dolphin 70e Black model does not have a battery retention strap, refer to the battery installation instructions on page 2-2.

⚠️ *Ensure all components are dry prior to placing the battery in the terminal. Mating wet components may cause damage not covered by the warranty.*

Note: Standard battery and standard battery door shown.

Battery Retention Strap
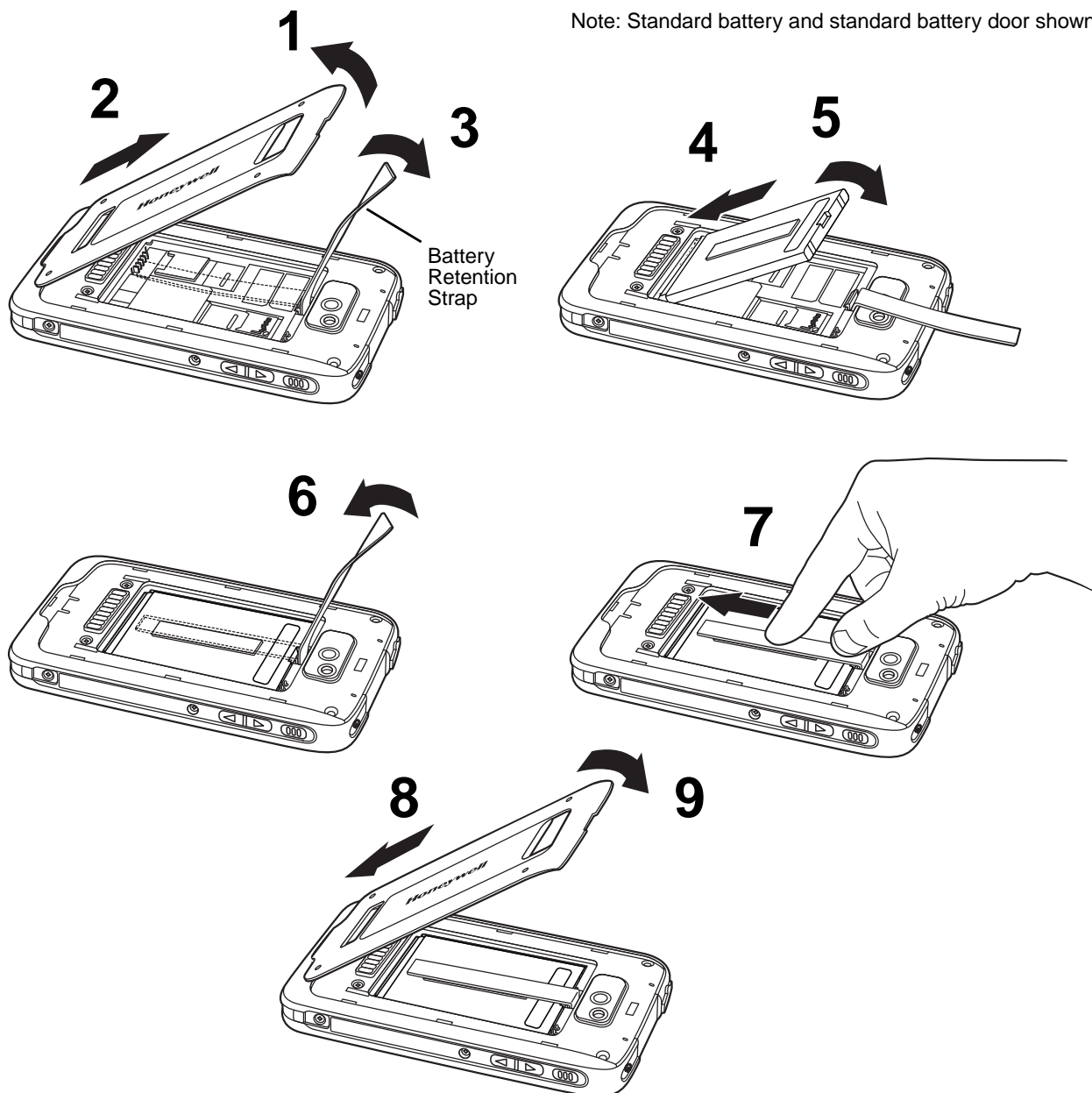
For information on how to remove the battery, see Replacing the Battery on page 2-14.

Step 2. Charge the Battery

The power source for the Dolphin terminal is the 3.7V Li-ion rechargeable battery located under the battery door on the back panel of the device. See Battery on page 3-12 for additional information on battery storage, use, and disposal.

Important: *Removing the battery from the terminal erases all non-persistent memory. Always place the terminal in Suspend mode before removing the battery. For information on how to remove the battery from the terminal, see Replacing the Battery on page 2-14.*

Before Initial Use

Dolphin terminals ship with the battery significantly discharged of power. After installing the battery in the terminal, charge the battery with a Dolphin 70e Black charging peripheral for a minimum of **4 hours** for the standard battery pack or **6 hours** for the extended battery pack. When using the 70e-USB Charge/Communication cable to charge from a 500mA USB port on a host device, charge the battery for a minimum of **6 hours** for the standard battery and **8 hours** for the extended battery.

Note: Inadequate source current may interfere with effective battery charging; see Important Charging Guidelines on page 3-13 for additional information.

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Dolphin 70e Black model terminals are designed for use with the following charging devices and cables: 70e-HB, 70e-EHB, 70e-CB, 70e-MB, 70e-MC, 70e-NB and 70e-USB ADAPTERKIT. See pages 3-2 and 3-3 for additional information on Dolphin 70e Black peripherals and accessories.

⚠ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

Using the USB Charge/Communication Cable (Model 70e-USB ADAPTERKIT)

Dolphin 70e Black terminals ship with a USB Charge/Communication Cable and a power adapter with regional plug adapters. The USB Charge/Communication cable provides two options for charging the terminal. Use the cable in conjunction with the provided power supply adapter and plug adapter to charge the terminal from a power outlet (Option 1 on page 2-5) or connect the cable to a high-power USB port to charge from a host device (Option 2 on page 2-5).

⚠ *Warning - The terminal shall only be connected to CTIA certified adapters, products that bear the USB-IF logo or products that have completed the USB-IF compliance program when using the micro USB port as a charging source.*

Option 1: Charging from a power outlet

Use only a UL Listed power supply, which has been qualified by Honeywell with an output rated at 5VDC and 1A with the device.
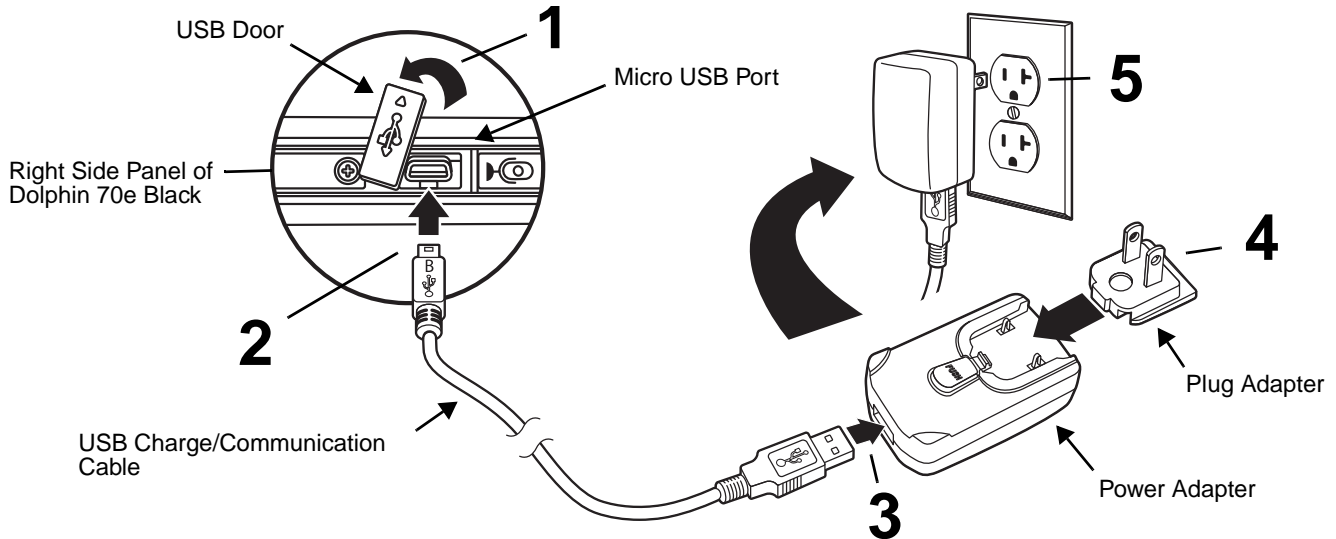
Option 2: Charging from a high power USB port on a host device (PC)

Charging the battery through a USB port takes more time than direct charging using the provided power supply. Inadequate source current may lengthen the charge time or prevent the battery from charging if the terminal is drawing more current than supplied by the USB port. The maximum current supplied by a USB Host can vary from 100mA to 500mA. **Do not attempt to charge the terminal from a 100mA source.** An active Dolphin terminal uses more current than supplied by a 100mA source causing the terminal to continue to draw power from the battery. See Important Charging Guidelines on page 3-13 for additional information.

*Note: Placing the terminal in **Suspend** mode while charging reduces the current draw of the terminal and shortens the charging time of the battery.*

Touch 🪟 > **Settings** > **System** > **Power** to view the battery charge status.

To access detailed information on the battery, touch 🪟 > **Settings** > **System** > **Battery.**
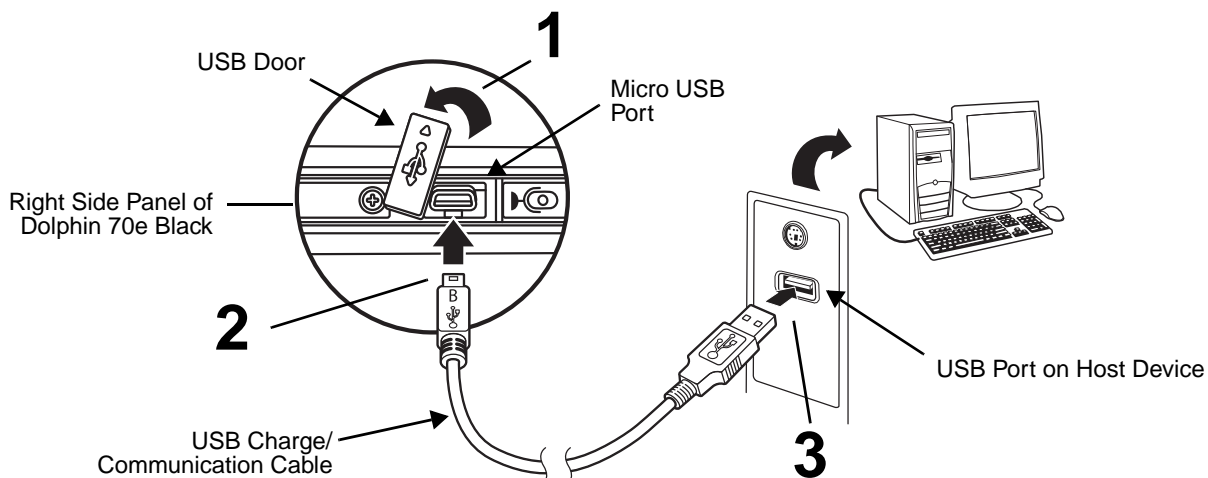
Step 3. Boot the Terminal and Access the Home Screen

The terminal begins booting as soon as power is applied. Do not press any keys or interrupt the boot process. When the boot process is complete, the **Home** screen appears.

Note: During the initial charging stage, the terminal display may dim to conserve battery power due to inactivity. Touch the display to turn on the backlight.

The Home Screen

After the Dolphin terminal initializes, the **Home** screen appears.

Touch a menu item to access additional screens. →

Touch 🔲 to access the **Start** menu. →

← Title Bar (page 2-6)

Swipe up or down with your finger or stylus to scroll through the menu items.

← Tile Bar (page 2-9)

Touch to access the **Contacts** screen.

Touch to access the **Clock & Alarms** settings screen.
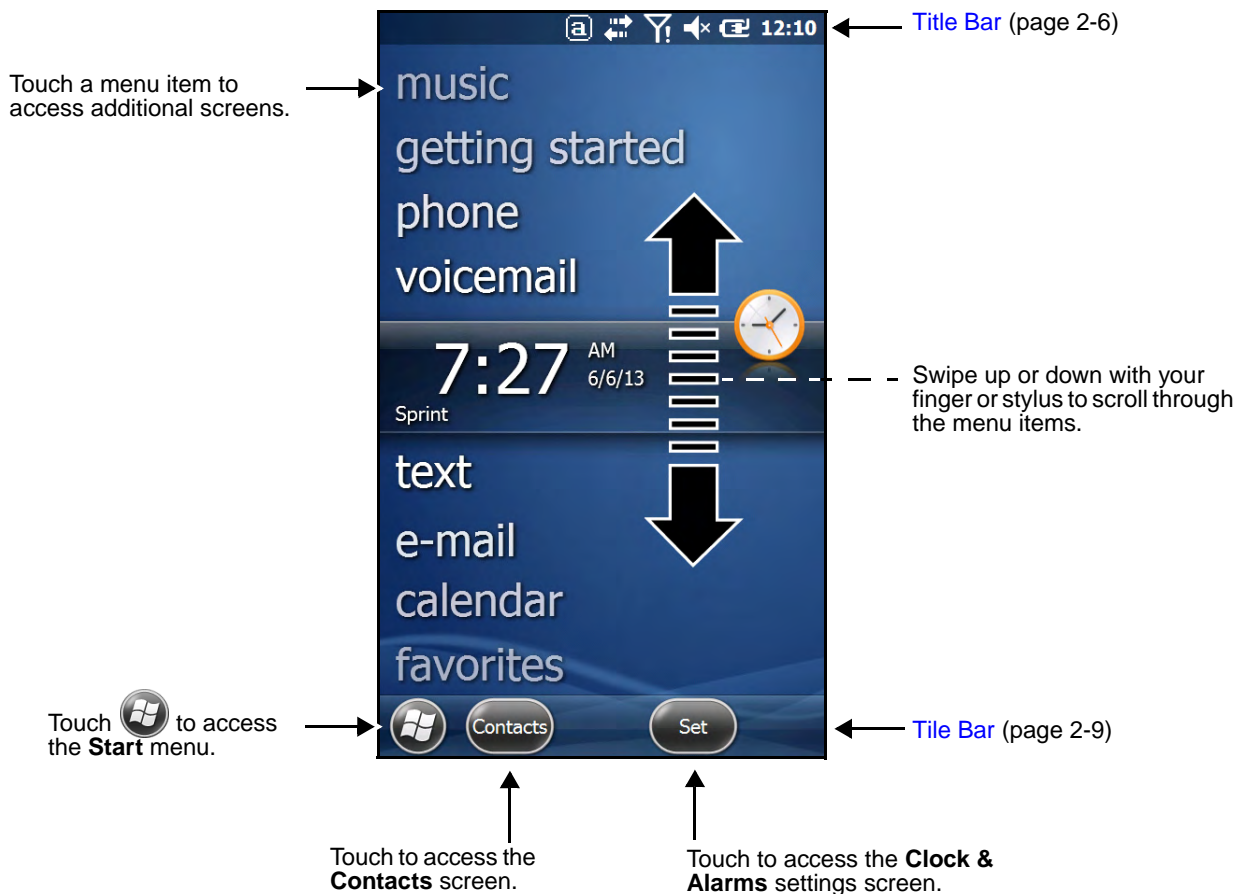
Title Bar

The Title bar, located at the top of the screen, displays the active program, the status of various system functions, and the current time. Touching on the title bar provides access to the Horizontal Scroll. The scroll provides access to additional programs and application screens. For additional information, see Horizontal Scroll on page 2-9.

Text here indicates the active program. → **Clock & Alarms** ⓐ 🔀 📶 ◀× ⤶ 12:11 ← Icons here indicate the status of various system functions.

Icons in the Title Bar

Indicator	Meaning
	Synchronizing data
	The terminal could not synchronize data with the workstation via ActiveSync.
	New e-mail
	New text message
	New voicemail
	New instant message
	Vibrate on
	Ringer off
	Speaker phone on
	Voice call in progress
	Calls are forwarded
	Call on hold
	Missed call
	Data call in progress
	A battery error has occurred. Replace the main battery with a Honeywell Li-ion battery pack.
	Battery is has a full charge
	Battery has a high charge
	Battery has a medium charge
	Battery has a low charge
	Battery has a very low charge and requires charging
	Terminal is running on external power. If a battery pack is installed, the battery is charging in the background.

Icons in the Title Bar

Indicator	Meaning
	The terminal is not connected to external power. A battery is installed, but is defective; specifically, its charge level cannot be measured.
	No SIM card is installed
	Active network connection
	No active network connection
	GPRS available
	GPRS connecting
	GPRS in use
	HSDPA available
	HSDPA connecting
	HSDPA in use
	EDGE available
	EDGE connecting
	EDGE in use
	UMTS available
	UMTS connecting
	UMTS in use
	Radio is off
	The radio is not connected to a network.
	The radio is connected. The bars indicate the signal strength.
	No radio signal
	The terminal is searching for a signal.

Icons in the Title Bar

Indicator	Meaning
♟	Wi-Fi is on, but device is not connected
♀	Wi-Fi data call
🔔	Pending alarm
❊	Bluetooth

Horizontal Scroll

The Horizontal Scroll, located at the top of most application windows, provides access to additional application screens. You can swipe left or right on the scroll or touch each label on the scroll, until you get to the desired screen. Touching a label to the left or right of the center item brings new labels into view.

Note: Touch the Title bar to access the horizontal scroll if it is not visible on the screen.

The content of the Horizontal scroll changes according to the open application.
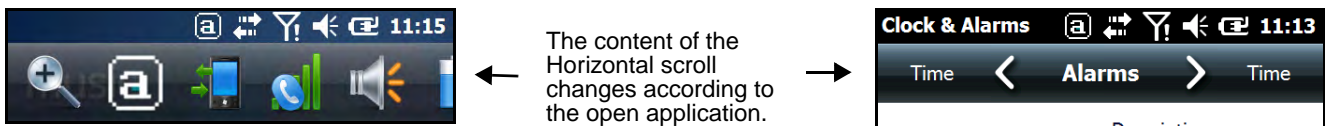
Tile Bar

The **Tile Bar** is located at the bottom of an application window.

Touch 🪟 to access the Start menu ().

The **Tile Bar** displays icons you use to open and close screens, menus, and features.

The icons change according to the open application.
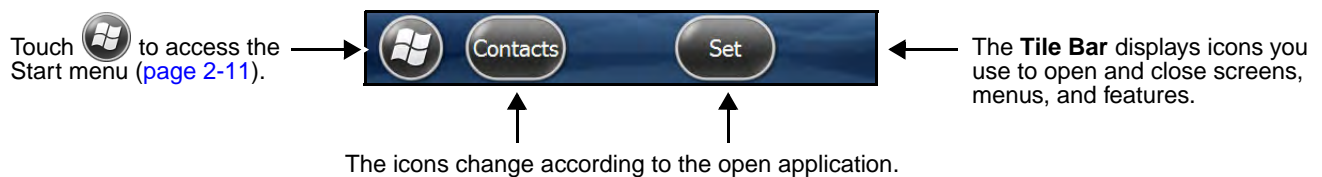
Virtual Keyboard

The virtual keyboard appears when you open an application or select a field that requires text or numerical input. You can also touch the keyboard icon on the tile bar to toggle the keyboard on or off.

Touch to toggle the virtual keyboard display on or off.

Note: When you touch an hold the keyboard icon, a pop-up menu allows you to switch between the default enhanced Honeywell virtual keyboard, which is fully customizable or the standard Windows Embedded Handheld virtual keyboard.

The Enhanced Honeywell Virtual Keyboard

During text input, you may need to switch between keyboard modes to access additional character sets (e.g., function keys, symbols, and numbers). Each keyboard mode, includes navigation keys, which allow you to quickly switch between modes. Touch the **ABC** key to switch to the Qwerty Mode, the **123** key to switch to the Numeric Mode, and the **#@&** key to switch to the Function & Symbols Mode.

Note: The content of the keyboard and the mode initially displayed may vary depending on the application in use and the input field requirements.

Alternate Keys

Some keys include a second symbol in red. In order to use the alternate symbol, touch and hold the key until the alternate symbol appears, then release the key to type the symbol.

Honeywell Virtual Keypad Creator

The default *enhanced* Honeywell virtual keyboard is fully customizable using the *Honeywell Virtual Keypad Creator* software available for download at www.honeywellaidc.com. The user-friendly utility allows you to personalize multiple keyboard features including key position, size, quantity, color, and the keyboard skin. In addition, you can make language changes, create alternate or function keys for special character sets, and add application launch keys to streamline common business tasks.

There are two software components required for customizing the *enhanced* Honeywell Virtual keyboard.

• The first is the *Honeywell Virtual Keypad Creator*, which resides on your PC and is used to design, save, and download custom keyboard layouts to your Dolphin terminal.

• The second is the *enhanced* Honeywell virtual keyboard CAB file (i.e., HoneywellVK-Ver1.x.x.CAB), which is located in the `\IPSM\Honeywell\AutoInstall` folder on your Dolphin terminal. This keyboard file is what displays on the terminal screen when the *enhanced* Honeywell virtual keyboard is selected as the default virtual keyboard.

The customization process is easy. Simply download and install the Honeywell Virtual Keypad Creator software onto your PC, open and modify the provided standard template, click on the **Synchronize with Device** button and select **Install Keypad**. Follow the prompts to install the Virtual Keypad on your mobile device.

Note: An active Microsoft® ActiveSync® or Windows® Mobile Device Center connection between the host PC running Virtual Keypad Creator and your mobile device is required for this operation.

The Start Menu

To see the programs loaded on your terminal, touch ![icon] to access the **Start** menu.
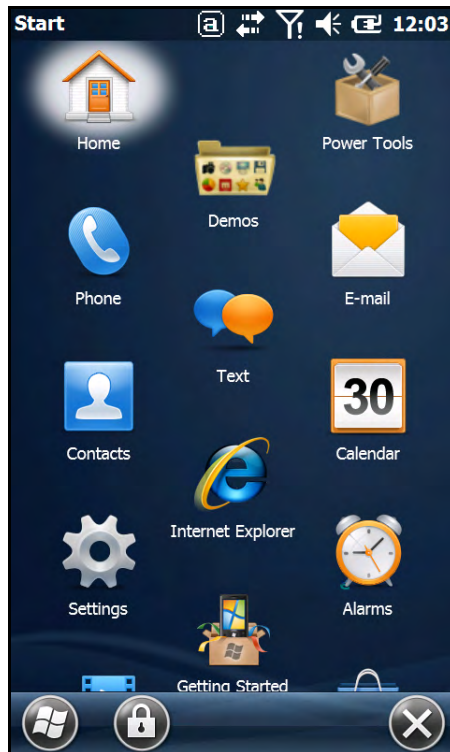
Navigating the Start Menu

- Swipe up or down with your finger or stylus to scroll through the menu icons.
- To open a program, touch once on the program icon.
- To reposition an icon on the **Start** menu, touch and hold the stylus on the icon, then drag the icon to the desired position.

Pop-Up Menus

With pop-up menus, you can quickly choose an action for a selected item. To access a pop-up menu, touch and hold on the item name of the action you want to perform. When the menu appears, touch the action you want to perform.

Touch anywhere outside the menu to close the menu without performing an action.

File Explorer

You can use the File Explorer to find files and organize files into folders.

Touch ⊞ > File Explorer 🔍 .

Touch on the name to open a file or folder.

Touch to toggle the virtual keyboard display on or off.

Touch and hold to access a pop-up menu of keyboard options.

Touch to return to the Start menu.

Touch to access additional **Menu** options.

Touch to **close** File Explorer.

Touch to move **Up** one level in the directory.

File Explorer ⓐ ⇄ ▽! ◀ ⊡ 3:13

My Documents ▾   Name ▾

Business

My Music

My Pictures

My Ringtones

Personal

Templates

⊞   Up   ⌨   Menu   ✕

Go To   ▸

Refresh

Select Files   ▸

Show All Files

Sort By   ▸

Send...

Beam File...

New Folder

Rename

Delete

Edit   ▸

To **move** or **copy** files between folders using File Explorer:

1. Touch and hold on the item you want to move, then touch **Cut** or **Copy** on the popup menu.

2. Navigate to the folder you want to move or copy the file to, then touch and hold a blank area of the window.

3. Touch **Paste** on the pop-up menu.

   Note: *If there is no blank space available in the window, touch* **Menu** *on the tile bar, navigate to the end of the menu using the down arrow, then touch* **Edit** *>* **Paste***.*

File Provisioning on the Dolphin 70e Black

\IPSM\Honeywell

The IPSM folder is the only partition on the terminal that persists across a kernel upgrade (*.UPG file extension). During a kernel upgrade, files are automatically copied from the `\IPSM\Honeywell` folder and then installed in the `\Honeywell` (root file system) folder as part of the upgrade process.

`\IPSM\Honeywell\AutoInstall`

The files in the `IPSM\Honeywell\AutoInstall` folder are only installed when a factory reset or kernel upgrade occurs. Once the files are installed, they persist through hard and soft resets. If a file is added to the folder and a hard or soft reset is performed, it will have no effect. If a program is manually removed using the Remove Programs application (see page 6-29), then the program is not automatically re-installed on a hard or soft reset.

\Honeywell

The Honeywell partition or root file system partition is persistent over a hard reset, soft reset, and the removal of the battery pack or the removal of AC power. However, during a kernel upgrade the root file system is reformatted so all data in the folder is deleted and replaced by any files in the `\IPSM\Honeywell` folder as part of the upgrade process.

⚠ *To prevent data loss, back up all user data to an SD card or external memory device before performing an upgrade.*

`\Honeywell\AutoInstall`

If you run a CAB file from within the `\Honeywell\AutoInstall` (user store) folder, after the program has been installed, the CAB file will be deleted from the User Store. However, the program remains installed through all successive Hard and Soft resets.

If you want the program to be part of the Autoinstall that occurs after a factory reset or software upgrade, paste the program file(s) in both the `\IPSM\Honeywell\Autoinstall` folder and the `\Honeywell\Autoinstall`.

Contact a Honeywell technical support representative for information on how to perform a factory reset or for information on available software upgrades for your Dolphin terminal. For contact information, see Technical Assistance on page 16-1.

⚠ *To prevent data loss, back up all user data to an SD card or external memory device before performing an upgrade.*

Search

The Search feature helps you quickly locate information. Touch 🪟 > **Search Phone** 🔍 .

Enter the text you want to find, select a data type, and then touch **Search**. Select **Larger than 64 KB** in the **Type** drop-down field to quickly find information that is taking up storage space.

Turning Power On/Off

To turn the terminal **On**, press the **Power** button ⏻.

To turn the terminal **Off**:

1. Press and hold the **Power** button ⏻ for approximately 4 seconds until the options menu displays.

2. Touch **Power off**.

Suspend Mode

Suspend mode differs from **Power off** mode. **Power off** mode is the equivalent to having no battery or external power source connected to the device. The terminal does not receive incoming calls when power is off since the device completely shuts down. In **Suspend** mode, the device enters a low power state to conserve battery power. The radio associated with the phone maintains enough power to wake the terminal for incoming phone calls.

Suspend mode automatically turns the touch screen off to save battery power when the terminal is inactive for a programmed period of time. The automatic timeout limits are adjustable from the **Advance** tab located under **Settings > System > Power** (see page 6-27)**.**

Press and release the **Power** button ⏻ to toggle the terminal in or out of **Suspend** mode.

*Note: You should always place the terminal in **Suspend** mode before removing the battery.*

Replacing the Battery

Note: Before replacing the main battery, read the Guidelines for Battery Pack Use and Disposal on page 3-15.

Identifying Your Model Type

Dolphin 70e Black models **equipped with a battery door lock** are designed for use with battery part numbers BAT-STANDARD-**02** (Li-ion 3.7V, 6.179 watt hour) and BAT-EXTENDED-**02** (Li-ion 3.7V, 12.358 watt hour) manufactured for Honeywell International Inc. See page 2-15 for battery replacement instructions.

Back panel of the terminal with standard battery door shown.

Battery Door Lock

Dolphin 70e Black models **not equipped with a battery door lock** are designed for use with battery part numbers BAT-STANDARD-**01** (Li-ion 3.7V, 6.179 watt hour) and BAT-EXTENDED-**01** (Li-ion 3.7V, 12.358 watt hour) manufactured for Honeywell International Inc. See page 2-16 for battery replacement instructions.

Back panel of the terminal with standard battery door shown.

Replacing the Battery in Terminals Equipped with a Battery Door Lock

The following instructions are relevant for Dolphin 70e Black terminals equipped with a battery door lock. If your Dolphin 70e Black terminal **does not** have a battery door lock, refer to the instructions on page 2-16.

⚠ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

Note: The following illustrations depict a standard battery with a standard battery door; however, battery removal/ installation procedures are the same for the extended battery and battery door.

1. Press the **Power** button ⏻ to place the terminal in **Suspend** mode.

2. Unlock and remove the battery door.
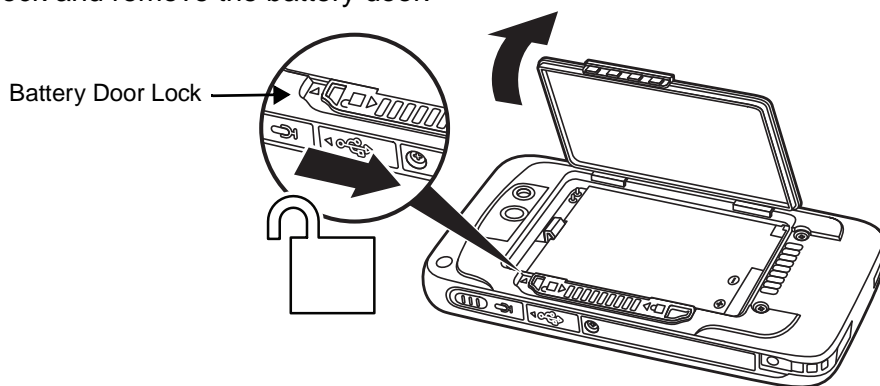
3. Pull the battery latch back and remove the battery.
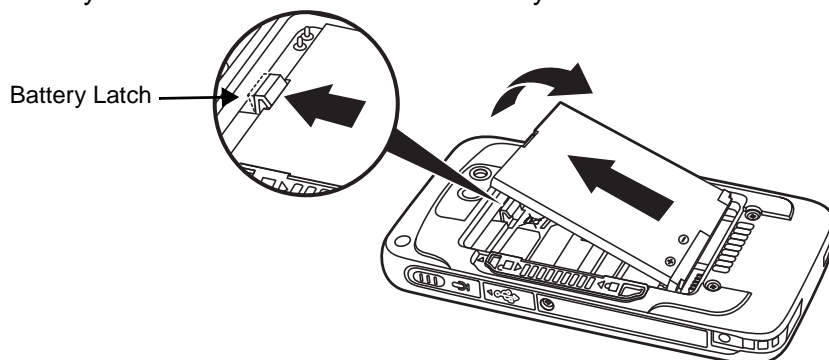
4. Insert the new battery, install the battery door and engage the door lock. See battery part number specifications on page 2-14.
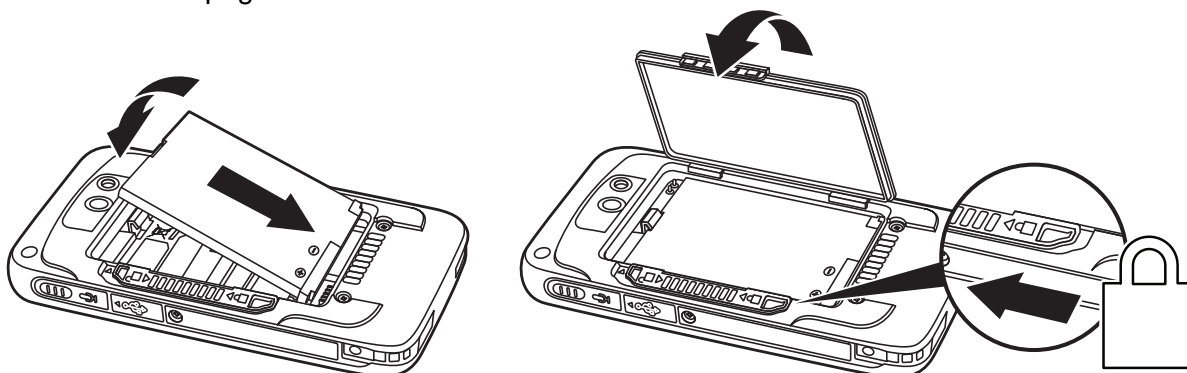
⚠ *We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Replacing the Battery in Terminals Not Equipped with a Battery Door Lock

The following instructions are relevant for Dolphin 70e Black terminals equipped with battery retention strap. If your Dolphin 70e Black terminal does not have a retention strap but it does have battery door lock, refer to the instructions on page 2-15.

⚠ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

Note: The following illustrations depict a standard battery with a standard battery door; however, battery removal/installation procedures are the same for the extended battery and battery door.

1. Press the **Power** button ⏻ to place the terminal in **Suspend** mode.

2. Remove the battery door and release the battery retention strap.
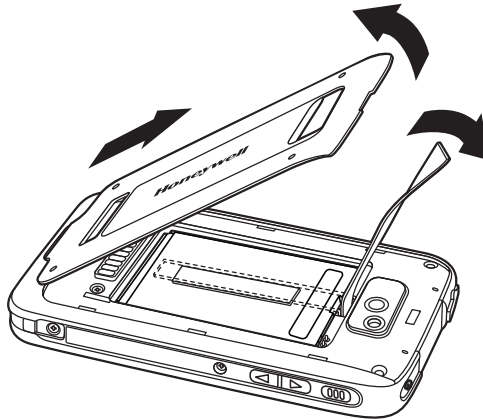
3. Push the battery door latch back to remove the battery. **Do not pull on the battery the retention strap when attempting to remove the battery**.
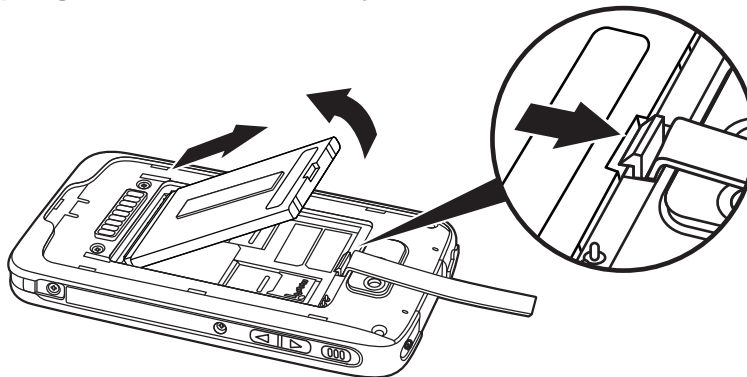
4. Install the new battery. See battery part number specifications on page 2-14.
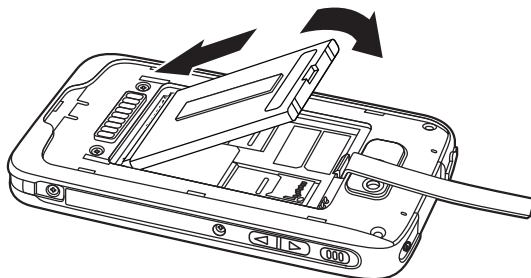
5. Secure the battery retention strap.
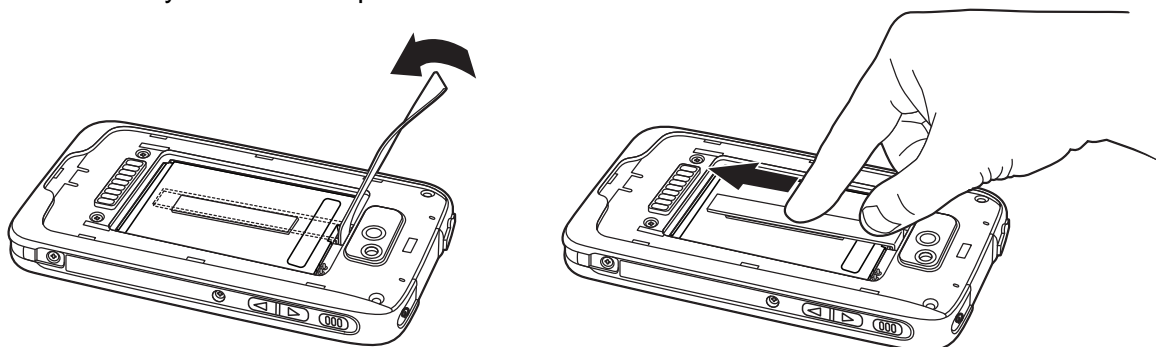
6. Install the battery door. The terminal begins booting as soon as power is applied.
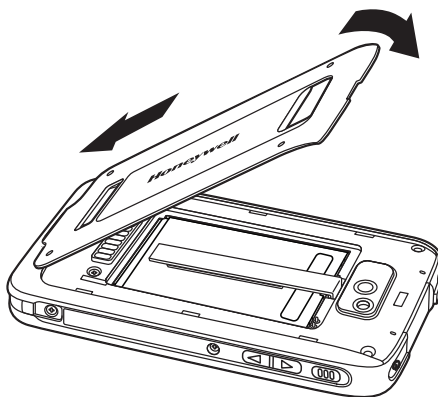
⚠ *We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Resetting the Terminal

There are three types of system resets: a **Soft Reset**, a **Hard Reset**, or a **Factory Reset**. The soft and hard resets preserve all data stored in the file system. Contact a Honeywell technical support representative for more information on how to perform a **Factory Reset**. For contact information, see Technical Assistance on page 16-1.

A **Soft Reset** (Warm Boot) re-boots the device and preserves any objects created in RAM. You would perform a soft reset when: the terminal fails to respond, after installing some software applications, or after making changes to certain system settings, such as network cards.

A **Hard Reset** (Cold Boot) re-boots the terminal and closes any open applications running in RAM at the time of the reset.

To perform a **Soft Reset** or **Hard Reset**:

1.   Press and hold the **Power** button ⏻ until the options menu appears.

2.   Touch **Soft Reset** or **Hard Reset** on the menu.

3.   When the reset is complete, the **Home** screen displays.

*Note: To perform a **Hard Reset** if the touch screen has stopped responding, press and hold the **Power** button for approximately 8 seconds until the terminal starts to re-boot. When the reset is complete, the **Home** screen displays.*

3

Hardware Overview

Standard Configurations for the Dolphin 70e Black

WLAN, WPAN & Camera

- Microsoft Windows Embedded Handheld 6.5 Professional
- TI OMAP3715 1.0GHz Processor
- 512MB RAM X 1GB Flash
- 3.7V Li-ion rechargeable standard or extended battery pack
- Dedicated imager capable of decoding standard 1D and 2D bar code symbologies
- 5.0 megapixel auto focus camera
- 802.11a/b/g/n and Bluetooth

WLAN, WPAN, WWAN, GPS & Camera

- Microsoft Windows Embedded Handheld 6.5 Professional
- TI OMAP3715 1.0GHz Processor
- 512MB RAM X 1GB Flash
- 3.7V Li-ion rechargeable standard or extended battery pack
- Dedicated imager capable of decoding standard 1D and 2D bar code symbologies
- 5.0 megapixel auto focus camera
- 802.11a/b/g/n and Bluetooth
- Voice and Data, GSM/CDMA/GPS - SW Definable Radio

WLAN, WPAN, WWAN, NFC, GPS & Camera

- Microsoft Windows Embedded Handheld 6.5 Professional
- TI OMAP3715 1.0GHz Processor
- 512MB RAM X 1GB Flash
- 3.7V Li-ion rechargeable standard or extended battery pack
- Dedicated imager capable of decoding standard 1D and 2D bar code symbologies
- 5.0 megapixel auto focus camera
- 802.11a/b/g/n and Bluetooth
- Voice and Data, GSM/CDMA/GPS - SW Definable Radio
- Near Field Communication (NFC) support

WLAN, WPAN, WWAN, GPS & Camera

- Microsoft Windows Embedded Handheld 6.5 Professional
- TI OMAP3715 1.0GHz Processor
- 512MB RAM X 1GB Flash
- 3.7V Li-ion rechargeable standard or extended battery pack
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- Voice and Data GSM/GPS

WLAN, WPAN, WWAN, NFC, GPS & Camera

- Microsoft Windows Embedded Handheld 6.5 Professional
- TI OMAP3715 1.0GHz Processor
- 512MB RAM X 1GB Flash
- 3.7V Li-ion rechargeable standard or extended battery pack
- Dedicated imager capable of decoding standard 1D and 2D bar code symbologies
- 5.0 megapixel auto focus camera
- 802.11a/b/g/n, and Bluetooth
- Voice and Data, GSM/GPS
- Near Field Communication (NFC) support

Peripherals for the Dolphin 70e Black

Each of the following items is sold separately to enhance the capabilities of your Dolphin terminal.

Dolphin 70e Black HomeBase (Model 70e-HB)

The Dolphin 70e Black HomeBase device is a charging and communication cradle equipped with a USB host port that is Hi-Speed 2.0v compliant, which enables the terminal to interface with the majority of PC-based enterprise systems. This device also contains an auxiliary battery well that charges a spare Honeywell standard or extended battery pack.

For more information, see Dolphin 70e Black HomeBase (Model 70e-HB) on page 11-1.

Dolphin 70e Black eBase (Model 70e-EHB)

The Ethernet (eBase) device enables a single Dolphin 70e Black terminal to communicate with a host device over an Ethernet network. In addition, the ebase is equipped with a USB host port that is Hi-Speed 2.0v compliant, which enables the terminal to interface with the majority of PC-based enterprise systems. This device also contains an auxiliary battery well that charges a spare Honeywell standard or extended battery pack.

For more information, see Dolphin 70e Black eBase (Model 70e-EHB) on page 12-1.

Dolphin 70e Black Mobile Base (Model 70e-MB)

The Dolphin 70e Black Mobile Base is a charging cradle designed specifically for in-premise and in-transit data collection applications. It features a flexible mounting bracket, an integrated speaker with volume control, and a cigarette lighter adapter to adapt it to your mobile environment.

For more information, see Dolphin 70e Black Mobile Base (Model 70e-MB) on page 13-1.

Dolphin 70e Black ChargeBase (Model 70e-CB)

The Dolphin 70e Black ChargeBase is a 4-slot charging cradle that holds, powers, and charges terminals.

For more information, see Dolphin 70e Black ChargeBase (Model 70e-CB) on page 14-1.

Dolphin 70e Black Net Base Device (Model 70e-NB)

The Net Base enables up to four Dolphin 70e Black terminals to communicate with a host device over an Ethernet network. In addition, the Net Base provides a second RJ45 Ethernet port for connection to an additional device such as a printer, workstation, eBase, or another Net Base.

For more information, see Dolphin 70e Black Net Base (Model 70e-NB) on page 15-1.

QuadCharger (Model COMMON-QC)

The QuadCharger is a compact 4-slot battery charging station designed for use with Dolphin 70e Black 3.7V Li-ion rechargeable batteries. For additional information on the QuadCharger, visit the Dolphin 70e Black product page at www.honeywellaidc.com or contact your local sales representative.

Accessories for the Dolphin 70e Black

Each of the following items is sold separately to enhance your terminal's capabilities.

Note: When using accessories where the terminal is worn on the body, the terminal's touch panel must face away from the body.

Dolphin 70e Black Mobile Charger (Model 70e-MC)

The Dolphin 70e Black Mobile Charger is a charging cable that connects the terminal directly to a 12 Volt DC power source, such as a cigarette lighter port inside a vehicle, eliminating the need for a cradle. Intelligent battery technology on-board the terminal ensures proper charging. The Dolphin 70e Black Mobile Charger is an ideal low-cost charging solution for in-transit mobile applications.

USB Charge/Communication Cable and Adapter Kit (Model 70e-USB ADAPTERKIT)

The Dolphin USB charge/communication cable adapter kit is an all-in-one solution for charging and communication. Use the 70e-USB cable in conjunction with provided power supply adapter and plug adapter to charge the terminal from a power outlet or connect the cable to a high-power USB port to charge from a host device. The 70e-USB cable also supports communication with a computer without the need for a cradle. See Connecting and Synchronizing the Terminal and Workstation on page 7-9.

Holster (Model HOLSTER-1)

The holster provides convenient storage for the Dolphin 70e Black terminal in mobile environments. The holster features an integrated belt clip and spare battery pouch.

Wrist Lanyard (Model SL-LANYARD-1)

The black wrist lanyard attaches to the bottom corner of the terminal providing additional security from accidental drop during terminal use.

Stylus or Stylus and Tether Kit (Model 70e-Stylus or 70e-STYLUSTHR KIT)

The stylus has a special tip for added accuracy and ease when operating the touch panel. The tether is a coiled, elastic cord, which secures the stylus to the terminal to prevent accidental loss. The stylus may be ordered with or without the tether.

Stylus Battery Door Kits

Battery doors with an integrated stylus slot are available with or without a stylus and tether. The stylus has a special tip for added accuracy and ease when operating the touch panel. The integrated slot in the battery door holds the stylus when not in use. The tether is a coiled, elastic cord, which secures the stylus to the terminal preventing accidental loss when the stylus is not properly stored in the slot. See Important Battery and Battery Door Replacement Guidelines on page 3-12 before ordering battery door kits for your terminal.

Battery (Models 70e-BTSC and 70e-BTEC)

The 3.7V Li-ion rechargeable battery provides the main power for the terminal. See Battery on page 3-12 for battery specifications, replacement part numbers, and guidelines for use and disposal.

Features of the Dolphin 70e Black

Front, Bottom, and Right Panels

General Notification LED

Front Speaker

WAN Notification LED

Right Scan/Image Button

Touch Panel Display

Side Digital Microphone

USB Door/Micro USB Port

Scan Button

Back Button

Home Button

End Button

Fastener for an Optional Wrist Lanyard or Stylus Tether

Send Button

Front Digital Microphone

Bottom Speaker
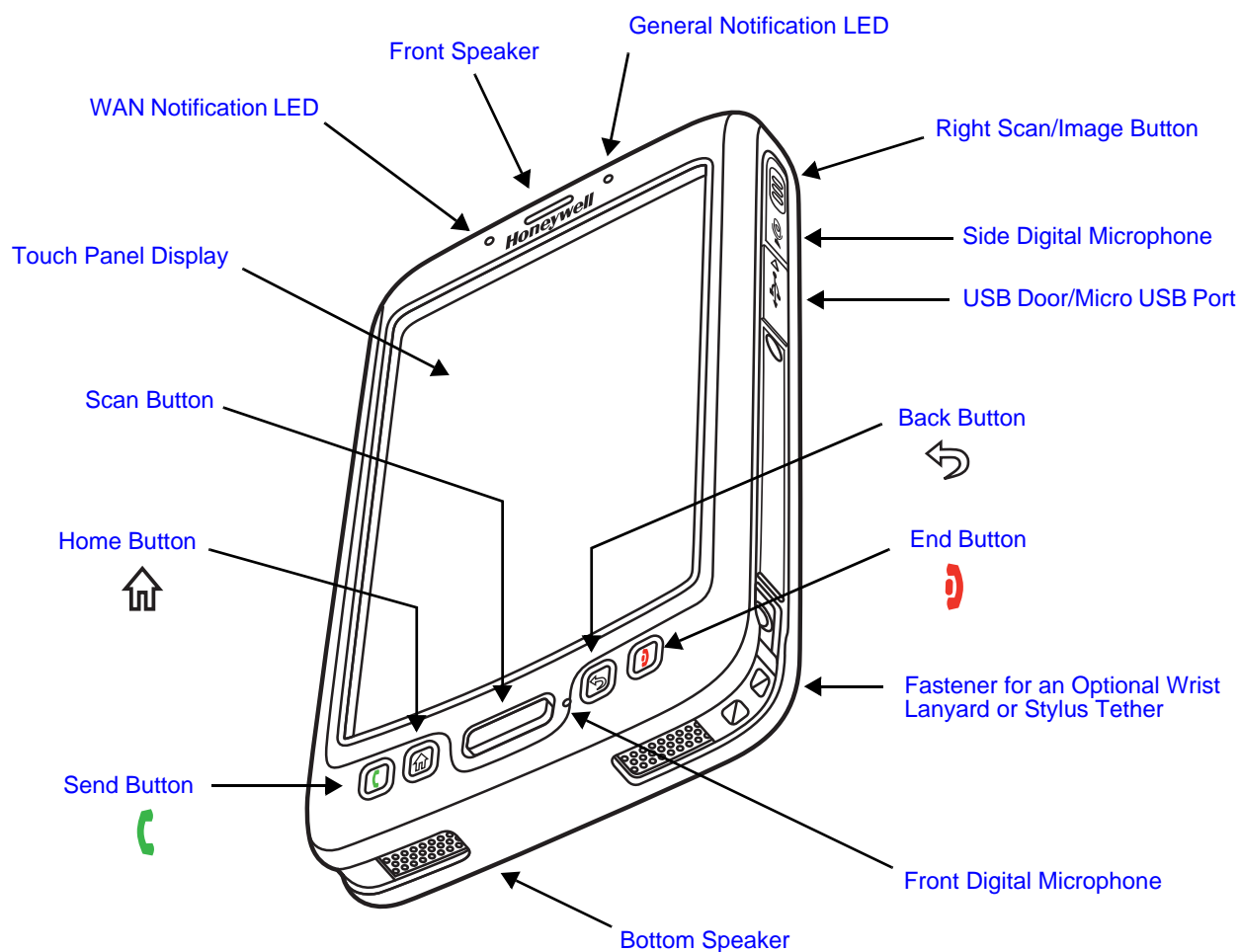
Important - *Do not cover the side microphone with your hand when using the terminal for handset phone calls. Both the front and side microphones must be free from obstruction for the noise cancellation feature to function.*

Note: Noise cancellation is only available on WWAN equipped models.
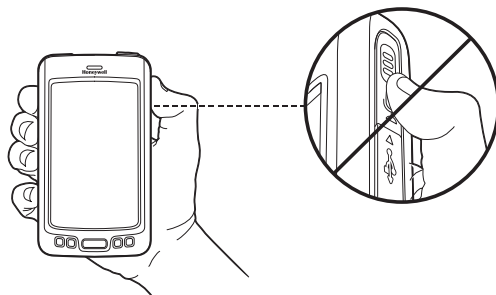
For a description of each callout, .

Feature Descriptions: Front, Bottom, and Right Panels

Back Button

By default, the Back button returns you to the previous screen. The back button is one of six programmable buttons on the Dolphin 70e Black. You can reassign the button to launch applications or execute commands. For additional information, see Changing Button Assignments on page 6-5.

Bottom Speaker

The integrated bottom speaker sounds audio signals as you scan bar code labels and enter data. The integrated speaker also supports playback of wave and MP3 files, software mixer, and speaker phone for WWAN/GSM audio.

Digital Microphone

The integrated dual array digital microphones, located on the side and front of the terminal provide audio input for handset voice calls when a headset is not plugged into the Audio Jack, page 3-9. When a headset is plugged into the Audio Jack, the terminal defaults to the microphone on the headset. By default, the front microphone is also used for speaker phone calls, voice command audio input, and recording sound.

The digital microphones provide background noise cancellation for clear audio input. See Voice Communication on page 8-4.

Important - Do not cover the side microphone with your hand when using the terminal for phone calls. Both the front and side microphones must be free from obstruction for the noise cancellation feature to function during handset mode calls.

Note: Noise cancellation is only available on WWAN equipped models.

End Button

By default, the End button disconnects a phone call or exits some applications if a phone call is not in progress. See Voice Communication on page 8-4. The End button is one of six programmable buttons on the Dolphin 70e Black. You can reassign the button to launch applications or execute commands. For additional information, see Changing Button Assignments on page 6-5.

Front Speaker

The front speaker is the receiver for handset voice calls. See Voice Communication on page 8-4.

Fastener for an Optional Wrist Lanyard or Stylus Tether

The fastener provides access for attaching an optional wrist lanyard or stylus tether.

General Notification LED

The light emitting diode (LED) located above and to the right of the LCD display flashes and illuminates during resets, scanning/imaging, and taking a picture. The LED indicates that an external power source is connected to the terminal. This LED can be programmed by various software applications.

Home Button

By default, the Home button returns you to the **Home** screen, see page 2-6. The Home button is one of six programmable buttons on the Dolphin 70e Black. You can reassign the button to launch applications or execute commands. For additional information, see Changing Button Assignments on page 6-5.

Right Scan/Image Button

By default, the right button triggers the scanner/imager. You can reassign the button to launch applications or execute commands. For additional information, see Changing Button Assignments on page 6-5.

Scan Button

The Scan button is centrally located for easy access with the right or left hand. By default, the button activates the scanner/imager. You can reassign the button to launch applications or execute commands.

Send Button

Answers a phone call or initiates a phone call. See Voice Communication on page 8-4.

Touch Panel Display

The color 4.3 inch (liquid crystal display (LCD) touch panel is covered with an industrial, protective lens for greater durability. The wide video graphic array (WVGA) display resolution is 800 X 480. The touch panel can be activated with a finger or with the optional stylus.

The touch panel backlight illuminates when the screen is touched. For more information, see Backlight on page 6-16.

USB Door/Micro USB Port

The Micro USB port is located under the protective USB door on the right side of the terminal. To access the micro USB port, gently lift the top edge of the door closest to the digital microphone, and then rotate 90° counterclockwise.

The micro USB port in conjunction with the USB Charge/Communication Cable (model 70e-USB) powers the terminal, charges the main battery, and facilitates communication. The micro USB port supports low, full, and high-speed USB v2.0 client communication with a maximum rate of 480 Mbps.

For additional information, see Using the USB Charge/Communication Cable (Model 70e-USB ADAPTERKIT) on page 2-4 and Connecting and Synchronizing the Terminal and Workstation on page 7-9.

WAN Notification LED

The light emitting diode (LED) located above and to the left of the LCD display flashes and illuminates for WAN notifications (e.g., a missed call, new voice mail, SMS message, or email). The notification LED flashes when the terminal is active or stays on steady when the terminal is in Suspend mode.

Back, Top, and Left Panels

Dolphin 70e Black Models Equipped with a Battery Door Lock

Note: If your Dolphin 70e Black model does not have a battery door lock, .

Audio Jack

Image Engine Window (LED Aperture)

Power Button

Color Camera Lens

Flashlight/Camera Flash

Left Scan/Image Button

Volume Control Button

Battery Door Lock

Battery Door
(Standard Model Shown)

I/O Connector
()

Battery Latch (battery and
battery door not shown)

SIM Card Retention Flap*

SIM Card Socket*

Memory Card Retention Flap

Memory Card Socket
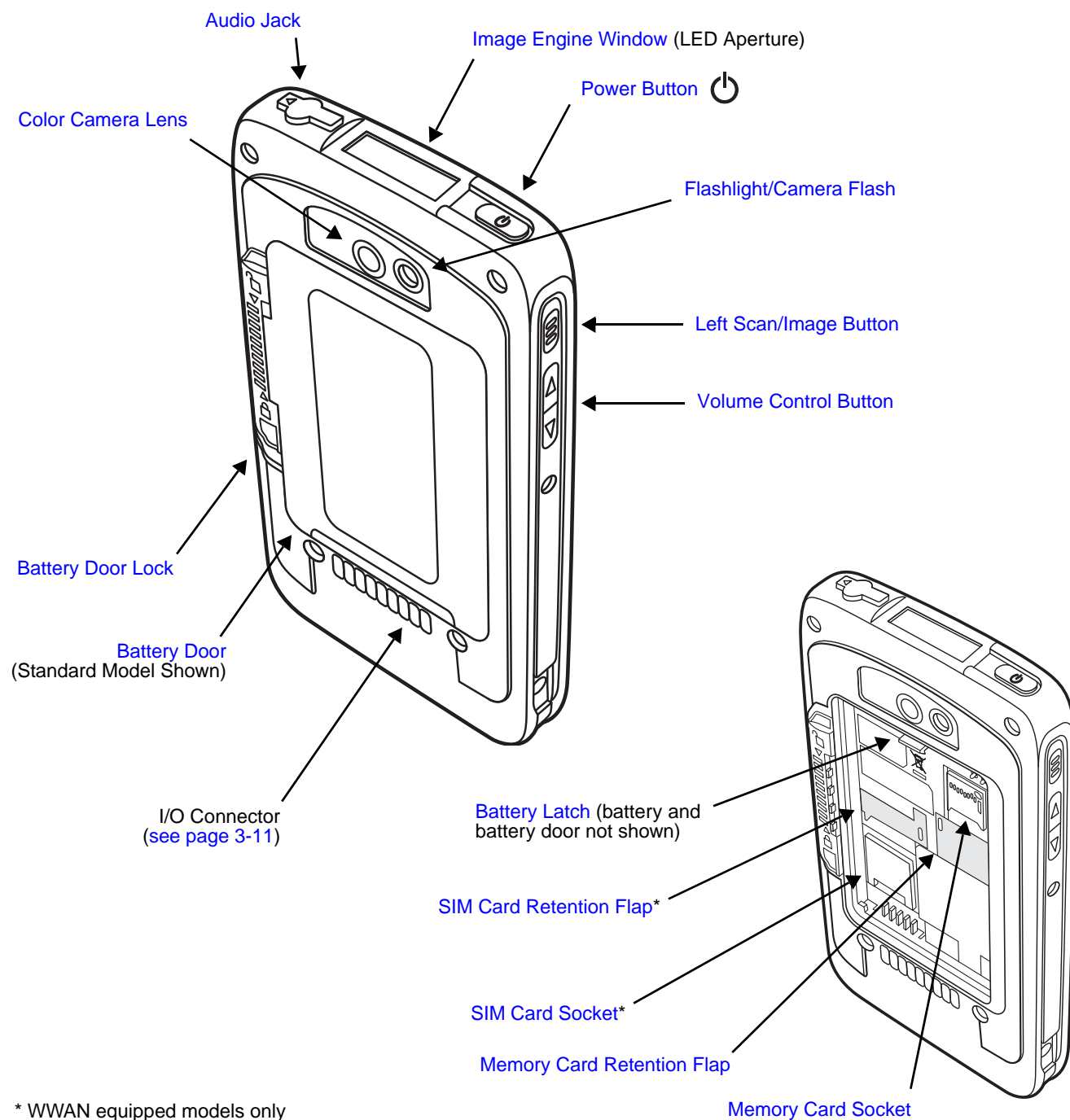
* WWAN equipped models only

For a description of each callout, .

Dolphin 70e Black Models **Not** Equipped a Battery Door Lock

Note: If your Dolphin 70e Black model does not have a battery retention strap, .

Audio Jack

Image Engine Window (LED Aimer Aperture)

Power Button

Left Scan/Image Button

Color Camera

Volume Control Button

Flashlight/
Camera Flash

Battery Latch
(located under battery retention Strap)

I/O Connector
()

Battery Retention Strap
(battery and battery door not shown)

Battery Door
(Standard Model Shown)

SIM Card Retention Flap*

SIM Card Socket*

Memory Card Retention Flap

Memory Card Socket
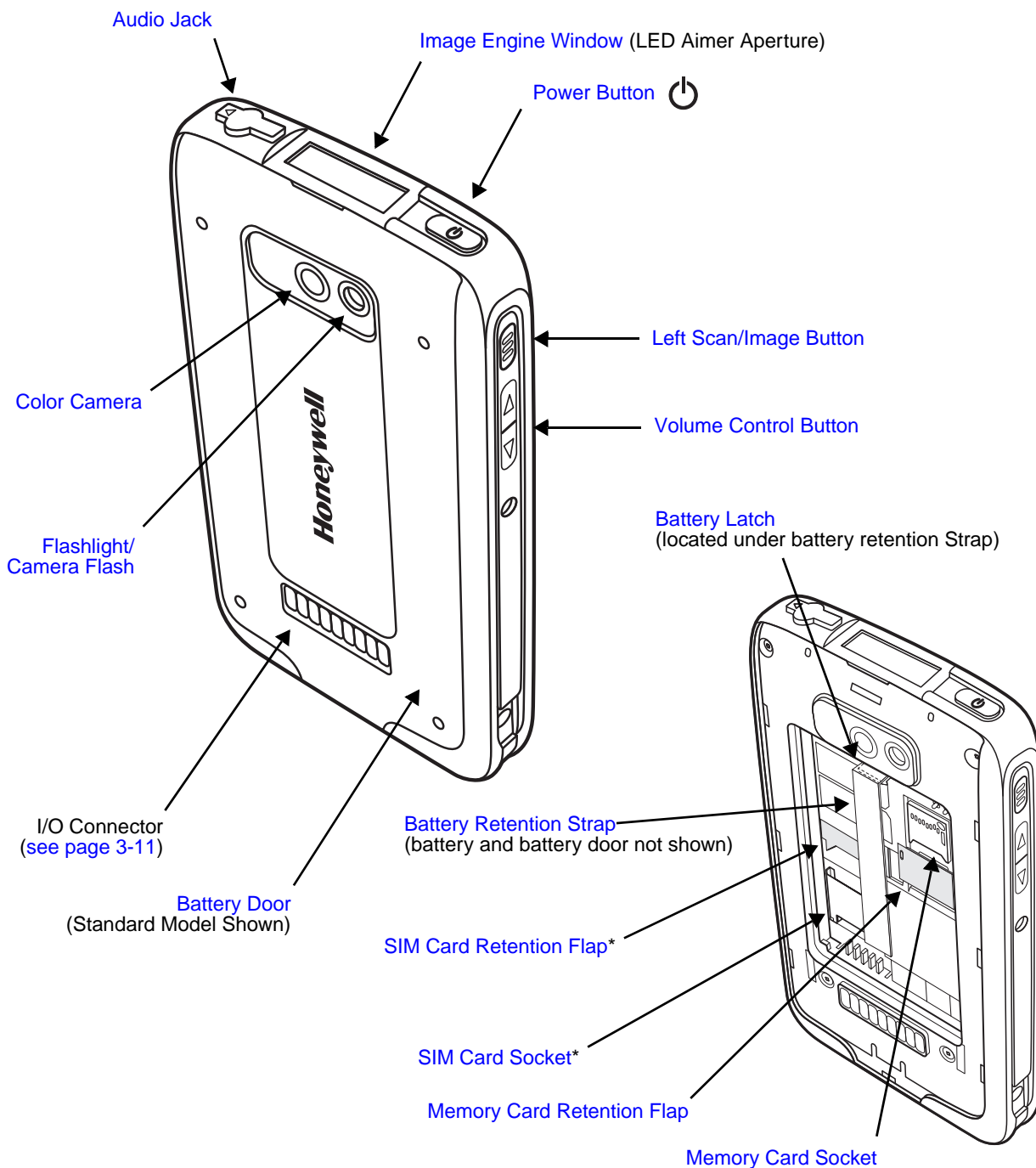
 * WWAN equipped models only

For a description of each callout,

Feature Descriptions: Back, Top, and Left Panels

Audio Jack

The audio jack is located under the protective door on the top of the terminal. To access the jack gently lift the edge of the door and rotate it 90° counterclockwise. The 3.5mm audio jack supports both speaker (stereo) and microphone (mono) headsets.

Battery

The 3.7V Li-ion rechargeable battery provides the main power for the terminal and is protected by the battery door. See Battery on page 3-12 for battery specifications, replacement part numbers, and guidelines for use and disposal.

Battery Door

The battery door protects the battery and any installed SIM and/or memory cards in the terminal's battery well. Proper installation of the battery door preserves the environmental rating of the terminal. For information on how to remove the battery, see Replacing the Battery on page 2-14. See Important Battery and Battery Door Replacement Guidelines on page 3-12.

Note: Do not use the terminal without the battery door installed.

Battery Door Lock

Some Dolphin 70e Black models come equipped with a battery door lock on the back panel. Slide the lock down toward the IO contacts to release the lock for battery door removal and battery access. Slide the lock up toward the camera lens to secure the battery door closed and seal the battery in the terminal. Proper installation of the battery door preserves the environmental rating of the terminal. For information on how to remove the battery, see Replacing the Battery on page 2-14.

Battery Latch

All Dolphin 70e Black models come equipped with a battery latch that secures the battery in the battery well. To remove the battery from the terminal, first pull the latch back away from the battery. For information on how to remove the battery, see Replacing the Battery on page 2-14.

Battery Retention Strap

Some Dolphin 70e Black models come equipped with a battery retention strap, which in conjunction with the battery latch secures the battery in the battery well. The retention strap attaches to battery once the battery is installed in the terminal. **Do not pull on the retention strap while attempting to remove the battery.** For information on how to remove the battery, see Replacing the Battery on page 2-14.

Color Camera

The 5.0-Megapixel Resolution auto-focus color camera provides easy picture and video capture. The camera lens and camera flash are located on the back panel of the terminal.

Flashlight/Camera Flash

The flashlight/camera flash is located on the back panel of the terminal.

When used as a Flashlight, touch ⊞ > **Flashlight** 🔦 to turn the flashlight On or Off. When used as a Camera Flash with the terminal's color camera, the flash is controlled by the camera application.

Image Engine Window

The image engine reads and decodes linear, stacked linear (e.g., PDF417), and 2D matrix bar code symbologies. The LED aperture for the imaging engine's LED aimer is contained behind this window. For more details, see Using the Scan Image Engine on page 4-1.

Left Scan/Image Button

By default, the left button triggers the scanner/imager. You can reassign the button to launch applications or execute commands. For additional information, see Changing Button Assignments on page 6-5.

Memory Card Socket

The memory card socket provides the user with the option to expand the terminal's memory capacity using microSD or microSDHC memory interfaces. The expansion socket is located under the battery door and battery.

Note: Honeywell recommends the use of Single Level Cell (SLC) industrial grade microSD or microSDHC memory cards with Dolphin terminals for maximum performance and durability. Contact a Honeywell sales representative for additional information on qualified memory card options.

When the battery door and battery pack are properly installed, the card is sealed against moisture and particle intrusion, read/write data is stored securely, and the terminal's environmental rating is preserved; see Installing a SIM Card and/or Memory Card on page 3-17.

Memory Card Retention Flap

The memory card retention flap locks the memory card in the socket; see Installing a SIM Card and/or Memory Card on page 3-17.

Power Button

The Power button located on the top of the terminal initiates multiple functions depending on the length of time the button is pressed.

- A quick press of the button toggles Suspend Mode On or Off.
- Press and hold the button down for approximately 4 seconds to access the options menu for a **Hard Reset**, a **Soft Reset**, entering **Suspend** mode, or to **Power Off** the terminal.
- Press and hold the button down for approximately 8 seconds to initiate a manual **Hard Reset** if the touch screen has stopped responding.

SIM Card Socket

The card socket for the Subscriber Identity Module (SIM) is located under the battery door and main battery. When the battery door and battery are properly installed, the card is sealed against moisture and particle intrusion, read/write data is stored securely, and the terminal's environmental rating is preserved; see Installing a SIM Card and/or Memory Card on page 3-17.

SIM Card Retention Flap

The SIM card retention flap locks the SIM card in the socket; see Installing a SIM Card and/or Memory Card on page 3-17.

Volume Control Button

Press the top or bottom of the volume button to raise or lower the volume of the active speaker. Lower the volume all the way down to enable vibration mode.

The I/O Connector

The I/O connector powers the terminal, charges the main battery, and facilitates communication. Dolphin 70e Black peripherals are designed to work exclusively with this connector. The I/O connector supports low, full, and high speed USB v2.0 communication with a maximum rate of 480 Mbps.

Terminal Back Panel

Non-Locking Battery Door Model with Standard Door

Locking Battery Door Model with Standard Door

Pin 9   Pin 1

Pin 9   Pin 1
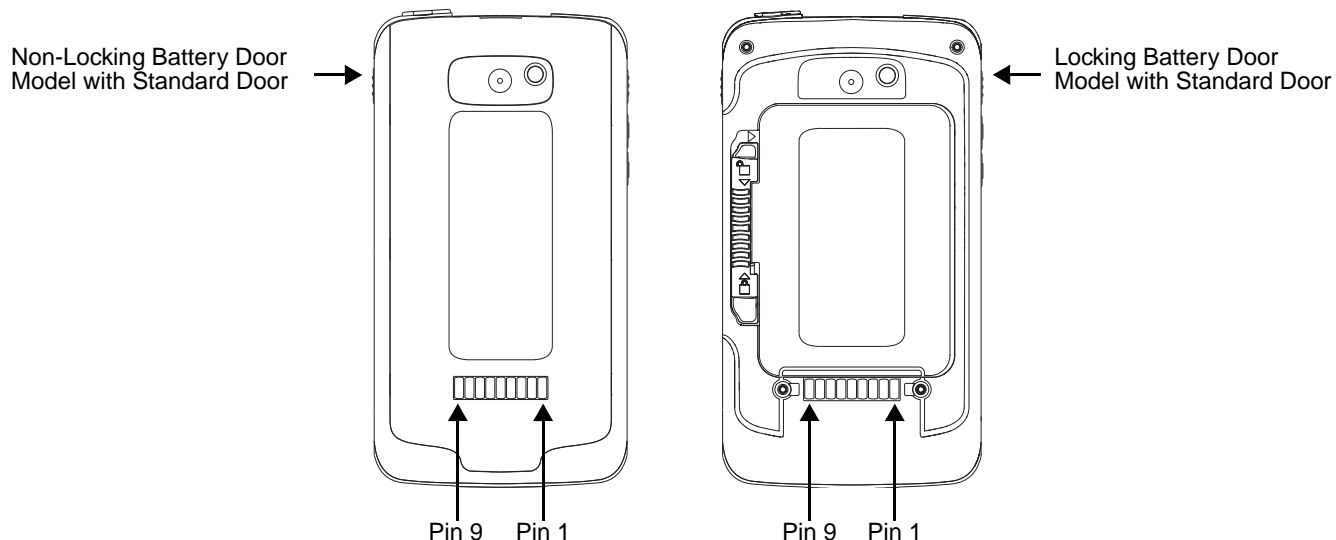
Pin	Signal	Description
1	VDC_IN	5V DC input for charging and operation
2	VBUS_HOST	5V output for USB host and peripheral power
3	USB_DM_HOST	USB D- for the host port
4	USB_DP_HOST	USB D+ for the host port
5	USBC_DET	Multipurpose pin to allow for detection of an unpowered SLED, determine SLED type, and to signal a HomeBase the docking of the terminal.
6	GND	Ground connection
7	USB_DN_DOCK	USB D- for the client port
8	USB_DP_DOCK	USB D+ for the client port
9	VBUS_DOCK	5V input for USB client (and charging)

Note: Signals referenced are for a DTE device.

Battery

The primary power source for the Dolphin terminal is the 3.7V Li-ion rechargeable battery located under the battery door on the back panel of the device. Honeywell recommends, you keep the battery in the terminal charged at all times to help prevent data loss. Letting the battery become fully discharged causes the terminal to lose all data in RAM.

Note: All data in RAM is cleared when the battery is removed. Always place the terminal in Suspend mode before removing the battery to ensure any changes made are saved to the flash memory.

Replacement Battery Specifications

Dolphin 70e Black models **equipped with a battery door lock** are designed for use with battery part numbers BAT-STANDARD-**02** (Li-ion 3.7V, 6.179 watt hour) and BAT-EXTENDED-**02** (Li-ion 3.7V, 12.358 watt hour) manufactured for Honeywell International Inc. See page 2-15 for battery replacement instructions.

Back panel of the terminal with standard battery door shown.

Battery Door Lock

Dolphin 70e Black models **not equipped with a battery door lock** are designed for use with battery part numbers BAT-STANDARD-**01** (Li-ion 3.7V, 6.179 watt hour) and BAT-EXTENDED-**01** (Li-ion 3.7V, 12.358 watt hour) manufactured for Honeywell International Inc. See page 2-16 for battery replacement instructions.

Back panel of the terminal with standard battery door shown.
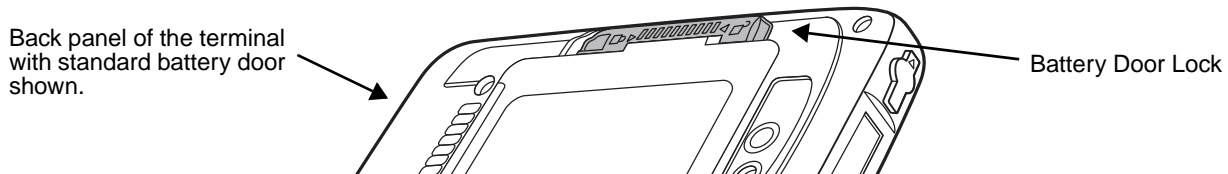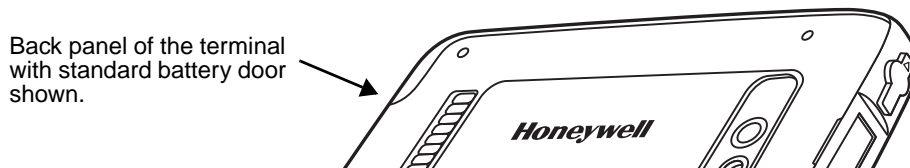
Important Battery and Battery Door Replacement Guidelines

Follow the guidelines listed below when ordering batteries and/or battery doors.
- Size (e.g., standard or extended): The battery and battery door must be the same size.
- Type (e.g., locking or non-locking): The battery and battery door must match your terminal type. See details above.
- Near Field Communication (NFC) requirements: Use only NFC compatible battery doors with NFC equipped Dolphin models identified with a letter N at the end of the model number (e.g., 70exx**N)**.

⚠️ *We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Charging Options

Dolphin terminals ship with the battery significantly discharged of power. **Before using a Dolphin terminal for the first time,** charge the battery with a Dolphin charging device for a minimum of **4 hours** for the standard battery and **6 hours** for the extended battery. When using the 70e-USB Charge/ Communication cable to charge from a 500mA USB port on a host device, charge the battery for a minimum of **6 hours** for the standard battery and **8 hours** for the extended battery.

When the main battery is installed in the terminal, use one of the following:

- Dolphin 70e Black HomeBase (Model 70e-HB), see page 11-1
- Dolphin 70e Black eBase (Model 70e-EHB), see page 12-1
- Dolphin 70e Black Mobile Base (Model 70e-MB), see page 13-1
- Dolphin 70e Black ChargeBase (Model 70e-CB), see page 14-1
- Dolphin 70e Black Net Base (Model 70e-NB), see page 15-1
- Dolphin 70e Black USB Charge/Communication Cable (Model 70e-USB ADAPTERKIT), see page 2-4

When the main battery is not installed in the terminal:

- Place the battery pack in the Auxiliary Battery Well of the Dolphin 70e Black HomeBase (Model 70e-HB) or the Dolphin 70e Black eBase (Model 70e-EHB).
- Insert the battery in the QuadCharger (Model COMMON-QC).

Charging Times

Charging Peripheral/Accessory	Model 70e-BTSC BAT-STANDARD-**01** or BAT-STANDARD-**02**	Model 70e-BTEC BAT-EXTENDED-**01** or BAT-EXTENDED-**02**
HomeBase (Model 70e-HB)	4 hours	6 hours
eBase (Model 70e-EHB)	4 hours	6 hours
ChargeBase (Model 70e-CB)	4 hours	6 hours
Net Base (Model 70e-NB)	4 hours	6 hours
Mobile Base (Model 70e-MB)	4 hours	6 hours
Mobile Charger (Model 70e-MC)	4 hours	6 hours
USB Charge/Communication Cable with provided power supply (Model 70e-USB ADAPTERKIT)	4 hours	6 hours
USB Charge/Communication Cable (Model 70e-USB) connected to a workstation (PC) 500mA USB port	6 hours	8 hours
QuadCharger (Model COMMON-QC)	4 hours	6 hours

Important Charging Guidelines

Source Current Specifications

Battery charging times can be significantly lengthened or charging may not occur if the terminal is drawing more currant than is supplied by the charging peripheral (e.g., HomeBase, eBase, Mobile Base, or ChargeBase), USB wall charger, or USB Host (e.g., workstation PC).

- The maximum current supplied through a charging peripheral is 2.0A.
- The maximum current supplied by the USB wall charger is 900mA.
- The maximum current supplied by a USB Host can vary from 100mA to 500mA.
  Do not attempt to charge the terminal from a 100mA source. An active Dolphin terminal uses more current than supplied by a 100mA source causing the terminal to continue to draw power from the battery.

*Note: Placing the terminal in **Suspend** mode while charging reduces the current draw of the terminal and shortens the charging time of the battery.*

To verify your terminal is not drawing more current then supplied by the charging source:

1. Touch [icon] > **Settings** [icon] > **System** [icon] > **Battery** [icon] when the terminal is connected to a charging source.

2. Check the Battery Current. If the current is positive, then charging current is going into the battery. If the current is negative, the battery is discharging current and your terminal is drawing more current than the charging source.

    Note: The charging current is always less than source current due to the terminal being in operation.

Charging a Severely Low or Completely Discharged Battery

Battery Charge Status	Symptom
Severely Low	Pressing the Power button does not wake the terminal from Suspend mode. The general notification LED may flash once when the Power button is pressed.
Completely Discharged	Pressing the Power button does not wake the device and the general notification LED remains off.

Use one of the following options to charge a severely low or completely discharged battery.

1. Insert the battery into the auxiliary battery well of the HomeBase. When the auxiliary battery LED on the HomeBase turns green, the battery is fully charged.

2. Dock the terminal into the charging well of a peripheral (e.g., HomeBase, eBase, Mobile Base, or ChargeBase). The terminal starts to boot as soon as power is supplied by the base.

    *Note: To prevent the possible loss of unsaved data, do not remove the terminal from the base until the battery has sufficiently charged. Touch the **Start** > **Settings** > **System** > **Battery** to view detailed information on the status of the battery.*

3. Charge the terminal from a wall power outlet using the USB Charge/Communication Cable and power supply provided with your terminal. As the battery charges, the general notification LED cycles through green, red, amber and off. The LED continues to cycle until the battery reaches a safe charge threshold and the terminal begins to boot. The length of time before the battery reaches a safe charge threshold varies depending on the extent of the battery discharge.

    Note: If the general notification LED does not start to cycle after approximately 5 seconds when power is applied, press the Power button once.

4. Charge the terminal from a USB host device (PC) using the USB Charge/Communication Cable.

    Note: Inadequate source current may interfere with effective battery charging; see Important Charging Guidelines on page 3-13 for additional information.

    As the battery charges, the general notification LED cycles through green, red, amber and off. The LED continues to cycle until the battery reaches a safe charge threshold and the terminal begins to boot. The length of time before the battery reaches a safe charge threshold varies depending on the extent of the initial battery discharge level and the current supplied by the USB charging source.

    *Note: If the general notification LED does not start to cycle after approximately 5 seconds when power is applied, press the **Power** button once.*

Battery Error Notification

If your terminal displays the following indicators, replace the battery with an authentic Honeywell Dolphin 70e Black standard or extended battery pack. For information on how to remove the battery from the terminal, see Replacing the Battery on page 2-14.

- An "Authentication Error" pop up window appears during startup.
- ⊖ appears in the Title bar at the top of the touch screen.
- The General Notification LED illuminates red.
- A Notification appears on the Tile bar at the bottom of the touch screen.

Storing Batteries

To maintain top performance from batteries, avoid storing batteries outside of the following temperature ranges:

- 14°F to 113°F (-10°C to +45°C) for short term storage of less than one month
- 32°F to 86°F (-0°C to +30°C) for long term storage

Do not store batteries in extremely high humidity. For prolonged storage, do not keep batteries stored in a charger that is connected to a power source.

Guidelines for Battery Pack Use and Disposal

The following are general guidelines for the safe use and disposal of batteries:

- Do not disassemble or open crush, bend or deform, puncture or shred.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.
- Improper battery use may result in a fire, explosion or other hazard.
- We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may pose a personal hazard to the user.
- Only use the battery for the system for which it is specified. Do not use a battery in any other manner outside its intended use in Dolphin terminals and peripherals.
- Only use the battery with a charging system that has been qualified with the system per CTIA Certification Requirements for Battery System Compliance to IEEE 1725. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.
- Replace the battery only with another battery that has been qualified with the system per this standard, IEEE-Std-1725. Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard.
- Replace defective batteries immediately; using a defective battery could damage the Dolphin terminal.
- Never throw a used battery in the trash. Promptly dispose of used batteries in accordance with local regulations.
- Do not short-circuit a battery or throw it into a fire; it can explode and cause severe personal injury. Do not allow metallic conductive objects to contact battery terminals.
- If you observe that the Honeywell battery supplied is physically damaged, please send it to Honeywell International Inc. or an authorized service center for inspection, see Product Service and Repair on page 16-1.
- Battery usage by children should be supervised.

- Avoid dropping the terminal or battery. If the terminal or battery is dropped, especially on a hard surface, and the user suspects damage, send it to a Honeywell International Inc. or an authorized service center for inspection.
- If you are not sure the battery or charger is working properly, send it to Honeywell International Inc. or an authorized service center for inspection, see Product Service and Repair on page 16-1.
- Excessive discharge can degrade battery performance. Recharge the battery when your terminal indicates low battery power.
- Although your battery can be recharged many times, the battery life is limited. Replace it after the battery is unable to hold an adequate charge.
- The Dolphin 70e Black should only be connected via its microUSB connector to CTIA certified adapters, products that bear the USB-IF logo or products that have completed, the USB-IF compliance program.

Managing Battery Power

Letting the battery become fully discharged causes the terminal to lose all data in RAM. Honeywell recommends, you keep a charged battery in the terminal at all times to help prevent data loss. Removing the battery from the terminal erases all non-persistent memory.

Default Critical and Low Battery Points

When the terminal is running on battery power (as opposed to external power), warnings are displayed when the battery reaches critical and low battery points. The warning points are determined by the following registry entry:

 [HKEY_LOCAL_MACHINE\ControlPanel\Power]

There are two DWORD values in this registry entry: **MedState** and **LowState**.

The default values for these entries are as follows:

MedState=25%

> This sets the Low Battery point to 25%. When the battery hits the percentage charge specified here, the user is notified.

LowState=10%

> This sets the Critical Battery point to 10%. When the battery hits the percentage charge specified here, the user is notified.

Note: Warnings do not appear when the terminal is on external power.

Setting Critical and Low Battery Points

Developers can reset the battery parameters in the registry from 0 (no warning) to 99 (would nearly always warn). You can review and set these battery points in the RegEdit Power Tool.

1. Touch 🏁 > **Power Tools** > **RegEdit**.

2. Drill down to **HKEY_LOCAL_MACHINE** > **ControlPanel** > **Power**.

3. Touch the **Value Name** (i.e., MedState or LowState) to change the Value Data.
   You can reset the Value Data from 0 (no warning) to 99 (would nearly always warn).

4. Touch **OK** to save changes.

Checking Battery Power

1. Touch ⊞ > **Settings** ⚙ > **System** 📁

2. Touch **Power** 🔋 to view the power status of the main battery.

Or

Touch **Battery** 🔋 to view detailed information on the installed battery pack.

For additional information on Advanced Power Settings, .

For additional information on the Battery Log Configuration, .

System Resets

See .

Hardware Maintenance

When needed, clean the image engine window and the touch screen with a clean, non-abrasive, lint-free cloth. The terminal can be cleaned with a damp cloth.

Important - All battery and connector doors must be present, undamaged, and properly closed to maintain the environmental rating of the terminal.

Installing a SIM Card and/or Memory Card

SIM Card

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

Before installing the SIM card:

- The service provider **must** activate the SIM card.
- The terminal **must** be powered Off.

Note: If no SIM card is installed, you can still make emergency phone calls (e.g., 9-1-1).

Memory Card

You can expand the terminal's memory capacity by installing a microSD or microSDHC memory card. Honeywell recommends the use of Single Level Cell (SLC) industrial grade microSD or microSDHC memory cards with Dolphin terminals for maximum performance and durability. Contact a Honeywell sales representative for additional information on qualified memory card options.

Note: Format the memory card before initial use.

Installation

Note: The following illustrations depict a standard battery with a standard battery door; however, battery removal procedures are the same for the extended battery and battery door.

1. Press the **Power** button ⏻ to place the terminal in **Suspend** mode.

2. If your Dolphin 70e Black model is equipped with a battery door lock:

    a. Unlock and remove the battery door.

    b. Pull the battery latch back and remove the battery.

Battery Door Lock
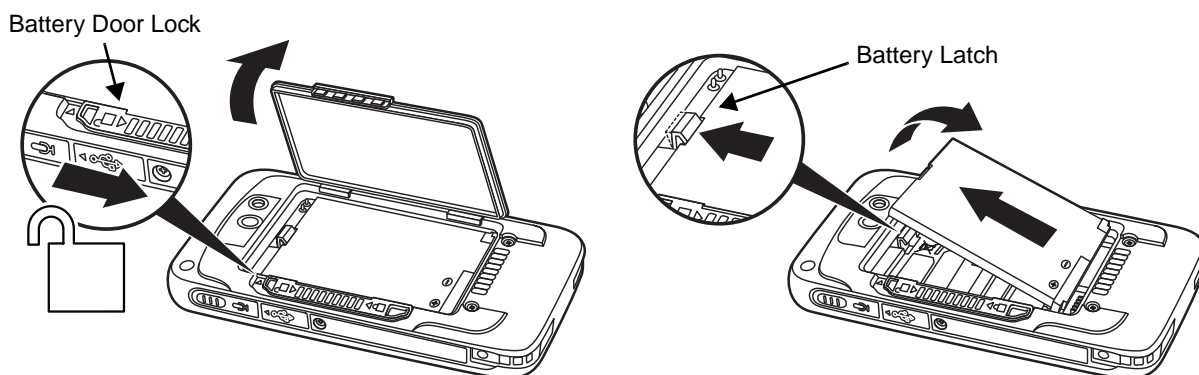
Battery Latch

If your model is **not** equipped with a battery door lock:

a. Remove the battery door and release the battery retention strap.

b. Pull the battery latch back and remove the battery. **Do not pull on the battery retention strap when attempting to remove the battery**.

Battery Latch

Battery Retention Strap
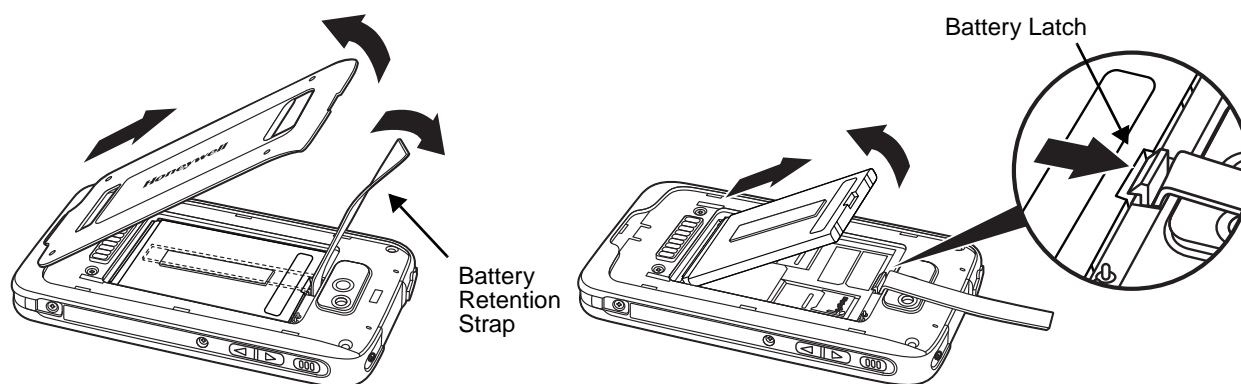
3. Lift the card retention flap for the appropriate socket.

SIM Card Retention Flap

Memory Card Retention Flap
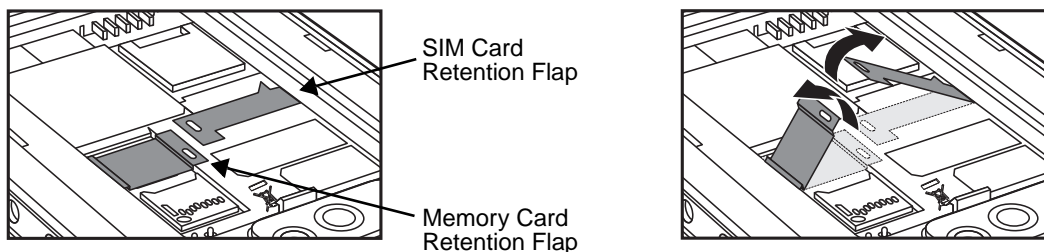
4. Slide the SIM and/or memory card (contacts facing down) into the appropriate socket(s), then close the retention flap.

Chamfered Corner
of SIM Card

SIM Card

Memory Card
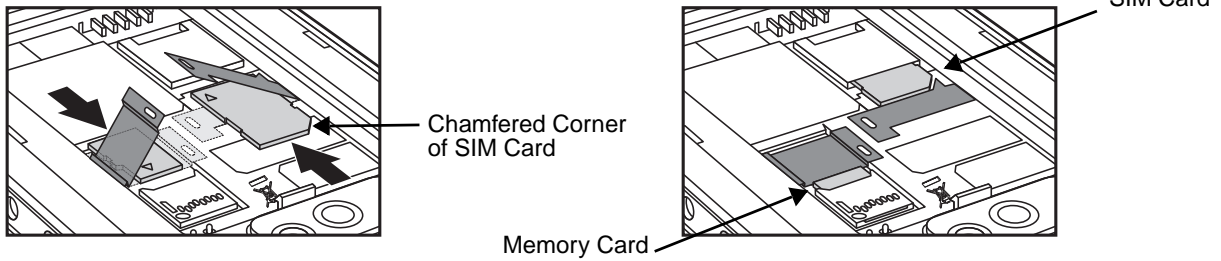
5. Insert the battery. Secure the battery retention strap if applicable for your model type.

6. Install the battery door. Engage the battery door lock if applicable for your model type. The terminal begins booting as soon as power is applied.

Using the Scan Image Engine

Overview

The Dolphin 70e Black terminal houses a compact image engine that instantly reads popular 1D and 2D bar codes and supports omni-directional aiming and decoding for greater flexibility in real-world settings. The image engine can also capture black and white digital images, such as signatures and pictures of damaged inventory.

With the latest CMOS-based technology, the engine works like a digital camera and enables black and white digital image capture, signature capture, and reading of OCR characters.

LED Safety

See LED Safety on page 1-1.

Image Engine Specifications

Field of View

Horizontal Field Angle (°) 21.9+/-0.5 degree

Vertical Field Angle (°) 15.9+/-0.5 degree

Depth of Field

The depth of field measurements used the following parameters:

- Distances are measured from the front of the engine.
- +23°C (+73°F), 0 lux
- Photographic quality codes

Symbology	Distance (in/cm) Near	Distance (in/cm) Far	Delta (in/cm)
3 mil C39/128	-	-	-
5 mil C39/128	2.25 (5.7)	4.35 (11.049)	2.1 (5.3)
7.5 mil C39/128	1.25 (3.2)	6.87 (17.4)	5.62 (14.3)
10 mil C39/128	0.67 (1.7)	9.93 (25.2)	9.26 (23.5)
15 mil C39/128	1.01 (2.6)	15.16 (38.5)	14.15 (35.94)
20 mil C39/128	1.80 (4.57)	18.56 (47.14)	16.76 (42.57)
100% 13 mil UPC	1.57 (3.9)	12.18 (30.9)	10.61 (26.9)
5 mil PDF417	-	-	-
6.7 mil PDF417	1.53 (3.8)	4.63 (11.7)	3.1 (7.8)
10 mil PDF417	1.38 (3.5)	7.34 (18.6)	5.96 (15.1)

5 mil microPDF	-	-	-
5 mil DataMatrix	-	-	-
10 mil DataMatrix	1.52 (3.8)	4.87 (12.3)	3.35 (8.5)
20 mil DataMatrix	1.07 (2.7)	9.66 (24.5)	8.59 (21.8)
10 mil QR	1.50 (3.8)	5.13 (13.0)	3.63 (9.2)
20 mil QR	2.48 (6.3)	9.66 (24.5)	7.18 (18.2)
32 mil Maxicode	1.56 (3.9)	13.19 (33.5)	11.63 (29.5)

Supported Bar Code Symbologies

| Symbology Type	Symbology Name	
1D Symbologies	Codabar Code 3 of 9 Code 11 Code 32 Pharmaceutical (PARAF) Code 93 Code 128 EAN with Add-On EAN with Extended Coupon Code EAN-8 EAN-13 GS1-128 GS1 Databar Interleaved 2 or 5	ISBT 128 Matrix 2 of 5 MSI Plessey Straight 2 of 5 IATA Straight 2 of 5 Industrial Telepen Trioptic Code UPC with Add On UPC-A UPC-E
2D Symbologies	Aztec Codablock A Codablock F Data Matrix	GS1 Databar MaxiCode Micro PDF PDF417 QR Code
Composite Codes	UPC/EAN UCC/EAN GS1 Databar	
OCR	MICR E 13-B OCR-A OCR-B	
Postal Codes	Postnet and most international 4-state codes Australian Post British Post	Canadian Post China Post

Decoding

The terminal supports image decoding for use in various bar code reading and imaging applications. Full-area imaging provides omni-directional reading of linear and non-linear 1D and 2D bar codes, OCR, signature capture, and picture taking. When reading all bar code types using full-area imaging, a positive read can be obtained from many positions; see The Aiming Beam on page 4-3. To achieve the best read, the aiming beam should be centered horizontally across the bar code.

Using the Scan Demo to Decode a Bar Code

The aiming beam should be oriented in line with the bar code to achieve optimal decoding.

1. Touch ⊞ > **Demos** 📁 > **Scan Demo** ▐█▌ .

2. Point the Dolphin terminal at the bar code. Press and hold the **Scan** button.

    Note: The left and right side buttons also trigger the scan/imager.
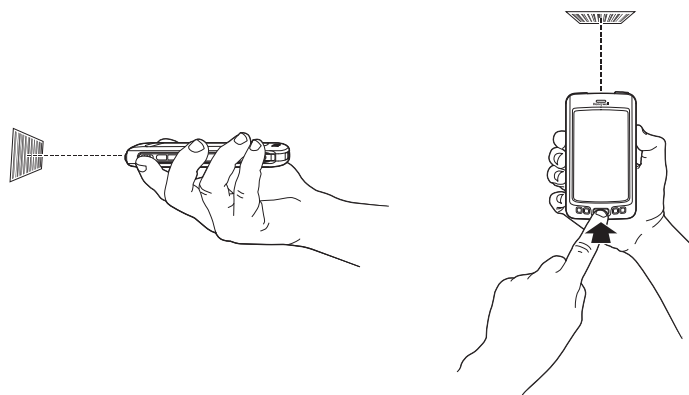
3. Center the aiming beam over the bar code; see The Aiming Beam on page 4-3.

    Note: By default, the LED illumination and aiming beam options are enabled. For optimum performance, avoid reflections by scanning the bar code at a slight angle.

4. When the bar code is successfully decoded, the terminal beeps and the bar code information appears on the touch screen.

The Aiming Beam

The aiming beam is smaller when the terminal is held closer to the code and larger when it is farther from the code. Symbologies with smaller bars or elements (mil size) should be read closer to the unit whereas symbologies with larger bars or elements (mil size) should be read farther from the unit.

Linear Bar Code

2D Matrix Symbol

## Capturing Images Using the Imaging Demo

The image-capture process is an intuitive, split-second operation for experienced users. By following the basic guidelines, new users can easily develop their own technique and, with practice, quickly learn to adapt it to different application environments.

Image Preview

When the imaging process is initiated, the touch screen displays a preview of the object. This is a live video image of what the imager is currently viewing. The live video image has a slightly degraded appearance compared to the captured image. This is normal.

Scan Key

On all Dolphin 70e Black terminals, the Scan button captures images.

Scan Key
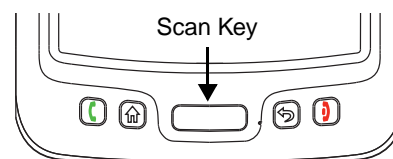
File Formats

File formats supported for image storage include Bitmap (BMP), JPEG (JPG) and Portable Network Graphics (PNG). The default file format for images is a gray scale JPG.

Compression

Digital images have a maximum image size of 640 x 480 pixels and may have up to a 256 (8 bit) gray scale image definition.

The image quality and related file size are determined by the data compression method used by the software application used to take images. The average size of the image file is approximately 4–8K. However, the size of the image depends on the content of the image - the more complex the content, the larger the file size.
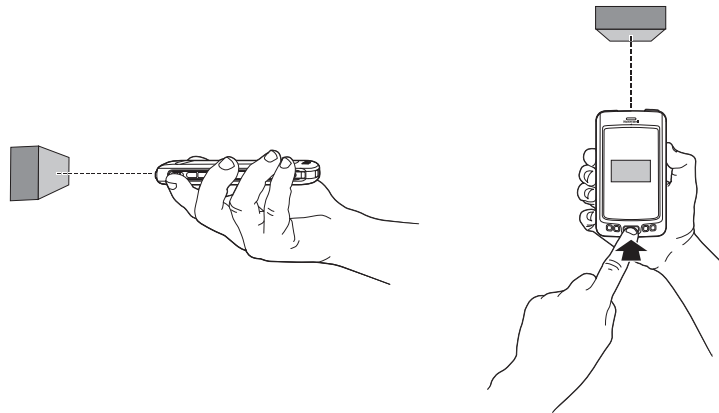
Taking an Image

The following steps are basic guidelines for taking images:

1. Touch ⊞ > **Demos** > **Imaging Demo** 🖼️ .

2. Point the Dolphin terminal at the object. To preview the image, press and hold the **Scan** button.

   Note: The general notification LED above the touch screen illuminates red while the Scan button is pressed.

3. Adjust the terminal's position until the object appears on the touch screen the way you want it to appear in the image.

4. Release the **Scan** button to capture the image.

5. Touch **File** on the Tile bar, then select **Save** or **Save As**.

   *Note: Unless otherwise specified, the image is saved to the **My Device\My Documents** folder.*

Enabling the Aimer

By default, the Aiming Beam (see page 4-3) is turned off in the Imaging Demo application. To enable the aiming beam for image capture:

1. Touch **File** at the bottom of the Imaging Demo screen**.**

2. Select **Setup** from the menu, then touch **Aimer**.

   Note: If an option is enabled, a check mark appears next to the name.

3. The aiming beam is now enabled for imaging.

Uploading Images

Image files can be uploaded to a host workstation using Microsoft ActiveSync or Windows Mobile Device Center and a Dolphin communication peripheral. For additional information see Connecting and Synchronizing the Terminal and Workstation on page 7-9.

5

Using the Color Camera

Overview

Dolphin 70e Black terminals are equipped with 5.0-Megapixel auto focus cameras to provide easy integration of color picture and video capture into business applications. The camera lens and camera flash are located on the back panel of the terminal.

Taking a picture using the Camera Demo tool

1. Touch > **Demos** > **Camera Demo** .

2. Adjust the camera settings using the icon menu at the top of the display screen.

Color		Brightness		Pixels		Zoom	

	Saturation		Contrast		Sharpness		Lamp
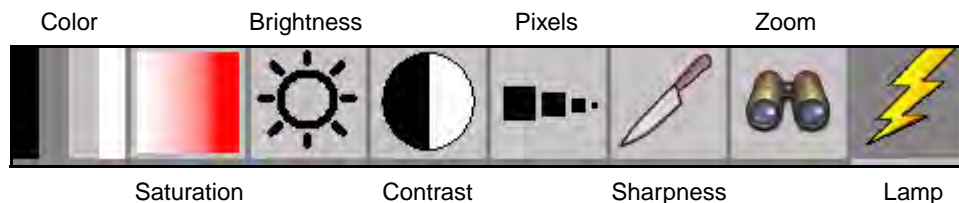
3. Point the terminal's camera lens at the object you want to capture.
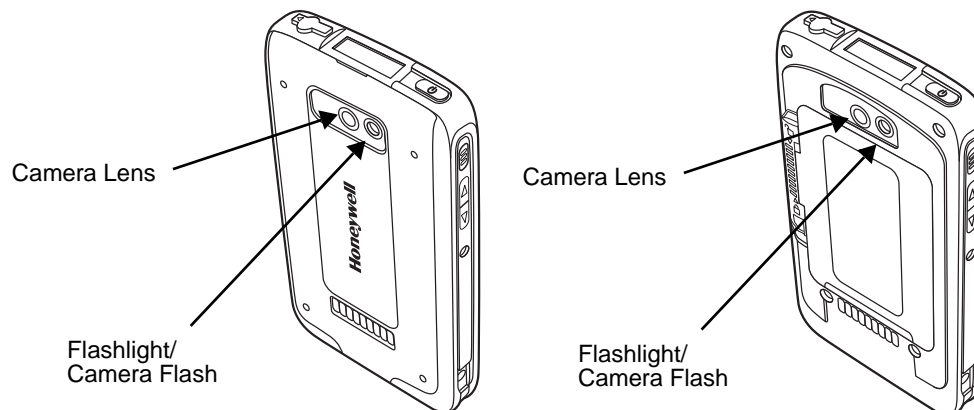
4. Center the object you want to take a picture of on the live preview screen.

5. Touch **Snap** on the touch screen.

Note: Touch the green arrow ◀ *to review or edit your pictures.*

To exit the picture review/edit screen, touch the green box □ *.*

Camera Options

The Camera Options menu provides access to create customized profiles, adjust audible feedback, modify file preferences, and set caption options. Touch **Options** > **Camera** to access the Camera Options menu.
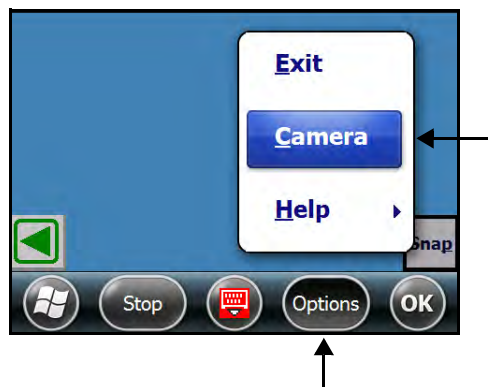
The Camera Options screen contains five tabs: **Profile, Display, Capture, Caption, and File**.

Profile Tab

Display Tab

The profile tab allows you to customize your camera settings, or chose from several predefined profiles designed to provide the best picture quality for common tasks.

Capture Tab

Camera Options ⓐ ⇄ ▽! ◀: ⊡ 1:56

Focus: using profile mode

Sound Effects: audible

| Profile | Display | Capture | Caption | File | |

Caption Tab

Camera Options ⓐ ⇄ ▽! ◀: ⊡ 1:56

Include:

☑ Date   ☑ Time

☑ File Name

☑ GPS coordinates

| Profile | Display | Capture | Caption | File | |

File Tab

Camera Options ⓐ ⇄ ▽! ◀: ⊡ 1:56

Folder: My Pictures   [...]

File:

Prefix: DEF

Index: 0001

Format: Bitmap (.BMP)

| Profile | Display | Capture | Caption | File | |

Taking a picture using the Windows Embedded Handheld 6.5 Camera tool

1. Touch **> Pictures & Videos > Camera**

2. Point the terminal's camera lens at the object you want to capture.

    Note: The camera lens is located on the back panel of the terminal.

3. Center the object you want to take a picture of on the live preview screen. Adjust the camera settings or let the camera auto-focus.

    Note: Focus On is the default Focus mode. In this mode, the camera performs auto-focus while it is in preview mode but not during picture capture.

4. Press the **Scan** button to capture the photo.

5. The touch screen displays the captured photo. Touch **OK** or **Camera** on the Tile Bar to return to the active viewfinder screen.

Menu

Touch **Menu** on the Tile Bar at the bottom of the touch screen to adjust the camera settings, switch to video mode, and access additional camera options.

Item	Descriptions
Video	Activate Video Mode
Mode	Set Mode (i.e., Normal, Burst, or Timer)
Resolution	Set Picture Resolution (i.e., QVGA, VGA, SVGA, XGA, UXGA, QXGA, or MEGA5)
Zoom	Set Zoom (i.e., x1, x2, or x3)
Flash	Set Camera Flash On or Camera Flash Off
Focus	Set Focus Off, Focus On (default), Focus on Trigger, or Fixed-Focus
	Focus On (default setting): The camera auto-focuses while it is in preview mode. As you move the camera, the lens targets and auto-focuses on different objects. Once the picture is in focus in preview screen, the camera is ready for the picture to be taken. To reduce the capture time of the photo, the camera does not auto-focus during picture capture process.
	Focus on Trigger: The camera auto-focuses while it is in preview mode and again during picture capture. The Focus on Trigger lengthens the capture time of the photo.
Brightness	Set the brightness setting from +2.0 EV to -2.0 EV in .5 EV increments
Full Screen	Switch to full screen mode
Options	Set Camera Options, Video Options, Slide Show Options or General Options

Options

Touch **Menu** > **Options**. The Options menu contains four screens:

General Screen
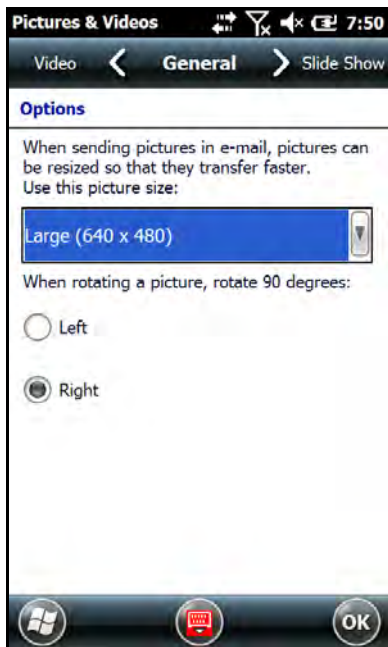
Slide Show Screen

Camera Screen
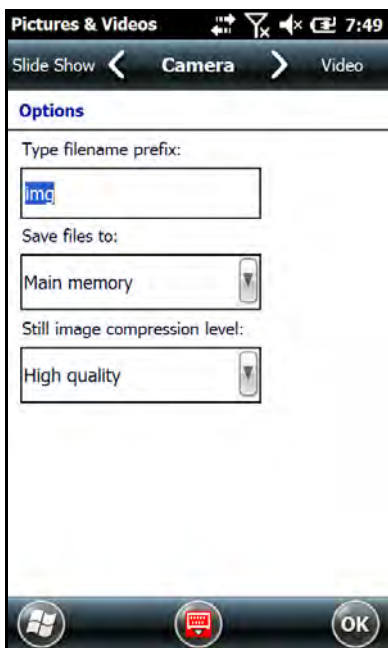
Video Screen
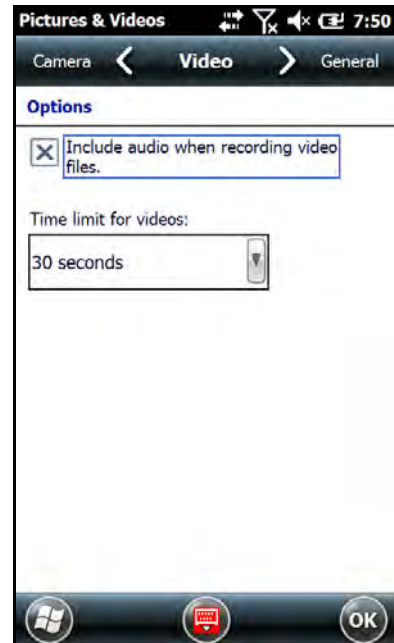
Recording Video using the Windows Embedded Handheld 6.5 Camera tool

1. Touch ⊞ **> Pictures & Videos > Camera > Menu > Video**

2. Point the terminal's camera lens at the object you want to capture.

3. Press the **Scan** button to start recording.

4. Touch **Stop** on the screen or press **Scan** button to stop recording.

Uploading Pictures and Videos

Picture and Video files can be uploaded to a host workstation using Microsoft ActiveSync or Windows Mobile Device Center and a Dolphin communication peripheral. For additional information see Connecting and Synchronizing the Terminal and Workstation on page 7-9.

6

System Settings

Overview

Customized settings are available on the System Settings menu. Touch ⊞ > **Settings** ⚙ and the settings screen opens.
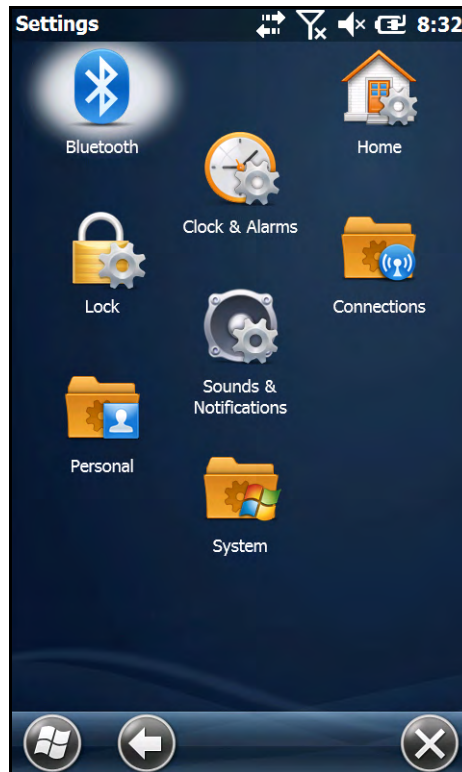
Icon		Description
Bluetooth		Configure the Bluetooth radio. See Working with the Bluetooth Radio and NFC on page 9-1.
Home		Customize the look and the information displayed on the Home screen.
Clock & Alarms		Set the system clock, date, time and schedule alarms. See Clock & Alarms on page 6-2.
Lock		Password protect the terminal to limit access. See Lock on page 6-3.
Sounds & Notifications		Set the sound volume, enable or disable sounds for specific actions, set sound parameters for system notifications and enable or disable vibrator notification.

Icon		Description
Connections		Establishes network connections settings. See Connections Menu on page 7-1.
Personal		Customizes buttons, and set SIP options. See Personal Menu on page 6-4.
System		Adjusts system settings. See System Menu on page 6-12.

Clock & Alarms

The Clock & Alarms settings can be accessed from the **Home** screen or the **Settings** menu.

1. On the **Home** screen, touch the line that displays the time and date or touch [logo] > **Settings** > **Clock & Alarms**.

2. The **Time** settings screen provides access to set the system clock (i.e., Time Zone, Date, and Time). All scheduled items run according to the settings on the screen. Touch the arrow to the right of the time zone to open the drop down menu. Select the appropriate time zone from the menu. Set the correct time and date in the remaining fields and touch **OK** to save.
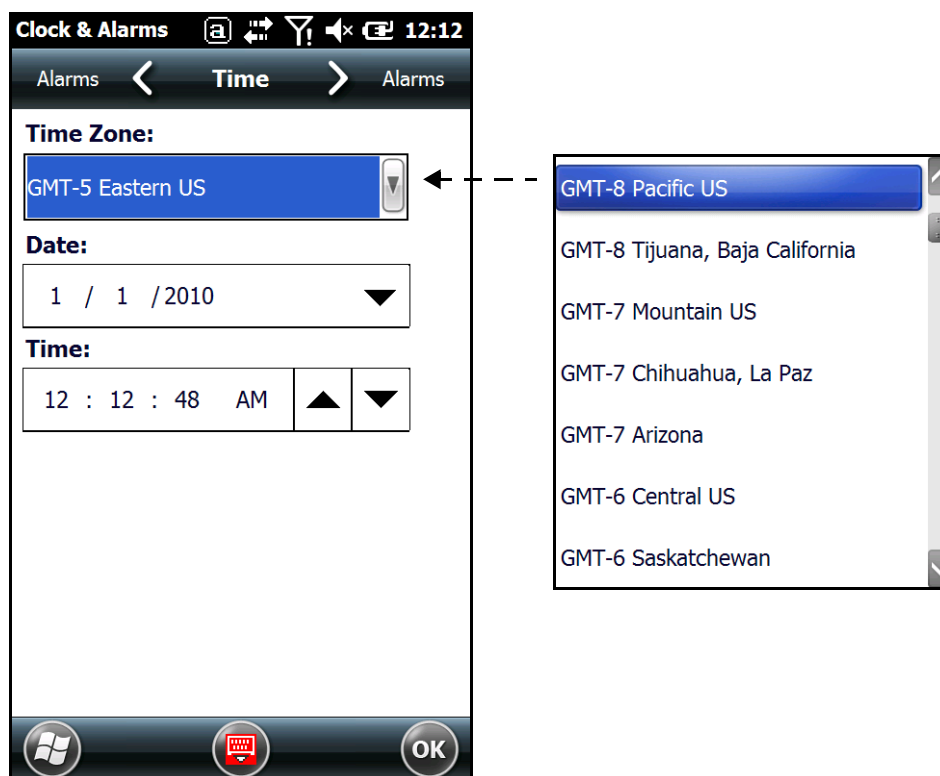
Lock

The Lock settings screen provides access to additional password security features that enable you to prevent an unauthorized person from unlocking the touch screen and accessing the terminal. Select from two password security options: a **Strong Alphanumeric Password** or a **Simple PIN**.

To **add** password protection:

1. Touch ⊞ > **Settings** ⚙ > **Lock** 🔒 .

2. Check the box next to the phrase "**Prompt if phone unused for**".

3. Select the length of inactive time you want the terminal to wait before implementing password security for terminal access.

4. Select **Strong Alphanumeric Password** or **Simple Pin** from the Password type drop-down menu.

5. Input the **Password** you want to use to unlock the terminal.

6. Input the password a second time to **Confirm**.

7. Touch **OK** on the tile bar.

8. Select **Yes** to save the password settings.

To **remove** password protection:

1. Touch ⊞ > **Settings** ⚙ > **Lock** 🔒 .

2. Enter your password.

3. Uncheck the box next to the phrase "**Prompt if phone unused for**".

4. Touch **OK** on the tile bar.

Personal Menu

To access the Personal Menu, touch ⊞ > **Settings** ⚙ > **Personal** 📁. The screen opens displaying the Personal Menu.

Icon		Description
Buttons		The Dolphin 70e Black has six programmable buttons (i.e., Right, Left, Home, Scan, Back, and End). Touch the Buttons icon to program the buttons to perform specific tasks. See Buttons on page 6-5.
Owner Information		Enter your contact information (e.g., name, company, address, telephone number and E-mail address).
Phone		The Phone icon is present on Dolphin models equipped with WWAN radio (GSM/UMTS/GPRS/EDGE) capabilities. Touch this icon to set up user parameters. See Options on page 8-6.
Voice Command		Touch the voice command icon to enable or disable voice command for specific applications, adjust how calendar and notification announcements are performed and set up voice activated password protection. See Voice Command on page 6-8.

Buttons

The Dolphin 70e Black has six programmable buttons: **Home**, **Scan**, **Back**, **End** and the **Right** and **Left** side buttons. Use the **Buttons** setting to reassign the buttons to launch applications or execute commands.

Changing Button Assignments

1. Touch 🪟 > **Settings** ⚙ > **Personal** 📁 > **Buttons** 📱 .
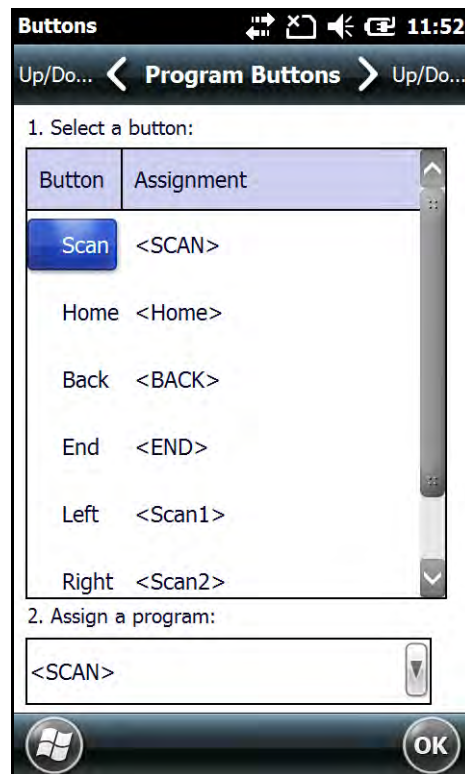
Note: The buttons that appear on this window are the only buttons that can be programmed via the Buttons setting. You cannot add buttons to this window.

2. To change button assignment, touch on the name of the button in the **Button** column, and then select a program or command in the **Assign a program** drop down list.

3. Touch **OK** to save.

4. Press the button to verify that the program is launched or action performed.

Available Applications

The **Assign a program** list contains the applications installed on the terminal. If there is a program installed that you would like to see in this list, paste a Shortcut to the program in the `\\Windows\Start Menu\Programs` folder. For instructions about creating shortcuts, see Using File Explorer on the Terminal on page 6-6.

Additional Functions

The **Assign a program** list also contains the following commands:

Command	Description
<BACK>	Returns to the previous screen.
<Context Menu>	Performs the same function as touch-and-hold to open the context menu for the control.
<END>	Ends a phone call.
<Home>	Returns to the Home screen.
<Input Panel>	Opens the soft input panel.
<Left Softkey>	Opens the menu or performs the action displayed on the left side of the Command bar.
<None>	Nothing happens when the button is pressed.
<OK/Close>	Performs the same function as touching **OK** on the screen.
<Right Softkey>	Opens the menu or performs the action displayed on the right side of the Command bar.
<Rotate Screen>	Changes the screen orientation from portrait to landscape.
<SCAN>	Front panel scan button - Activates the scanner/imager.
<Scan1>	Left side button - Activates the scanner/imager.
<Scan2>	Right side button - Activates the scanner/imager.
<Scroll Down>	Scrolls down in the open application.
<Scroll Left>	Scrolls left in the open application.
<Scroll Right>	Scrolls right in the open application.
<Scroll Up>	Scrolls up in the open application.
<Start Menu>	Opens the Start menu.

Using File Explorer on the Terminal

If you do not see the program listed under the Assign a Program list, you can use File Explorer on the terminal or workstation () to create a shortcut to the program and place the shortcut in the Start Menu folder.

Note: We recommend that you Copy and Paste Shortcut so that you do not alter your program configurations by accident. Using Copy and Paste Shortcut (as opposed to Cut and Paste) ensures that the program files remain where they need to be for the system to find them to perform system functions.

1. On the terminal, touch > **File Explorer** .

2. Touch the **Program Files** folder under **My Device**.

3. Touch and hold on the program, then touch **Copy** on the pop-up menu.

4. Navigate back to the **My Device** root directory, then touch **Windows** > **Start Menu**.

Touch the arrow ▼ , then select **My Device**.
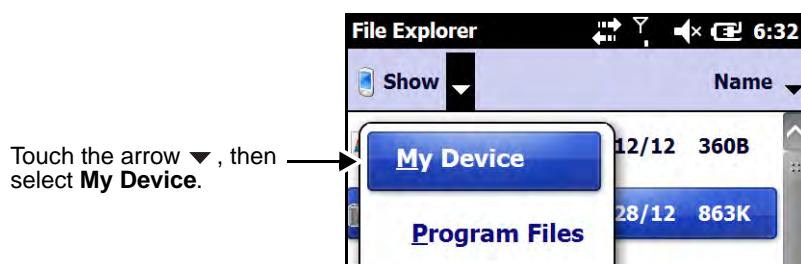
5. Touch and hold a blank area of the window, then touch **Paste Shortcut** on the pop-up menu.

   Note: If there is no blank space available in the window, touch on **Menu** > **Edit** > **Paste Shortcut**.
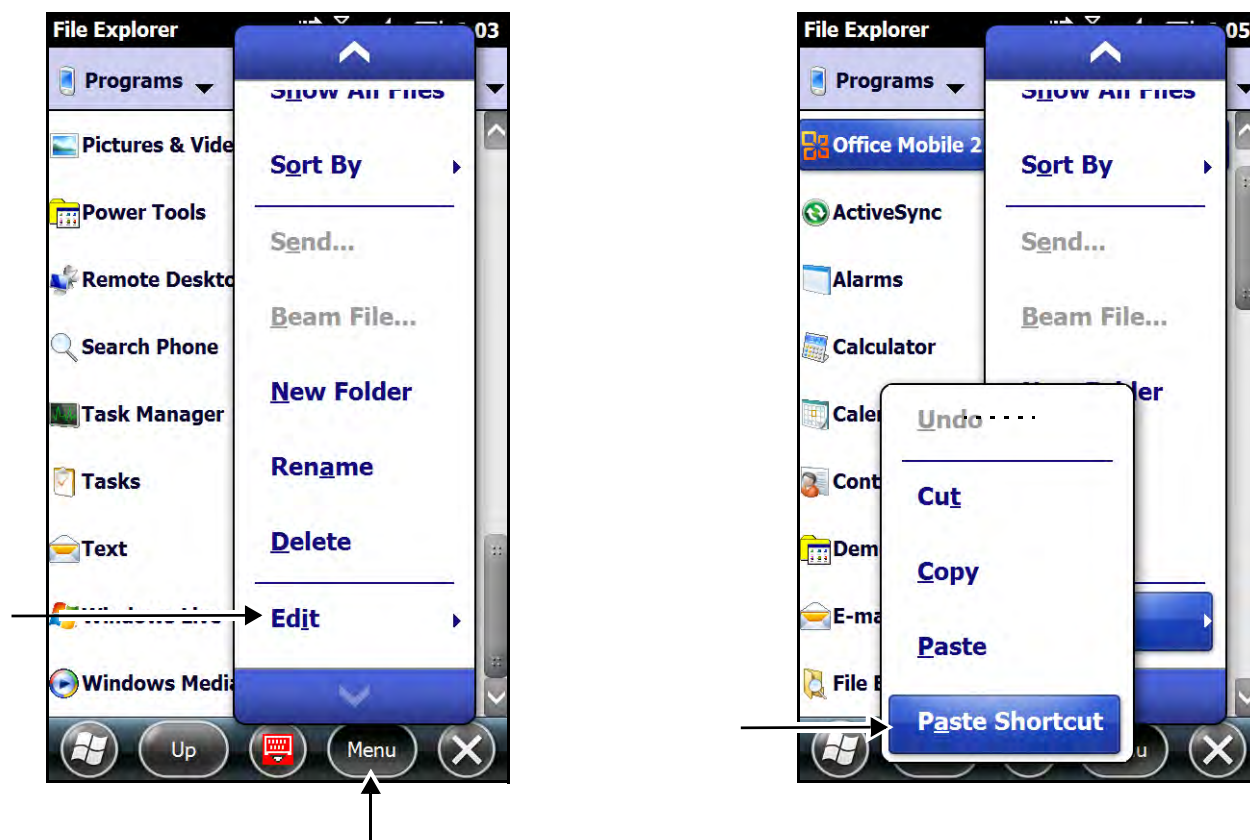
6. Touch to verify that the program now appears on the **Start** menu.

Using File Explorer on the Workstation via ActiveSync or Windows Mobile Device Center

Here, you are performing the same basic process as on the terminal, except you are using the Explore utility (Windows Explorer) on the workstation to copy and paste the shortcut.

1. Connect the terminal to the workstation using a Dolphin 70e Black peripheral.

2. Open Windows Explorer on the workstation using ActiveSync or WMDC. Navigate to the folder containing the program. See Exploring the Terminal from the Workstation on page 7-11.

3. Right-click on the program and select **Create Shortcut**.

4. Select the shortcut, right-click, and select **Cut**.

5. Navigate to the **Start Menu** folder (**Windows > Start Menu > Programs**).

6. Right-click on an empty area and select **Paste Shortcut**.

7. On the terminal, touch the **Start** menu.

8. Verify that program appears.

Voice Command

The Voice Command screen provides access to enable or disable voice command for specific applica-tions, adjust how calendar and notification announcements are performed and set up voice activated password protection.

To access the Voice Command settings, touch [ ] > **Settings** [ ] > **Personal** [ ] > **Voice**

Command [ ] .

Enable or Disable Voice Command functionality.

Enable or Disable Voice Command for specific applications.
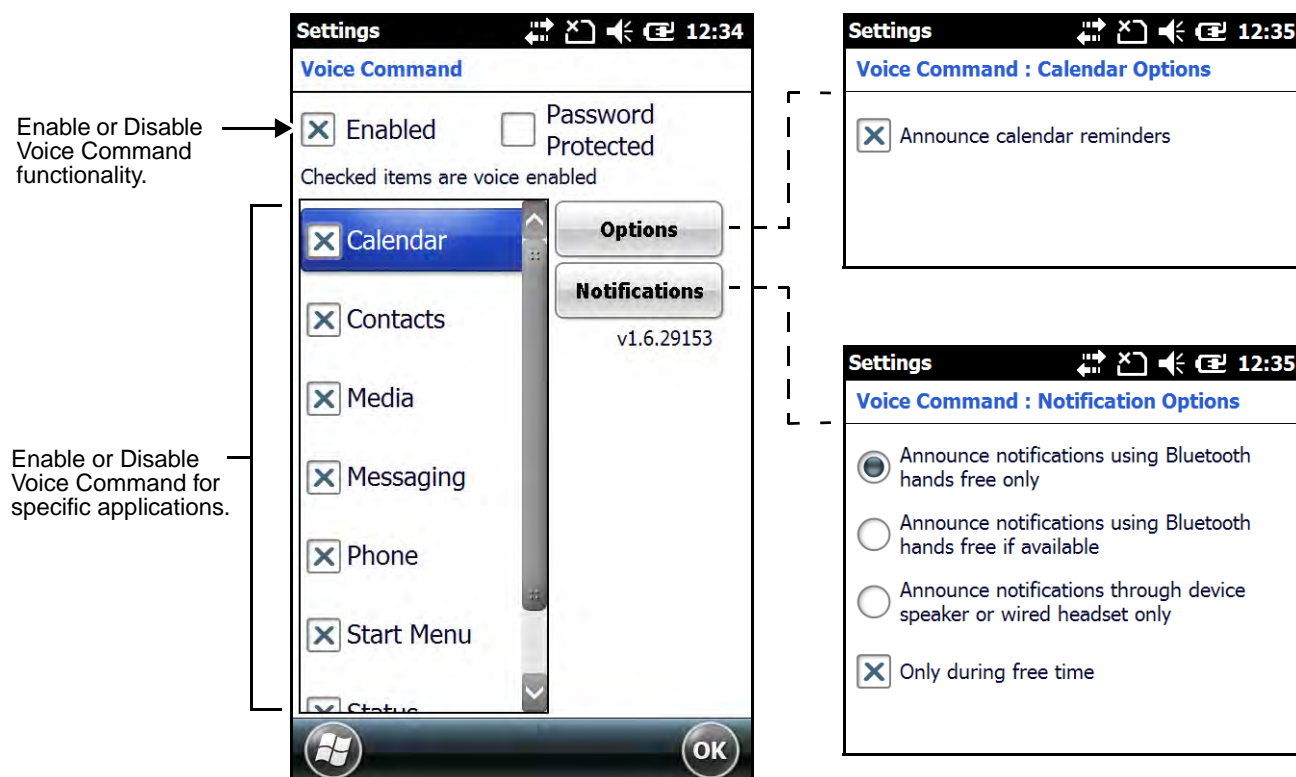
Setting up the terminal for Voice Command

To utilize the Voice Command feature you must set one of the six programmable buttons on the terminal for "Voice Command" initiation.

1. Touch ![start icon] > **Settings** ![settings icon] > **Personal** ![personal icon] > **Buttons** ![buttons icon] .

2. Touch on the name of the **Button** you want to press to initiate voice command input.

3. Select **Voice Command** on the **Assign a program** drop down list.

4. Touch **OK** to save.

5. Touch **Voice Command** ![voice command icon] .

6. On the Voice Command screen, check the **Enabled** box. Select the applications you want accessible using voice commands, set voice reminder and notification preferences, and enable or disable password protection.

7. Touch **OK**.

Using Voice Command

Once you have configured the terminal for Voice Command input:

1. Press the button you programmed to initiate Voice Command input.

   Note: A microphone appears on Title bar at the top the screen when Voice Command is activated.

2. Ask a query or speak a command (e.g., What time is it? or Send e-mail).

   Note: When using some action commands, the terminal will ask if the command is correct before completion. Indicate Yes to complete the command or No to try the command again.

Voice Commands

Action/Query Commands	Results	Example(s)
Yes or Correct	Verifies you want the command completed or a selection from a list.	
No or Incorrect	Try the command again or continue to next contact on the list when using the call contact or show contact command.	
Help What can I say What are my choices	Initiates context sensitive help	
Phone (Action) *Note: SIM contacts must be copied to the Contacts application on the terminal to be used in conjunction with Voice Commands.*		

Call *contact*	Initiates a phone call to a name or company saved on the terminal contact list. *Note: Company can only be used if the Name field on the contact list is empty.*	Call Sara Call Gas Company
Call *contact* at *location* Call *contact* on *location*	Initiates a phone call to a name or company on the terminal contact list when more than one location is saved (e.g., Home, Home2, Work, Mobile, Cell and Car).	Call Sara at home Call Sara on mobile
Dial number	Dial a specific phone number (i.e. nnn-nnnn, nnn-nnn-nnnn, 1-nnn-nnn-nnnn, and n-1-1)	Dial 555 5555 Dial 1 555 555 5555
Callback	Initiates a call to the last phone number received.	
Redial	Redials the last call made.	
Show contact	View saved contact information. You can select a phone number, and then initiate the call from the contact screen.	Show Mark Smith
Set ringer level	Set the ringer volume to a specific level (i.e., High, Medium, Low, Vibrate or Off).	Set ringer low
Phone (Query)		
What calls have I missed	Hear a list of calls missed and reset the missed calls count.	
Calendar & Clock (Action)		
Reminders on Reminders off	Enable or disable reminder announcements	
Calendar & Clock (Query)		
What's my next appointment What's my next meeting	Hear the next scheduled appointment or meeting.	
What's my schedule today What's my calendar for today What are my meetings today What are my appointments today What's my schedule tomorrow What's my calendar for tomorrow What are my meetings tomorrow What are my appointments tomorrow	Hear a list of upcoming appointments for the time specified (e.g., today or tomorrow). Press the Voice Command button during appointment playback and say: • **Next** to skip to the next appointment • **Previous** to hear the previous appointment • **Repeat** to hear the current appointment again • **Cancel** to stop hearing appointments	
What date is it	Hear the current date.	

What time is it	Hear the current time.	
Programs (Action)		
Start program Open program	Start or switch to the specified program (i.e., Browser, Internet Explorer Mobile, MSN, Email, In Box, Messaging, Windows Media or Media Player).	Start browser. Start MSN Open Messenger Open Media Player
Status (Query)		
What is my battery level	Hear the charge level (%) of the battery.	
What is my signal strength	Hear the current signal strength for the phone.	
Windows Media Player (Action)		
Play Music Play Media	Initiates queries that guide you through music selection.	
Play Album Play Artist Play Genre	Initiates queries that guide you through selecting available music by Album, Artist or Genre.	
Play *Artist* Play *Album* Play *Genre*	Select music by specifying the artist, album or genre.	Play Paloma Play Latin
Next Track Previous Track	Interrupt play and select the next or previous track.	
Play	Play the current track in Windows Media Player.	
Pause	Pause the current track in Windows Media Player.	
Stop	Stop the current track in Windows Media Player.	
Turn Shuffle On Turn Shuffle Off	Turns shuffle (random playing of tracks) on or off.	
Windows Media Player (Query)		
What song is this What track is this	Hear information about the current track.	

System Menu

The System menu enables you to verify and sometimes alter system parameters.

To access the System menu, go to ![Windows] > **Settings** ![Settings] > **System** ![System] . Touch the appropriate icon to open that system setting.
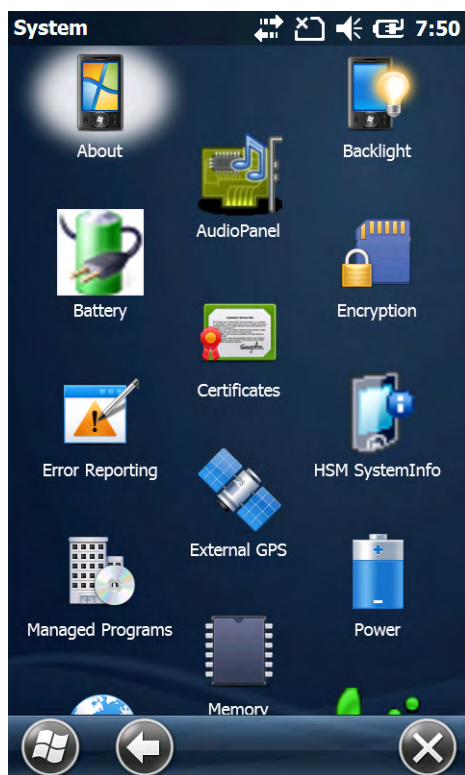
Icon		See Page
About		See About on page 6-14.
AudioPanel		See Audio Panel on page 6-14.
Backlight		See Backlight on page 6-16.
Battery		See Battery on page 6-18.
Certificates		See Certificates on page 6-20.

Icon		See Page
Encryption		See Encryption on page 6-20.
Error Reporting		See Error Reporting on page 6-21.
External GPS		See External GPS on page 6-21.
HSM SystemInfo		See HSM SystemInfo on page 6-21.
Managed Programs		See Managed Programs on page 6-26.
Memory		See Memory on page 6-26.
Power		See Power on page 6-27.
Regional Settings		See Regional Settings on page 6-28.
Remove Programs		See Remove Programs on page 6-29.
RIL		See RIL on page 6-30.
Screen		See Screen on page 6-30.
SIP Config		See SIP Config on page 6-22.
Smart Sensors		See Smart Sensor on page 6-23.
Task Manager		See Task Manager on page 6-31.

About

The **About** system settings screen displays specific information about the terminal. Three information screens are available:

- The **Version** screen displays software, operating system, and processor information.
- The **Device ID** screen displays the **Device name** and **Description** of the terminal.
- The **Copyrights** screen displays important copyright information.

To access the **About** system screen, touch > **Settings** > **System** . > **About** .

Audio Panel

The Audio Panel application specifies how the terminal routes audio input/output for media and VOIP applications. Six preferred audio device options are available: **Auto**, **Handset**, **Speaker**, **Headset**, **Aux/ Carkit** and **Bluetooth Headset**. **Sidetone** and/or microphone gain (**Mic Gain**) adjustments are dependent on the audio device selected and may be disabled (N/A) for some devices.

Note: The Audio Panel application does not control Phone audio settings. Audio Panel settings only affect media audio and VOIP audio.

Touch > **Settings** > **System** > **Audio Panel** to access the **Audio Panel**

Touch **Reset** to discard changes and revert to the default Audio Panel settings.

Touch **OK** to save changes.
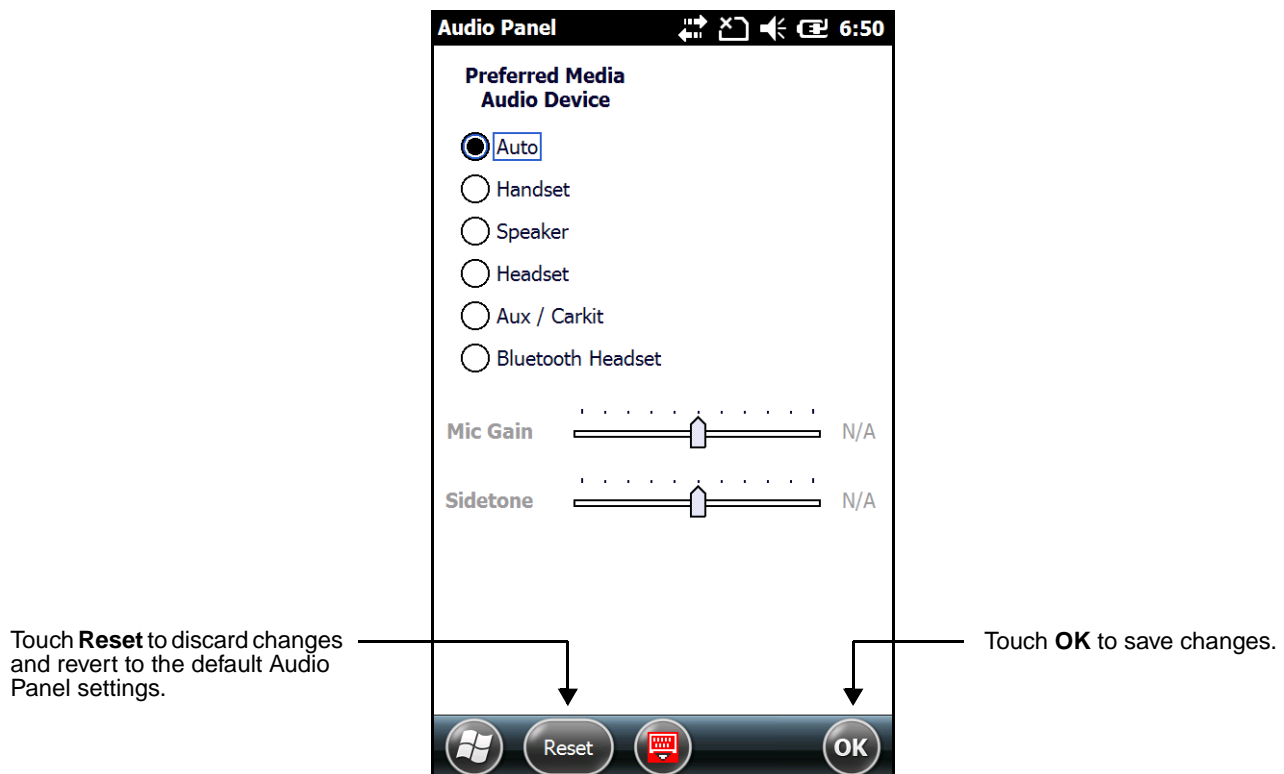
Auto

Select **Auto** to set the terminal to automatically use the highest priority device from the list below (1=Highest, 4=Lowest).

1. A2DP Headphone, BT Wireless Stereo profile

2. Wired Headset

3. Aux/Carkit

4. Speaker

Note: The Mic Gain and Sidetone sliders are disabled (N/A) when Auto is selected.

Handset

Select **Handset** to always route audio to the Handset (i.e., front speaker and front microphone).

Note: Connecting a headset or installing the terminal in a mobile base has no effect when Handset is selected.

The **Mic Gain** slider adjusts the audio input sensitivity of the microphone.
The **Sidetone** slider adjusts the volume of feedback from the front microphone into the front speaker (e.g., the volume of your voice in your own ear piece).

Speaker

Note: Connecting a headset or installing the terminal in a mobile base has no effect when Handset is selected.

The **Mic Gain** slider adjusts the audio input sensitivity of the microphone.

Note: The Sidetone slider is disabled (N/A) when Speaker is selected.

Headset

Select **Headset** to always route audio to a Wired Headset if it is present. If a headset is not connected to the terminal, there is no audio. By default, the headset microphone is used for audio input.

The **Mic Gain** slider adjusts the audio input sensitivity of the microphone. To amplify the microphone input, check the **Headset Mic Boost** box.

The **Sidetone** slider adjusts the volume of the feedback from the headset microphone into the headset ear piece (e.g., the volume of your voice in the headset ear piece).

Aux/Carkit

Select **Aux/Carkit** to always route audio to an external speaker on a peripheral device (e.g., Mobile Base). If an external speaker is not present, there is no audio. By default, the front microphone on the terminal is used for audio input.

The **Mic Gain** slider adjusts the audio input (gain) of the microphone.

Note: The Sidetone slider is disabled (N/A) when Aux/Carkit is selected.

Bluetooth Headset

Select **Bluetooth Headset** to set the terminal to automatically use the highest priority device available from the list below (1=Highest, 4=Lowest).

1. Bluetooth enabled Headset (Hands Free profile)

2. A2DP Headphone (BT Wireless Stereo profile)

3. Wired Headset

4. Aux/Carkit

5. Speaker

By default, if a Bluetooth Headset is selected the headset microphone is used for audio input.

The **Mic Gain** slider adjusts the audio input sensitivity of the microphone.

The **Sidetone** slider adjusts the volume of the feedback from the device microphone into the device ear piece (e.g., the volume of your voice in your own ear piece).

Backlight

The Backlight system setting enables you to customize backlight functionality for the display and keypad (i.e., Send, Home, Back and End buttons). The settings menu contains three tabs: **Dim Backlight**, **Brightness** and **Keypad Backlight.**

To access the Backlight settings, touch ⊞ > **Settings** ⚙ > **System** 📁 > **Backlight** 📱 .

Dim Backlight

The **Dim Backlight** settings determine if the backlight dims during periods of non-use and how many minutes you want to elapse before the backlight automatically dims when the terminal is running on battery power, external power or USB power.

- **Battery Power:** The terminal is being powered by the battery.
- **External Power:** The terminal is being powered by an external power source, e.g., HomeBase, Mobile Base or ChargeBase.
- **USB Power:** The terminal is being powered by a USB connection, e.g., the Charge/ Communication cable connected to a workstation (PC) or used in conjunction with the provided power supply (70e-USB ADAPTERKIT).

Check the box next to the option to enable automatic backlight dimming.

Touch the arrow, then select the time increment you want to elapse before the backlight automatically dims.
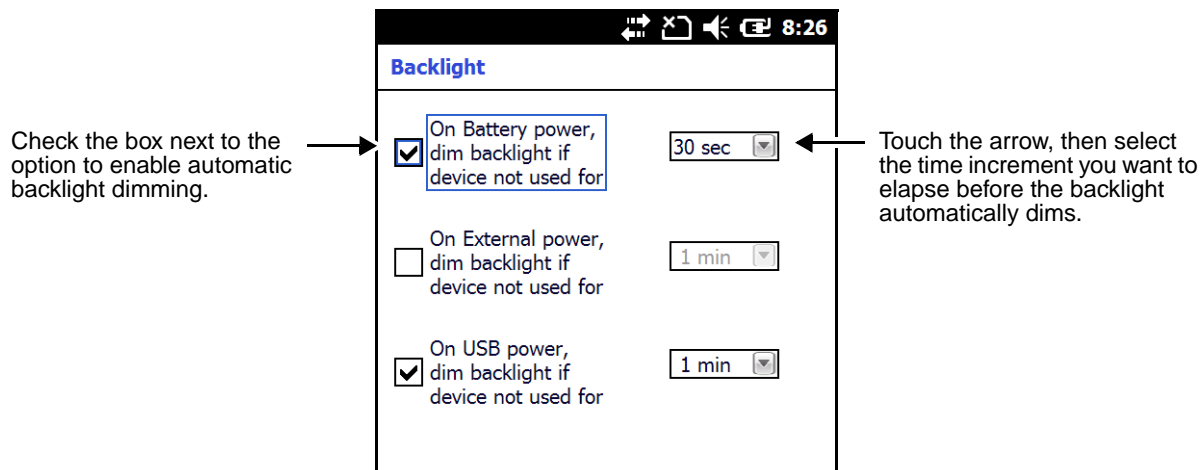
Brightness

The **Brightness** tab determines the backlight intensity of the display when the terminal is in use. The settings customize how the terminal responds to the environmental lighting conditions in which the terminal is being used.

Check the "Auto adjust backlight" box to enable automatic adjustment of the backlight intensity depending on the operating environment. Once enabled, the terminal automatically adjusts the backlight intensity to low, medium or high depending on the detected operating environment.

- Low light environments (e.g., dark areas with a limited light source) trigger a low intensity backlight.
- Medium light environments (e.g., standard lighting in office buildings) trigger a medium intensity backlight.
- High light environments (e.g., outside environments with bright sunlight) trigger a high intensity backlight.

When the terminal is in a specific environment, you can manually adjust the brightness level for the environment by changing the Brightness level number from 1 to 8 or by dragging the slider left or right on the screen. The highest Brightness level is indicated with an 8.

Check the box to enable automatic adjustment of the backlight intensity for low, medium, and high light environments.

Touch and drag the slider to manually adjust the Brightness level setting of the current environment.
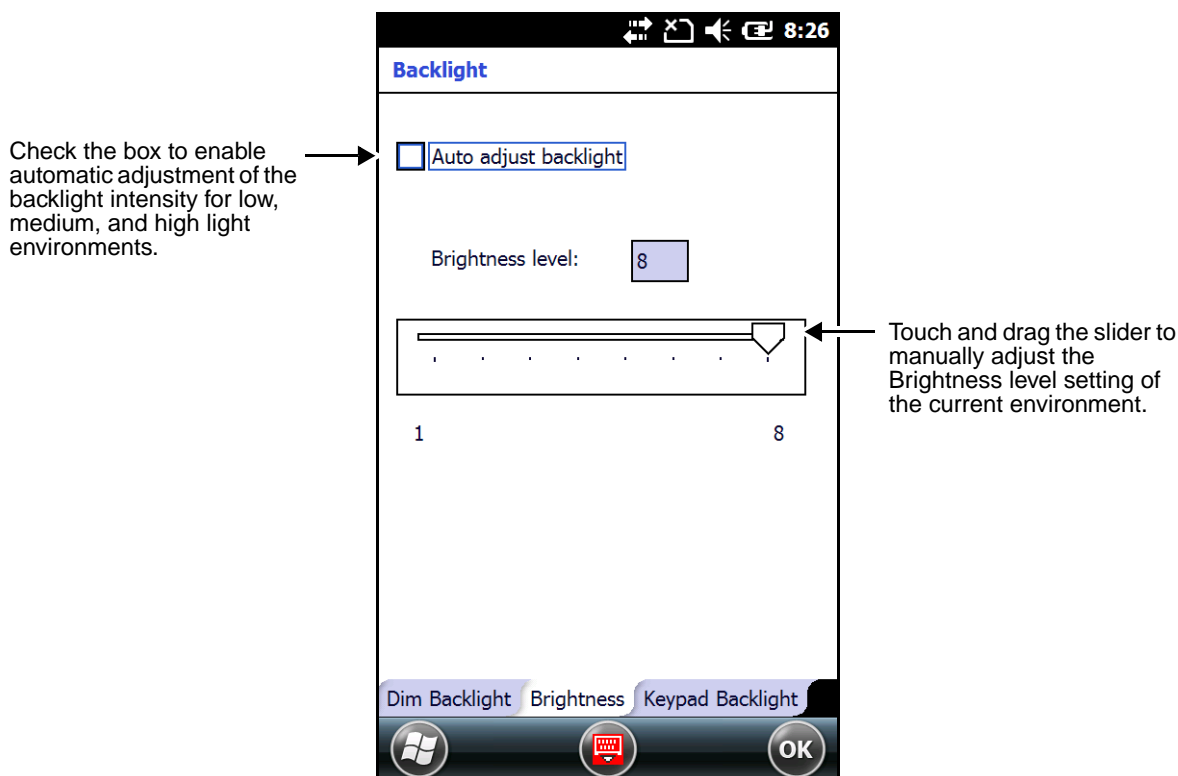
Keypad Backlight

The **Keypad Backlight** tab setting determines when the keypad (i.e., Send, Home, Back and End buttons) backlight is activated. The backlight can be set to turn on with the display, to turn on in dark environments or to stay turned off.
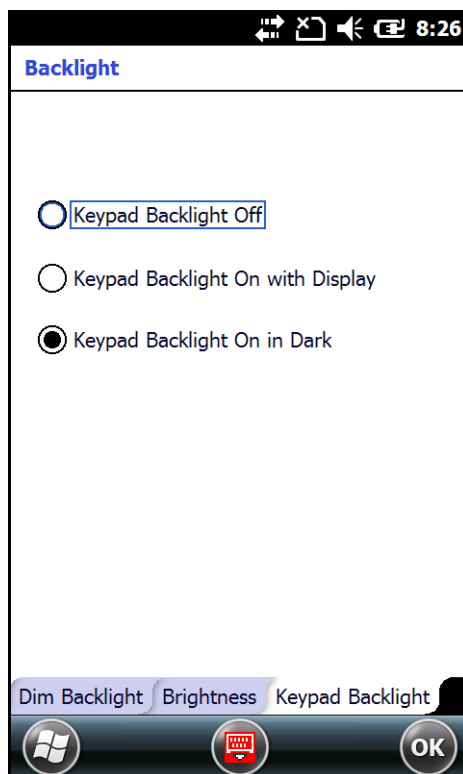
Battery

The Battery system settings menu contains two tabs: **Battery Status** and **Log Config**. The **Battery Status** tab provides the status of the battery pack (e.g., Battery Time to Full or Battery Time to Empty, Voltage, Current, Temperature, Chemistry, and Serial Number). The **Log Config** Tab allows you to configure the BatteryLogFile.

To access the Battery system settings, touch [icon] > **Settings** [icon] > **System** [icon] > **Battery** [icon].

Battery Status

The Battery Status tab provides the following information on the battery.

Battery Life Percent

The Battery Life Percent indicates the percentage of charge remaining on the battery.

Battery Time to Full or Empty

When external power is supplied to the terminal, the estimated charging time remaining to achieve a full charge is listed. When power is supplied by the battery, the estimated time remaining on the battery charge is listed.

Note: Time estimates are based on the present voltage and current readings.

Battery Voltage

The Battery Voltage status can range from approximately 3.2 V to 4.2 V.

Battery Current

The Battery Current reflects the charging current going into the battery when it is a positive and the discharge current when it is negative.

Note: The charging current is always less than current source due to device being in operation.

Battery Temperature

The Battery Temperature indicates the temperature status of the battery.

Battery Chemistry

The Battery Chemistry provides the battery type (e.g., LiIon).

Battery Serial Number

The Battery Serial Number displays the serial number of the authenticated Honeywell battery.

Battery Status Tab

Log Config Tab

Certificates

Certificates shows you the certificates that are recognized by the operating system. The Horizontal scroll bar at the top of the screen provides access to the three certificate screens: **Intermediate**, **Personal**, and **Root**.
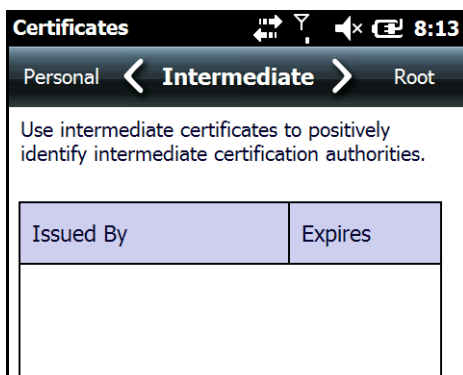
Swipe left or right on the Horizontal scroll or touch the label (e.g., Root or Personal) to access the additional screens.

Encryption

Encryption gives you the option of encrypting files placed on storage cards so that those files cannot be read by any other device. Check the box to enable file encryption when saving to a storage card.
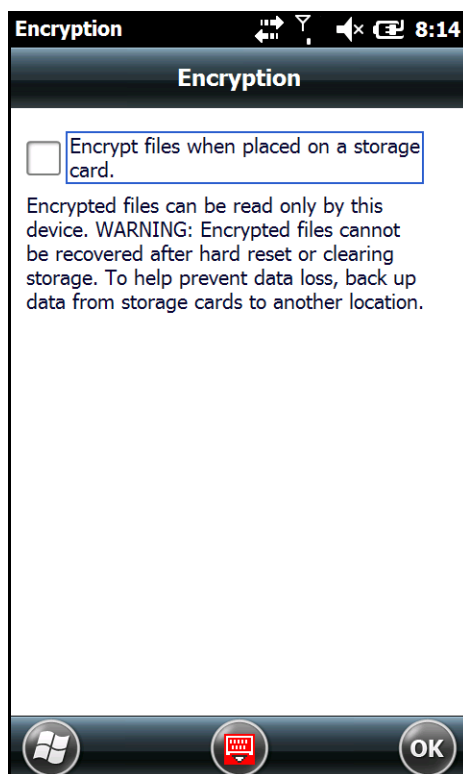
Error Reporting

Error Reporting gives you the option of enabling or disabling the error reporting function of Windows Embedded Handheld 6.5.

External GPS

External GPS determines which port a third-party GPS software application can use to access the GPS receiver.
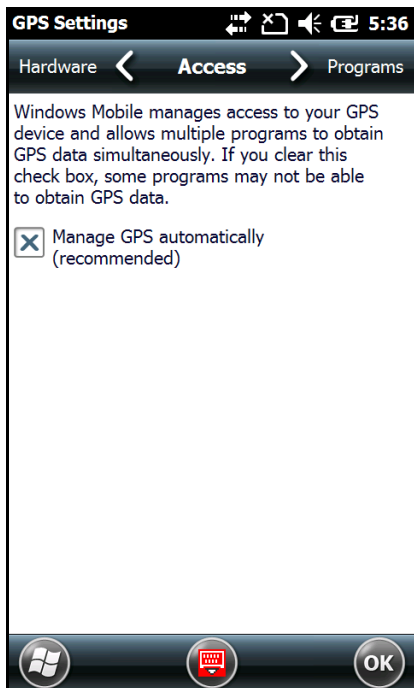
Access Screen	Hardware Screen	Programs Screen
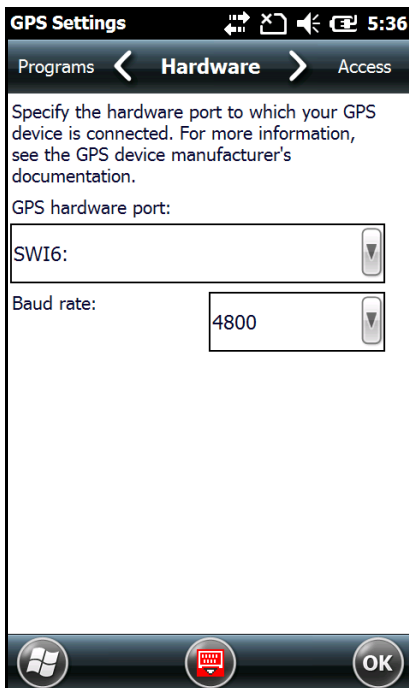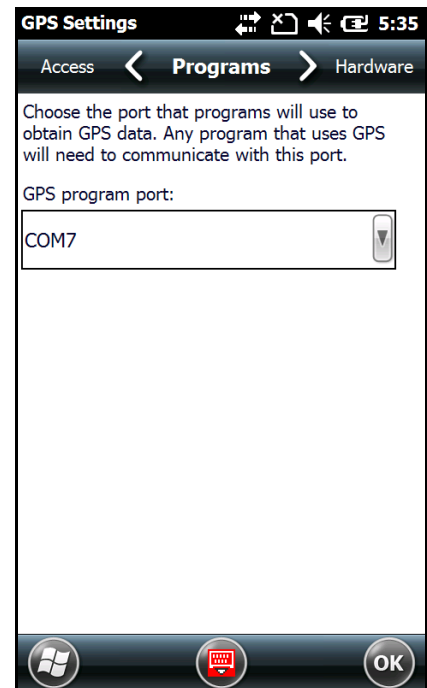
Note: You need the installation parameters from the GPS manufacturer to configure the connection.

HSM SystemInfo

The HSM SysInfo screen provides important system information including firmware versions, DLL versions, system parameters, as well as network and radio information. HSM SysInfo screen contains six tabs: **System**, **HW**, **SW**, **Radio**, **EXE** and **DLL**.

To output the system information to a text file:

1. Touch > **Settings** > **System** > **HSM SystemInfo** .

2. Touch **Save** on the tile bar.

3. A text file containing the collected system information is created and saved to **IPSM/SysInfo.txt**.
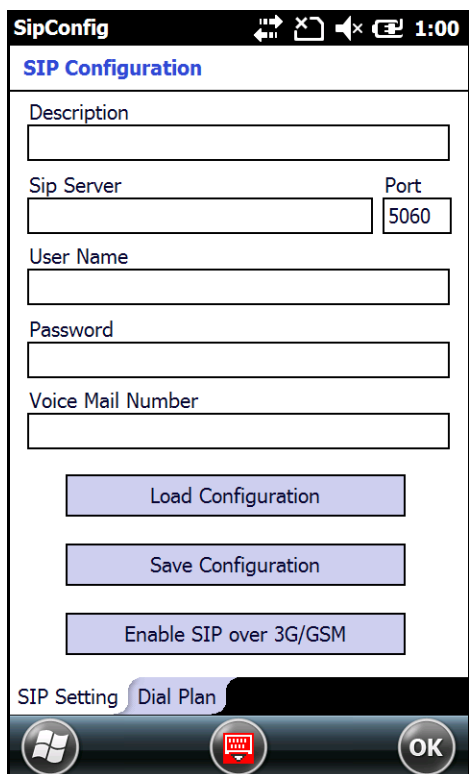
Note: The SysInfo.txt file can be uploaded to a host workstation using Microsoft ActiveSync or Windows Mobile Device Center and a Dolphin communication peripheral. For additional information see Connecting and Synchronizing the Terminal and Workstation on page 7-9.

SIP Config

The SIP Config settings screen enables you to configure Session Initiation Protocol (SIP) for Voice Over IP (VoIP) and Telephony communication.
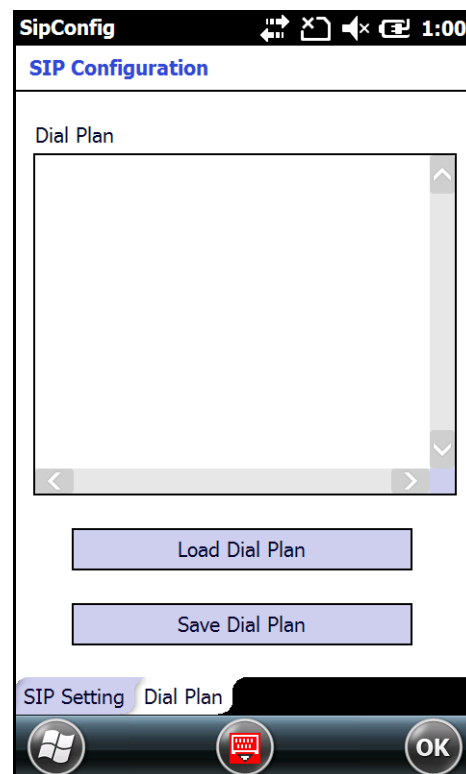
To access the SIP Config screens, touch > **Settings** > **System** > **SIP Config** .

SIP Setting Tab   **Dial Plan Tab**

SipConfig	⇄ ⤬ ◀× 1:00
SIP Configuration	

Description
[   ]

Sip Server   Port
[   ]   [5060]

User Name
[   ]

Password
[   ]

Voice Mail Number
[   ]

[Load Configuration]

[Save Configuration]

[Enable SIP over 3G/GSM]

SIP Setting | Dial Plan

SipConfig	⇄ ⤬ ◀× 1:00
SIP Configuration	

Dial Plan
[   ]

[Load Dial Plan]

[Save Dial Plan]

SIP Setting | Dial Plan

Smart Sensor

The Smart Sensor configuration utility enables you to configure the Dolphin's integrated accelerometer, and motion settings.

Touch ⊞ > **Settings** ⚙ > **System** 📁 > **Smart Sensor** 🔴 .

```
Smart Sensors        ↔ ⊽  ◄× 🔋 8:18
┌Smart Sensors Settings─────────────

        ┌──────────────────────────┐
        │     Motion Settings      │
        └──────────────────────────┘



        ┌──────────────────────────┐
        │     Proximity Settings   │
        └──────────────────────────┘
        ┌──────────────────────────┐
        │  Accelerometer Calibration │
        └──────────────────────────┘
```

Touch to customize how the terminal responds to motion and object orientation for ease of operation and advanced power management. *(points to Motion Settings)*

Touch to customize how the terminal responds to objects detected close to the touch screen display. *(points to Proximity Settings)*

Touch to calibrate the integrated accelerometer sensor used for motion detection. *(points to Accelerometer Calibration)*

Motion Settings

Motion Settings enable you to customize how the terminal responds to motion and object orientation for ease of operation and advanced power management. The Motion Settings menu contains three tabs: **Display**, **Power, Management,** and **Event Tracker**.

Display

The **Display** tab provides access to enable or disable **Auto Display Orientation**. When enabled, the Dolphin's display automatically switches between portrait and landscape depending on how you hold the terminal.

Power Management

The **Power Management** tab provides access to customize how the terminal responds to object orientation and motion to reserve power and reduce time between charge cycles.

- **Face Down**:
  Save power by turning off the display and/or suspending the device when the terminal is placed face down.

- **Motion Detection**:
  Modify the Motion Detection settings to wake the terminal from suspend mode or prevent the terminal from entering suspend mode when motion is detected.
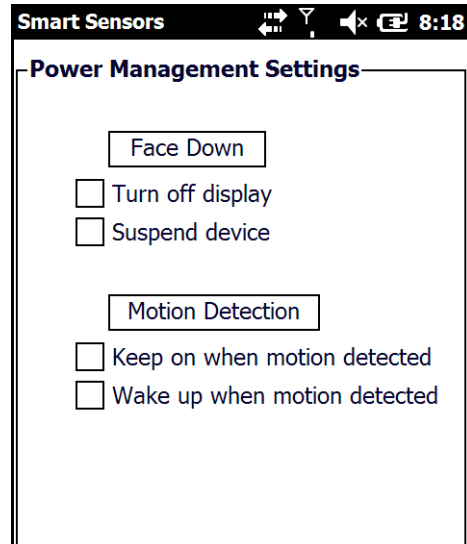
Event Track

The Event Track tab displays an event log summary of detected free fall events exceeding 2 ft. over 500ms. The summary includes the time, date, and duration of the most recent 50 events. Several options are provided for audible notification of free fall events.
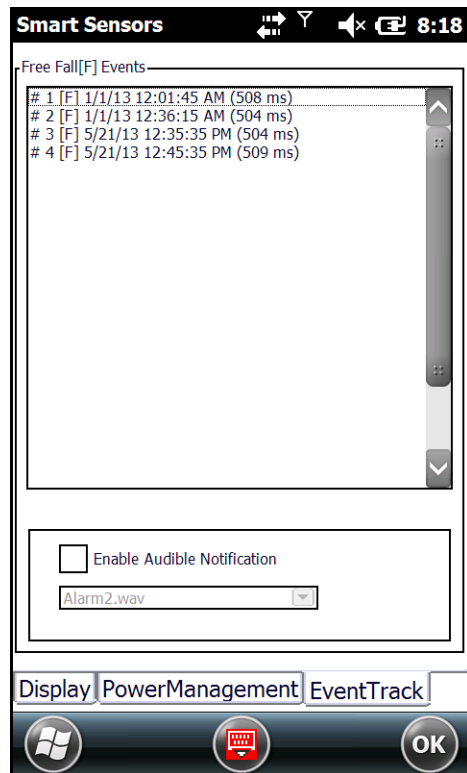
Proximity Sensor Settings

The integrated proximity sensor detects when an object is in close proximity to the entire touch panel display (e.g., a person's face, carrying holster, or tabletop). By default, the proximity sensor automatically turns the display and touch panel off when you hold the terminal near your ear during a phone call. The display and touch panel turn back on when the sensor detects the removal of the object.

To enable this feature at all times, not just during phone calls, check the **Enable Proximity Sensor** box.
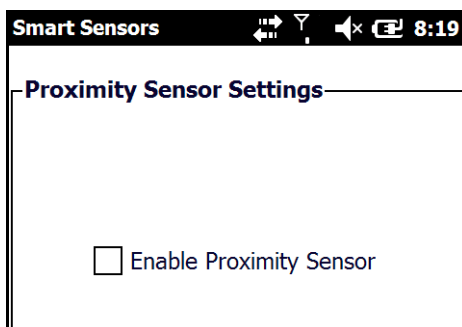
Accelerometer Calibration

Touch **Start** to calibrate the integrated accelerometer sensor used for motion detection. When calibration is complete, the "Accelerometer Calibration Finished!" message window appears.
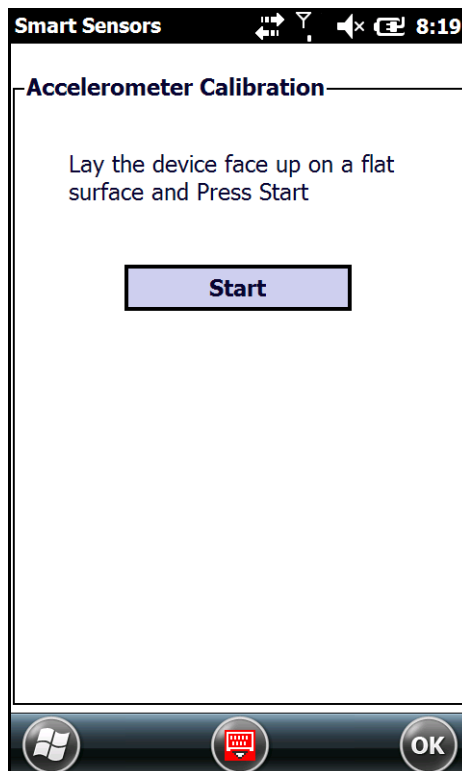
Managed Programs

The Managed Programs screen lists the installation history of programs on the terminal that are managed by and enrolled to an enterprise domain. Managed Programs is the client-side that works with the server product System Center Mobile Device Manager (MDM). MDM consists of MDM Gateway Server and one or more computers that run MDM Device Management Server; MDM Enrollment Server; and Microsoft SQL Server® 2005 databases.

It lets system administrators:

- provide an authenticated connection to Line of Business (LOB) applications, managed Group Policy, and application packages.
- use Group Policy and software packages to manage the enrolled Windows phones (enforce policy, wipe devices, etc.).
- manage the requests for and retrieving of certificates for devices and for creating the Active Directory® Domain Service objects that represent these devices. By using these objects, you can manage the devices as if they were members of a domain.

Memory

The Memory applet shows the capacity and usage of the Storage and Program portions of the Flash file system. The Storage portion includes the IPSM folder, which can be detailed under the Storage Card tab. When the Program portion becomes too full, you can use the Task Manager to remove any unnecessary tasks.

Main Screen

The Main screen displays the usage statistics of the flash memory.

Memory			8:20
Storage C...	**Main**	Storage C...	

Storage		**Program**	
Total:	599.91 MB	Total:	420.54 MB
In use:	74.32 MB	In use:	140.37 MB
Free:	525.58 MB	**Free:**	280.17 MB

Find large files using storage memory.
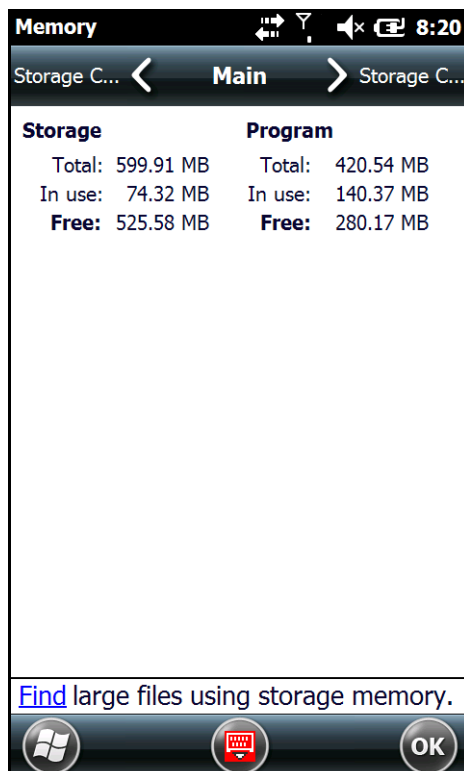
Storage Card Screen

The **Storage Card** screen displays the current capacity and usage statistics of the selected memory type: IPSM, RAMDISK or Storage Card. Select the memory type from the drop-down list. RAMDISK is selected by default.

- **IPSM** (Internal Persistent Storage Manager)
  Data or programs stored in the IPSM are not affected when the operating system is upgraded. Autoinstall programs, for example, are stored in \\IPSM\Honeywell\Autoinstall so that they are always installed after an operating system upgrade or factory reset. Contact a Honeywell technical support representative for more information on how to perform a factory reset. For contact information, see Technical Assistance on page 16-1.

- **RAMDISK**, is a virtual disk that resides in RAM, volatile memory. The virtual disk provides faster access speed than the ISPM or other system folders. RAMDISK is volatile and is cleared when a reset (i.e., soft, hard or factory) is performed or power is lost.

- **Storage Card**
  You can install one memory card in Dolphin terminals (see Installing a SIM Card and/or Memory Card on page 3-17). If a storage card is installed in the terminal, you can select it in the drop-down list and see capacity and usage statistics for the card.
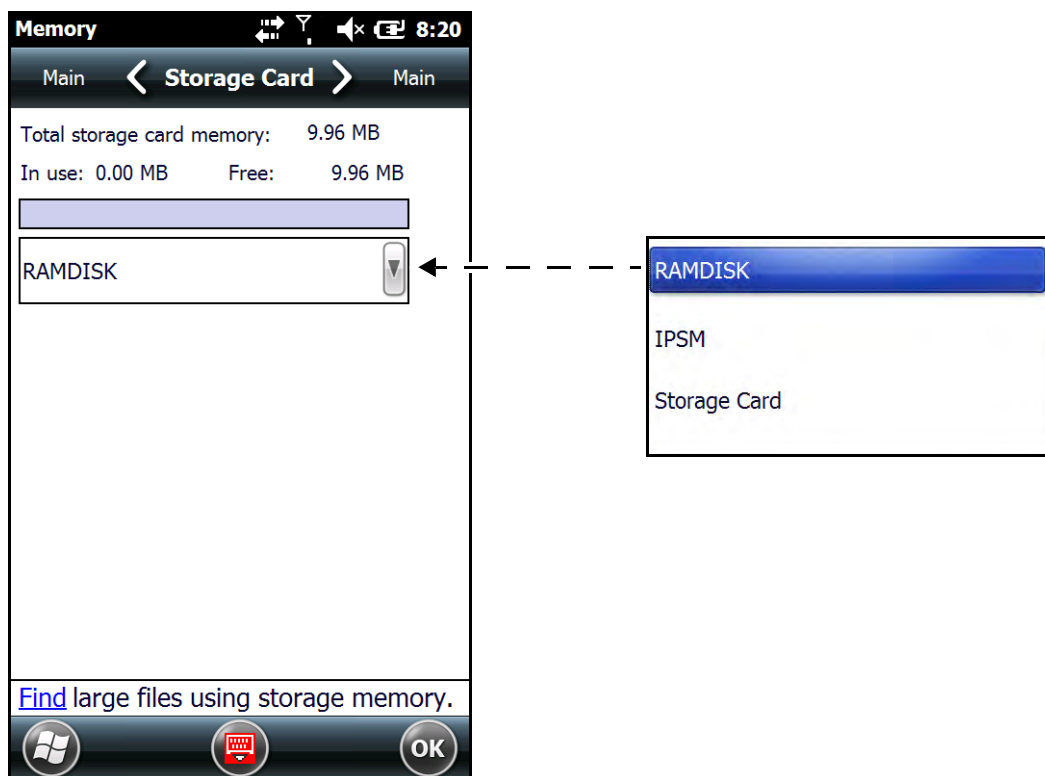
Power

Power system settings contains two tabs: **Battery** and **Advanced**

Touch > **Settings** > **System** > **Power**

Battery Tab

The battery tab displays the power level status of the battery. For detailed information on the main battery, see Battery on page 6-18.

Advanced Tab

The Advanced tab settings determine power time-outs when running on **battery power**, **external power**, or **USB power**. To reserve power and extend time between charging cycles, configure the terminal to automatically enter Suspend Mode (see page 2-14) after a specific number of minutes of inactivity.

On battery power: The terminal is being powered by the battery.

On external Power: The terminal is being powered by an external power source, e.g., HomeBase, Mobile Base or ChargeBase.

On USB Power: The terminal is being powered by a USB connection, e.g., the Charge/Communication cable connected to a workstation (PC) or used in conjunction with the provided power supply (70e-USB ADAPTERKIT).

*Note: The **On USB power** time-out setting does not auto-spend the terminal if an ActiveSync connection between the terminal and workstation is active. Disable ActiveSync on the workstation in order for the device to auto-suspend while connected to the workstation.*

Check the box next to the option to enable power time-outs.

Power

On battery power:
☑ Turn off device if not used for | 1 minute ▼

On external power:
☐ Turn off device if not used for | 1 minute ▼

On USB power:
☐ Turn off device if not used for | 1 minute ▼

Battery | Advanced
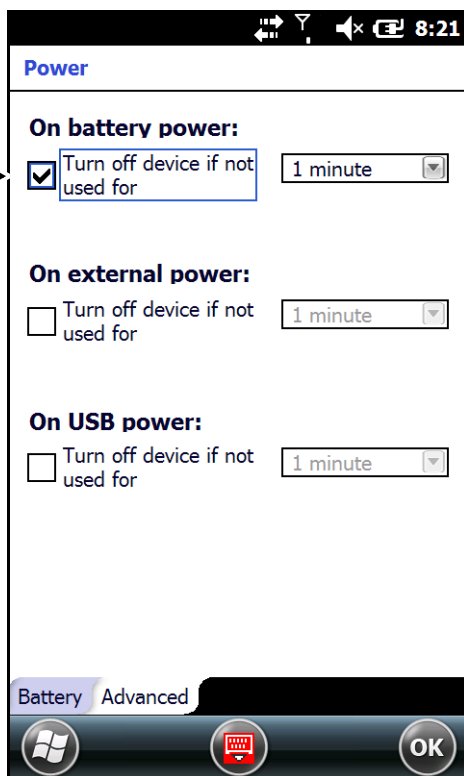
Touch the arrow, then select from the drop-down list, the number of minutes of inactivity you want to pass before the terminal enters Suspend Mode.

Regional Settings

Regional Settings enables you to customize the appearance and formatting to your geographic region. Specifically, you can customize numbers (i.e., number of decimal places allowed), currency (i.e.,using the $ or ? symbol), time, and date. These specifications apply to all screens, including the Home screen. The Region screen displays an overview of the region selected in the drop-down list at the top.

The terminal is loaded with a number of pre-programmed regional settings. Select one from the list and the results appear on the screen. To see specific settings or to change a specific setting, touch on one of the items on the horizontal scroll bar (i.e., Region, Number, Date), make the change, and touch **OK** to save.

Remove Programs

Remove Programs enables you to remove programs installed on the terminal. Any program (usually CAB or DLL files) stored in the \\IPSM\Honeywell\Autoinstall folder re-installs after a software upgrade or a factory reset. If a program is manually removed using the **Remove Programs** application, the program does not re-install on a hard or soft reset.

Note: A program (file) does not automatically install if it is added to the \\IPSM\Honeywell\Autoinstall folder and a hard or soft reset is performed. For information on program installation, see Installing Additional Software on page 7-11.

For information about the system resets, see Resetting the Terminal on page 2-17. See Honeywell support for more information on how to perform a factory reset.

1. Touch > **Settings** > **System** > **Remove Programs** .

2. Select the program you want to remove on the list, and then touch **Remove**.

3. Touch **Yes**. Wait while the program is removed.
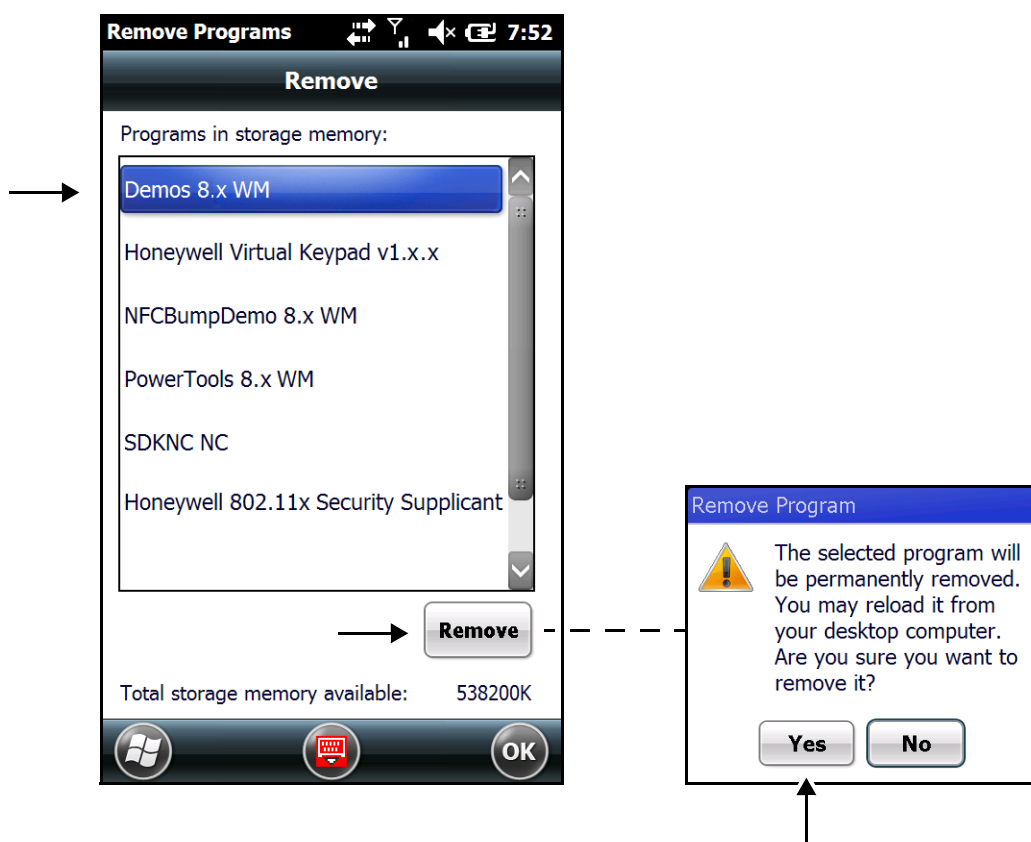
4. Verify that the program no longer appears in the list.

RIL

The **RIL** Information screen displays useful statistics for the GSM/CDMA WWAN Voice module and enables you to turn **HAC Audio Mode** on or off. When **HAC Audio mode** is enabled, a magnetic/voice coil activates in the terminal earpiece/receiver speaker allowing the terminal to interface with a hearing-aid. To verify whether or not the WWAN radio is enabled, check the Dolphin Wireless Manager (see page 8-6).

HAC Audio Mode

To enable the terminal for use with a hearing-aid:

1. Touch > **Settings** > **System** > **RIL** .

2. Check the box next to **Use HAC Audio Mode**.

3. Touch OK.

Screen

The Screen system setting contains two screens: **Clear Type**, and **Text Size**.

Touch > **Settings** > **System** > **Screen** .

ClearType Screen

The display supports ClearType font rendering, which is a Microsoft technology that dramatically increases the readability of text on LCD displays.

To enable ClearType font rendering, select **Enable ClearType** and touch **OK**.

Note: For more information about ClearType font rendering, visit: www.microsoft.com/typography/ WhatIsClearType.mspx.

Text Size Screen

The Text Size screen enables you to perform font scaling within certain views of the: Home screen (only on non-phone devices), Contacts, Calendar, Messaging, and Tasks. Font scaling means that you can increase or decrease the point size of the font on application windows.

To change the text size, move the slider toward **Smallest** or **Largest**. The Example text changes to reflect the font change.

Touch **OK** to save the new text size.
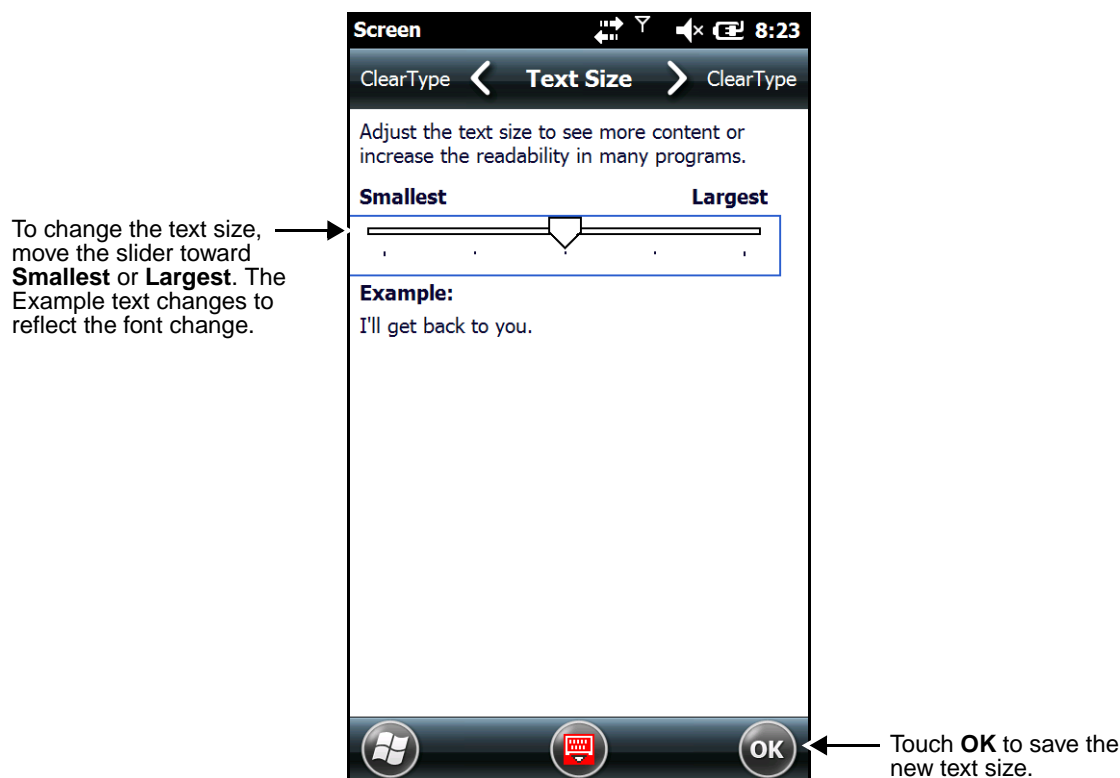
Task Manager

The Task Manager provides information about applications and processes running on your mobile computer. You can use the Task Manager to monitor the memory and CPU usage of specific applications and processes. Check the Task Manager when you are receiving out of memory errors or when the mobile computer is running slowly.

Touch 🪟 > **Settings** ⚙ > **System** 📁 > **Task Manager** 📊 .

Applications

To view the status of the programs running on your mobile computer, touch the **Menu** button at the bottom of the screen, then touch **View > Applications**.
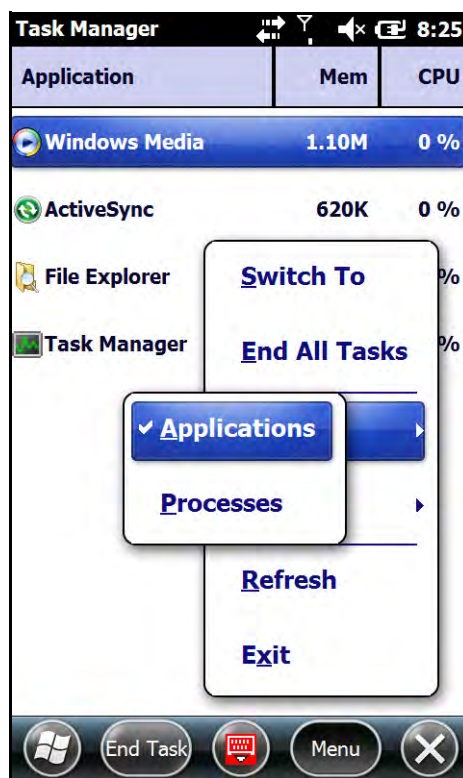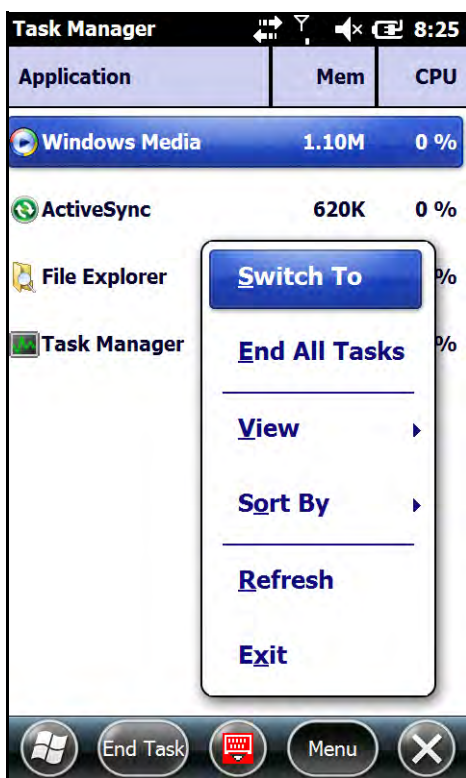
From the application list, you can:

- Touch and hold on an application, then touch **Switch To** on the pop-up menu.
- Touch and hold on an application, then touch **End Task** or **End All Tasks** on the pop-up menu.

Note: Anytime you stop a running program, it frees up memory. To free up memory, return to the running program, save your data, and close the application.

Processes

To view information about the processes running on the mobile computer, touch the **Menu** button at the bottom of the screen, then touch **View > Processes**.

7
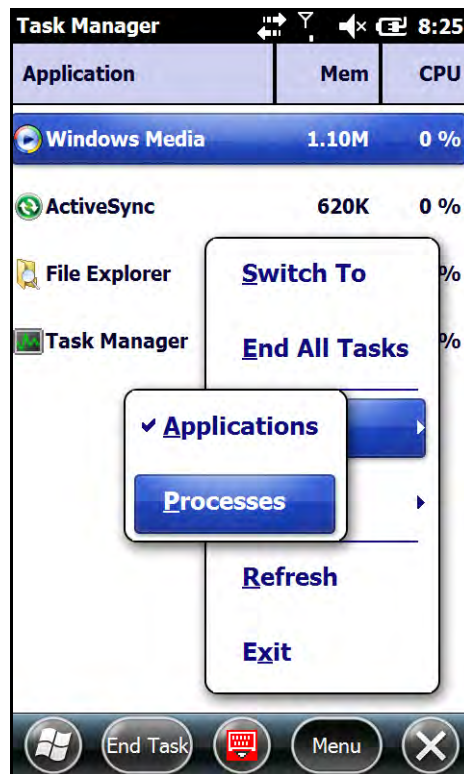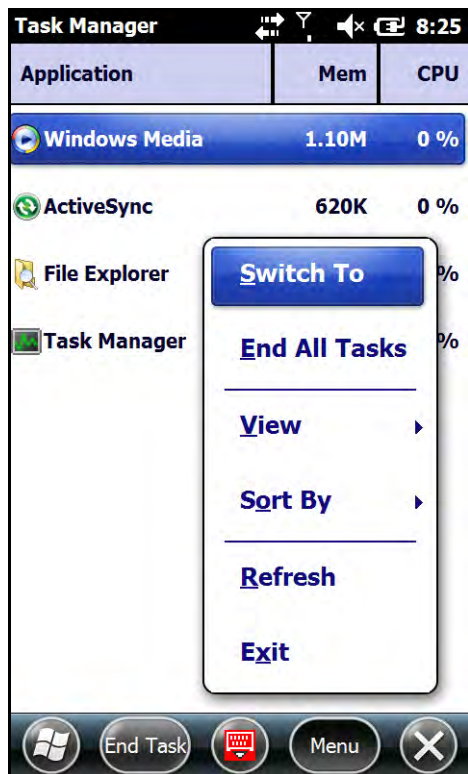
Communication

Connections Menu

The Connections system setting provides access to the terminal's various wireless communication options.

Icon		Description
Beam		Enable the terminal to receive incoming beams from devices using Bluetooth wireless technology. See Working with the Bluetooth Radio and NFC on page 9-1.
Connections		Open the Microsoft connections application. See Microsoft Connections Application on page 7-2.
Dolphin Wireless Manager		Manage the wireless radios installed in the terminal. See Dolphin Wireless Manager on page 7-5. Note: The Dolphin Wireless Manager icon may not appear on the Connections menu on terminals running Microsoft Windows Embedded Handheld 6.5 Classic. For information on how to access the Dolphin Wireless Manager, see page 7-5.
Domain Enroll		Open the Enrollment screen for connecting your phone with company resources. Note: System administrator password is required for domain enrollment.

Icon		Description
USB to PC		Enable advanced wired USB to PC communication via sync software. See Connecting and Synchronizing the Terminal and Workstation on page 7-9.
Network Cards		Manage Network card settings, search and add wireless networks, and modify advanced Wi-Fi settings (e.g., network notifications and connection time-outs).

Microsoft Connections Application

The Microsoft **Connections** application sets up multiple network connections to Internet Service Providers (ISPs) via an external modem.

Do NOT enter connection parameters in the Connections application if:

- you are using one of the on-board wireless radios to connect to a network. The Dolphin terminal uses the settings from each radio's configuration utility to connect. The connections application is used primarily to setup WAN modem dial up connections.
- you are using Wireless Zero Configuration (WZC). By default, WZC is disabled on Dolphin terminals.

To Access the Connections Application

Touch ⊞ > **Settings** ⚙ > **Connections** 📁 > **Connections** 🖥.
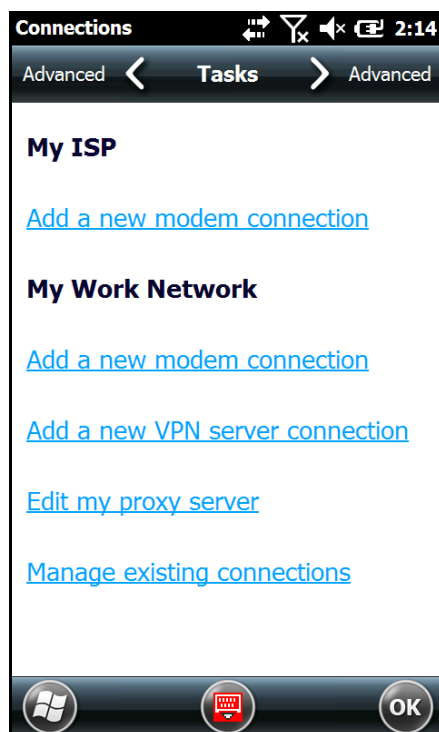
Tasks

The Tasks screen enables you to initially configure, and then manage network settings when using a modem. Select an item in this list and then complete the setup screens that follow with the appropriate information for your network.
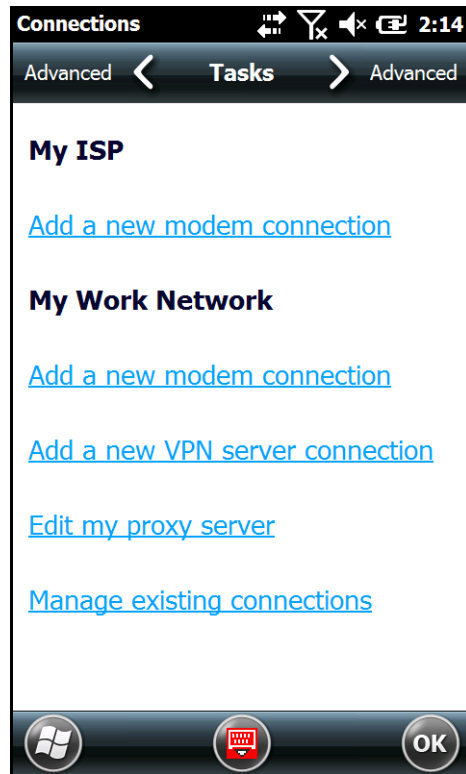
My ISP

The links under the *My ISP* heading enable you to add and manage modem connections to an Internet Service Provider (ISP). To complete the setup screens, obtain the following information from your ISP:

- ISP dial-up access telephone number
- User name
- Password
- TCP/IP settings

My Work Network

The links under *My Work Network* enable you to establish the following connection types:

- Modem
- Virtual Private Network (VPN)
- Proxy server connection

Note: If you are connected to your ISP or private network during synchronization, the terminal should download the proper proxy settings during synchronization with the workstation. If these settings are not on your workstation or need to be changed, ask your ISP or network administrator for the proxy sever name, server type, port, type of Socks protocol used, and your user name and password.

To complete the setup screens, obtain the network parameters from your system administrator.

Modify an Existing Connection

The **Manage existing connections** link appears on the **Connections** screen under the *My ISP* heading after at least one network connection has been established. Touch **Manage Existing Connections**, then follow the setup screens to modify an existing connection.
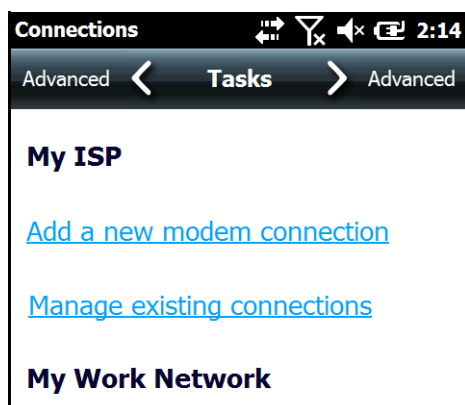
Advanced

The Advanced screen enables you to select the default network, dialing rules, and IP address exceptions for modem connections.
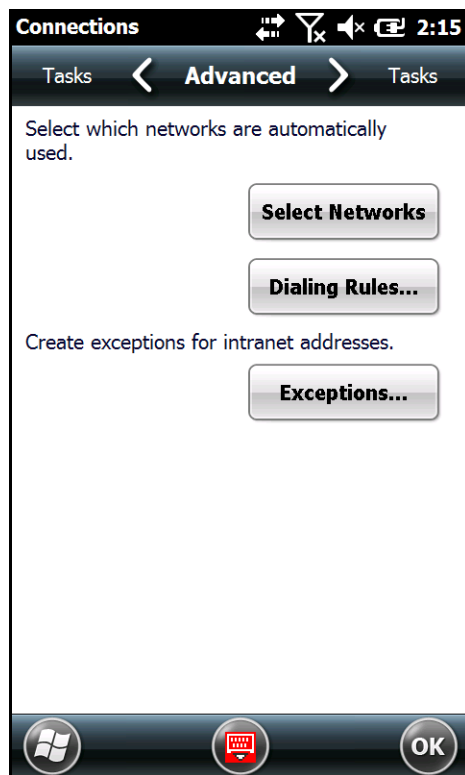
Note: You should not need to change Advanced settings because most ISPs now use DHCP addresses.

Dolphin Wireless Manager

The Dolphin Wireless Manager provides a centralized interface that enables and disables all the on-board radios. Each radio has its own configuration program. The Dolphin Wireless Manager also provides shortcuts to the configuration utilities for each radio.

To open the **Dolphin Wireless Manager** do one of the following:

1. Touch once on the Title bar to access the **Horizontal Scroll** bar, then touch ![icon] .

2. Select, **Dolphin Wireless Manager**.

OR

1. Touch ![icon] > **Settings** ![icon] > **Connections** ![icon] > **Dolphin Wireless Manager** ![icon] .
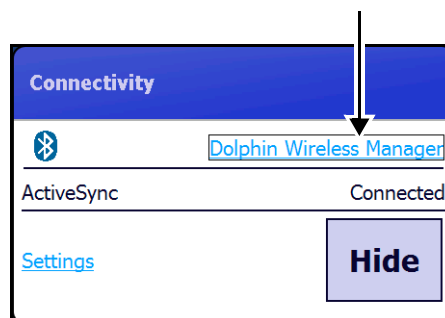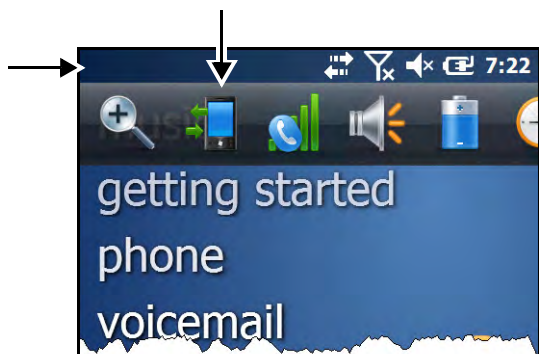
Dolphin Wireless Manager Window
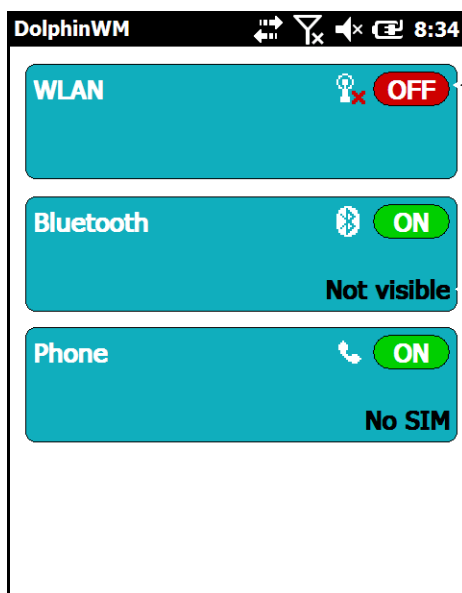
The state of the radio is shown in the upper right corner of the radio box.

If applicable, information about the radio displays when the radio is activated.

Enabling the Radios

1. Open the **Dolphin Wireless Manager** (see page 7-5).

2. Touch anywhere inside the rectangle of the radio you want to enable.
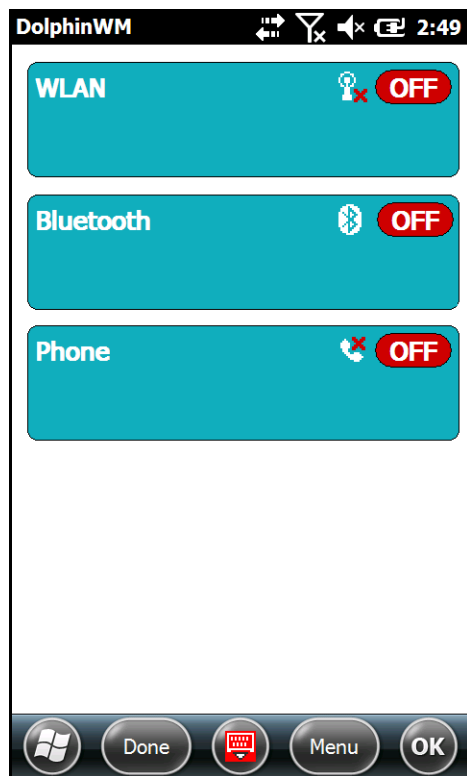
3. The radio begins activating.
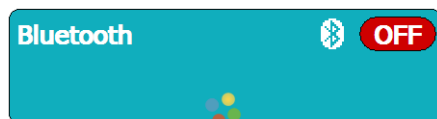
4. When the radio is activated (i.e., transmitting a signal), the **Off** button changes to **ON**.

Note: If applicable, information about the radio appears in the rectangle.

Accessing Radio Configuration Utilities

Each radio has its own configuration utility that you can access by touching **Menu** on the tile bar.

Radio Type	Menu Option
802.11a/b/g/n	Touch **WLAN Settings** and the Honeywell WLAN Security Supplicant opens.
	The *Honeywell WLAN Security Supplicant User's Guide* is available for download from at www.honeywellaidc.com.
Bluetooth	Touch **Bluetooth Settings** and the Bluetooth Settings screen opens. For details, see Working with the Bluetooth Radio and NFC on page 9-1.
GSM/HSDPA/UMTS/ GPRS/EDGE/CDMA	Touch **Phone Settings** and the Phone opens. For details, see Working with Wireless Wide Area Networking (WWAN) on page 8-1.

USB to PC

Enable **advanced network functionality** under the **USB to PC** connection settings if you are having trouble connecting and synchronizing your terminal with a workstation PC using a wired USB connection and ActiveSync or Windows Device Mobile Center. The advanced network functionality can also be enable to improve transfer speeds when synchronizing large groups of data or copying large files between the terminal and workstation. See Connecting and Synchronizing the Terminal and Workstation on page 7-9.

1. Touch [icon] > **Settings** [icon] > **Connections** [icon] > **USB to PC** [icon] .

2. Check the box next to "Enable advanced network functionality".

3. Touch **OK**, then attempt to sync the terminal and workstation PC.

Network Cards

The **Network Adapters** screen provides access to set and configure the type of Network Adapter used by the Network card in the terminal. You can modify the adapter settings (e.g., Name Servers or IP address) by touching on the adapter type or highlighting the adapter and touching **Edit** at the bottom of the screen.

Touch [icon] > **Settings** [icon] > **Connections** [icon] > **Network Cards** [icon] to access the Network Adapters screen.
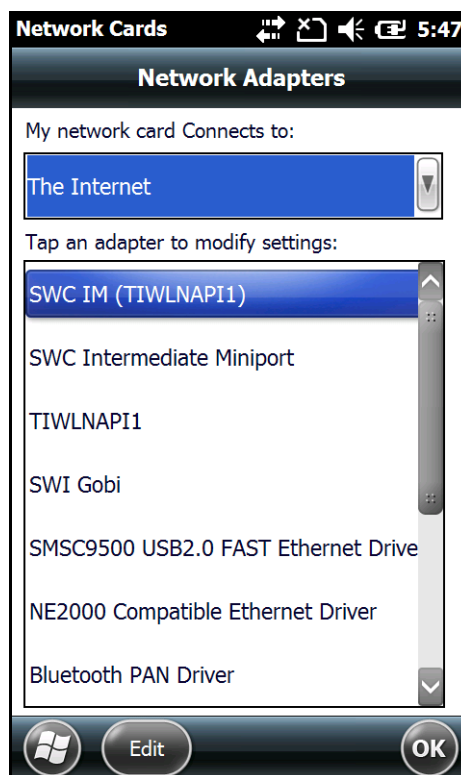
Connecting and Synchronizing the Terminal and Workstation

To synchronize data between the terminal and the workstation, ActiveSync (version 4.5 or higher) or Windows Mobile Device Center (WMDC) must be installed and configured for the appropriate communication type on the host workstation (Windows-based PC). Dolphin terminals ship with ActiveSync already installed. If ActiveSync or WMDC is already installed on the host workstation, you just need to connect the Dolphin terminal to the host workstation (via a Dolphin peripheral) to initiate communication (see page 7-10).

If ActiveSync (4.5 or higher) is not installed on the host system, you can download and install the most current version of the software from the Microsoft Web site (http://www.microsoft.com/en-us/download/details.aspx?id=15).

If WMDC is not installed on the host workstation, you can download and install the most current version of the software from the Microsoft Web site (http://support.microsoft.com/kb/931937).

Note: ActiveSync on your Dolphin terminal works with WMDC on host workstations running Windows Vista or Windows 7 and with ActiveSync on host workstations running Windows XP.

⚠ *When communicating via ActiveSync or WMDC, your terminal is designed to be connected to the host workstation with a communication peripheral sold/manufactured by Honeywell, such as the charge/communication cable. Use of any peripheral not sold/manufactured by Honeywell may cause damage not covered by the warranty.*

Capabilities

- Back up and restore your device data.
- Copy (rather than synchronize) files between your device and workstation.
- Control when synchronization occurs by selecting a synchronization mode. For example, you can synchronize continually while connected to your workstation or only when you choose the synchronize command.
- Select which information types are synchronized, controlling how much data is synchronized. For example, you can choose how many weeks of past appointments you want synchronized.

Communication Types

The Dolphin 70e Black terminal supports Hi-Speed USB communication (USB 2.0) via ActiveSync through the I/O connector (see page 3-11) on the back panel of the terminal and the microUSB port (see page 3-6) on the right side panel of the terminal. The maximum data transfer rate is 480 Mbps. A USB cable and/or a Honeywell hardware peripheral (e.g., HomeBase) allow the terminal to communicate with a workstation or to be networked through a USB hub. The Dolphin terminal defaults to USB communication out of the box.

Hardware and Software Requirements

Hardware Requirements

- A Dolphin 70e Black HomeBase with power supply and a USB A (M) to USB B (M) cable if one is not supplied with the communication peripheral.
  OR
- The USB charge/communication cable provided with your Dolphin 70e Black terminal.

Software Requirements

- ActiveSync (v4.5 or higher) or Windows Mobile Device Center installed and configured on the host workstation (PC).
- Windows 98 Second Edition, Windows Me, Windows 2000, Windows NT (4.0 SP6 or higher), Windows XP, Windows Vista, and Windows 7 operating systems.

Setting Up the Host Workstation

To synchronize data between the terminal and the workstation, ActiveSync (v4.5 or higher) or Windows Mobile Device Center must be configured for the same communication type on both the host workstation and the Dolphin terminal.

ActiveSync

1. Open ActiveSync on your workstation, select **File** > **Connection Settings**.

2. Verify the box next to "Allow USB connections" is checked.

Windows Mobile Device Center

1. Open WMDC on your workstation, select **Mobile Device Settings** > **Connection Settings**.

2. Verify the box next to "Allow USB connections" is checked.

Connecting the Dolphin Terminal to the Host Workstation

Note: ActiveSync or WMDC must be installed and setup on your workstation before you initiate synchronization from the terminal for the first time.

After setting up the host workstation:

1. Connect the Dolphin terminal to the workstation using a Dolphin communication peripheral (e.g., HomeBase with USB cable or USB charge/communication cable).

2. ActiveSync or WMDC should open and connect automatically to the Dolphin terminal.

3. Once the connection is established, you are given the option to either:

   a. set up synchronization of data between the workstation and terminal, or

   b. connect to the workstation without setting up the device for automatic synchronization.

Synchronizing with the Host Workstation

After you setup data synchronization between the terminal and workstation using ActiveSync or WMDC, automatic synchronization of data begins anytime you connect the terminal to the workstation via the HomeBase USB connection or the USB charge/communication cable. For additional information on mobile phone synchronization, ActiveSync or WMDC visit the Microsoft Windows Phone Web site (http://go.microsoft.com/fwlink/?LinkId=147001).

*Note: If you are having trouble connecting and synchronizing your terminal with a workstation PC using a wired USB connection and ActiveSync or WDMC, try enabling the **advanced network functionality** setting under **Settings** > **Connections** > **USB to PC** on the terminal.*

Exploring the Terminal from the Workstation

ActiveSync

1. Open the main ActiveSync window on the workstation.

2. Click **Explore**. This opens the Mobile Device folder for the terminal in Windows Explorer.

3. The Dolphin terminal is now treated as a mass storage device, and transferring files is as simple as dragging and dropping or copying and pasting.

Windows Mobile Device Center

1. Open WMDC on the workstation.

2. Click **File Management**. > **Browse the content of your device**. This opens Windows Explorer where you can access the folder for the terminal.

3. The Dolphin terminal is now treated as a mass storage device, and transferring files is as simple as dragging and dropping or copying and pasting.

Installing Additional Software

Dolphin terminals ship with the operating system, radio drivers, and custom Honeywell software already installed. These are the default programs that install when your terminal first boots up. You can install additional software programs to the terminal provided the following parameters are met:

• The terminal has enough memory to store and run the software program.
• The terminal processor meets the minimum requirements to run the software program.
• The software program was created for a Windows Embedded Handheld 6.5 device.
• The software program file has an EXE, CAB, or DLL extension.

Note: To verify the terminal processor, touch ⊞ *> Settings > System > About. The processor is displayed on the Version screen.*

To install additional software, you can use the communication options described in this chapter.

   • Adding Programs Using ActiveSync or Windows Mobile Device Center.
   • Adding Programs Using the Internet, see page 7-13.

Adding Programs Using ActiveSync or Windows Mobile Device Center

Generally, software for Windows Embedded Handheld devices must be installed to the host workstation first, then transferred to the Dolphin terminal.

Note: An active Microsoft ActiveSync or WMDC connection between a host workstation and the Dolphin terminal is required to add programs. For additional information, see Connecting and Synchronizing the Terminal and Workstation on page 7-9.

1. Read any installation instructions, Read Me files, or documentation that comes with the program.

2. Download the program to the workstation from either the Internet or the software installation CD. You may see a single *.exe or setup.exe file, a *.cab file, or a *.dll file.

   Note: There may be several versions of files for different device types and processors. Select the file that matches the terminal processor.

3. Connect the terminal to the workstation via a Dolphin communication peripheral.

4. Follow the appropriate instructions below based on the type of program file you are using for the installation.

If the File is an Installer (*.exe or setup.exe)

An installer program is one that installs on the workstation and the terminal simultaneously; one process installs to both devices.

1. On the workstation, double-click the *.exe or setup.exe file. The installation wizard begins.

2. Follow the directions on the workstation screen. The installation process includes transferring the software to the Dolphin terminal.

Note: If you receive an error indicating the program is designed for a different type of computer, then the file is not an installer (see below).

If the File is Not an Installer

Some programs cannot be installed on workstation PCs because they are designed exclusively for Windows Embedded Handheld devices. In these cases, the appropriate files must be stored on the host workstation and transferred to the terminal via and active ActiveSync or WDMC connection.

1. If no documentation is provided with the software, do one of the following base on your workstation OS:

   a. Open **ActiveSync** and click **Explore.**

   OR

   b. Open **Windows Mobile Device Center** and click **File Management**.

2. Navigate to the *workstation* folder where the program file is saved.

3. Either **Copy** and **Paste** or drag the file into the **Program Files** folder on the *Dolphin terminal*.

   Note: If you want the program to be part of the Autoinstall that occurs after a factory reset or software upgrade, paste the program file(s) in both the \IPSM\Honeywell\Autoinstall *folder and the* \Honeywell\Autoinstall.

4. On the Dolphin terminal, open **File Explorer**. Navigate to the folder where you saved the program file.

5. Touch the program file to start the installation.

   Note: If you copied the file to the \Honeywell\Autoinstall *folder, you can perform a Soft Reset to install the program. For more information, see*

Connecting the Terminal to a Wireless Network

You connect the terminal to a wireless network through the on-board radio (802.11a/b/g/n, Bluetooth, and/or GSM/CDMA). Each radio has its own configuration utility and requires specific information about the wireless network to connect. Successful connection depends on your network infrastructure about which you will need specific information from your network administrator.

WLAN (802.11a/b/g/n)

The Dolphin 70e Black has a 2.4 GHz 802.11b/g/n - 5.0 GHz 802.11a/n WLAN (Wireless Local Area Network) radio. The radio is interoperable with other 802.11a/b/g/n, Wi-Fi compliant products including access points (APs), workstations via PC card adapters, and other wireless portable devices. By default, the 802.11a/b/g/n radio is enabled after each factory reset. The next step is to configure the connection parameters of the radio to connect to a wireless network.

WLAN Radio

The WLAN radio is configured in the Honeywell WLAN Security Supplicant, which you access by touching the WLAN SWC icon on the Start menu. For complete configuration instructions, download the *Honeywell Secure Wireless Client (SWC) User's Guide* from www.honeywellaidc.com. A link to this guide appears on the Dolphin 70e Black product page.

Adding Programs Using the Internet

When you have established a network connection, you can access the Internet and download additional software programs. When selecting additional software, **always verify your Dolphin terminal meets the minimum system requirements to run the software** (e.g., available memory, processor, and operating system) before attempting to download the software.

Note: To verify the terminal processor, touch > Settings > System > About. The processor is displayed on the Version screen.

1. Open Internet Explorer and navigate to the program's location. You may see a single *.exe or setup.exe file, or several versions of files for different device types and processors.

2. Select the program version that matches your Dolphin terminal OS and processor.

3. Read any installation instructions, Read Me files, or documentation that comes with the program. Many programs provide special installation instructions.

4. Download the program to the terminal directly from the Internet. You would normally store the program in the \Program Files folder unless another location is required by the program.

5. On the terminal, touch the installer file: e.g., *.exe or setup.exe file.

6. The installation wizard for the program begins.

7. Follow the directions on the screen to complete the installation.

Software Upgrades

Contact a Honeywell technical support representative for information on available software upgrades for your Dolphin terminal, see Customer Support on page 16-1. or go to www.honeywellaidc.com.

⚠ To prevent data loss, back up all user data to a microSD card or external memory device before performing an upgrade.

Note: An active Microsoft ActiveSync or Windows Mobile Device Center connection between a host workstation and the Dolphin terminal may be required for some types of software upgrades. For additional information, see Connecting and Synchronizing the Terminal and Workstation on page 7-9.

For information on File Provisioning on the Dolphin 70e Black, see page 2-13.

Dolphin 70e Black COM Port Assignment Table

COM Port	Description
COM0	Bluetooth Serial Port Service
COM1	USB Host - Dock - Switched
COM2	Bluetooth
COM3	Unused
COM4	Bluetooth Serial Port Service
COM5	Unused
COM6	Unused
COM7	**GPS:** COM Port for the GPS receiver
COM8	**USB Serial:** Virtual USB Serial port for ActiveSync
COM9	Bluetooth BTHATCI server

8

Working with Wireless Wide Area Networking (WWAN)

Overview

The Dolphin 70e Black has two radio options for WWAN voice and data communications:

- a multi-mode (software definable) WWAN radio, which provides support for three band 3.9G UMTS/HSPA+ (850/1900/2100 MHz), quad band GSM/GPRS/EDGE (850/900/1800/1900 MHz), and dual band CDMA/EVDO Rev A - 1xRTT/EVDO (800/1900 Mhz) or
- a GSM WWAN radio, which provides support for two-band UMTS/HSPA+ (3.9G) 900/2100 Mhz and quad-band GSM/GPRS/EDGE (850/900/1800/1900 MHz).

GSM   Short for Global System for Mobile communications, GSM is an open, non-proprietary wireless WAN system that is constantly evolving and growing.

HSPA+   Short for High-Speed Download Packet Access, HSPA+ is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks.

UMTS   Short for Universal Mobile Telecommunications System, UMTS is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks.

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.

EDGE   E-GPRS is a non-voice value added service that allows packet-switched data to be instantly sent and received across mobile telephone networks at a higher data rate than standard GPRS.

CDMA   Short for Code Division Multiple Access.

1xRTT   Short for Single-Carrier Radio Transmission Technology.

EVDO   Short for Evolution-Data Optimized.

Requirements

Using GSM/HSPA+/UMTS/GPRS/EDGE requires:

- a network subscription to a GSM/HSPA+/UMTS/GPRS/EDGE network (you need to know what service providers are in your geographic area), and
- an installed SIM card that has been activated by the network service provider (see Installing a SIM Card and/or Memory Card on page 3-17).

Using CDMA requires:

- an active account with a CDMA carrier. The account is linked to the Mobile Equipment Identifier (MEID) of the integrated WWAN radio.

Antenna Band

The WWAN radio features two internal antennas: an omni-directional antenna optimized for power output and receiver sensitivity and a second diversity receiver antenna.

For terminals with the multi-mode (software definable) WWAN radio:

- A penta band antenna supports 850, 1900, 2100 Mhz (UMTS/HSPA), 850/900/1800/1900 Mhz (GSM/GPRS/EDGE) and 800/1900 Mhz (EV-DO/CDMA).
- A diversity receiver antenna supports 850 & 1900Mhz

For terminals with the GSM WWAN radio:

- A penta band antenna that supports 900, 2100 Mhz (UMTS/HSPA) and 850/900/1800/1900 Mhz (GSM/GPRS/EDGE).
- A diversity receiver antenna supports 2100Mhz

Signal Strength

On terminals equipped with a WWAN (voice + data) radio, the signal strength of the WWAN connection is indicated by the number of bars that appear in the signal strength icon in the Title bar at the top of the window.

Icon	Indicates…
	The signal strength of the radio connection.
	The signal strength of the phone (voice) connection.
	The signal strength of the data connection.

Voice and Data Communication

Dolphin terminals with integrated GSM/HSPA+/UMTS/GPRS/EDGE (voice + data) radios are optimized for the following two-way communications:

Voice: GSM voice data (dial-up)

Data: Available speed depends on the wireless network carrier and their supported packet-data technology in addition to network conditions.

> GPRS Class 10: data transmission max. 85.6 kbps (DL), max. 42.8 kbps (UL)
> HSPA+: data transmission max. 14.4 Mbps (DL), max. 5.76Mbps (UL)
> UMTS: data transmission max. 384 kbps (DL), max 384 kbps (UL)
> EDGE (E-GPRS) Class 10: data transmission max. 237 kbps (DL), max. 118 kbps (UL)

Note: You can use the GSM radio for simultaneous voice and data communication on a UMTS (3G) network only. On a GSM network, if you want to communicate over the phone (voice), you cannot send data. If you want to send data, you cannot use the phone.

Enabling the WWAN Radio

You can enable or disable the WWAN radio in the Dolphin Wireless Manager (see page 7-5).

Note: By default, the WWAN radio is enabled after a factory reset.

To enable the WWAN radio:

1. Touch [icon] > **Settings** [icon] > **Connections** [icon] > **Dolphin Wireless Manager** [icon].
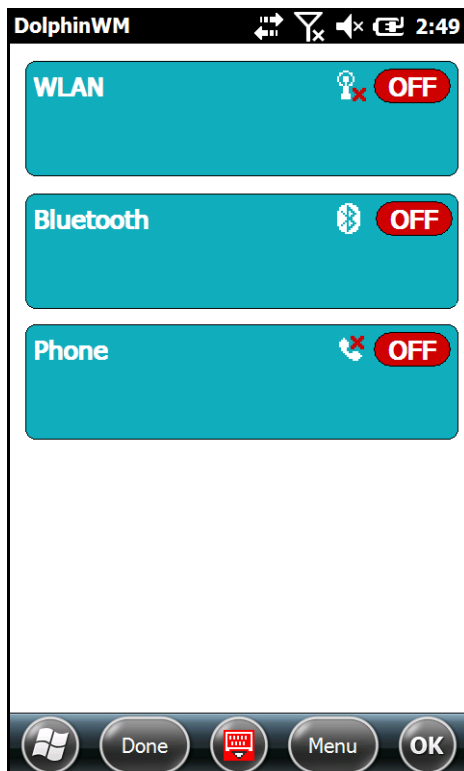
2. Touch anywhere inside the Phone rectangle and WWAN radio begins activating.

3. When the radio is activated (i.e., transmitting a signal), the **Off** button changes to **On**.

Audio Modes

The Dolphin 70e Black terminal is equipped with speakers on the front and bottom of the terminal and dual microphones that you can use to send and receive audio signals over the GSM network, see Features of the Dolphin 70e Black on page 3-4.

There are three audio modes:

- **Handset Mode** - The front speaker is used for receiving handset voice calls and the digital microphones, located on the front and side panel of the terminal, provide noise cancellation for clear audio input.
- **Headset Mode** - When a headset is plugged into the Audio Jack, the terminal defaults to the headset for receiving calls and audio input.
- **Hands-Free Mode** - The bottom speakers are used as a speaker phone. To switch to speaker phone during a call, touch on the phone icon in the tile bar at the bottom of the screen, then select **Speaker On**.

Important - Do not cover the side microphone with your hand when using the terminal for phone calls. Both the front and side microphones must be free from obstruction for the noise cancellation feature to function properly during a handset mode call.
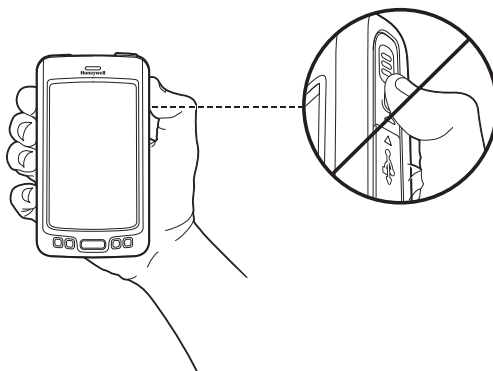
Volume Control

Press the up or down arrow on the **Volume Control** button on the left side of the device to adjust the volume of the active speaker, see Volume Control Button on page 3-10.

Voice Communication

Accessing the Dialer Window

Note: The WWAN radio must be active for voice communication, see Enabling the WWAN Radio on page 8-3.

To open the Phone dialer do one of the following:

- From the Home screen, touch twice on **"phone"**.

- From the Home screen, touch ⊞ > **Phone** 📞 .

- Press the **Send** button 📞 .

Displays the network carrier from the SIM card.

Displays the most recent calls.

Phone			4:57
Verizon			

↳ 1 (555) 555-8100

1	abc 2	def 3	←
ghi 4	jkl 5	mno 6	Call History
pqrs 7	tuv 8	wxyz 9	☎ Talk
*	+ 0	#	☎ End

Open Call

Save to Contacts

Send Text Message

Paste

Speed Dial

Options...

View ▶

• **Calls and Contacts**

All Calls

Speed Dial

Toggles the touch screen keypad On or Off.

Menu
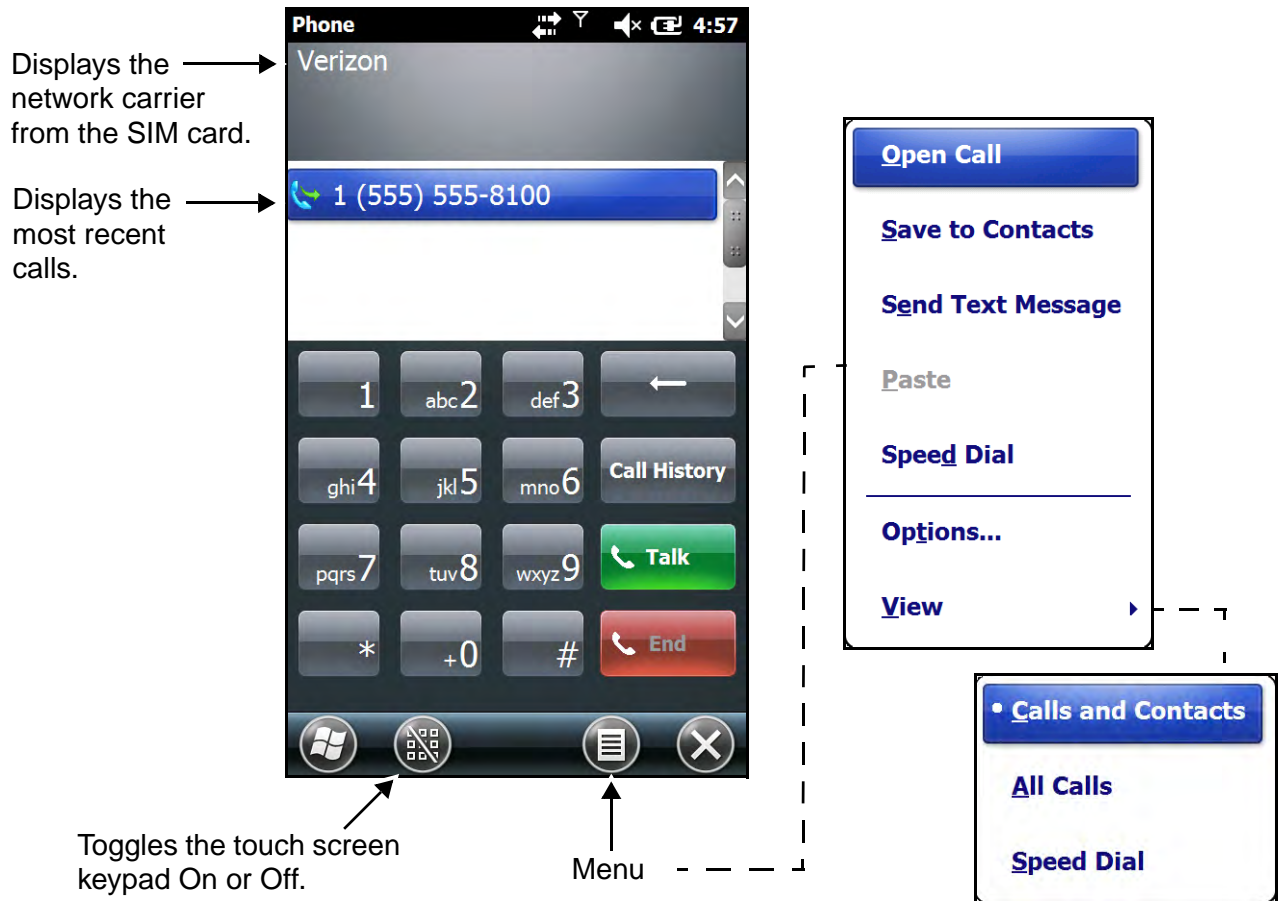
Dialing

Touch the buttons on the dialer window.

Sending Calls

After the number is dialed, touch **Talk** ☎ Talk or press the **Send** button (.

Note: The 📶 icon indicates that the phone is in use.

Ending Calls

While the phone call is live, touch **End** ☎ End or **End** button) .

Accessing Voice Mail

From the **Home** screen, touch twice on "**voicemail**".

Note: Update the voice mail retrieval number by turning the phone Off and then On via the Dolphin Wireless Manager, see Enabling the WWAN Radio on page 8-3.

Customizing the Phone

Touch **Menu** ⊞ from the Dialer screen to customize options for your phone.

View

Select **View** on the Menu to modify the display screen to show Calls and Contacts, All Calls or Speed Dial numbers.

Options

Select **Options** on the **Menu** to customize and view features specific to the network firmware the terminal is configured to use (e.g., GSM/UMTS or CDMA) for voice and data communication. See Dolphin Connection Manager (page 8-12) for information on Network firmware configuration.

GSM/UMTS Options

When the WWAN radio is configured to communicate with GSM/UMTS networks, the **Options** menu contains four setting widows: **Sounds**, **Security**, **Services**, and **Network.** For information on CDMA Options, see page 8-8.

Sounds
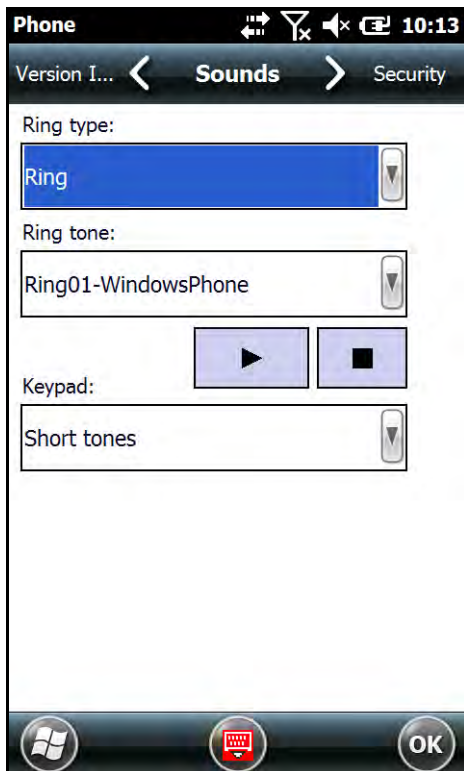
The **Sounds** screen enables you to customize the:

- Ring type (e.g., Ring, Increasing ring, Ring once, Vibrate, Vibrate and ring, Vibrate then ring or None)
- Ring tone
- Keypad tone (e.g., Long, Short, or Off)

Security
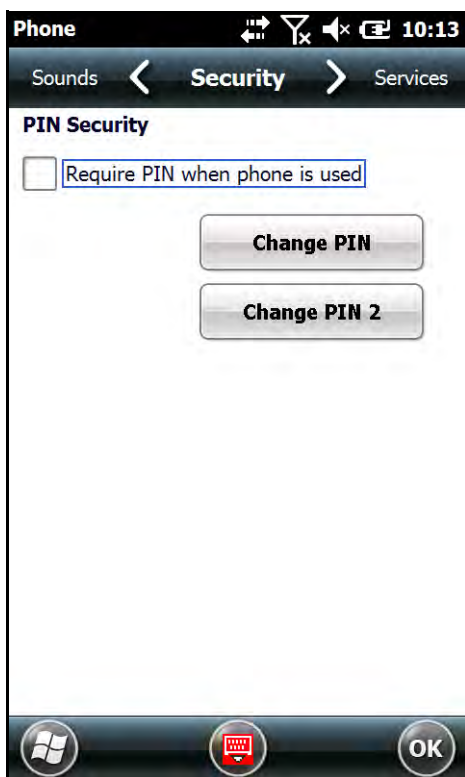
The **Security** screen provides access to establish or change your security PIN for phone calls. Check the box next to, "Require a PIN when the phone is used" to enable the PIN security feature.

Services
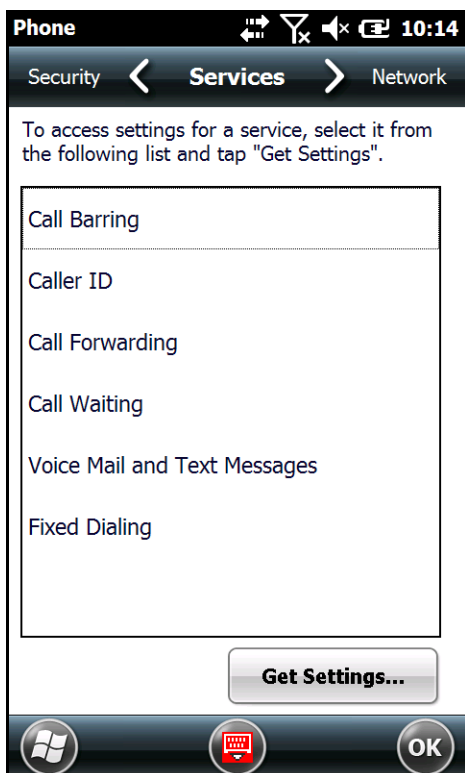
For each service, the phone reads settings from the network stored on the SIM card and then displays the available options from the carrier on the screen. To customize the settings, select it from the list and touch "Get Settings".

Network
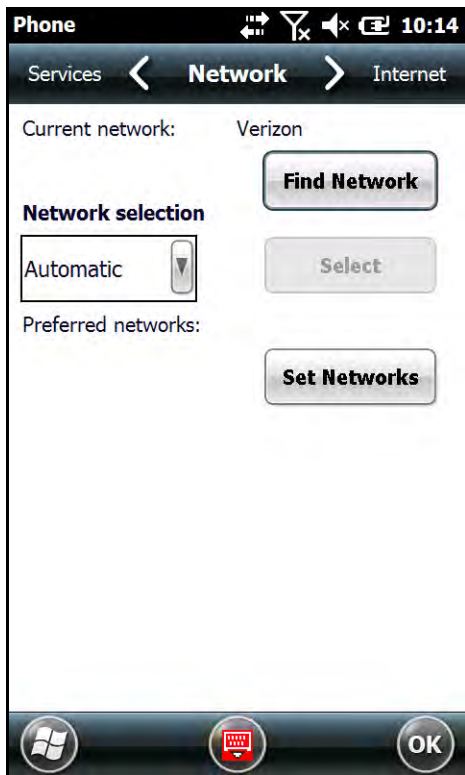
You can find, select, and set your preferred network order from the **Network** screen.

CDMA Options

When the WWAN radio is configured to communicate with CDMA networks, the **Options** menu contains three or four setting widows depending on your network firmware configuration: **Sounds**, **Location Settings**, **Data Settings** (Sprint® specific), and **Version Information**. See Dolphin Connection Manager (page 8-12) for information on Network firmware configuration.

From the Dialer window, touch **Menu** ▤ > **Options.**

Sounds

The Sounds screen enables you to customize the:

- The Voicemail phone number used by the carrier
- Ring type (e.g., Ring, Increasing ring, Ring once, Vibrate, Vibrate and ring, Vibrate then ring or None)
- Ring tone
- Keypad tone (e.g., Long, Short, or Off)

Location Settings

Selecting the radio button next to "**Location ON**" enables the network to detect the physical location of the Dolphin terminal, which improves ease of use for some carrier specific applications.

Selecting the radio button next to "**911 Only**" turns the location feature off hiding the physical location of the terminal from everyone except 911.

Note: Even if location is turned on in this handset no service may use your location without your express permission.

Data Settings

The Data Settings screen is available only if the terminal is configured for Sprint network communication. Touch the "**Provision**" button, to initiate an auto-update of your Sprint Vision profile.PC5 Vision.

Version Information

The **Version Information** screen displays useful statistics for the CDMA WWAN Voice module including:

- RIL, SDK, USB, and OEM Aux Versions
- Modern HW, FW, and PRL Versions
- Boot Loader Version
- ESN number
- MEID number

Data Communication

You set up data communication using the Microsoft® Connections application.

Touch > **Settings** > **Connections** > **Connections** to access the Microsoft Connections application.

System Requirements

- The WWAN radio must be enabled; see Enabling the WWAN Radio on page 8-3.
- If the terminal is configured for GSM/UTMS network communication, you must have an active SIM card with a DATA plan installed; see Installing a SIM Card and/or Memory Card on page 3-17. The carrier on the SIM card is the ISP.
- If the terminal is configured for CDMA network communication, you must have an active account with a CDMA carrier that includes a DATA plan. The account is linked to the Mobile Equipment Identifier (MEID) of the integrated WWAN radio.

Establishing Data Communication

1. Touch >**Settings** > **Connections** > **Connections** .
2. Under My ISP, touch **Add a new modem connection**.

3. Enter a name for the connection in the "Enter a name for the connection" box. Select **Cellular Line (GPRS)** from the drop-down list in the "Select a modem" box. Touch **Next**.
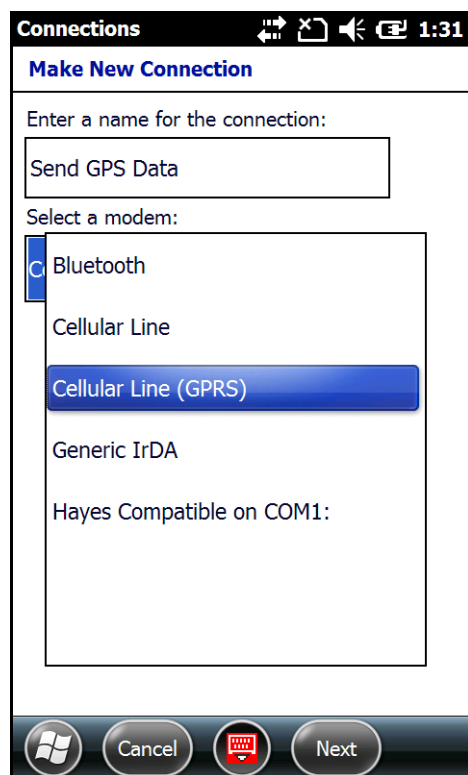
4. For GSM/UMTS terminal network configuration, the "Access point name" field is automatically filled in with data retrieved from the active SIM card.

   Note: If you want to manually configure the APN, user name and password fields instead of having the settings automatically retrieved from the SIM card, first uninstall/remove the RIL_AutoAPN_x_x.CAB file.

   For CDMA terminal network configuration, enter the number exactly as it should be dialed. Including any extra numbers, such as an outside line or credit card.

5. Touch **Next**.

6. For GSM/UMTS terminal network configuration, the "User name" and "Password" fields are automatically filled in with data retrieved from the active SIM card.
   For CDMA terminal network configuration, enter the user name and password for the account.

7. Touch **Finish**.

8. The connection you just created should appear in the list on the **Modem** screen under **My ISP > Manage existing connections**.

9. Touch and hold on the connection name. Select **Connect** on the popup menu.
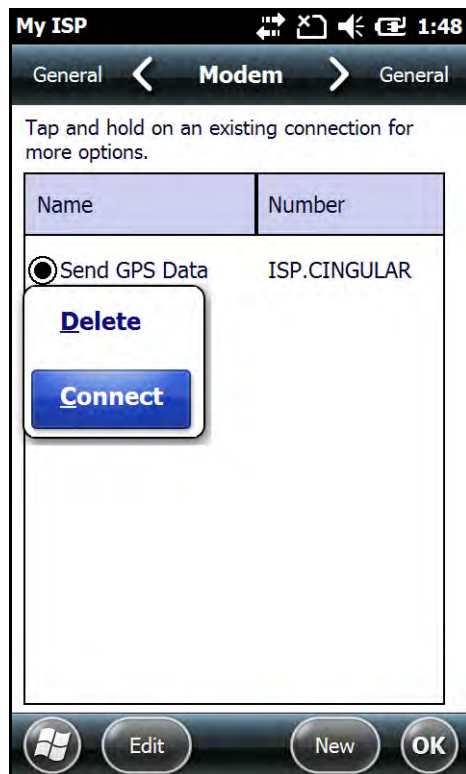
10. The network icon in the Title bar indicates the GSM radio is attempting to connect ⊞↵ .

   Note: When the device is on a 2G (EDGE/GPRS) network, a data connection failure occurs if the phone is in use for a voice call while attempting a data connection. Simultaneous voice and data use is only supported if the device is on a 3G network. In 2G mode, a voice call takes precedence over data connections. Active data connections are placed in "park" mode automatically and the data is "retrieved" when the voice call ends.

11. When the connection is complete, the network icon changes to: ⊞ꭅꓕ .

12. You can now send data over GSM.

Manual Network Selection (GSM/UTMS)

You can select Automatic or Manual network selection. The Phone defaults to Automatic network selection.

Note: Manual Network Selection is not applicable for CDMA network communication.

1. When an active SIM card is inserted in the terminal, touch 🪟 > **Phone** 📞 > **Menu** > **Options**.

2. Select the **Network** on the Horizontal Scroll bar.

3. Under **Network selection**, select **Automatic** (the default selection) or **Manual**.
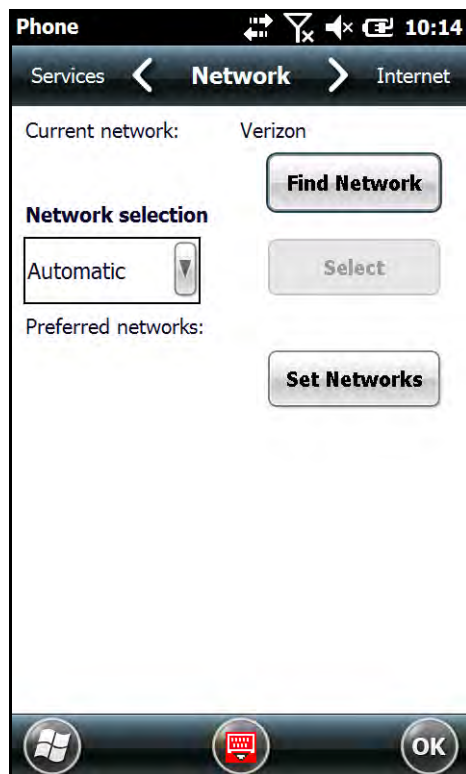
a. If you select **Manual**, the Phone searches for available networks.

b. Select a new network and touch **OK**.
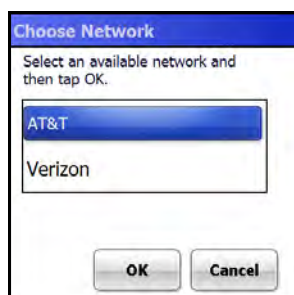
c. The Phone registers on the new network and the Network screen appears.

d. To switch to another network, touch the now active **Select** button to repeat the process.

4. To switch back to automatic roaming, select **Automatic** under **Select networks**, then touch **OK**.

Dolphin Connection Manager

The Dolphin Connection Manager (DolphinCM) enables you to see real time status of the radio, setup your Network selection, view you're profile and scan for networks. The DolphinCM contains four tabs: **Status**, **Setup**, **Profile**, **Hyper Roaming** and **About**.

Touch > **DolphinCM** to access the **Dolphin Connection Manager.**

Status Tab

The **Status** tab contains the real time radio status information including:

- The power status of the radio (e.g., ON or OFF)
- The received signal strength intensity (RSSI)
- The radio mode used (e.g., GSM, UMTS, EVDO or 1xRTT)
- The network firmware used
- The IP Address assigned

You can also turn the radio ON or OFF and Start or Stop a data session from the Status tab.

Setup Tab

The **Setup** tab allows you to view and customize the Network Setup including:

- The Network Firmware (e.g., AT&T, Verizon, or Sprint)
- The SIM Slot accessed
- The Access Point Name (APN)
- The User name of the account
- The Password of the account
- Enable or Disable Automatic Data Sessions
- Update the Preferred Roaming List (PRL) for CDMA
- Activate Over the Air (OTA) Provisioning in CDMA

Profile Tab

The **Profile** tab allows you to see Radio capability information and network statistics including:

- Radio Hardware and Software versions
- Radio and SIM identification numbers
- Serving network connection type and state
- Available radio interfaces for the current serving network
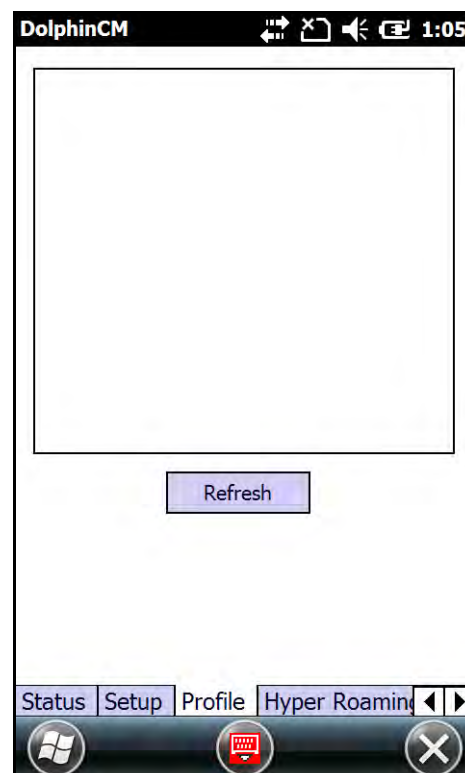
Hyper Roaming Tab

The **Hyper Roaming** tab allows you to turn roaming capabilities on or off and customize network and connection settings including:

- Designating and configuring supported networks
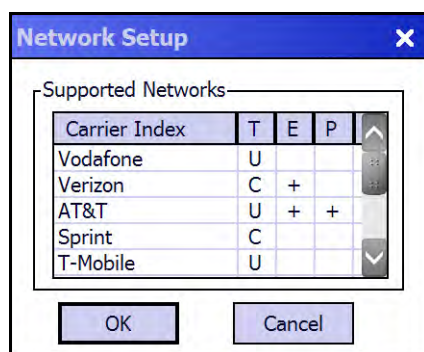
- Selecting a connection type (e.g., 2G, 3G or DISABLED)
- Setting the RSSI Threshold and Dwell
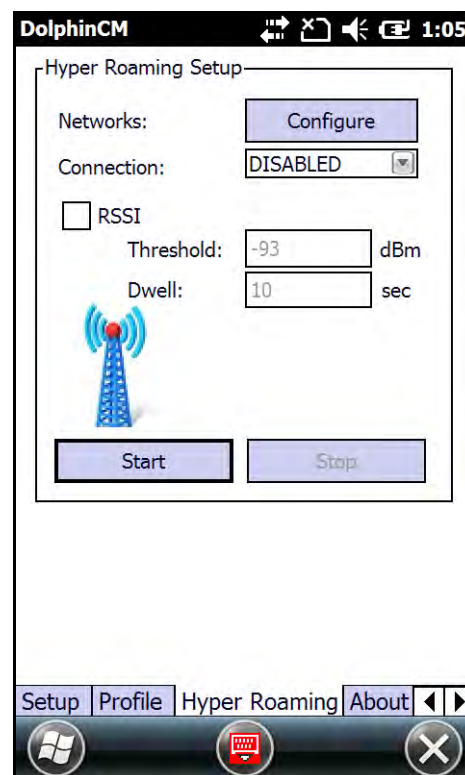
About Tab

Displays copyright and version information for the Dolphin Connection Manager.

9

Working with the Bluetooth Radio and NFC

Enabling the Bluetooth Radio

You enable the Bluetooth radio in the Dolphin Wireless Manager (see page 7-5).

1. Touch ⊞ > **Settings** ⚙ > **Connections** 📁 > **Dolphin Wireless Manager** 📡.
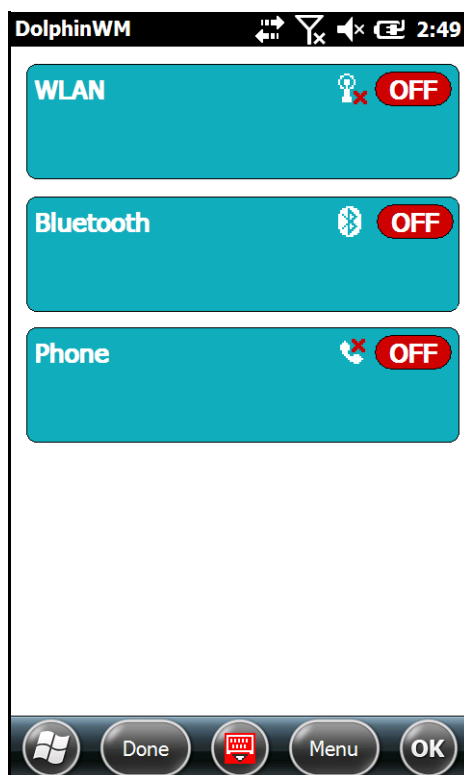
2. Touch anywhere inside the Bluetooth rectangle to begin activation of the Bluetooth radio.
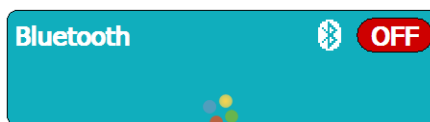
3. When the radio is activated (i.e., transmitting a signal), the **Off** button changes to **On**.

When the Bluetooth radio is transmitting a signal, additional text displays in the Bluetooth section providing information about the radio. "Visible" and "Not visible" indicates whether the Bluetooth radio is set to be discoverable or not discoverable by other Bluetooth devices. To make the terminal discoverable, see page 9-6.

Pairing and Trusted Devices

The terminal supports pairing. Pairing happens during the general connection setup. Paired devices are "trusted" devices. This means that there is unrestricted access to all services (including services that require authorization and authentication).

A connection can exclude pairing. A device that is connected to the terminal but not paired with it is considered an untrusted device. Content can still be passed to untrusted devices by requiring authorization with each attempt (for example, with the initialization of a file exchange).

Connecting to Other Bluetooth Devices

To connect to other Bluetooth equipped devices, you need to perform a device discovery, select a discovered device, and then connect to the selected device. Pairing happens as part of the connection process.

1. Make sure the Bluetooth device is in range and set to be discoverable by other bluetooth devices.

2. In the Dolphin Wireless Manager, touch **Menu** > **Bluetooth Settings**.

   OR

   Touch [icon] > **Settings** [icon] > **Bluetooth** [icon] .

3. Touch **Add new device**. The terminal begins searching for discoverable Bluetooth devices.
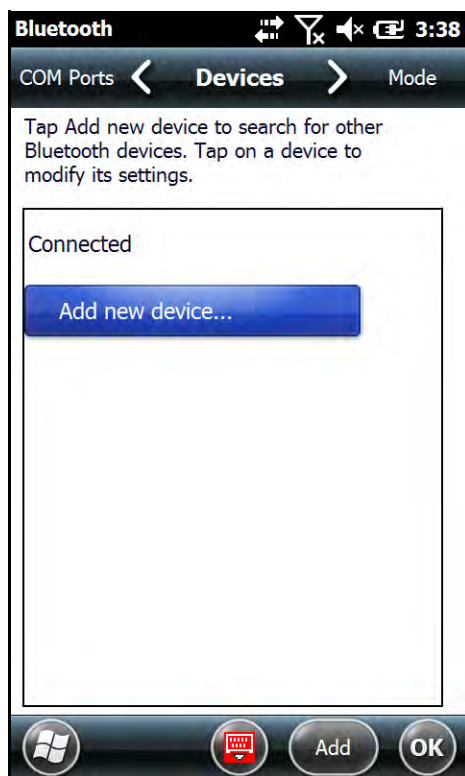
4. Select a device from the list and touch **Next**.

The types of devices in the vicinity of the radio appear in the list of discovered devices.
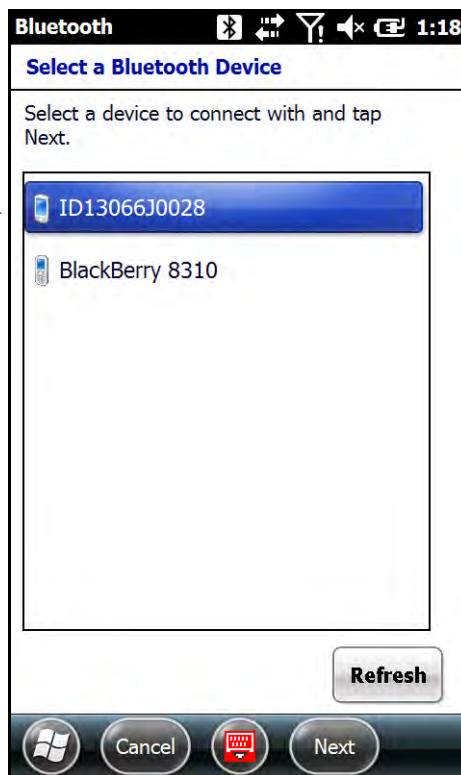
5. You are prompted to enter a passcode.

• If the device has a specific passcode, enter it in the **Passcode** field and touch **Next**.

When attempting to connect to a printer or headset with Bluetooth capabilities, the passcode may default to either 1111 or 0000. If there is no default, consult the device literature for the number.

• If the device does not have a specific passcode, you can enter one in the **Passcode** field and touch **Next** to create a passcode.

6. The Bluetooth radio tries to connect with the device.

7. If you created a passcode, you will be prompted by the other device to enter the same passcode. Enter the created passcode to establish a paired connection.

If you entered a device specific passcode, you should not have to do anything on the other device.

8. When the connection is complete, a list of matching and supported services on the device appears. Only the services that are mutually supported on both devices appear in the Partnership Settings window.
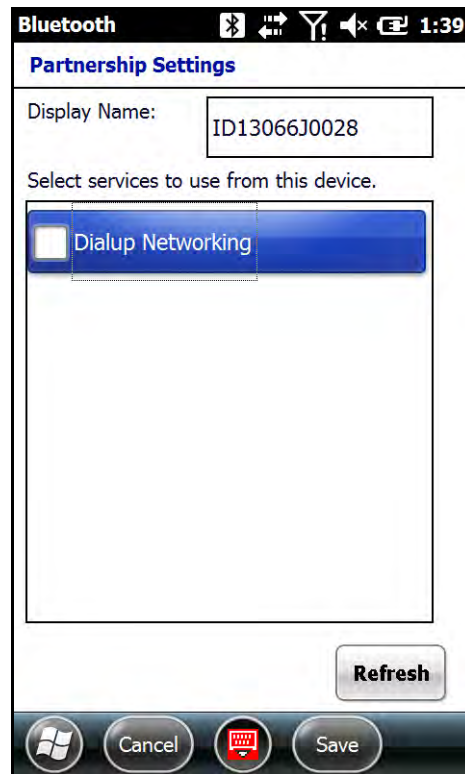
9. Select the services you want to use and touch **Save**.

   The services on the new devices have to be selected or the pairing won't include those services, even though the devices are paired. If services are not selected, you will be continually re-prompted for the passcode from the device.

10. The device appears in the list on the main window.

    Note: If you are connecting to a printer or headset, complete any additional steps required by the device.

11. After the passcodes have been accepted on both sides, you have a trusted (paired) connection.

Transferring Files using Beam File

Before attempting to transfer files, make sure the receiving Bluetooth device is in range, set to be discoverable by other devices, and set to receive incoming beams.

1. Touch [icon] > **File Explorer**.

2. Navigate to the file you want to transfer.

3. Touch and hold on the file, then select **Beam File** on the popup menu.

4. The Bluetooth radio begins searching for devices. When a Bluetooth device is first found, it appears as an "Unknown device". The [icon] icon indicates that the device is a Bluetooth equipped device. As data is retrieved, the device IDs appear in the list.

During a search, Bluetooth equipped devices found within range appear on the screen.
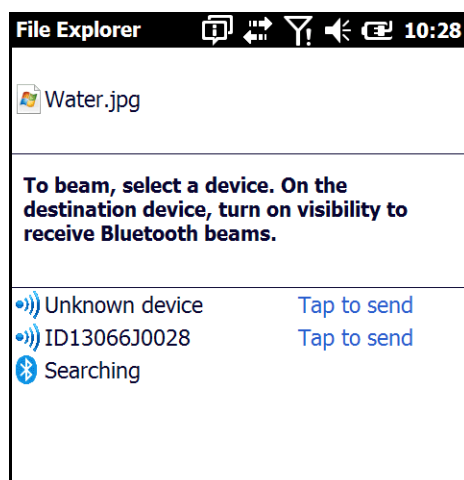
5. Touch a device on the list to begin sending the selected file.

6. The selected device reads "Pending" while the terminal tries to connect.
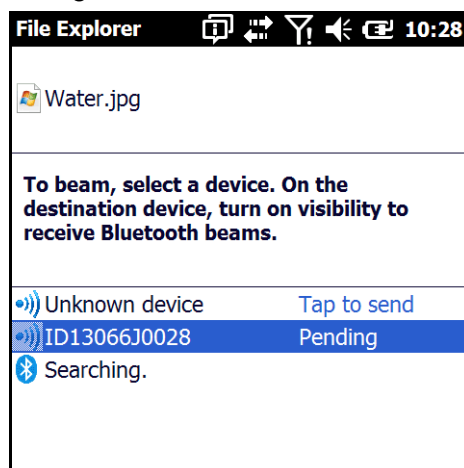
7. Once a connection is made and the file is being transferred, the selected device reads "Sending".

8. The selected device reads "Done" when the transfer is complete.

Making the Terminal Discoverable

By default, the Dolphin terminal is not discoverable, which means that the terminal will not be found by other Bluetooth devices.

1. To make the terminal discoverable, touch > **Settings** > **Bluetooth** .

   *Note: If you are in the Dolphin Wireless Manager, touch **Menu** > **Bluetooth Settings**.*

2. Touch **Mode** on the Horizontal scroll.

3. Select "Make this device visible to other devices**"** and touch **OK**.
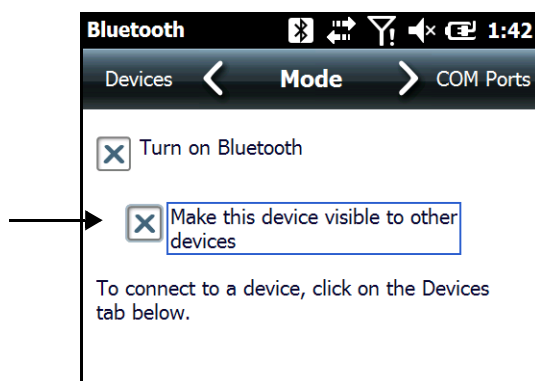
Enabling the Terminal to Receive Incoming Beams

By default, the Dolphin 70e Black terminal is not configured to receive incoming beams from other devices attempting file transfers via the Beam File command. Before initiating a file transfer from another device follow the steps below to enable Beam reception on your Dolphin terminal.

1. Touch > **Settings** > **Connections** > **Beam** .

2. Select "Receive all incoming beams."

3. Touch **OK**.

Selecting COM Ports

For more information on available COM ports, see Dolphin 70e Black COM Port Assignment Table on page 7-14.
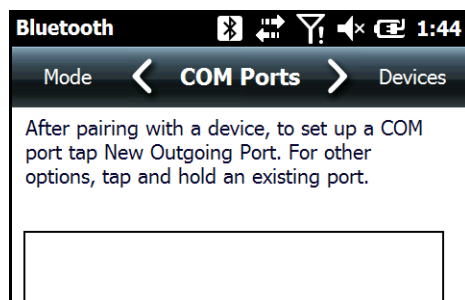
Near Field Communication (NFC)

Near Field Communication functionality is hardware dependent and only available on Dolphin 70e Black models ending with the letter N (e.g., 70exxN). The terminal model number is located on the serial number label affixed to the bottom of the battery well. Use only NFC compatible replacement battery doors with NFC equipped Dolphin models.

Using the NFC Demo

The NFCBump Demo demonstrates the basic NFC capabilities of the terminal and is not intended as a functional business solution. Detailed information on how to create custom applications for your Dolphin terminal is provided in the Software Development Kit (SDK), available for download at www.honeywellaidc.com.

NFC Tag Reading

To read information from a passive tagged item (e.g., NFC tagged posters, marketing material, or book covers):

1. Touch > **Demos** > **NFCBump Demo** .

2. Hold the NFC tag close to the battery door on the back of the terminal.

3. An "NFC Tag Detected" notification displays on the screen with the raw data contained in the tag.

NFC Device Discovery and Creating a Bluetooth Connection for File Sharing

To share a file between two Dolphin 70e Black terminals:

1. Touch > **Demos** > **NFCBump Demo** on both terminals.

    Note: Running the NFCBump Demo automatically turns on the Bluetooth radio.

2. Touch **Device Discovery** on the terminal that contains the file you want to share.

3. Hold the terminal back to back with the other terminal.

4. Select the **Options** tab after "Device Found!" and "Device Connected!" appear on the screen.

5. Touch **Push File**.

6. On the **Beam** screen, find and select the file you want to share.

7. A "File sent" pop-up notification on the transmitting terminal and a "File saved" notification the receiving terminal indicate a successful file transfer.

NFC Device Discovery and Creating a Bluetooth Connection for Device Configuration Sharing

Common device configuration settings are stored in the Honeywell/DeviceConfig.exm file on your terminal. The **Push Settings** option in the **NFCBump Demo**, allows the you to push the configuration settings in the DeviceConfig.exm file from one Dolphin 70e black terminal to another.

Note: Before using the Push Settings option, make a backup copy of the DeviceConfig.exm on your Dolphin terminal.

To Push Settings from one Dolphin 70e Black to another Dolphin 70e Black terminal:

1. Touch > **Demos** > **NFCBump Demo** on both terminals.

   Note: Running the NFCBump Demo automatically turns on the Bluetooth radio.

2. Touch **Device Discovery** on the terminal that contains the file you want to share.

3. Hold the terminal back to back with the other terminal.

4. Select the **Options** tab after "Device Found!" and "Device Connected!" appear on the screen.

5. Touch **Push Settings**.

6. A "Config pushed to device" pop-up notification displays on the transmitting terminal.

The receiving terminal automatically reboots to apply the new device configuration settings.

10

Working with GPS

Overview

The Dolphin 70e Black terminal contains an integrated GPS module that allows location tracking of workers and vehicles, providing better utilization of field assets. Optional mapping and navigation software provides turn-by-turn driving directions and location information.

Assisted GPS Support

Assisted GPS (A-GPS) is turned on by default. The Dolphin 70e Black utilizes gpsOneXTRA Assistance™ Technology to improve time-to-first-fix (TTFF) positioning by using network resources for quicker satellite identification. The carrier agnostic feature downloads a file (approximately 40KB) containing emphersis data from a Qualcomm® server approximately every 7 days.

Note: A data connection is required and data transfer charges may apply depending on your carrier.

A-GPS can be turned off with the following registry key:

`[HKEY_LOCAL_MACHINE\Software\Sierra Wireless Inc\swigobi\GPSSettings]`

`"GpsXtra"=dword:00000001`

`1 = enabled, 0 = disabled"`

Powering the GPS Module

The GPS module powers on automatically when accessed by a software application and powers off automatically when that software application closes. You cannot manually power on and off the GPS module.

Communication Ports

There are two ways to access the GPS module: through the actual COM port (COM7) or the GPS Intermediate Driver. The method you use depends on the software application you are using. If the software application requires the actual COM Port, set the operating system to use COM7. If the software application requires the GPS Intermediate Driver, set the operating system to use the GPS Intermediate Driver.

Selecting the Port

1. Touch > **Settings** > **System** > **External GPS** .

2. In the **GPS program port:** drop-down list, select **COM7** or **GPD1** (the GPS Intermediate Driver) as required by the application.

Note: The GPS program port and hardware port cannot be the same value.

3. Touch **OK** to save.

COM7

COM Port 7 can be set to the following baud rates:

- 4800
- 9600 (Default baud rate. Recommended for optimal performance.)
- 19200
- 38400

Other baud rates are not possible. The baud rate selected on COM7 is the actual baud rate with which the GPS communicates.

GPS Intermediate Driver

When the first user of GPD1 opens the port, the GPS Intermediate Driver opens the COM7 port. The GPS Intermediate Driver allows multiple applications to open GPD1, and the GPS data is broadcast to all open ports.

When the GPSID driver is in use, the COM7 port is allocated to GPSID as READ|WRITE (COM7 is still available for access mode of 0).

For more information about the GPS Intermediate Driver available from Microsoft, follow this link: http://msdn.microsoft.com/en-us/library/ms850332.aspx

GPS Demo

The GPS Demo demonstrates the main functionality of the integrated GPS module. The GPS Demo uses COM7.

To see the GPS Demo, touch > **Demos** > **GPS Demo** .

11

Dolphin 70e Black HomeBase (Model 70e-HB)

Overview

The Dolphin 70e Black HomeBase (Model 70e-HB) is a charging and communication cradle that supports USB Hi-Speed 2.0v communication, which enables the terminal to interface with the majority of PC-based enterprise systems. The HomeBase also contains an auxiliary battery well that charges a spare Honeywell standard or extended battery.

The 70e-HB charger is designed for use with the following Dolphin models and batteries manufactured for Honeywell International Inc:

Dolphin Model	Battery Model No.	Battery Part No.	Battery Specification
Dolphin 70e Black	70e-BTSC	BAT-STANDARD-01 BAT-STANDARD-02	Li-ion 3.7V, 6.179 watt hour
	70e-BTEC	BAT-EXTENDED-01 BAT-EXTENDED-02	Li-ion 3.7V, 12.358 watt hour

> ⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Unpacking the HomeBase

Open the shipping box and inspect the package to see that the following standard items are included:

- One Dolphin HomeBase, model 70e-HB
- One power supply (see Power on page 11-5)
- One power cord

These items are needed to operate the HomeBase. If any items are missing or anything appears to be damaged, contact your Customer Account Representative. Keep the original packaging in case you need to return the HomeBase for service or to store the HomeBase while not in use.

Optional Equipment

A standard USB (Type A to B) cable is required when using the HomeBase for communication between the terminal and a host device.

Charging Overview

The base 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. The base completes a full charge of the main battery installed in the terminal seated in the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. The base completes a full charge of the battery pack in the Auxiliary Battery Well (see page 11-3) in 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-15.

> ⚠ *We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Communications

Reliable data communications at speeds of up to 480 Mbps can be transmitted by the base through the Hi-Speed USB port.

Note: These bases cannot be physically connected to each other - sometimes referred to as "daisy-chained".

Convenient Storage

The intelligent battery charging system makes this base a safe and convenient storage receptacle for your Dolphin terminal.

Capacity

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

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Dimensions

65.6 mm
[2.58 inches]

129.3 mm
[5.09 inches]

116.3 mm
[4.58 inches]
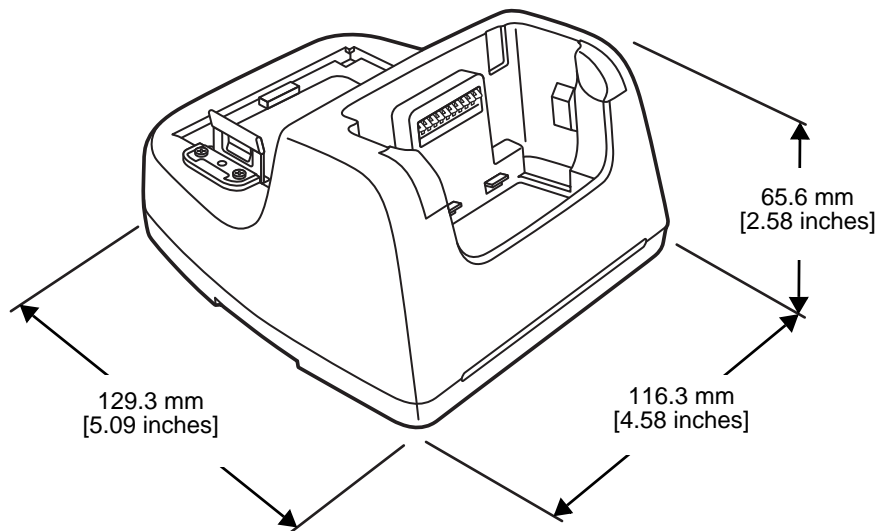
Weight

HomeBase weight: 303g [.668 lbs]

Parts and Functions
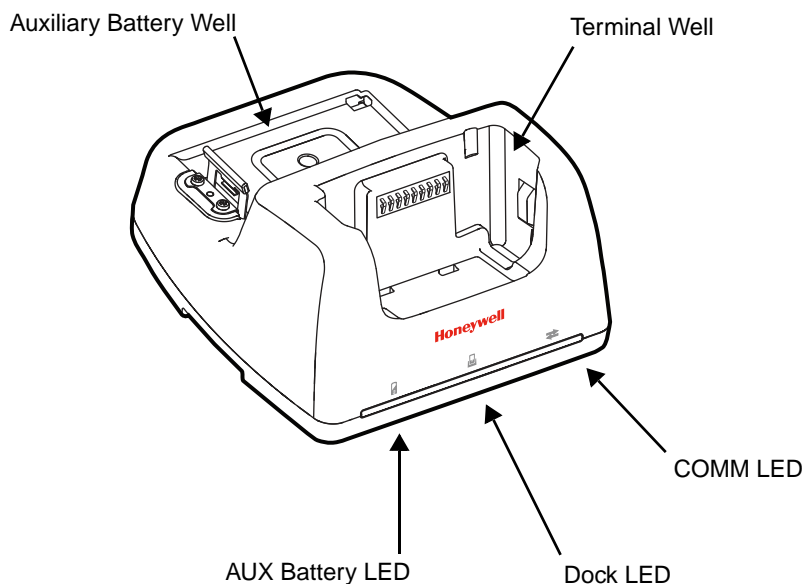
Front Panel

Auxiliary Battery Well

Terminal Well

COMM LED

AUX Battery LED

Dock LED

Terminal Well

Place the terminal in this well to communicate with a host device, power the terminal, and charge the installed battery pack. The base completely charges the main battery in a Dolphin terminal in 4 hours for the standard battery or 6 hours for the extended battery. If the host device is a workstation that uses ActiveSync or Windows Device Mobile, and the synchronization begins immediately.

Auxiliary Battery Well

See Auxiliary Battery Well on page 11-4.

AUX Battery LED

Indicates status of the battery charging in the auxiliary battery well; see Back Panel on page 11-4.

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

For information about charging a battery in the auxiliary battery well, see page 11-6.

Dock LED

Indicates if a terminal is docked properly in the base.

This color	means…
Blue	The terminal is properly seated in the base.

COMM LED ⇄

This is the communication LED. It indicates the status of data transfer between the Dolphin terminal and the host device.

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

Back Panel

Auxiliary Battery Well

USB Port

DC Power Jack
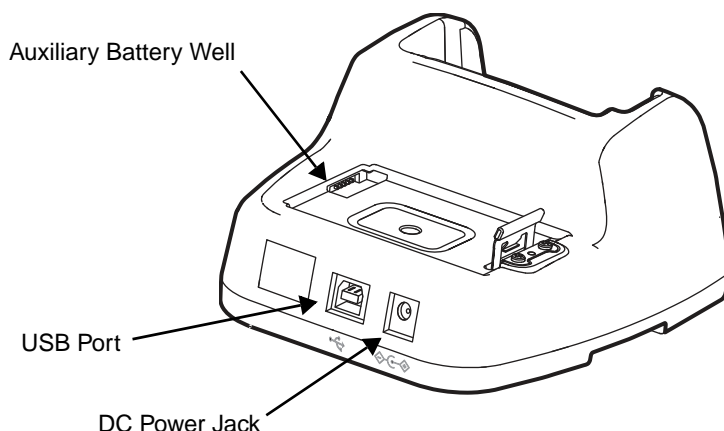
Auxiliary Battery Well

The base enables you to charge an additional battery pack independently of the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. This feature ensures that you can always have a fully-charged battery for your terminal. See Charging a Spare Battery in the Auxiliary Battery Well on page 11-6.

USB Port

This USB port is USB v2.0 Hi-Speed (480 Mbps) compliant. Using a USB cable, you can connect the base to a host device, such as a workstation. USB communication occurs through Microsoft ActiveSync (v4.5 or higher) or Microsoft Windows Mobile Device Center (WMDC) depending on the host workstation's operating system. When the terminal is seated in the terminal well, it is connected to the host device via the base.

Note: ActiveSync on your Dolphin terminal works with Windows Mobile Device Center on host workstations running Windows Vista or Windows 7 and with ActiveSync on host workstations running Windows XP. For detailed information on ActiveSync and WMDC visit the Microsoft Windows Phone Web site (http://go.microsoft.com/fwlink/?LinkId=147001).

DC Power Jack

See Power on page 11-5.

Bottom Panel

For details on how to mount the HomeBase, see Mounting the HomeBase on page 11-7.
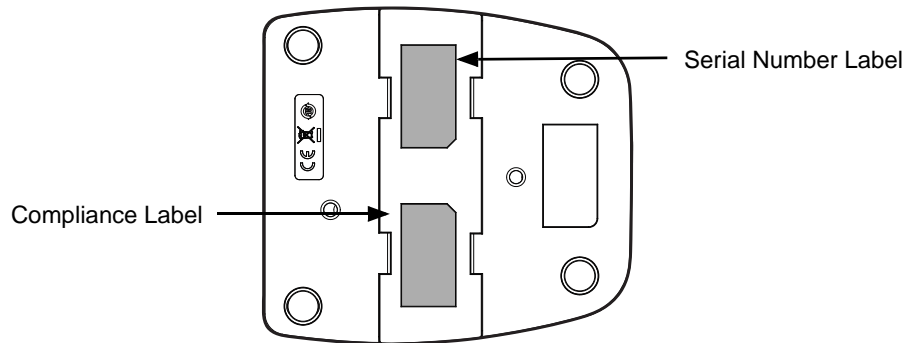
Serial Number Label

Compliance Label

Power

The base requires 12 Volts DC input for communications, battery charging, and power output to the terminal. The power adapter included with the base, converts the voltage from the AC power source to 12 Volts DC. **Use only a UL listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 3 amps with the device.** The operating temperature range is -10° to 50°C (14° to 122°F). Honeywell recommends that you leave the base connected to its power source at all times, so that it is always ready to use.

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

## Connecting Power to the HomeBase

1. Plug the A/C power cord into the power adapter.

2. Plug the power cable into the power connector on the back of the HomeBase.

3. Plug the A/C power cord into a grounded power source.
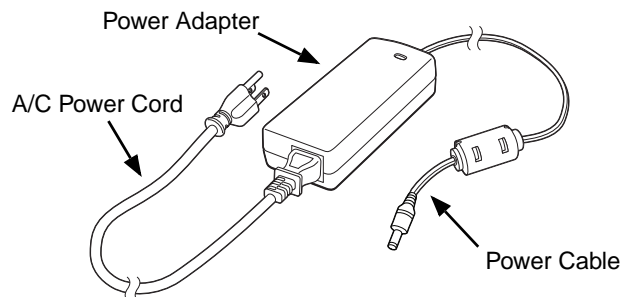
Power Adapter

A/C Power Cord

Power Cable

Charging the Main Battery

The base provides power to the Dolphin terminal and allows the charging of the terminal's battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be stored in the base indefinitely without damage to the terminals, battery, or the base. When the terminal is docked, the base completes a full charge in 4 hours for the standard battery or 6 hours for the extended battery.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 6-27) and Battery (page 3-12).

To Power a Terminal and Charge its Main Battery

⚠ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

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

2. Slide the terminal into the terminal well. The Dock LED illuminates blue. Battery charging begins immediately if required by the Dolphin terminal.

   Note: When the terminal is docked, the Battery Icon changes from ▭ to ▭ indicating the terminal is running on external power. Battery charging occurs in the background. When the Dolphin is removed from the base, the battery icon indicates the charge level of the battery, see Icons in the Title Bar on page 2-7. For additional information on how to check the power levels of the battery, while the terminal is docked, see Checking Battery Power on page 3-17.

⚠ *We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Charging a Spare Battery in the Auxiliary Battery Well

The auxiliary battery well located on the back of the base 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 4 hours for the standard battery pack or 6 hours for the extended battery pack; see Auxiliary Battery Well on page 11-4.

1. Insert the battery at an angle.

   Note: Align the battery contacts with the contacts inside the auxiliary battery well.

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

3. Use the AUX Battery LED to monitor the charging progress. The LED changes to green when the auxiliary battery has completed charging and is ready for use.
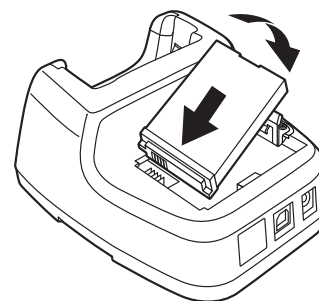
Communication

Dolphin terminals support USB communications out of the box. The HomeBase also supports USB communications using the USB port located on the back panel of the base. The HomeBase acts as a USB device by interfacing the USB signals of the Dolphin terminal to the USB of the host workstation. Using a standard USB cable, the USB interface of the HomeBase allows the Dolphin terminal to communicate with a workstation.

Requirements

- A base powered by a power cable and power adapter cable
- A standard USB (Type A to B) communication cable
- A work station running Windows 98 Second Edition, Windows Me, Windows 2000, Windows NT (4.0 SP6 or higher), Windows XP, Windows Vista, or Windows 7.
- ActiveSync (v4.5 or above) or Widows Mobile Device Center on the workstation

Setting Up and Connecting the Dolphin Terminal to the HomeBase

1. Connect power to the HomeBase (see).

2. Plug the USB communication cable into the USB port on the back of the base.

3. Connect the other end of the USB cable to the host workstation.

4. Insert the Dolphin terminal into the terminal well of the base. The Dock LED illuminates blue.

5. The Dolphin terminal activates and automatically opens ActiveSync to establish a connection.

6. The connection icon in the Dolphin's navigation bar changes from ⬌ to ⬌ it indicate a successful connection. The base can now transfer data between the terminal and the host device.

Mounting the HomeBase

Set the base on a dry, stable surface, such as a desktop or workbench near an electrical outlet. The user should be able to view and operate the Dolphin terminal while it is in the base. When choosing a mounting location, bear in mind that the location must allow users' easy access to the Auxiliary Battery Well and the back panel of the HomeBase where the USB port and the power jack are located.

Optional DIN Rail Mount

A DIN rail (7.5 X 35 mm) may be installed on the bottom of the base to provide the optional security of mounting the base to a flat horizontal surface with hardware.

Additional Hardware

- DIN Rail, Qty. 1
- 3/16 in. dia x 5/8 in. long pan head screw, Qty. 2
- 1/2 in. OD x 7/32 in. ID x 3/64 in. thick washer, Qty. 4
- 3/16 in. dia nut, Qty. 2

Note: The items listed above are for reference only. Final hardware selection is dependent on the material type and thickness of the mounting surface.

1. Slide the DIN rail into the slot along the bottom panel of the base.

DIN Rail Slot
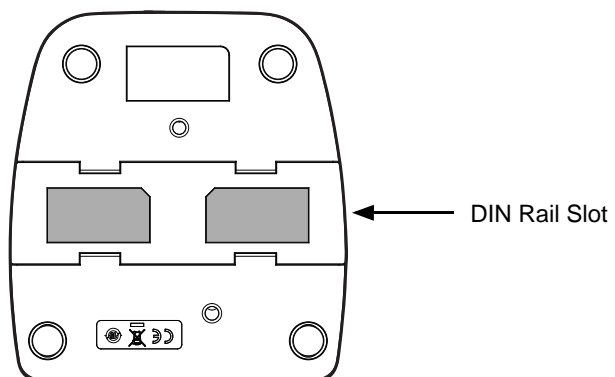
2. Use the appropriate hardware to secure the DIN rail to the desk or flat surface.
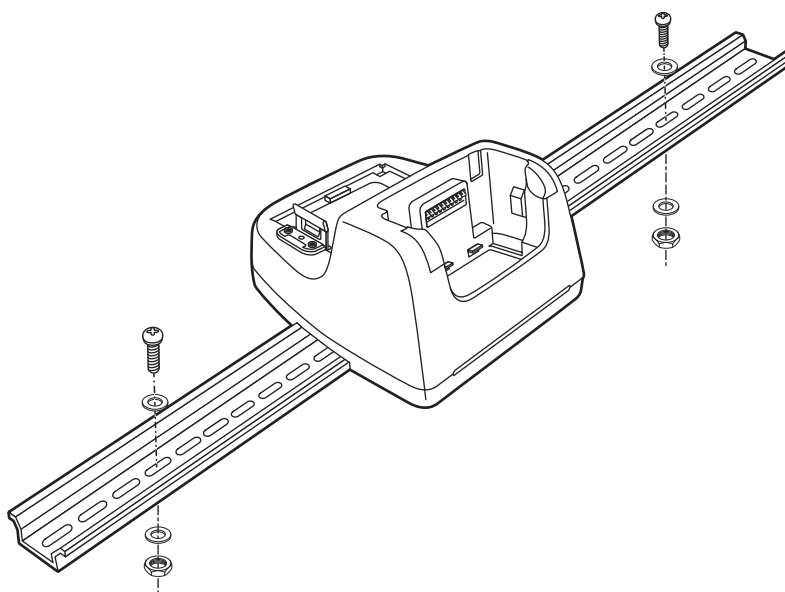
Dolphin 70e Black eBase (Model 70e-EHB)

Overview

The Ethernet Base (eBase) enables a single Dolphin 70e Black computer to communicate with a host device over an Ethernet network.

The 70e-HB charger is designed for use with the following Dolphin models and batteries, manufactured for Honeywell International Inc:

Dolphin Model	Battery Model No.	Battery Part No.	Battery Specification
Dolphin 70e Black	70e-BTSC	BAT-STANDARD-01 BAT-STANDARD-02	Li-ion 3.7V, 6.179 watt hour
	70e-BTEC	BAT-EXTENDED-01 BAT-EXTENDED-02	Li-ion 3.7V, 12.358 watt hour

> ⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Unpacking the eBase

Open the shipping box and inspect the package to see that the following standard items are included:

- One Dolphin eBase Ethernet cradle, model 70e-EHB
- One power supply (see Power on page 12-5)
- One power cord

These items are needed to set up and operate the eBase. If any items are missing or anything appears to be damaged, contact your Customer Account Representative. Keep the original packaging in case you need to return the eBase for service or to store the eBase while not in use.

Optional Equipment

- A standard USB (Type A to B) cable is required when using the eBase for USB communication between the terminal and a host device.
- A standard CAT-5 Ethernet network cable is required when using the eBase for communication between the terminal and a host device over an Ethernet network.

Charging Overview

The base 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. The base completes a full charge of the main battery pack installed in the terminal seated in the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. The base completes a full charge of the battery pack in the Auxiliary Battery Well (see page 12-3) in 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-15.

> ⚠ *We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Convenient Storage

The intelligent battery charging system makes this base a safe and convenient storage receptacle for your Dolphin terminal.

Capacity

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

Dimensions

65.6 mm
[2.58 inches]

129.3 mm
[5.09 inches]

116.3 mm
[4.58 inches]
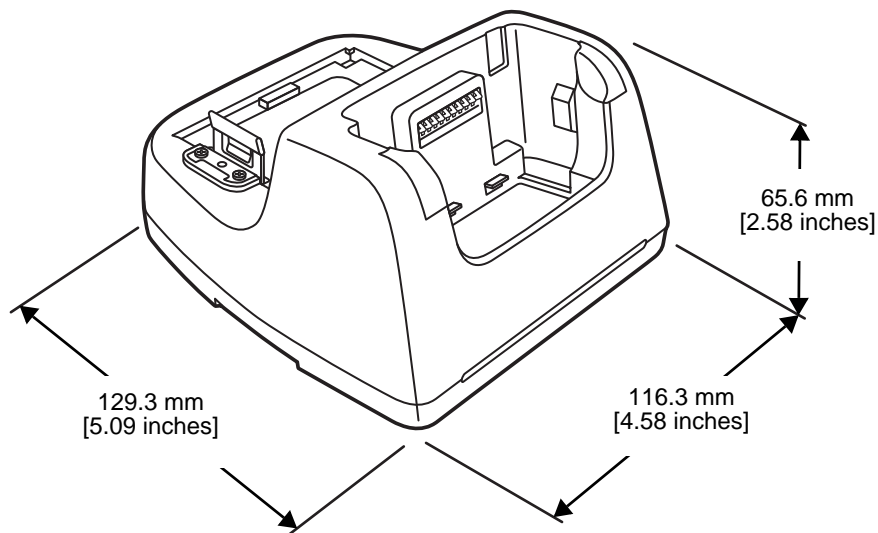
Weight

eBase weight: 310g [.683 lbs]

Note: Weight excludes packaging, cables and power supply.

Parts and Functions

Front Panel
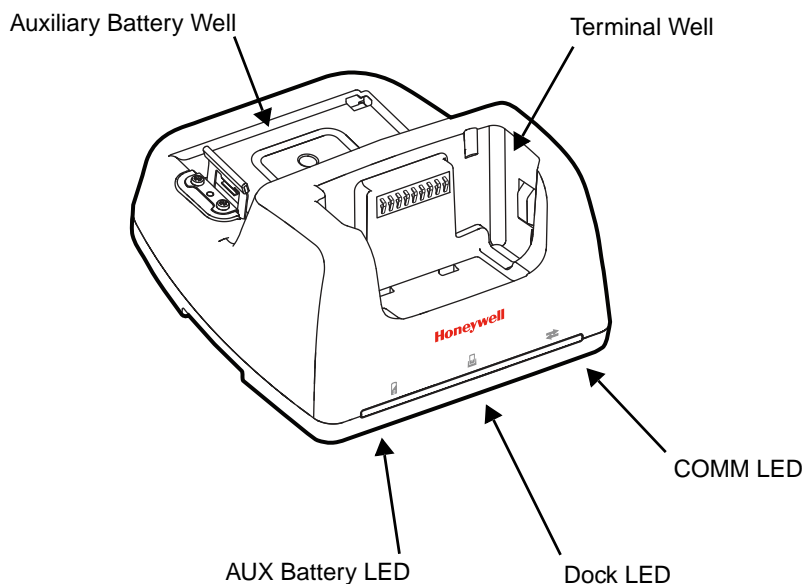
Terminal Well

Place the terminal in this well to communicate with a host device, power the terminal, and charge the installed battery pack. The eBase completely charges the main battery in a Dolphin terminal in 4 hours for the standard battery or 6 hours for the extended battery.

Auxiliary Battery Well

See Auxiliary Battery Well on page 12-4.

AUX Battery LED

Indicates status of the battery charging in the auxiliary battery well; see Back Panel on page 12-4.

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

For information about charging a battery in the auxiliary battery well, see page 12-6.

Dock LED

Indicates if a terminal is docked properly in the base.

This color	means…
Blue	The terminal is properly seated in the base.

COMM LED ⇄

Indicates the status of the connection and data transfer between the Dolphin terminal and the host device.

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

Note: Ethernet activity is indicated by RJ45 integrated LED on the back panel of the base.

Back Panel

Auxiliary Battery Well

Green LED

Yellow LED

RJ45 Ethernet Port

USB Port

DC Power Jack
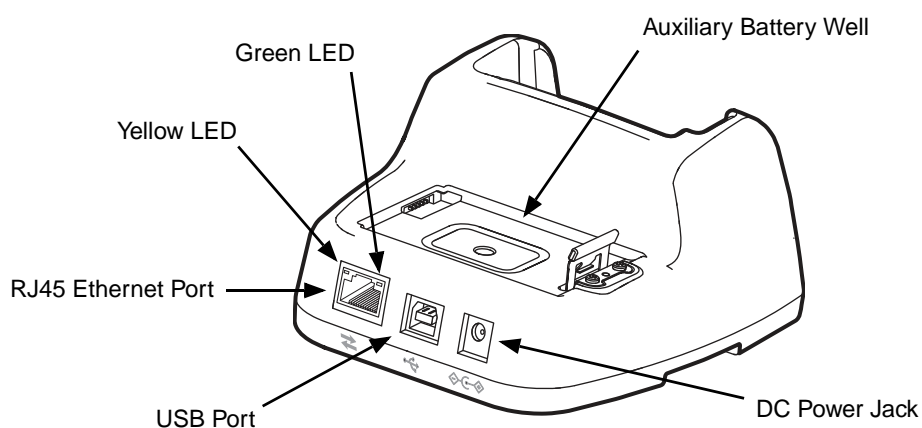
Auxiliary Battery Well

The eBase enables you to charge an additional battery pack independently of the terminal well in 4 hours for the standard battery or 6 hours for the extended battery. This feature ensures that you can always have a fully charged battery for your terminal.

USB Port

This USB port is USB v2.0 Hi-Speed (480 Mbps) compliant. Using a USB cable, you can connect the eBase to a USB compliant device to facilitate communication to and from the terminal. USB communication occurs through Microsoft ActiveSync (v4.5 or higher) or Microsoft Windows Mobile Device Center depending on the host workstation's operating system. When the terminal is seated in the terminal well, it is connected to the peripheral device via the eBase.

Note: ActiveSync on your Dolphin terminal works with Windows Mobile Device Center on host workstations running Windows Vista or Windows 7 and with ActiveSync on host workstations running Windows XP. For detailed information on ActiveSync and Windows Mobile Device Center visit the Microsoft Windows Phone Web site (http://go.microsoft.com/fwlink/?LinkId=147001).

RJ45 Ethernet Port

> Use a standard CAT-5 Ethernet cable; you can connect the ebase to an Ethernet-compliant device to facilitate Ethernet communication to and from the terminal. The RJ45 connector includes integrated LEDs that provide Ethernet communication status and speed information.

Status	Yellow LED	Green LED
No Ethernet Link	Off	Off
10Mbps Ethernet Connection Established	Off	On
100Mbps Ethernet Connection Established	On	On
Data transfer in progress	Connection Speed Dependent (see above)	Flashing

DC Power Jack

> See Power on page 12-5.

Bottom Panel

For details on how to mount the eBase, see Mounting the eBase on page 12-8.
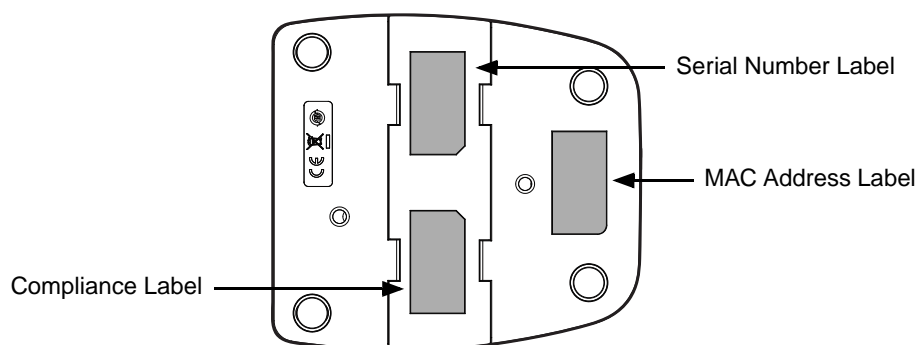
Serial Number Label

MAC Address Label

Compliance Label

Power

The base requires 12 Volts DC input for communications, battery charging, and power output to the terminal; the power adapter included with the base converts the voltage from the AC power source to 12 Volts DC. **Use only a UL listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 3 amps with the device.** The operating temperature range is -10° to 50°C (14° to 122°F). Honeywell recommends that you leave the eBase connected to its power source at all times, so that it is always ready to use.

⚠️ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Connecting Power to the eBase

1. Plug the A/C power cord into the power adapter.

2. Plug the power cable into the power connector on the back of the eBase.

3. Plug the A/C power cord into a grounded power source.
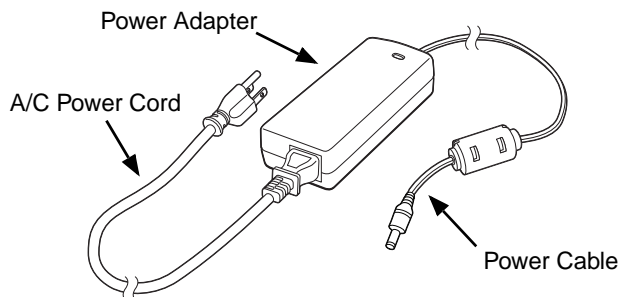
Power Adapter

A/C Power Cord

Power Cable

Charging the Main Battery

The base provides power to the Dolphin terminal and allows the charging of the terminal's battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be stored in the base indefinitely without damage to the terminals, battery packs, or the base. When the terminal is docked, the base completes a full charge in 4 hours for the standard battery or 6 hours for the extended battery.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 6-27) and Battery (page 3-12).
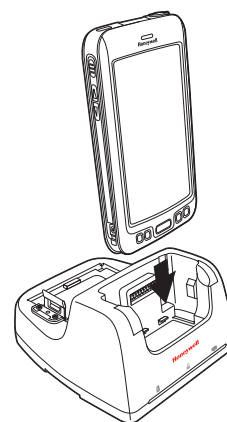

To Power a Terminal and Charge its Main Battery

⚠ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

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

2. Slide the terminal into the terminal well. The Dock LED illuminates blue. Battery charging begins immediately if required by the Dolphin terminal.

Note: When the terminal is docked, the Battery Icon changes from ▮▭ to ▮▭ indicating the terminal is running on external power. Battery charging occurs in the background. When the Dolphin is removed from the base, the battery icon indicates the charge level of the battery, see Icons in the Title Bar on page 2-7. For additional information on how to check the power levels of the battery, while the terminal is docked, see Checking Battery Power on page 3-17.

⚠ *We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Charging a Spare Battery in the Auxiliary Battery Well

The auxiliary battery well located on the back of the base 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 4 hours for the standard battery pack or 6 hours for the extended battery pack; see Auxiliary Battery Well on page 12-4.

1. Insert the battery at an angle.

   Note: Align the battery contacts with the contacts inside the auxiliary battery well.

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

3. Use the AUX Battery LED to monitor the charging progress. The LED lights green when the auxiliary battery has completed charging and is ready for use.
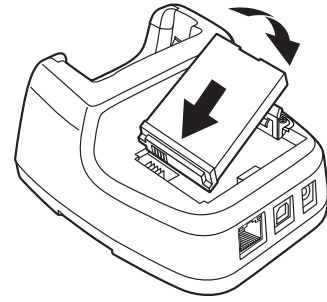
Communication

Establishing Ethernet Communication

Connecting the Dolphin Terminal to the eBase

By default, the Dolphin terminal is configured to obtain IP addresses automatically via DHCP server. This means that in most cases you would simply plug-and-play the unit.

1. Connect power to the eBase, see

2. Plug the CAT-5 Ethernet cable into the RJ45 connector on the back of the eBase.

3. Plug the Ethernet cable into the network.

4. Insert the Dolphin into the terminal well. The Dock LED for the well illuminates blue and the connection icon on the Dolphin's title bar changes from ⚡ to ⚡.

   Note: Instead of using the default for DHCP assigned IP addresses, the Dolphin terminal can use a statically assigned IP address. See standard Microsoft Windows Mobile documentation for how to assign a static IP address to a network adapter. In this case, set a static IP address for the adapter named "SMSC9500 USB2.0 FAST Ethernet Drive".

Displaying the eBase and Terminal IP Address

Once the Dolphin terminal has been successfully connected to the eBase, the terminal uses the eBase IP address. This IP address can be used by any application on the Dolphin terminal.

1. Tap 🏁 **> Power Tools > Network Utilities > IPConfig**.

2. Change the **Adapter** to SMSC95001.

3. On the Input tab, tap the **Display full configuration** button.

4. The Dolphin terminal retrieves and displays the IP configuration for the entire terminal and eBase.

5. Locate the **IpAddress** field in the IP configuration list.

Establishing USB Communication

Dolphin terminals support USB communication out of the box. The eBase also supports USB communications using the USB port located on the back panel of the base. The ebase acts as a USB device by interfacing the USB signals of the Dolphin terminal to the USB of the host workstation. Using a standard USB cable, the USB interface of the eBase allows the Dolphin terminal to communicate with a host workstation.

Requirements

- A base powered by a power cable and power adapter cable
- A standard USB (Type A to B) communication cable
- A work station running Windows 98 Second Edition, Windows Me, Windows 2000, Windows NT (4.0 SP6 or higher), Windows XP, Windows Vista, or Windows 7.
- ActiveSync (v4.5 or above) or Widows Mobile Device Center on the workstation

Setting Up and Connecting the Dolphin Terminal to the eBase

1. Connect power to the eBase, (see Power on page 12-5).

2. Plug the USB communication cable into the USB port on the back of the base.

3. Connect the other end of the USB cable to the host workstation.

4. Insert the Dolphin terminal into the terminal well of the base. The Dock LED illuminates blue.

5. The Dolphin terminal activates and automatically opens ActiveSync to establish a connection.

6. The connection icon in the Dolphin's navigation bar changes from ⇄ to ⇄ it indicate a successful connection. The eBase can now transfer data between the terminal and the host device.

Mounting the eBase

Set the base 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 base. When choosing a mounting location, bear in mind that the location must allow users' easy access to the Auxiliary Battery Well and the back panel of the eBase where the USB port, Ethernet port, and power jack are located.

Optional DIN Rail Mount

A DIN rail (7.5 X 35 mm) may be installed on the bottom of the base to provide the optional security of mounting the base to a flat horizontal surface with hardware.

Additional Hardware

- DIN Rail, Qty. 1
- 3/16 in. dia x 5/8 in. long pan head screw, Qty. 2
- 1/2 in. OD x 7/32 in. ID x 3/64 in. thick washer, Qty. 4
- 3/16 in. dia nut, Qty. 2

Note: The items listed above are for reference only. Final hardware selection is dependent on the material type and thickness of the mounting surface.

Installing the DIN Rail

1. Slide the DIN rail into the slot along the bottom panel of the base.

DIN Rail Slot
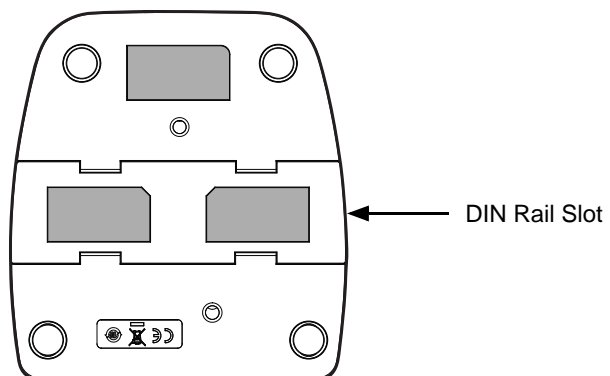
2. Then, using the appropriate nuts and bolts, secure the DIN rail to the desk or flat surface.

13
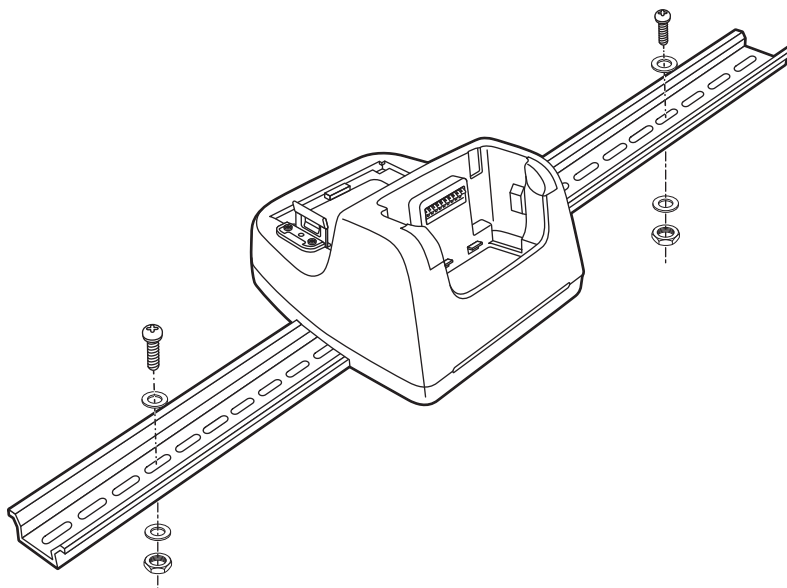
Dolphin 70e Black Mobile Base (Model 70e-MB)

Overview

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

The 70e-MB charger is designed for use with the following Dolphin models and batteries manufactured for Honeywell International Inc:

Dolphin Model	Battery Model No.	Battery Part No.	Battery Specification
Dolphin 70e Black	70e-BTSC	BAT-STANDARD-01 BAT-STANDARD-02	Li-ion 3.7V, 6.179 watt hour
	70e-BTEC	BAT-EXTENDED-01 BAT-EXTENDED-02	Li-ion 3.7V, 12.358 watt hour

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Charging Overview

The base provides power to the intelligent battery charging system in all terminals that senses when a full charge has been achieved and switches to a trickle charge to maintain the full charge. The base completes a full charge of the main battery in 4 hours for the standard battery pack or 6 hours for the extended battery pack.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-15.

⚠ *We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Convenient Storage

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

Dimensions

42.15 mm
[1.66 inches]

109.82 mm
[4.32 inches]

159.98 mm
[6.30 inches]
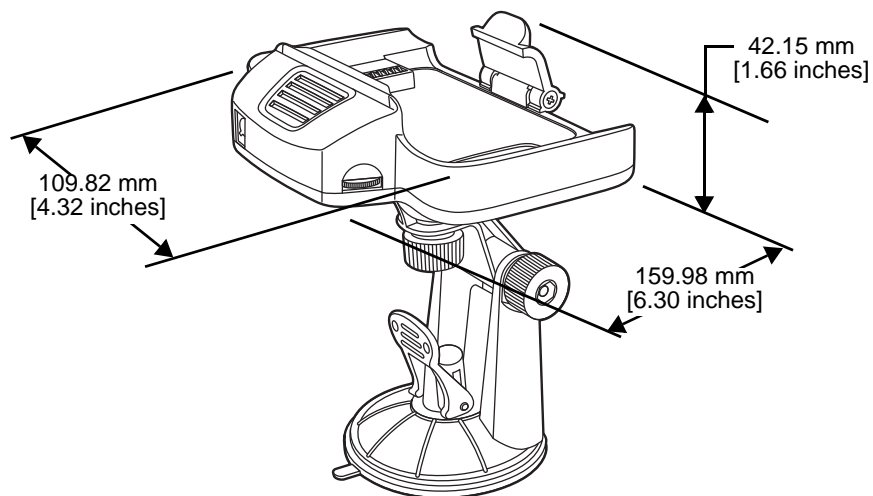
Weight

Mobile Base and adjustable arm weight: 270g [.668 lbs]

Mobile Base Components

Power Adapter

Terminal Charging Well

Spring
Latch

Speaker

Power Jack

Speaker Volume
Control

Mounting Lever

Suction Cup Base

Two point
Adjustable Arm
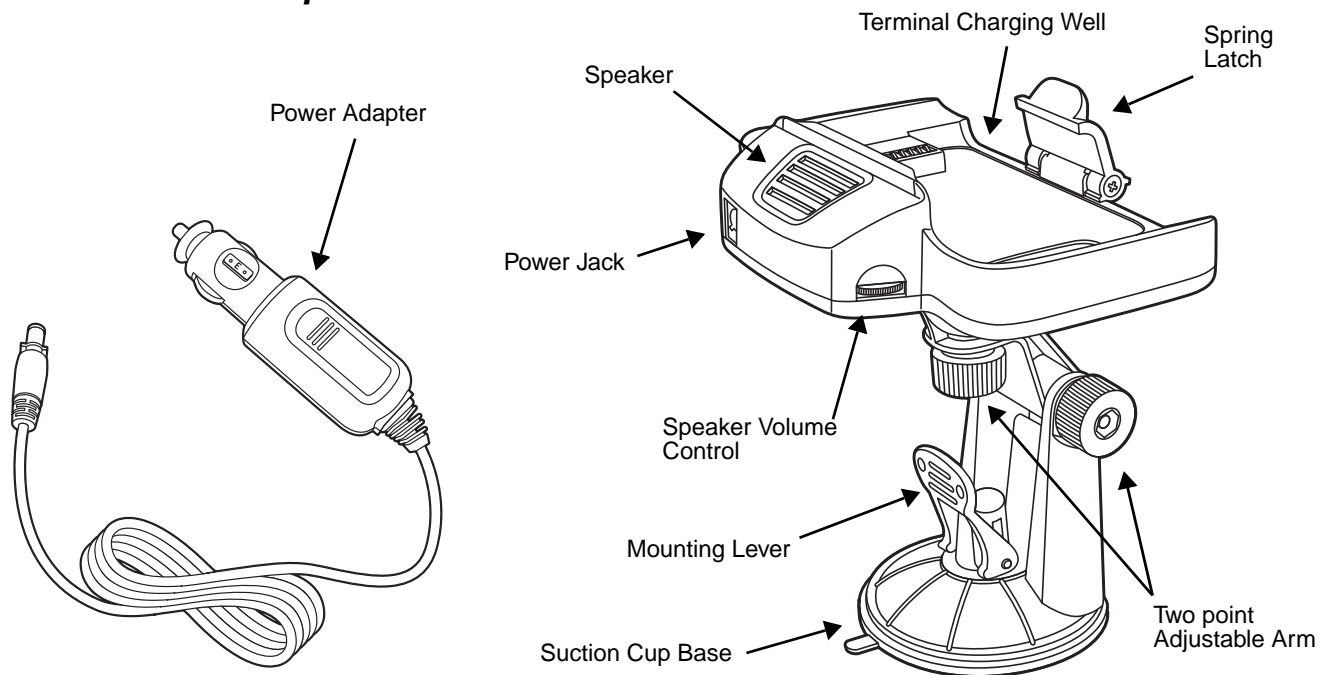
Adjustable Arm with Suction Cup Base for Windshield Mounting

The Mobile Base includes a two point adjustable arm with a suction cup base for fixed mount locations (e.g., a car windshield).

Power Adapter

> The mobile base is provided with a power adapter cable that can be connected to a vehicle cigarette lighter outlet.

> UL listed power supply
> Input: 10V - 30VDC, 0.43A(30V) - 1.28A(10V)
> Output: 4.75V - 5.25VDC, 0 - 2A

> ⚠ *Verify that the power source is always within the specified range and observe correct input voltage polarity. An improper input voltage range or reverse polarity could damage the power conversion circuitry.*

Speaker and Volume Control Dial

> The integrated speaker amplifies the Dolphin terminal's audio signals and the speaker volume is adjusted using the dial located on the side of the base.

Spring Latch

> The spring latch secures the terminal in the Mobile Base charging well.

Terminal Charging Well

> Place the terminal in this well to charge the battery.

Mounting the Mobile Base

Safety Precautions

Honeywell is not responsible for any damages caused to you, your vehicle, or other individuals due to the installation of the Dolphin Mobile mount.

Follow these safety precautions when mounting the mobile base:

⚠ Do not mount the base in a location where it prevents safe operation of the vehicle and/or impedes the vehicle operator's field of view.

⚠ Do not mount the base in a location where the connectors on the bottom panel of the base are not easily accessible. Be sure to leave enough room for unrestricted cable connections.

⚠ The Mobile base is intended for use in an enclosed space protected from the elements. Do not mount the Mobile base on external vehicle surfaces.

⚠ Do not install the Mobile base in an air bag deployment zone. Honeywell assumes no responsibility of liability for injury or death because of car crashes and/or air bag deployment.

Installation

1. Push the suction cup base firmly to the windshield.
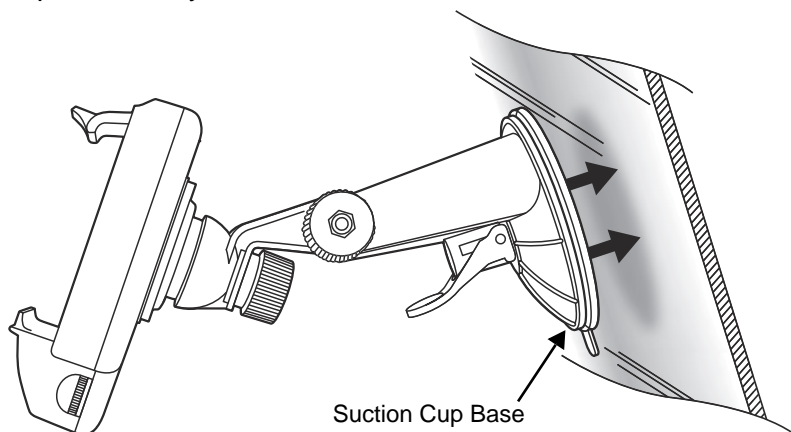
Suction Cup Base

2. Flip the mounting lever down to secure the suction cup.

Mounting Lever
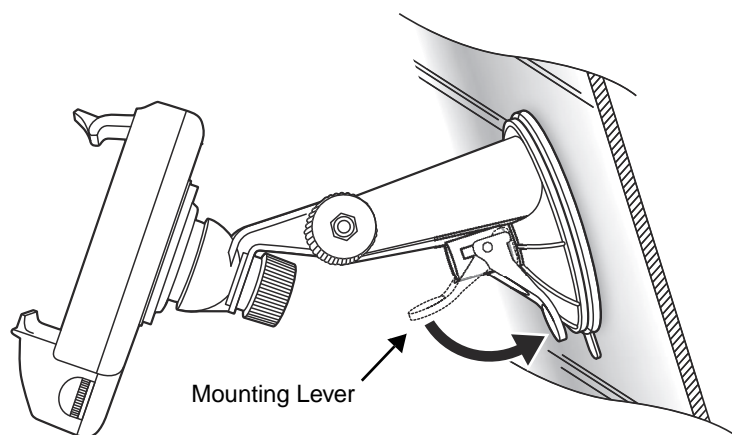
3. To adjust the angle of the bracket arm, twist the thumb screws counterclockwise to loosen the locks. Reposition the angle of the arm, then twist the knobs clockwise to lock the arm into position.

Thumb screws for arm angle adjustments.
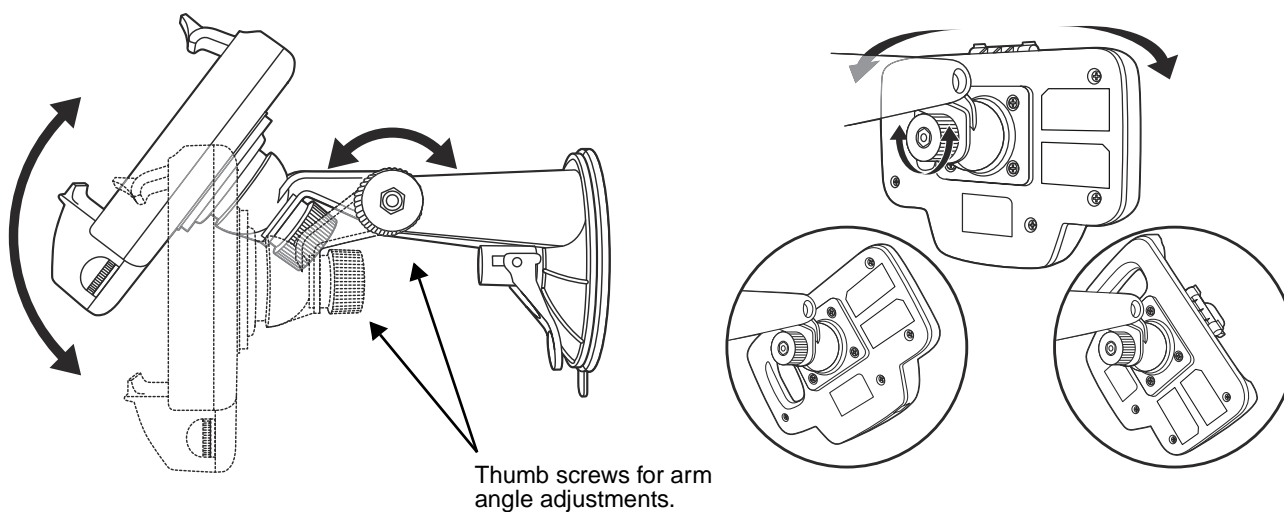
4. Insert the power cable connector into the power jack on the Mobile Base.

5. Twist the cable connector 90° clockwise to engage the cable lock.
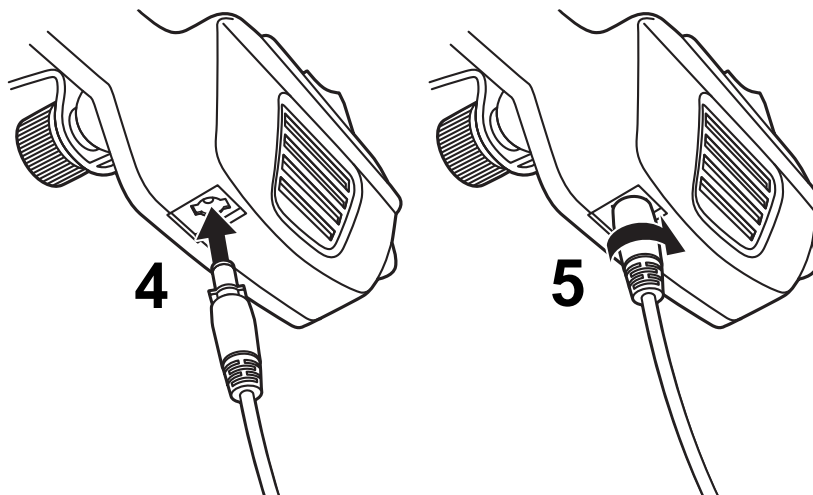
6. Plug the power adapter into the vehicle power outlet (e.g., cigarette lighter outlet)

Charging the Main Battery

The mobile base provides power to the Dolphin and allows charging of the main batteries in the terminal. The main battery charges in 4 hours for the standard battery or 6 hours for the extended battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that terminal may be seated in the base indefinitely without damage to the terminal, battery pack, or the base.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 6-27) and Battery (page 3-12).

To Power a Terminal and Charge its Main Battery

⚠️ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

⚠️ *We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

1. Install the main battery in the terminal; see Install the Battery on page 2-1.

2. Mount the Mobile base and install the power cable; see Mounting the Mobile Base on page 13-3.

3. Pull the spring latch back and insert the Dolphin 70e Black into the terminal well. Charging begins immediately if required by the Dolphin terminal.
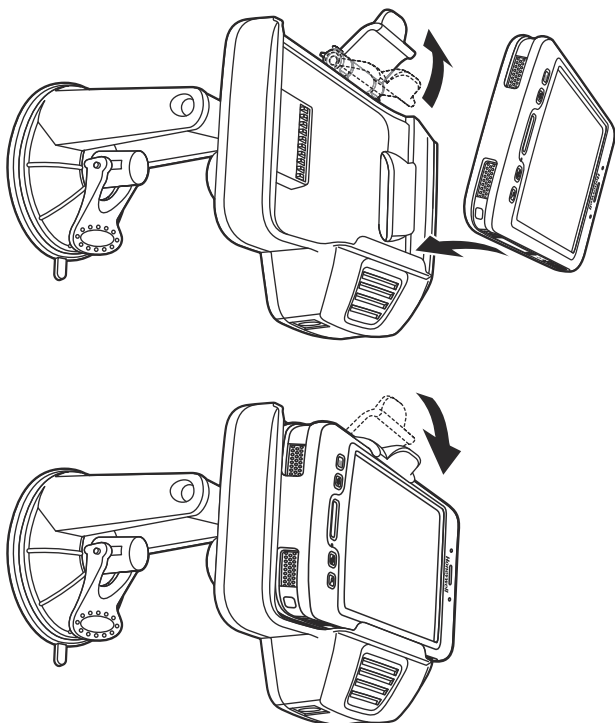
Note: *Align the contacts on the back panel of the terminal with the charging contacts on the Mobile Base.*

Removing the Cable

⚠ *Attempting to remove the cable without disengaging the lock may result in damage to the base and power cable not covered by the warranty.*

1. Twist the cable 90° counterclockwise to disengage the cable lock.

2. Remove the cable from the power jack.

14
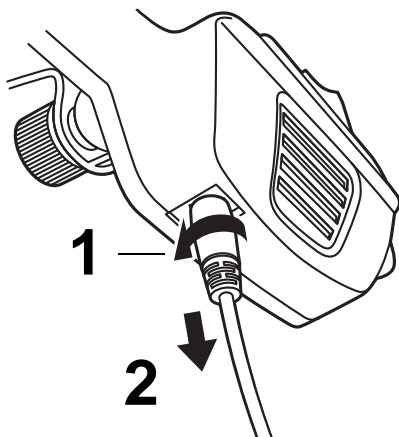
Dolphin 70e Black ChargeBase (Model 70e-CB)

Overview

The Dolphin 70e Black ChargeBase is a 4-slot charging cradle that can power four Dolphin terminals, and charge their main batteries in 4 hours for the standard battery or 6 hours for the extended battery.

The 70e-CB charger is designed for use with the following Dolphin models and batteries manufactured for Honeywell International Inc:

Dolphin Model	Battery Model No.	Battery Part No.	Battery Specification
Dolphin 70e Black	70e-BTSC	BAT-STANDARD-01 BAT-STANDARD-02	Li-ion 3.7V, 6.179 watt hour
	70e-BTEC	BAT-EXTENDED-01 BAT-EXTENDED-02	Li-ion 3.7V, 12.358 watt hour

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Unpacking the ChargeBase

Open the shipping box and inspect the package to see that the following standard items are included:

• One Dolphin ChargeBase, model 70e-CB
• One power supply (see Power on page 14-4)
• One power cord

These items are needed to operate the ChargeBase. If any items are missing or anything appears to be damaged, contact your Customer Account Representative. Keep the original packaging in case you need to return the ChargeBase for service or to store the ChargeBase while not in use.

Charging Overview

The base supplies power to the intelligent battery charging system in all Dolphin terminals, which 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 the battery type. The process monitors changes in temperature, current, and voltage. The main battery of each terminal charges in 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-15.

⚠ *We recommend use of Honeywell Li-Ion battery pack. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Convenient Storage

The intelligent battery charging system makes this base a safe and convenient storage receptacle for your Dolphin terminal.

Capacity

The base holds up to four Dolphin terminals. Each charging well charges each terminal independently of the other wells.

Dimensions

59.75 mm
[2.35 inches]

427.11 mm
[16.80 inches]

98.8 mm
[3.89 inches]
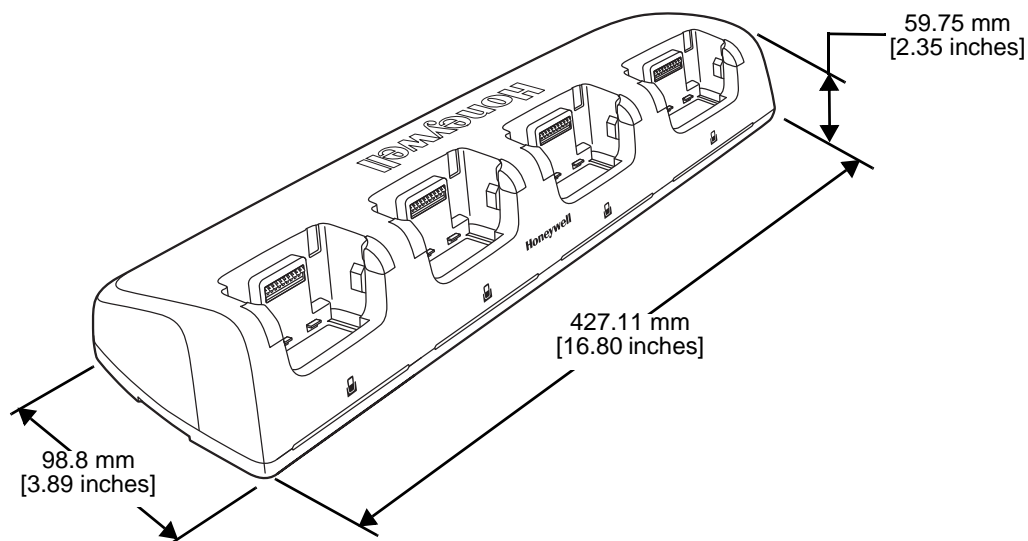
Weight

ChargeBase weight: 674g [1.49 lbs.]

Note: Weight excludes packaging, cables and power supply.

Parts and Functions

Front Panel

Terminal Wells (Qty. 4)

Dock LED (Qty. 4)
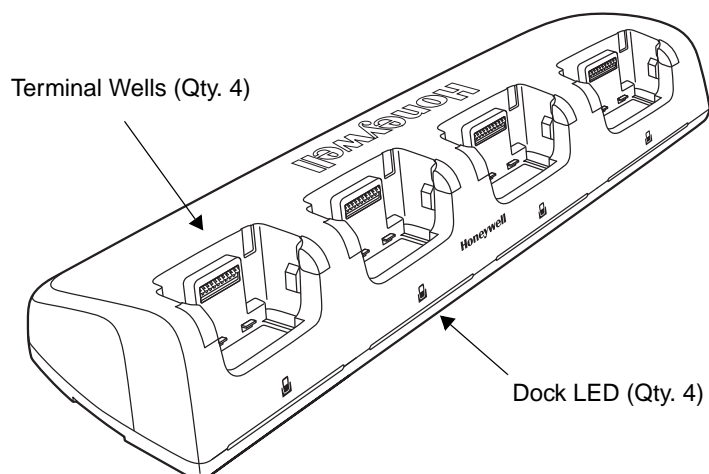
Terminal Wells

> The base contains four terminal wells, which offer independent battery charging for each docked terminal.

Dock LEDs

> The Dock LED indicates if the terminal is properly seated in the charging well. Each well has a dedicated Dock LED, which illuminates blue when a terminal is properly seated in the charging well.

Back Panel

DC Power Jack

DC Power Jack

> This connector receives input from the power adapter. Plug the power connector cable from the power adapter into this connector; see Power on page 14-4.

Bottom Panel

For details on how to mount the base, see
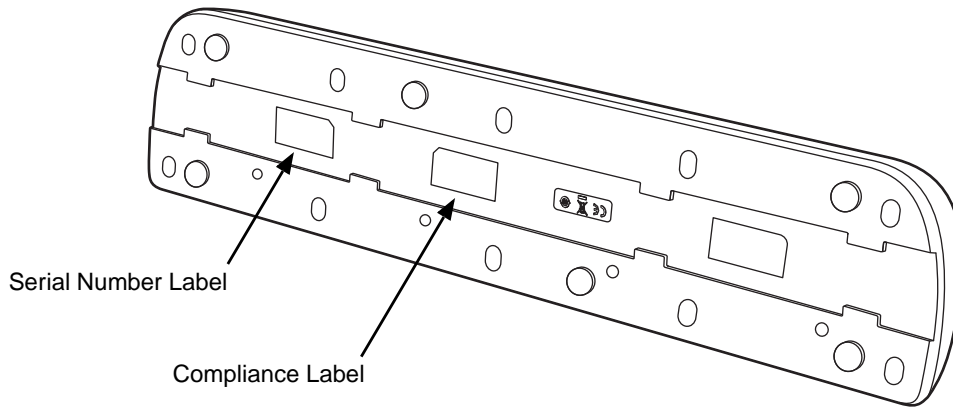
Serial Number Label

Compliance Label

Power

The terminal requires 12 Volts DC input for battery charging and power output to the terminal. The power adapter included with the base, converts the voltage from the AC power source to 12 volts DC. **Use only a UL Listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 5 amps with the device.** The operating temperature range is -10° to 50°C (14° to 122°F).

Honeywell recommends that you leave the ChargeBase connected to its power source at all times, so that it is always ready to use.

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Connecting Power to the ChargeBase
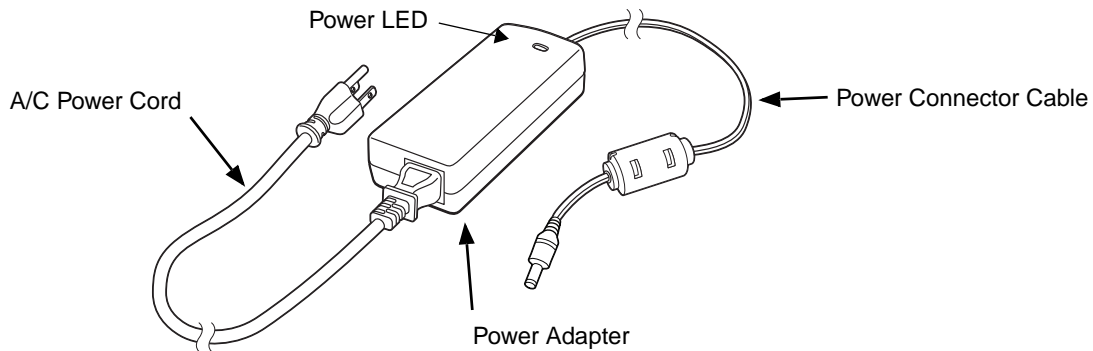
Power LED

A/C Power Cord

Power Connector Cable

Power Adapter

1. Plug the A/C power cord into the power adapter.

2. Plug the power cable into the power connector on the back of the base.

3. Plug the A/C power cord into a grounded power source.

4. The base is ready to begin charging terminals.

Charging the Main Battery

The base provides power to the Dolphin terminals and allows charging of the batteries in the terminals. The battery of each terminal charges in 4 hours for the standard battery or 6 hours for the extended battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be seated in the base indefinitely without damage to the terminals, batteries, or the base.

For more information about Honeywell battery packs and how to check battery power level in your terminal, refer to Power (page 6-27) and Battery (page 3-12).

To Power a Terminal and Charge its Main Battery

⚠️ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

1. Install the battery in the terminal, see page 2-1.

2. Slide the Dolphin terminal into one of the four terminal wells. The Dock LED for the well illuminates blue. Charging begins immediately if required by the Dolphin terminal.

   Note: When the terminal is docked, the Battery Icon changes from ▭ to ▭ indicating the terminal is running on external power. Battery charging occurs in the background. When the Dolphin is removed from the base, the battery icon indicates the charge level of the battery, see Icons in the Title Bar on page 2-7. For additional information on how to check the power levels of the battery, while the terminal is docked, see Checking Battery Power on page 3-17.

⚠️ *We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Mounting the ChargeBase

Set the base 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 base. When choosing a location, keep in mind that the mounting location must allow users to see the LEDs and provide easy access to the terminal wells and the power jack.

Bottom Panel

DIN Rail Slot

Rubber Feet, Qty. 6

Optional DIN Rail Mount

A DIN rail (7.5 X 35 mm) may be installed on the bottom of the base to provide the optional security of mounting the base to a flat horizontal surface with hardware.

Additional Hardware

- DIN Rail, Qty. 1
- 3/16 in. dia x 5/8 in. long pan head screw, Qty. 2
- 1/2 in. OD x 7/32 in. ID x 3/64 in. thick washer, Qty. 4
- 3/16 in. dia nut, Qty. 2

Note: The items listed above are for reference only. Final hardware selection is dependent on the material type and thickness of the mounting surface.

Installing the DIN Rail

1. Slide the DIN Rail into the DIN Rail slot on the bottom panel of the base.

DIN Rail

2. Turn the base and DIN Rail right side up.

3. Use the appropriate hardware to secure the DIN Rail to a stable, flat horizontal surface.

15

Dolphin 70e Black Net Base (Model 70e-NB)

Overview

The Net Base enables up to four Dolphin 70e mobile computers to communicate with a host device over an Ethernet network. In addition, the Net Base provides a second RJ45 Ethernet port for connection to an additional device such as a printer, workstation, eBase, or another Net Base.

The 70e-NB charger is designed for use with the following Dolphin models and batteries manufactured for Honeywell International Inc:

Dolphin Model	Battery Model No.	Battery Part No.	Battery Specification
Dolphin 70e Black	70e-BTSC	BAT-STANDARD-01 BAT-STANDARD-02	Li-ion 3.7V, 6.179 watt hour
	70e-BTEC	BAT-EXTENDED-01 BAT-EXTENDED-02	Li-ion 3.7V, 12.358 watt hour

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Unpacking the Net Base

Open the shipping box and inspect the package to see that the following standard items are included:

- One Dolphin Net Base Ethernet cradle, model 70e-NB
- One power supply (see Power on page 15-5)
- One power cord

These items are needed to set up and operate the Net Base. If any items are missing or anything appears to be damaged, contact your Customer Account Representative. Keep the original packaging in case you need to return the Net Base for service or to store the Net Base while not in use.

Optional Equipment

A standard CAT-5 Ethernet network cable is required when using the Net Base for communication between the terminal(s) and a host device over an Ethernet network.

Charging Overview

The base supplies power to the intelligent battery charging system in all Dolphin terminals, which 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 the battery type. The process monitors changes in temperature, current, and voltage. The main battery of each terminal charges in 4 hours for the standard battery or 6 hours for the extended battery.

Note: Before attempting to use, charge, or replace the battery in the terminal, you should read the Guidelines for Battery Pack Use and Disposal on page 3-15.
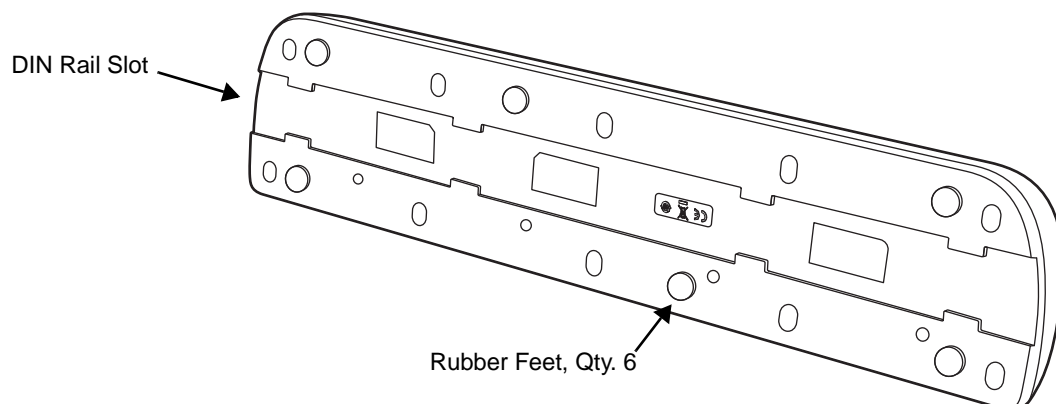
⚠ *We recommend use of Honeywell Li-ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Convenient Storage

Intelligent battery charging system makes this base a safe and convenient storage receptacle for your Dolphin terminal.

Capacity

The base holds up to four Dolphin terminals. Each charging well charges each terminal independently of the other wells.

Weight

Net Base weight: 694g [1.53 lbs.]

Weight excludes packaging, cables and power supply.

Dimensions
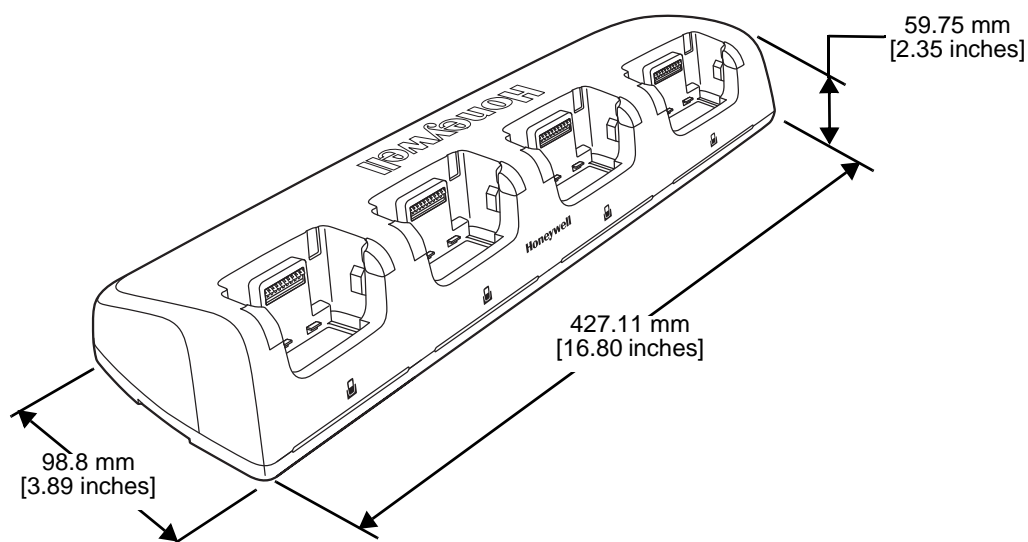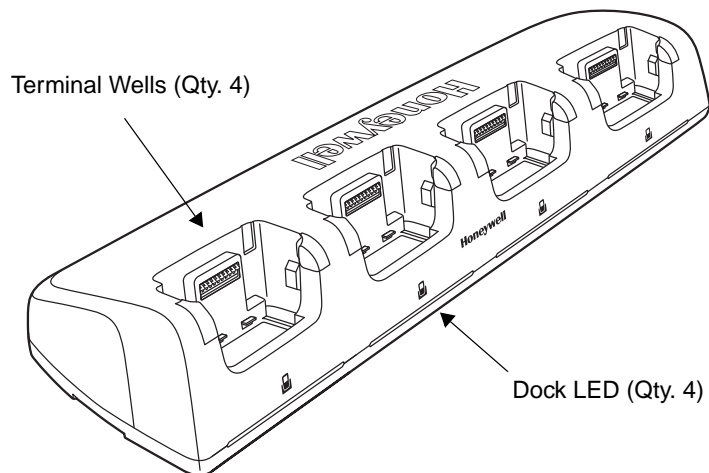
59.75 mm
[2.35 inches]

427.11 mm
[16.80 inches]

98.8 mm
[3.89 inches]

Parts and Functions

Front Panel

Terminal Wells (Qty. 4)

Dock LED (Qty. 4)

Terminal Wells

The base contains four terminal wells, which offer independent battery charging for each docked terminal.

Dock LEDs 📱

The Dock LED indicates if the terminal is properly seated in the charging well. Each well has a dedicated Dock LED, which illuminates blue when a terminal is properly seated in the charging well.

Back Panel

Yellow LED (Qty. 1 Per Port)

Green LED (Qty. 1 Per Port)

Port 1: 10/100Mbps RJ45 Ethernet Port

Port 2: 10/100Mbps RJ45 Ethernet Port

DC Power Jack

RJ45 Ethernet Ports

The Net Base contains two RJ45 Ethernet ports. You can connect the Net Base to an Ethernet-compliant device to facilitate Ethernet communication to and from the terminal by plugging a standard CAT-5 Ethernet cable into one of the two Ethernet ports provided. The second RJ45 Ethernet port can be used for connection to an additional device such as a printer, workstation, eBase, or another Net Base.
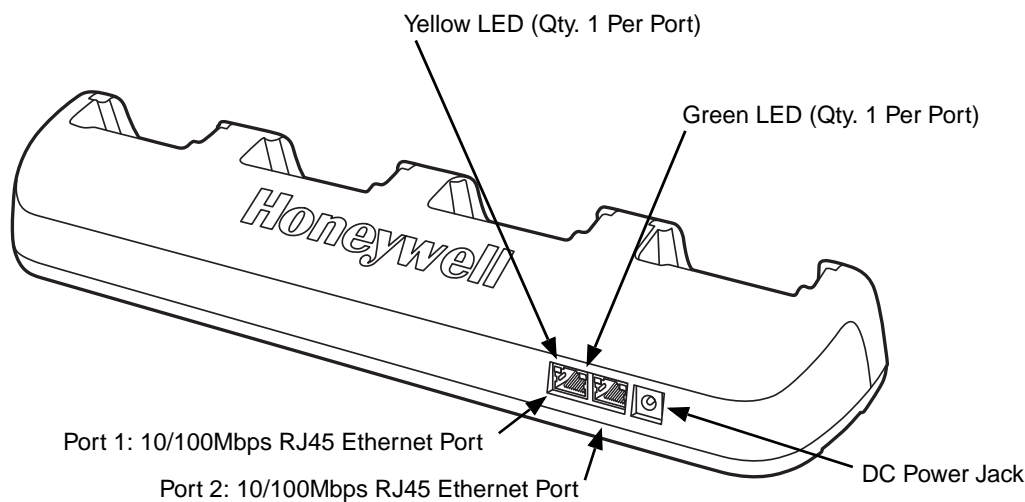
Note: The Net Base does not use a Spanning Tree Protocol (STP). When both RJ45 Ethernet ports are used, do not connect both Net Base interfaces to the same layer 2 LAN.

Each Ethernet port has a dedicated green and yellow status LED.

Status	Yellow LED	Green LED
No Ethernet Link	Off	Off
10Mbps Ethernet Connection Established	Off	On
100Mbps Ethernet Connection Established	On	On
Data transfer in progress	Connection Speed Dependent (see above)	Flashing

Note: The terminal and Ethernet link must be set up properly to allow the terminal to communicate to other devices and/or the Internet. For more information, see Establishing Ethernet Communication on page 15-6.
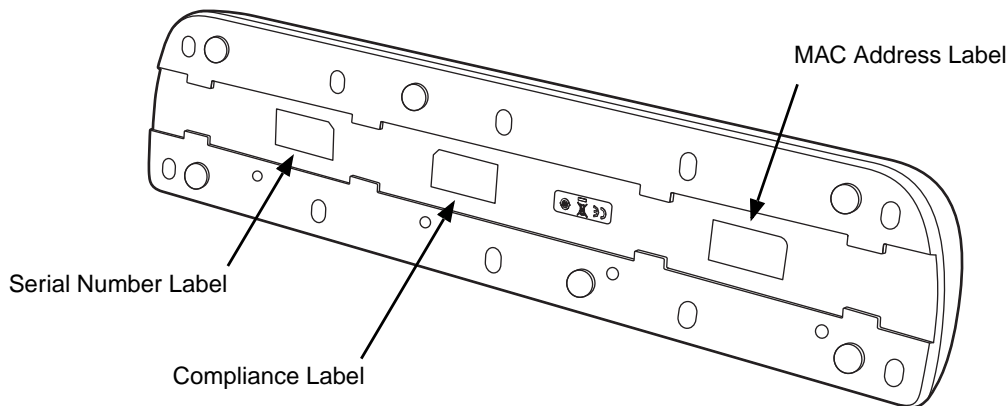
DC Power Jack

This connector receives input from the power adapter. Plug the power connector cable from the power adapter into this connector, see Power.

Bottom Panel

For details on how to mount the base, see Mounting the Net Base on page 15-7.

MAC Address Label

Serial Number Label

Compliance Label

Power

The terminal requires 12 Volts DC input for battery charging and power output to the terminal. The power adapter included with the base, converts the voltage from the AC power source to 12 volts DC. **Use only a UL Listed power supply, which has been qualified by Honeywell with output rated at 12VDC and 5 amps with the device.** The operating temperature range is -10° to 50°C (14° to 122°F).
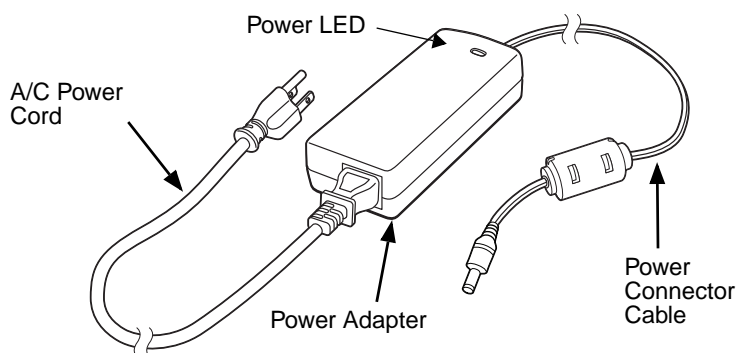
Honeywell recommends that you leave the Net Base connected to its power source at all times, so that it is always ready to use.

⚠ *We recommend use of Honeywell peripherals, power cables, and power adapters. Use of any non-Honeywell peripherals, cables, or power adapters may cause damage not covered by the warranty.*

Connecting Power to the Net Base

1. Plug the A/C power cord into the power adapter.

2. Plug the power cable into the power connector on the back of the base.

3. Plug the A/C power cord into a grounded power source.

4. The base is ready to begin charging terminals.

Power LED

A/C Power Cord

Power Adapter

Power Connector Cable

Charging the Main Battery

The base provides power to the Dolphin terminals and allows charging of the batteries in the terminals. The battery of each terminal charges in 4 hours for the standard battery or 6 hours for the extended battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be stored in the base indefinitely without damage to the terminals, battery packs, or the base.

For more information about Honeywell battery packs and how to check battery power levels in your terminal, refer to Power (page 6-27) and Battery (page 3-12).

To Power a Terminal and Charge the Main Battery

⚠️ *Ensure all components are dry prior to mating terminals/batteries with peripheral devices. Mating wet components may cause damage not covered by the warranty.*

1. Install the battery, see page 2-1.
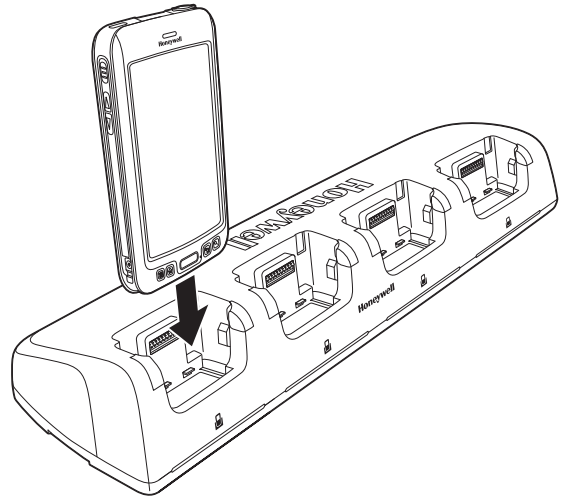
2. Slide the Dolphin terminal into one of the four terminal wells. The Dock LED for the well illuminates blue. Charging begins immediately if required by the Dolphin terminal.

   Note: When the terminal is docked, the Battery Icon changes from ▯ to ▣ indicating the terminal is running on external power. Battery charging occurs in the background. When the Dolphin is removed from the base, the battery icon indicates the charge level of the battery, see Icons in the Title Bar on page 2-7. For additional information on how to check the power levels of the battery, while the terminal is docked, see Checking Battery Power on page 3-17.

⚠️ *We recommend use of Honeywell Li-Ion battery packs. Use of any non-Honeywell battery may result in damage not covered by the warranty.*

Communication

Establishing Ethernet Communication

Connecting the Dolphin Terminal to the Net Base

By default, the Dolphin terminal is configured to obtain IP addresses automatically via DHCP server. This means that in most cases you would simply plug-and-play the unit.

1. Connect power to the Net Base, see Power on page 15-5..

2. Plug the CAT-5 Ethernet cable into the one of the RJ45 connectors on the back of the Net Base.

3. Plug the Ethernet cable into the network.

4. Insert the Dolphin into the terminal well. The Dock LED for the well illuminates blue and the connection icon on the Dolphin's title bar changes from ⇄ to ⇄.

By default, the DHCP server assigns a unique IP address to each of the Dolphin terminals docked in the Net Base. This IP address can be used by any application on the Dolphin terminal.

Note: Instead of using the default for DHCP assigned IP addresses, the Dolphin terminal can use a statically assigned IP address. See standard Microsoft Windows Mobile documentation for how to assign a static IP address to a network adapter. In this case, set a static IP address for the adapter named "SMSC9500 USB2.0 FAST Ethernet Drive".

Displaying the Net Base Terminal Well and Dolphin IP Address

Once the Dolphin terminal establishes communication, it uses the unique IP address assigned to the terminal well it is docked in on the Net Base. If four Dolphin terminals are successfully connected, then four different IP addresses are assigned to the adapter associated with the Dolphin terminal.

1. Tap ⊞ > **Power Tools** > **Network Utilities** > **IPConfig**.

2. Change the **Adapter** to SMSC95001.

3. On the Input tab, tap the **Display full configuration** button.
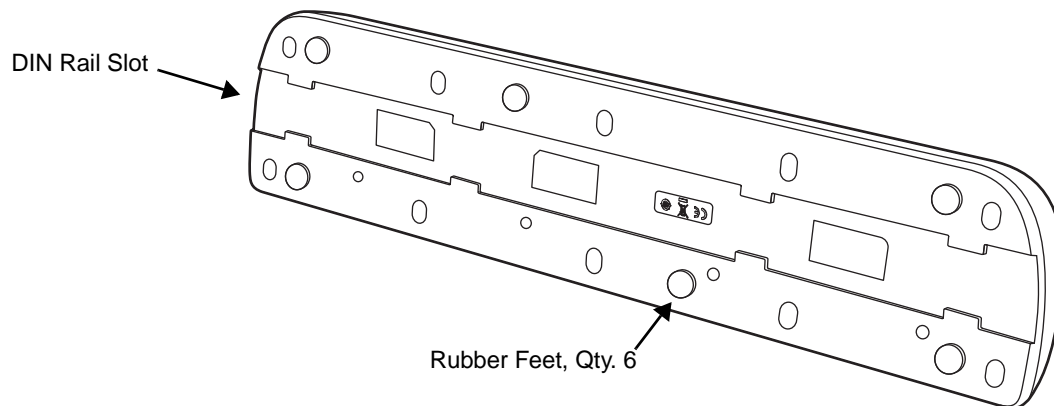
4. The Dolphin terminal retrieves and displays the IP configuration for the entire Dolphin terminal and the Net Base terminal well where the Dolphin is docked.

5. Locate the **IpAddress** field in the IP configuration list.

Mounting the Net Base

Set the base 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 base. When choosing a location, keep in mind that the mounting location must allow users to see the LEDs and provide easy access to the terminal wells, the Ethernet ports, and the power jack.

Bottom Panel

DIN Rail Slot

Rubber Feet, Qty. 6

Optional DIN Rail Mount

A DIN rail (7.5 X 35 mm) may be installed on the bottom of the base to provide the optional security of mounting the base to a flat horizontal surface with hardware.

Additional Hardware

- DIN Rail, Qty. 1
- 3/16 in. dia x 5/8 in. long pan head screw, Qty. 2
- 1/2 in. OD x 7/32 in. ID x 3/64 in. thick washer, Qty. 4
- 3/16 in. dia nut, Qty. 2

Note: The items listed above are for reference only. Final hardware selection is dependent on the material type and thickness of the mounting surface.

Installing the DIN Rail

1. Slide the DIN Rail into the DIN Rail slot on the bottom panel of the base.

DIN Rail

2. Turn the base and DIN Rail right side up.

3. Use the appropriate hardware to secure the DIN Rail to a stable, flat horizontal surface.

Customer Support

Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world. To obtain warranty or non-warranty service, please visit www.honeywellaidc.com, and select **Support > Contact Service and Repair** to see your region's instructions on how to obtain a Return Material Authorization number (RMA #). You should do this prior to returning the product.

For ongoing and future product quality improvement initiatives, the 70e comes equipped with an embedded device lifetime counter function. Honeywell may use the lifetime counter data for future statistical reliability analysis as well as ongoing quality, repair and service purposes.

Technical Assistance

If you need assistance installing or troubleshooting your device, please contact us by using one of the methods below:

Knowledge Base: www.hsmknowledgebase.com

Our Knowledge Base provides thousands of immediate solutions. If the Knowledge Base cannot help, our Technical Support Portal (see below) provides an easy way to report your problem or ask your question.

Technical Support Portal: www.hsmsupportportal.com

The Technical Support Portal not only allows you to report your problem, but it also provides immediate solutions to your technical issues by searching our Knowledge Base. With the Portal, you can submit and track your questions online and send and receive attachments.

Web form: www.hsmcontactsupport.com

You can contact our technical support team directly by filling out our online support form. Enter your contact details and the description of the question/problem.

Telephone: www.honeywellaidc.com/locations

For our latest contact information, please check our website at the link above.

Warranty Disclaimer: Proper Use of a Touch Screen Mobile Device

If your mobile device has a touch screen display, please note that a touch screen responds best to a light touch from the pad of your finger or a Honeywell approved stylus. Using excessive force or a metallic object when pressing on the touch-screen may cause damage to the tempered glass surface and may not be covered by the product's warranty.

Limited Warranty

Honeywell International Inc. ("HII") warrants its products and optional accessories to be free from defects in materials and workmanship and to conform to HII's published specifications applicable to the products purchased at the time of shipment. This warranty does not cover any HII 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 connec-

tions, (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 HII or its authorized representatives.

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

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, OR NON-INFRINGEMENT.

HII'S RESPONSIBILITY AND PURCHASER'S EXCLUSIVE REMEDY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT WITH NEW OR REFURBISHED PARTS. IN NO EVENT SHALL HII BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, AND, IN NO EVENT, SHALL ANY LIABILITY OF HII 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 HII FOR THE PRODUCT. THESE LIMITATIONS ON LIABILITY SHALL REMAIN IN FULL FORCE AND EFFECT EVEN WHEN HII 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 CONSE-QUENTIAL 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. Use of any peripherals not provided by the manufacturer may result in damage not covered by this warranty. This includes but is not limited to: cables, power supplies, cradles, and docking stations. HII extends these warranties only to the first end-users of the products. These warranties are non-transferable.

The limited duration of the warranty for the Dolphin 70e Black is as follows:

• The duration of the limited warranty for terminals with an integrated imager is one year.
• The duration of the limited warranty for touch screens is one year.
• The duration of the limited warranty for the Dolphin 70e Black HomeBase, Dolphin 70e Black eBase, Dolphin 70e Black Net Base, Dolphin 70e Black Mobile Base, Dolphin 70e Black ChargeBase, and Common QuadCharger is one year.
• The duration of the limited warranty for batteries is one year.
  Use of any battery from a source other than Honeywell may result in damage not covered by the warranty. Batteries returned to Honeywell International Inc. in a reduced state may or not be replaced under this warranty. Battery life will be greatly increased when following the battery instructions in this user's guide.

How to Extend Your Warranty

Honeywell International Inc. 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 Sales Representative, Customer Account Representative, or Product Service Marketing Manager from Honeywell International Inc., or your Authorized Reseller.

Honeywell Scanning & Mobility

9680 Old Bailes Road
Fort Mill, SC 29707
www.honeywellaidc.com