

Dolphin 70e Wearable Solution

with Windows Embedded Handheld 6.5

User's Guide

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Contact Customer Support

To search our knowledge base for a solution or to log in to the Technical Support portal and report a problem, go to www.hsmcontactsupport.com.

For our latest contact information, see www.honeywellaidc.com/locations.

Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world. To find your service center, go to www.honeywellaidc.com and select **Support**. Contact your service center to obtain a Return Material Authorization number (RMA #) before you return the product.

To obtain warranty or non-warranty service, return your product to Honeywell (postage paid) with a copy of the dated purchase record. Limited Warranty

Limited Warranty

For warranty information, go to www.honeywellaidc.com and click **Resources > Warranty**.

Send Feedback

Your feedback is crucial to the continual improvement of our documentation. To provide feedback about this manual, contact the Honeywell Technical Communications department at ACSHSMTechnicalCommunications@honeywell.com.



Getting Started

Overview

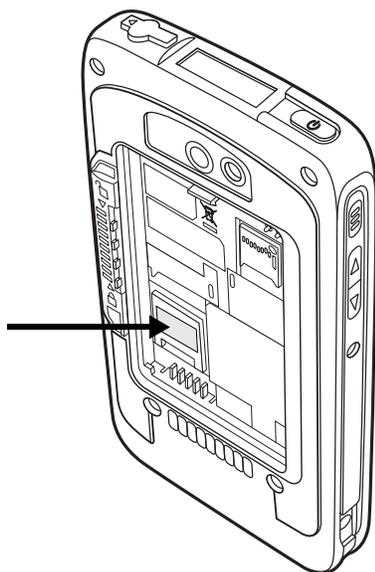
The Honeywell Wearable Solution consists of a Dolphin 70e Black mobile computer with Windows® Embedded Handheld 6.5 and a wearable sled. The wearable sled is available in one of the following configurations:

- Arm Mount Sled ([page 2-1](#))
- Belt Mount Sled ([page 2-4](#))

The wearable version of the terminal is available in either standard or extended battery versions. The Dolphin 70e Wearable Solution is IP 54 rated.

The wearable version of the terminal can be identified as follows:

- The **Part Number** ends in *XEW* (extended battery) or *SEW* (standard battery). To view the Part Number, select **Power Tools** > **SysInfo** and scroll down to the **System Info** section.
- A label is affixed to the SIM card holder to identify the wearable version. With the back cover open and the battery removed, look for a label as shown to the right to identify the wearable version of the Dolphin 70e Black



What You Need

There are several use cases for the Honeywell Wearable Solution. The examples below indicate the typical items used in sample use cases. The Dolphin 70e Black terminal and accessories may be packaged separately from the other wearable accessories.

Belt Mount with Voice

- Wearable version of Dolphin 70e Black
- Belt mount sled
- Belt mount clip
- Headset adapter cable
- Headset

Arm Mount with Tethered Ring Scanner

- Wearable version of Dolphin 70e Black
- Arm mount sled
- Armband
- Tethered Ring Scanner

Arm Mount with Voice and Tethered Ring Scanner

- Wearable version of Dolphin 70e Black
- Arm mount sled
- Armband
- Audio end cap (to replace standard end cap)
- Headset adapter cable
- Headset
- Tethered Ring Scanner

About this Guide

This User's Guide provides assembling and mounting instructions as well as information about terminal setup and configuration as a wearable solution. Daily use instructions are included. This document describes only those features of the Dolphin 70e unique to the Wearable Solution.

Additional Documents

This guide is intended to supplement the following documents available at www.honeywellaidc.com:

- *Dolphin 70e Black with Windows® Embedded Handheld 6.5 User's Guide*
- *Dolphin Power Tools 8.x User's Guide for Mobile Devices with Windows® Embedded Handheld*

Before You Begin

Here is a list of things you should check before you begin.

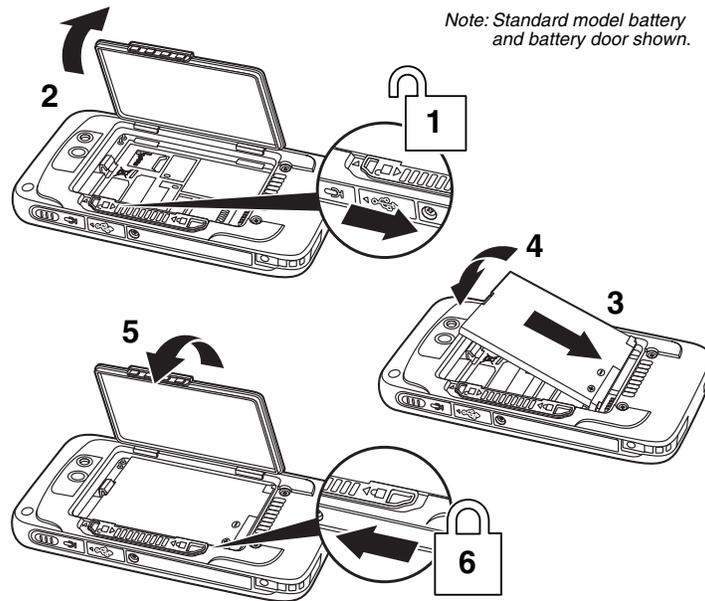
Battery

The Dolphin 70e Black wearable model is designed for use with battery part numbers BAT-STANDARD-02 (Li-ion 3.7 V, 6.179 watt hour) and BAT-EXTENDED-02 (Li-ion 3.7 V, 12.358 watt hour) manufactured for Honeywell International Inc.



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

Install the Battery



Charge the Battery

For best results, use a freshly charged battery for each shift. For information on charging the terminal and the charge bases that are available, see the User's Guide for your terminal at www.honeywellaidc.com.



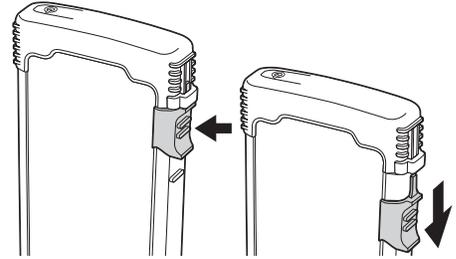
Installing and Mounting

Arm Mount Applications

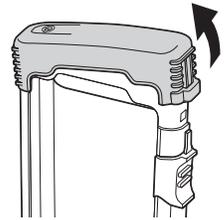
This section describes how to install the mount the arm mount configuration.

Install the Terminal in the Arm Mount Sled

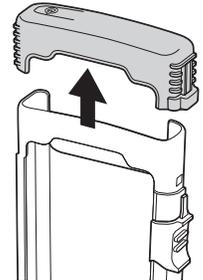
1. If the end cap is installed on the sled, slide the lock down to release the end cap.



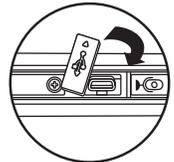
2. Push up on the right side (the side with the lock) of end cap. Do not attempt to remove the end cap without sliding the lock first!



3. Pull the end cap off the sled.

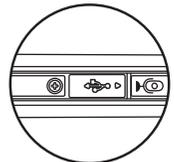


4. Make sure the USB door is closed. Rotate the door on the right side of the Dolphin 70e Black to close.

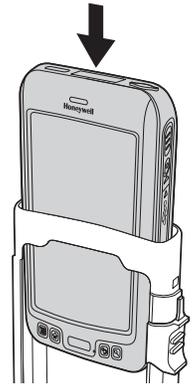


5. Press until the door is flush with the side of the terminal.

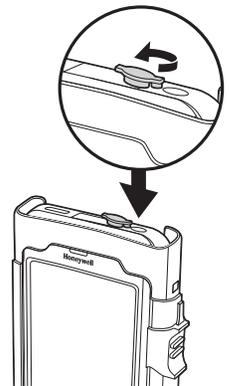
Note: If the door is not flush, it may be difficult to remove the terminal from the sled.



6. Slide the Dolphin 70e Black into the sled.

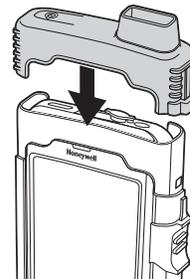


7. If using the audio end cap, make sure audio jack door is open. Pull the rubber door out and rotate the door 180° as shown to prevent damage.

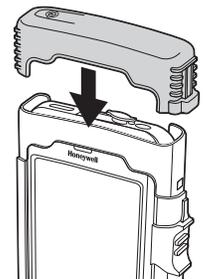


8. If using the audio end cap, make sure the audio cable is not installed in the end cap.

9. Slide the end cap straight onto the sled until it clicks in place.

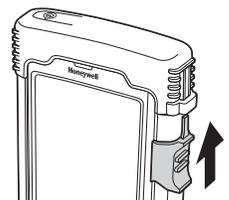


Audio End Cap



Standard End Cap

10. Slide the lock closed to secure the end cap.

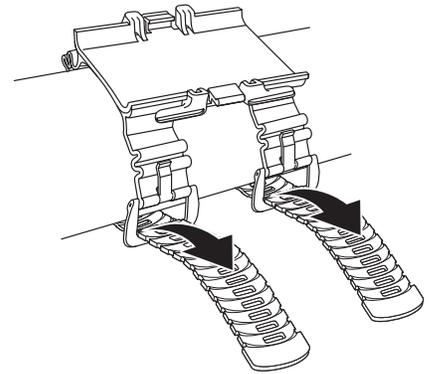


Mount the Arm Band and Attach the Terminal

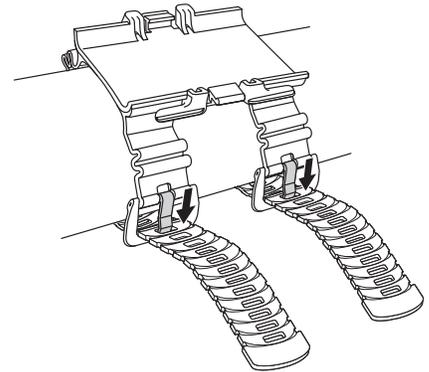
It is recommended that each user have their own arm band for hygiene reasons. The arm band can be washed between uses. Be sure to remove the sled from the arm band before washing the arm band.

Note: The illustrations in this procedure assume the sled has not yet been mounted to the arm band. However the sled can be mounted to the arm band before the user puts the arm band on.

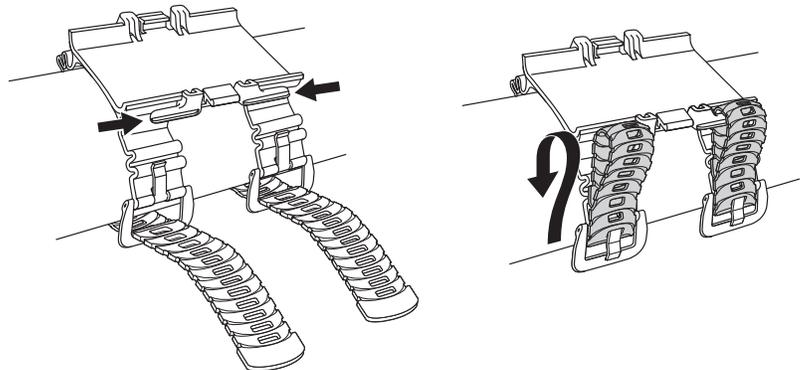
1. If the arm band straps are not fed through the buckles, feed them through to form a loop before placing the arm band on the arm. For ease of installation, the straps should be kept looped through the buckles.
2. Place and balance the arm band assembly on the top of the desired arm with the buckles toward the outside of the arm.
3. Using the other hand, pull each strap end straight away from the arm until the arm band is comfortably secured.



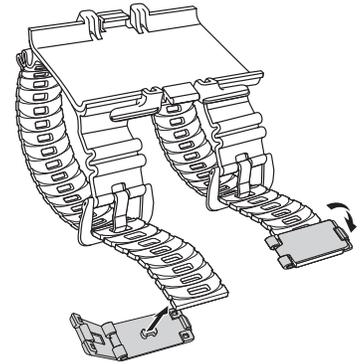
4. Ensure the latch on each buckle is through a hole in the strap.



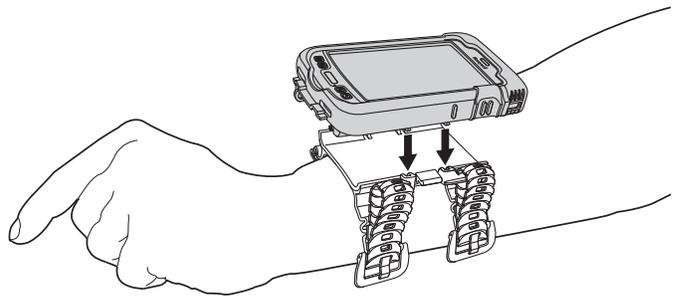
1. If there is excess strap length:
 - Loop the excess strap behind the horns on the sled, as shown, or



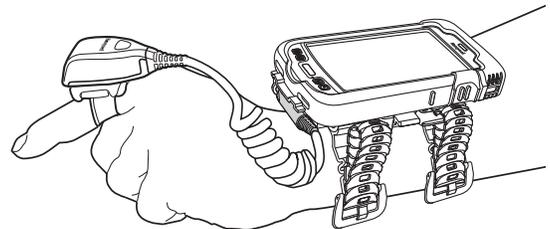
- Trim the straps to length and use the provided clips to terminate the strap end.



2. Align the sled assembly with the arm band and press on the sled until it latches onto the arm band. Be sure to align tabs on the back of sled with the notches on the arm band. The end of the sled with the ring scanner connector must face toward the hand.



3. If using the ring scanner ([Connect the Ring Scanner \(Optional\)](#) page 2-9), slide the ring scanner over the index finger and adjust the strap (if applicable) for a comfortable fit.



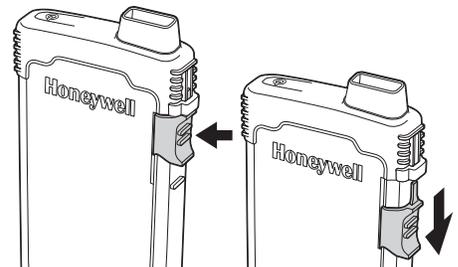
4. To remove the sled assembly, unbuckle and loosen the straps. It is not necessary to remove the strap from the buckle.

Belt Mount Applications

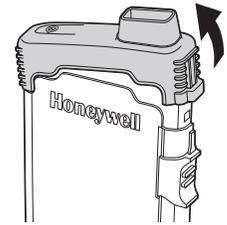
This section describes how to install and mount the belt mount configuration.

Install the Terminal in the Belt Mount Sled

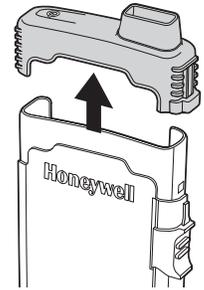
1. If the end cap is installed on the sled, slide the lock down to release the end cap.



-
2. Push up on the right side (the side with the lock) of end cap. Do not attempt to remove the end cap without sliding the lock first!



3. Pull the end cap off the sled.

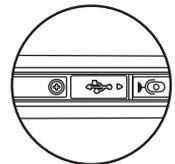


4. Make sure the USB door is closed. Rotate the door on the right side of the Dolphin 70e Black to close.



5. Press until the door is flush with the side of the terminal.

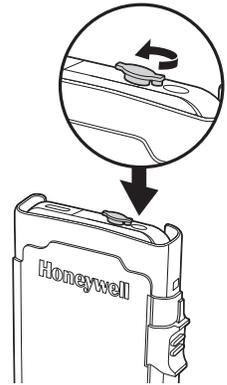
Note: If the door is not flush, it may be difficult to remove the terminal from the sled.



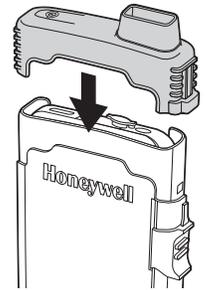
6. Slide the Dolphin 70e Black into the sled.



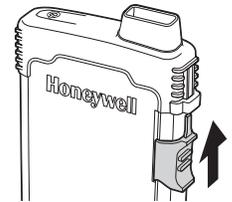
-
7. Make sure audio jack door is open. Pull the rubber door out and rotate the door 180° as shown to prevent damage.



8. Make sure the audio cable is not installed in the end cap.
9. Slide the end cap straight onto the sled until it clicks in place.

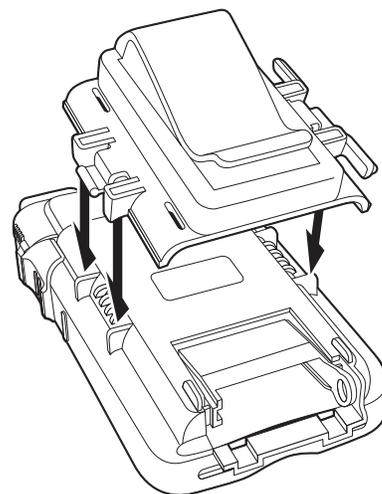


10. Slide the lock closed to secure the end cap.



Attach the Sled to the Belt Clip

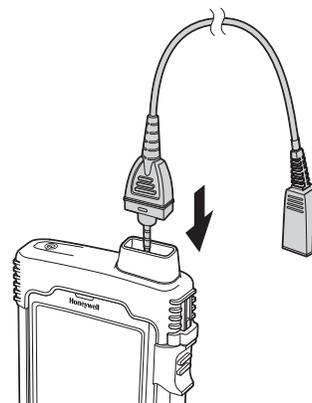
1. Align the sled assembly with the belt clip and press on the sled until it latches onto the belt clip. Be sure to align tabs on the back of sled with the notches on the belt clip.



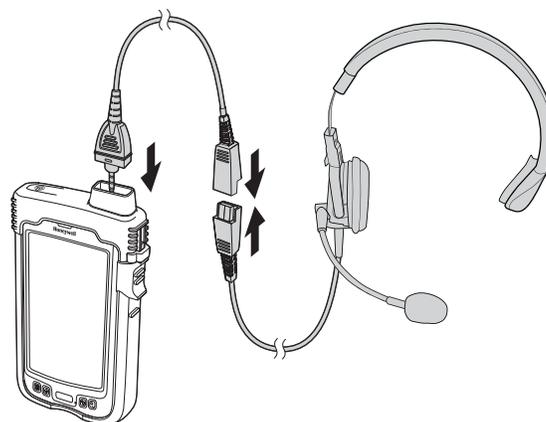
2. Slide the clip over a belt to wear the assembly.

Attach the Headset (Optional)

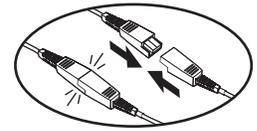
1. Make sure the audio jack door is open as shown in the previous section.
2. Slide the 3.5mm audio connector into the end cap.



3. Attach the quick disconnect end of the headset adapter cable to the headset's cable.

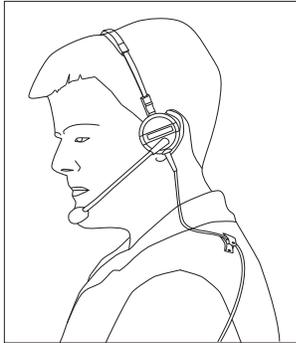


-
4. Slide the cable ends together until they click. Do not twist or bend the connectors.



Adjusting Headset / Microphone and Securing Cable

The headset consists of an earpiece, a microphone, a clothing clip and a cable. The headset attaches to the audio cable end of the voice cable which attaches to the audio end cap.



Do not twist the microphone boom when adjusting the microphone. The microphone should be adjusted to be about one or two finger widths from your mouth.

Make sure the microphone is pointed at your mouth. Note the small "Talk" label near the mouthpiece. Make sure the Talk label is in front of your mouth. The microphone cable can be routed over or under clothing.

Under Clothing

Leave the cable exposed only at the top of the collar. Be sure to leave a small loop of cable to allow movement of your head.

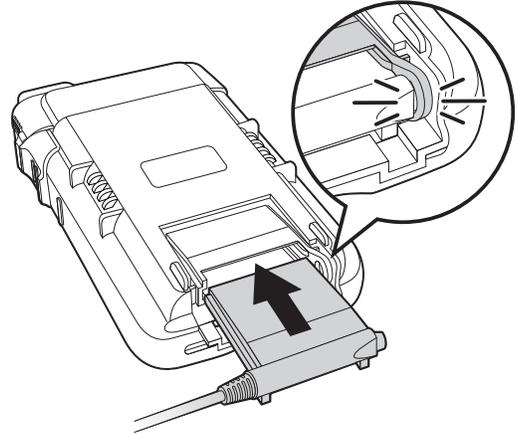
Over Clothing

Use clothing clips to hold the cable close to your body. Tuck the cable under the belt, but leave a small loop where it goes under the belt. Do not wear the cable on the front of your body. It may get in your way or get caught on protruding objects.

Connect the Ring Scanner (Optional)

1. Slide the ring scanner cable connector into the bottom of the sled until the connector ring clicks shut. It is not necessary to remove the ring scanner from the sled before removing the Dolphin 70e Black from the sled.
2. When connected to a terminal that is powered up, the terminal emits 3 beeps and the ring scanner LED blinks green one time.

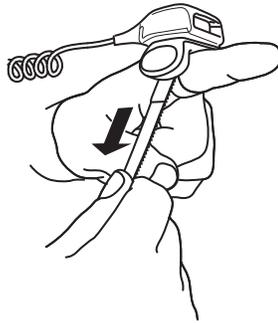
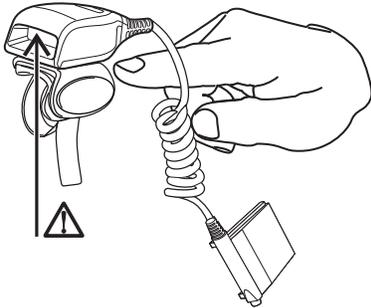
Note: When connecting the 8620 Ring Scanner you must have ScanWedge NGW running and a scanning application open on your terminal to be able to scan a bar code. See [ScanWedge NGW](#) on page 4-2.



Attaching the Ring to your Finger

1. Remove shipping film off the scanner window.
2. Slide finger into loosened ring strap.
3. Pull ring strap to secure ring to finger.

Note: If using the C-ring simply slide on to finger.

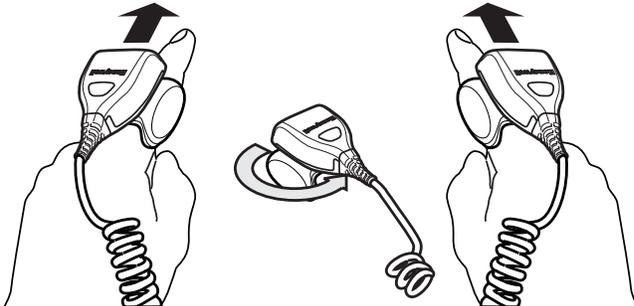


The ring scanner has a built-in quick disconnect designed for occasional safety hazards. It is not intended for frequent, normal removal of the ring scanner from the hand.

Do not touch, push against or brace your finger on the scan aperture at any time.

Trigger Rotation

The scanner head can be rotated 180° to be work on the right or left hand.





About the Hardware

About the Terminal

For more information on the Dolphin 70e, see the User's Guide for your product.

Turn Power On

To turn the terminal **On**, press and release the **Power** button .

Turn Power Off

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 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 **Advanced** tab located under **Settings > System > Power**.

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

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

Reset 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.

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  approximately 4 seconds until the options menu appears.
2. Touch **Soft Reset** or **Hard Reset** on the menu. When the reset is complete, the **Home** screen displays.

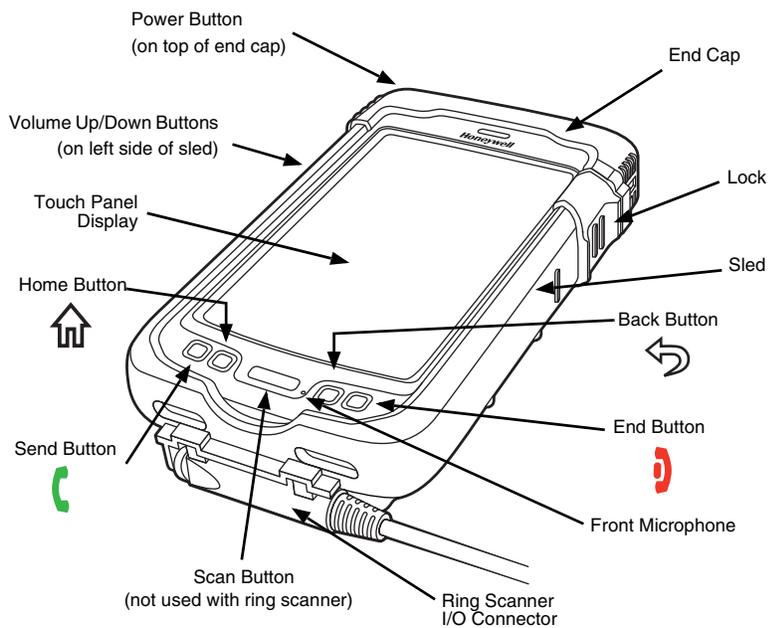
Note: To perform a **Hard Reset** if the touch screen has stopped responding, press and hold the **Power** button  for approximately 8 seconds until the terminal starts to re-boot. When the reset is complete, the **Home** screen displays.

About the Arm Mount Sled

Arm Mount Sled Features

The arm-mounted sled:

- Mounts the Dolphin 70e Black on the user's left or right arm
- Helps protect the Dolphin 70e Black from impact
- Allows for use of the Dolphin 70e Black display
- Includes an option to support voice applications via an audio cable and headset
- Supports a tethered ring scanner or Bluetooth scanner.



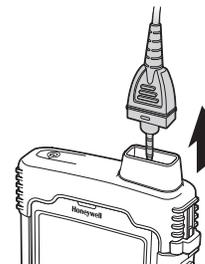
Terminal Features Not Used

When the Dolphin 70e Black is installed in the arm mounted sled, the following features are not available:

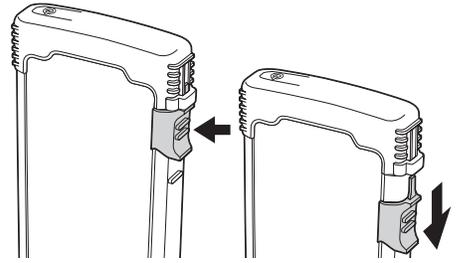
- Internal scanner
- Micro-USB port

Remove the Terminal from the Arm Mount Sled

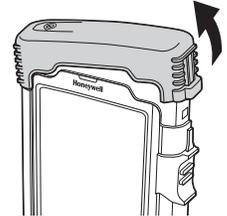
1. If the audio end cap is used, remove the audio cable. To prevent damage to the Dolphin 70e Black always unplug the audio cable (if used) before removing the end cap.



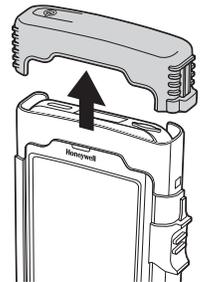
-
2. Slide the lock down to release the end cap.



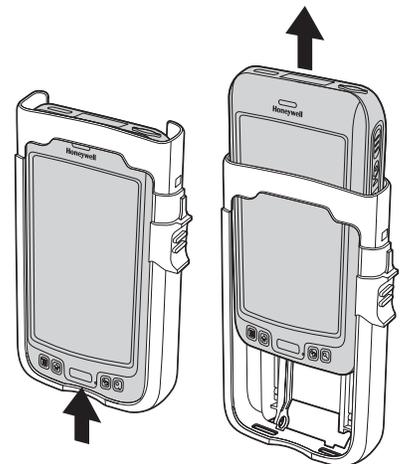
3. Push up on the right side of the end cap. Do not attempt to remove the end cap without opening the lock first!



4. Pull the end cap off of the sled.



5. Slide the Dolphin 70e Black out of the sled. Use the notch in the bottom of the sled to push the Dolphin 70e Black.

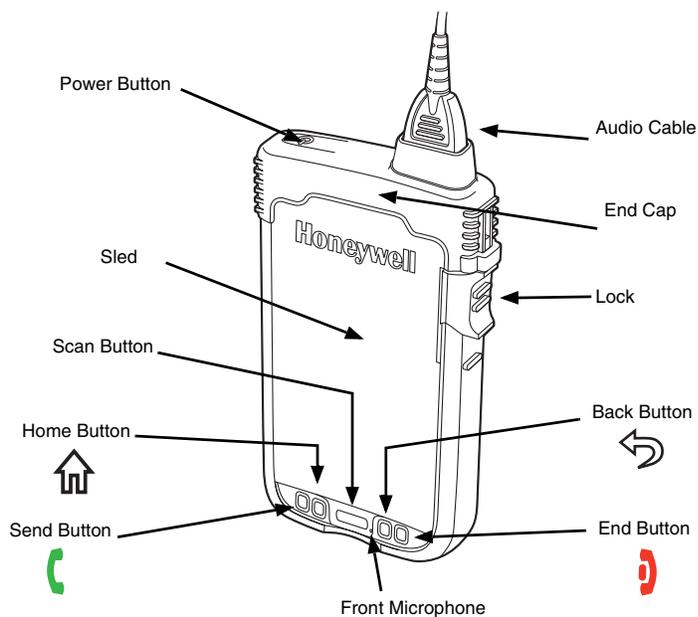


About the Belt Mount Sled

Belt Mount Sled Features

The belt-mounted sled:

- Mounts the Dolphin 70e Black on the user's belt
- Helps protect the Dolphin 70e Black from impact
- Conceals the Dolphin 70e Black display
- Designed for voice applications via an audio cable and headset
- Supports a Bluetooth scanner.



The sled encases the Dolphin 70e Black including the touch panel and helps protect the terminal from impacts.

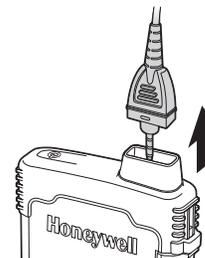
Terminal Features Not Used

When the Dolphin 70e Black is installed in the belt mounted sled, the following features are not available:

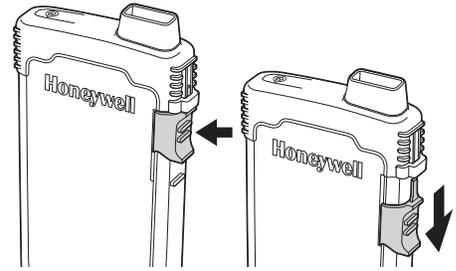
- Touch screen display
- Micro-USB port
- Internal scanner.

Remove the Terminal from the Belt Mount Sled

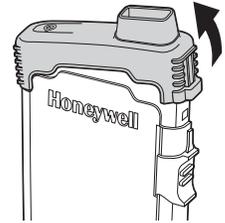
1. If the audio end cap is used, remove the audio cable. To prevent damage to the Dolphin 70e Black always unplug the audio cable before removing the end cap.



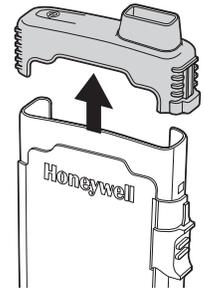
-
- Slide the lock down to release the end cap.



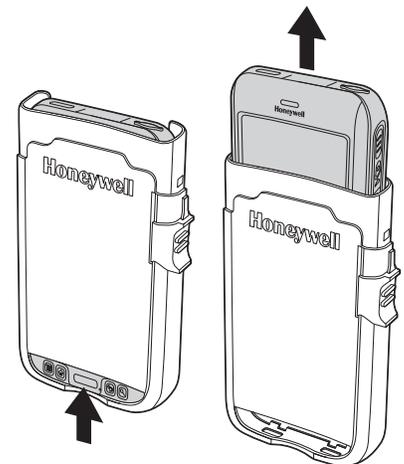
- Push up on the right side of the end cap. Do not attempt to remove the end cap without opening the lock first!



- Pull the end cap off of the sled.



- Slide the Dolphin 70e Black out of the sled. Use the notch in the bottom of the sled to push the Dolphin 70e Black.



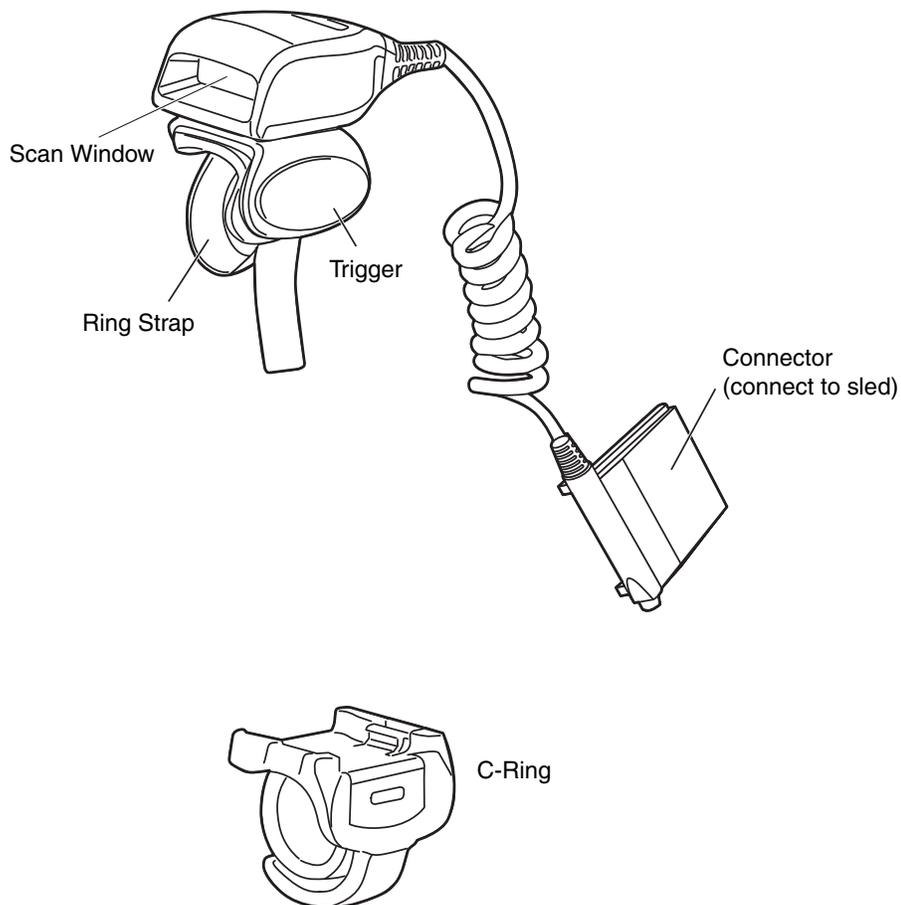
About the 8620 Ring Scanner

Ring Scanner Features

The ring scanner is shipped with 3 different finger attachments:

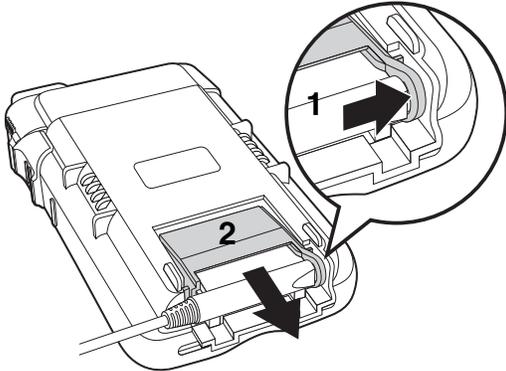
- Ring strap which is adjustable to your finger size
- Gray C-ring for small to medium sized fingers (self adjustable)
- Black C-ring for medium to large sized finger (self adjustable)

The trigger and ring strap/C-ring are user replaceable as described in this section.



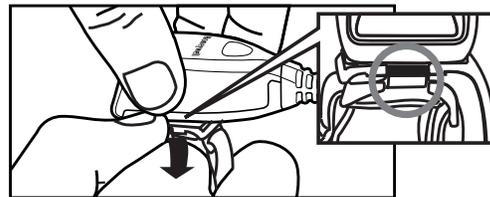
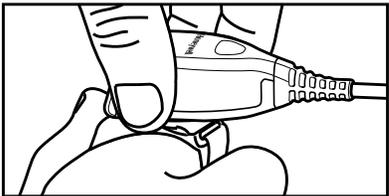
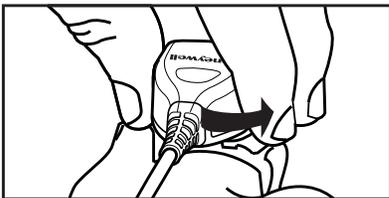
Eject the Ring Scanner

1. To eject the ring scanner, open the connector ring with one hand, pulling toward the outside of the sled.
2. Push the ring scanner connector out of the sled.

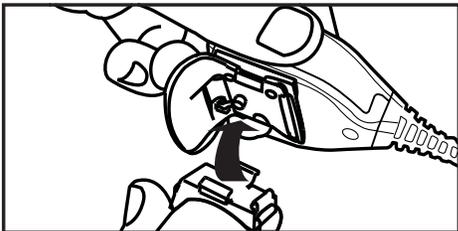


Remove the Ring Strap/C-Ring

1. Turn the scanner 90°.
2. Press latch down.

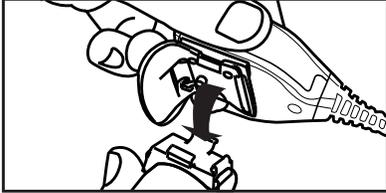


3. Remove the ring strap or c-ring.

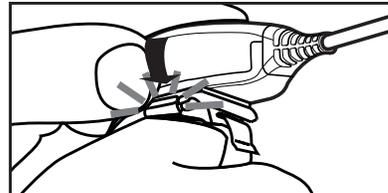


Replace the Ring Strap/C-Ring

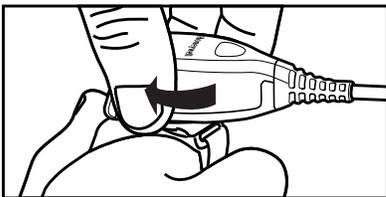
1. Connect ring latch with trigger catch.



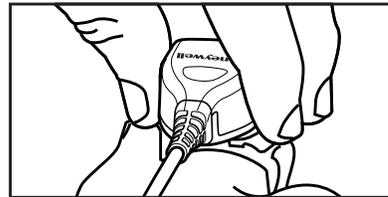
2. Press together until a click occurs.



3. Turn 90°.

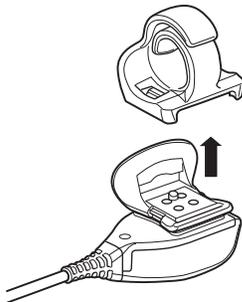


4. Ready to scan.

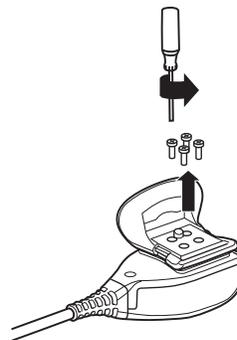


Remove the Trigger

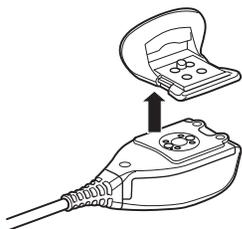
1. Remove ring strap or c-ring.



2. Unscrew the 4 screws.



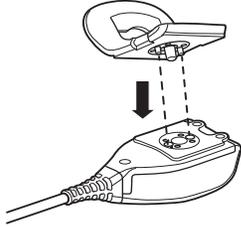
3. Remove trigger.



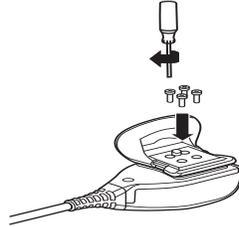
Note: When removing the trigger be careful that the metal spring is not dislodged.

Replace the Trigger

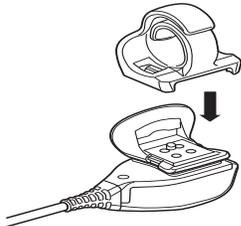
1. Place trigger on the scanner.



2. Screw in the 4 screws to secure the trigger.



3. Snap on ring strap or c-ring.



Battery Specifications

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.

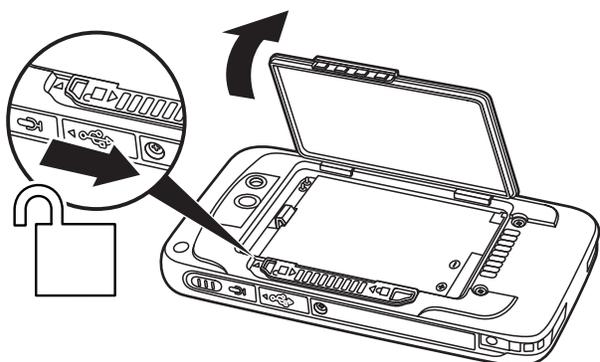
Guidelines for Battery Pack Use and Disposal

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

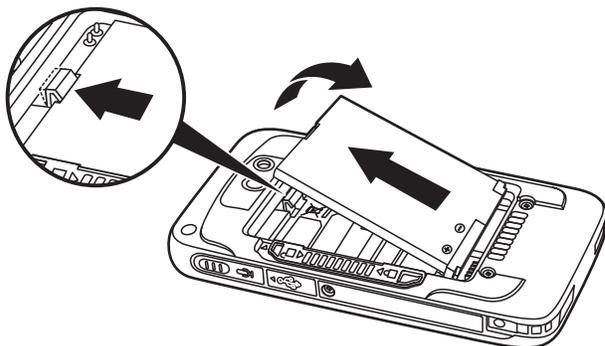
- Do not disassemble or open crush, bend or deform, puncture or shred.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, expose to fire, explosion or other hazard.
- Improper battery use may result in a fire, explosion or 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 -iii.
- 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 -iii.
- 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.

Remove the Battery

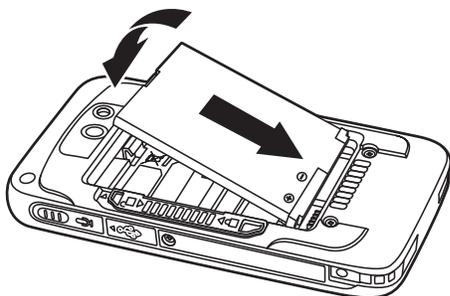
1. Remove the Terminal from the Arm Mount Sled (page 3-2) or Remove the Terminal from the Belt Mount Sled (page 3-4) changing the battery.
2. Place the terminal in **Suspend** mode by pressing and releasing the **Power** button .
3. Unlock and remove the battery door.



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



5. Insert the new battery and install the battery door.



Note: For information on charging the terminal and the charge bases that are available, see the User's Guide for your terminal.



Using the Ring Scanner and Headset

Overview

The 8620 ring scanner is a wearable external image engine that connects to the Dolphin 75e Wearable Solution. It reads popular 1D and 2D bar codes and supports omni-directional aiming and decoding for greater flexibility in real-world settings.

Note: This document describes the 8620 model ring scanner only. If you are using a different model, use Revision A of this document. For the 8620, the model number is located on the product label See [Required Safety Labels](#) on page A-3.

Decoding Bar Codes

Once the ring scanner is connected, you must run [ScanWedge NGW](#) (page 4-2) and have an application able to receive scanned data open before your scanner will be able to scan. The lighting and aimer will not turn on when you press the trigger until ScanWedge NGW and a data capture ready application are running on the terminal.

Note: You can change this behavior by specifying applications on the Blacklist, see [ScanWedgeNGW.exm Sections](#) on page 4-3.

Aiming Beam

When scanning bar codes, place the aimer over the bar code to be read.

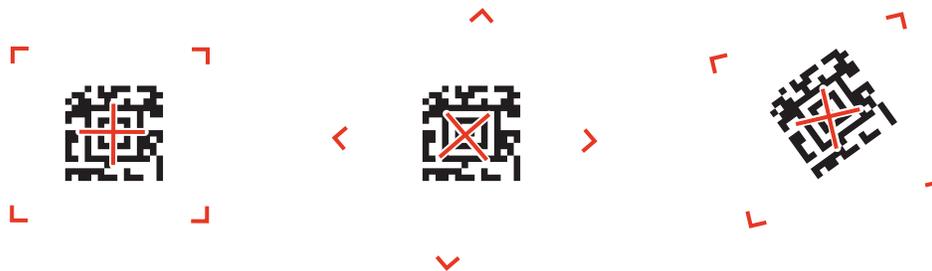


Warning: Do not stare directly in to the laser beam

Linear Bar Code.



2D Matrix Symbol



Power Tools

When ordered as part of the Honeywell Wearable Solution, the following additional Power Tools are installed on the Dolphin 70e Black terminal so that it can work with the ring scanner. This section will discuss software that is unique to the wearable version of the terminal.

ScanWedge NGW



ScanWedge NGW is similar to the regular ScanWedge Power Tool loaded on all Dolphin 70e Black terminals. However, ScanWedge NGW adds support for the 8620 ring scanner.

ScanWedge NGW sends data from a tethered ring scanner to the foreground application as keystrokes (as if the data were entered via the keyboard). The foreground application is the open software application whose window is currently active on the display. As a result, you can review input data in Windows Mobile applications such as Pocket Word, Pocket Excel, and Inbox without having to load third-party applications.

Note: You must have ScanWedge NGW and a foreground application open to be able to scan bar codes. The scanner lighting and aimer will not turn on if ScanWedge NGW and a foreground application are not running.

Launching ScanWedge NGW

Open Power Tools and tap the ScanWedge NGW icon once. ScanWedge NGW initializes and is running.

Command Bar Menu

When ScanWedge NGW is running, a smaller ScanWedge NGW icon appears in the command bar at the bottom of the Today screen.



Tap this icon to open the command bar menu.

Menu Item	This item ...
Enable	Enables and disables ScanWedge NGW without exiting ScanWedge NGW.
ScanWedge	Exits ScanWedge NGW and opens ScanWedge.
Settings	Opens the ScanWedgeNGW.exm file in EZConfig Editor.
About	Opens the About screen for ScanWedge NGW.
Exit	Exits ScanWedge NGW. The icon no longer appears in the Command bar.

Launching ScanWedge NGW at Startup

To run ScanWedge NGW automatically when the Dolphin terminal boots up, Add a link to the ScanWedge NGW.exe in the \WINDOWS\STARTUP folder

Closing ScanWedge NGW

Navigate to the Power Tools Main Window and tap the **ScanWedge NGW** icon again.

OR

Tap the ScanWedge NGW in the command bar ([page 4-2](#)) and select **Exit** in the command bar menu.

Modifying the ScanWedge NGW Configuration File

A ScaneWedgeNGW.exm file is inserted in the \Honeywell folder when ScanWedge NGW is installed, This file specifies configuration parameters for ScanWedge NGW and must not be moved.

Either use EZConfig Editor on your workstation or terminal to modify the ScnaWedgeNGW.exm file. For more information see EZConfig Editor on the Workstation (PC) or EZConfig Editor on the Dolphin Terminal in the *Dolphin Power Tools 8.x User's Guide for Mobile Devices with Windows Embedded Handheld* available on www.honeywellaidc.com.

ScanWedgeNGW.exm Sections

Section	Description
Settings	Programs general settings for ScanWedge NGW.
Comm	Specifies how the serial (RS-232) port interfaces with ScanWedge NGW.
Decode	Specifies how the decoder/scanner interfaces with ScanWedge NGW.
Centering	Defines the centering window for scanning bar codes when ScanWedge NGW is interfacing with the decoder.
Formatting	Defines data formatting functionality.
Symbology (XRS) (for model 8620)	Defines the symbologies that the scanner can decode and send to ScanWedge NGW. <i>Note: For 8620, the model number is located on the product label, see page A-3</i>
Symbology (LXE) (for all other models)	Defines the symbologies that the scanner can decode and send to ScanWedge NGW.
VK Mapping	Defines the virtual key sent to ScanWedge NGW for any decoded ASCII character.
Blacklist	Specifies applications where ScanWedge NGW is disabled.

Select the section then click or double click any Key to view the key's full information or to edit the key values in the ScanWedgeNGW.exm file.

Data Formatting Reference Charts

Data formatting is covered in the *Dolphin Power Tools 8.x User's Guide for Mobile Devices with Windows Embedded Handheld* available on www.honeywellaidc.com.

Continuous Scan Mode

Continuous Scan mode is disabled by default. When Continuous Scan is enabled, the scanner is continuously reading bar codes (approximately one scan every 200 milliseconds) as long as the scan trigger is held. The data read is processed by ScanWedge NGW and sent to the application. In normal mode (with Continuous Scan disabled), the scan trigger must be released between scans.

To enable Continuous Scan:

1. Open the **ScanWedge.exm** file in EZConfig on the terminal.
2. Select **Decode** from the sections.
3. Under the Key column, double-tap on **ContScan**. Set the value to **Enabled** and then tap **OK**.
4. Select **File > Save**.
5. Select **File > Tools > Launch Associated Application** to restart ScanWedge.
6. Select **File > Exit**.

Duplicate Scans in Continuous Scan Mode

When Continuous Scan mode is enabled, there is a timeout period during which scans of the same bar code are ignored by ScanWedge NGW and not passed to the application. The length of this timeout is set using **ContScanDupTimeout** in the Decode section of the ScanWedgeNGW.exm file. The default is 500 milliseconds (1/2 second).

Because the scanner scans approximately once every 200 ms in continuous mode and the default duplicate timeout period is 500 ms, duplicate scans can result in a good scan beep from the scanner yet the scanned data may not be processed by ScanWedge NGW. In such a situations, it may be desirable to set the timeout to 200 ms. However this also makes unintended duplicate scans of a bar code more likely.

To change the timeout period:

1. Open the **ScanWedge.exm** file in EZConfig on the terminal.
2. Select **Decode** from the sections.
3. Under the Key column, double-tap on **ContScanDupTimeout**. Set the value to the desired timeout and then tap **OK**.
4. Select **File > Save**.
5. Select **File > Tools > Launch Associated Application** to restart ScanWedge.
6. Select **File > Exit**.

NGW SettingsConfig



To launch NGW SettingsConfig, open Power Tools and tap the NGW SettingsConfig icon once.

Orientation

The automatic screen rotation is disabled on the wearable version of the Dolphin 70e Black. Instead the screen is locked in the selected orientation:

- Portrait
- Landscape (right-handed) - Designed for a right-handed person wearing the assembly on the left arm
- Landscape (left-handed) - Designed for a left-haded person wearing the assembly on the right arm.

Keyboard Layout Hot Key

Select the hot key that is used to scroll through the available on-screen keyboard layouts. If no keyboard is displayed, pressing the hot key calls up the on-screen keyboard. When the on-screen keyboard is displayed, pressing the hot key scrolls through the available layouts. Options are:

- Nbre
- Back 
- End 
- Scan
- Call 

Headset Volume

By default, the maximum headset volume for the Dolphin Black is limited. Because some headsets may play at lower volumes than others, it may be necessary to override the maximum headset volume. To override the maximum volume programmatically:

Maximum Volume Level



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

To change the maximum volume level in the registry:

- For Managed .NET development (C#, VB.NET) use the Registry Class in the Microsoft.Win32 namespace documented here:
<http://msdn.microsoft.com/en-us/library/microsoft.win32.registry.aspx>
- For Native development (C/C++) use RegOpenKeyEx() and RegGetValue() documented here:
<http://msdn.microsoft.com/en-us/library/aa914389.aspx>

The following registry items need to be changed:

- Set the value for the **HKEY_LOCAL_MACHINE > Software > SysAudio > Headset > 001C** key as follows:
 - Change to value to **511** to allow the increased maximum headset volume.
 - Change the value to **487** to return to the factory maximum volume setting.
- Set the value for **HKEY_LOCAL_MACHINE > Software > SysAudio > Update** key to 1.

The volume can then be adjusted as desired:

- The volume can be adjusted by an application via the registry keys or an API.
- The user can use the volume keys on the Dolphin Black to adjust the sound volume to a comfortable level.

WARNING To prevent possible hearing damage, do not listen at high volume levels for long periods.



Developer Tools

Developer tools such as APIs for audio and keyboard control are available. Contact [Contact Customer Support](#) (page -iii) for information.

Upgrading Ring Scanner Firmware

It may be necessary to upgrade the ring scanner firmware. To upgrade the firmware you will need:

- EZConfig-Scanning Software
- Interface Adapter (P/N: 8600502ADAPTER) to connect the ring scanner to a PC
- Standard USB-A to USB-B cable
- Firmware upgrade file

To upgrade the ring scanner firmware:

1. Disconnect the ring scanner from the sled.
2. Insert the ring scanner in to the interface adapter.
3. Connect the interface adapter to the PC using the USB cable.
4. Download the EZConfig-Scanning software from the web and follow the **Update Firmware** instructions in EZConfig.

Installing EZConfig-Scanning from the Web

Note: EZConfig-Scanning requires .NET software. If .NET is not installed on your PC, you will be prompted to install it during the EZConfig-Scanning installation.

1. Access the Honeywell web site at www.honeywellaidc.com from your PC.
2. Click on the **Products** tab. Under **Software**, select **Device Management**.
3. Click on **EZConfig-Device Configuration Software**.
4. Click on the **Software** tab. Select **EZConfig Cloud For Scanning** (online version, must register for access) or **EZConfig for Scanning** (to install on your PC, follow the next steps).
5. To install on your PC, when prompted, select **Save File**, and save the files to the **c:\windows\temp** directory.
6. Once you have finished downloading the file, exit the web site.
7. Using Explorer, go to the **c:\windows\temp** file.
8. Double click on the **Setup.exe** file. Follow the screen prompts to install the EZConfig-Scanning program.
9. If you've selected the defaults during installation, you can click on **Start Menu-All Programs-Honeywell-EZConfig-Scanning** and select EZConfig for your browser.

Ring Scanner Specifications

8620 Ring Scanner Specifications

Parameter	Specification
Dimensions (Typical):	50 mm x 30 mm x 30 mm (2.0 in. x 1.2 in. x 1.2 in.)
Weight:	71 g (2.5 oz.)
Illumination LED: White LED	Cool white (5700K) IEC62471: "Exempt Risk Group"
Aiming: Peak Wavelength Laser Optical Power Laser (CW)	650nm IEC 60825-1: "Class 2" <1mW with a beam divergence of <1.5mRAD (worst case)
Image Size	838 x 640 pixels
Skew Angle	±60° typical, 200 lux, EAN/UPC
Pitch Angle	±45° typical, 200 lux, EAN/UPC
Motion Tolerance:	580cm (228 in) per second typical on 13 mil UPC/EAN at optimal focus
Minimum X dimension	1D codes: 5 mil PDF417: 6.7 mil 2D codes: 10 mil
Symbol Contrast	100% UPC: 20% contrast
Temperature Ranges: Operating Storage	-4°F to +122°F (-20°C to 50°C) -13°F to +158°F (-25°C to 70°C)
Humidity	5% to 95% non-condensing @ 50°C
Tumble	Exceeds 1000 (0.5 m) tumbles per IEC 60068-2-32 specification
Vibration	Vibration Type: Standard Type Frequency Range: 2-10 Hz 14mm Pk-Pk, 13-55HZ 1.5mm Pk-Pk, 70-200Hz 2G Frequency Deviation: 1 octave/minute Cycle Time for 3 Axis: 2 hours total
ESD Tolerance	± 20kV Air ± 15kV Contact
Sealant Rating	IP54

Supported Bar Code Symbolologies

Symbology Type	Symbology Name	
1D Symbolologies	Codabar Code 11 Code 32 Pharmaceutical (PARAF) Code 39 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	ISBN ISBN with Add On ISBT 128 Matrix 2 of 5 MSI Straight 2 of 5 IATA Straight 2 of 5 Industrial Telepen TLC-39 Trioptic Code UPC with Add On UPC-A UPC-E
2D Symbolologies	Aztec Codablock A Codablock F DataMatrix HanXin	MaxiCode Micro PDF PDF417 QR Code TLC39
Postal Codes	Australian Post British Post Canadian Post China Post IntelligentMail Japanese Post	Kix (Netherlands) Post Korean Post Planet Postal-4i Postnet

Field of View

Horizontal Field of View $42.9^{\circ} \pm 1.2^{\circ}$ (Field Angle $\pm 21.4^{\circ}$)

Vertical Field of View $33.0^{\circ} \pm 0.8^{\circ}$ (Field Angle $\pm 16.5^{\circ}$)

Depth of Field

The depth of field measurements used the following parameters:

- Distances are measured from the front of the scanner.
- $+23^{\circ}\text{C}$ ($+73^{\circ}\text{F}$), 0 lux
- Photographic quality codes

Typical Performance

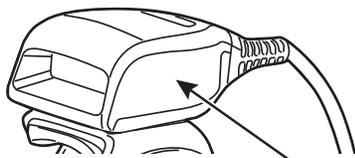
Symbology	Distance
5 mil C39	54 - 153 mm (2.1 - 6.0 in)
10 mil C39	18 - 328 mm (0.7 - 12.9 in)
100% 13 mil UPC	36 - 409 mm (1.4 - 16.1 in)
6.7 mil PDF417	36 - 175 mm (1.4 - 6.9 in)
10 mil DataMatrix	43 - 193 mm (1.7 - 7.6 in)

Guaranteed Performance

Symbology	Distance
5 mil C39	81 - 132 mm (3.2 - 5.2 in)
10 mil C39	38 - 295 mm (1.5 - 11.6 in)
100% 13 mil UPC	43 - 371 mm (1.7 - 14.6 in)
6.7 mil PDF417	54 - 158 mm (2.1 - 6.2 in)
10 mil DataMatrix	64 - 175 mm (2.5 - 6.9 in)

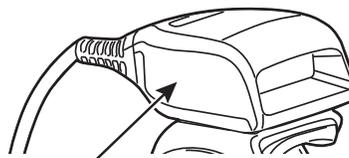
Required Safety Labels

Left Side of Scanner

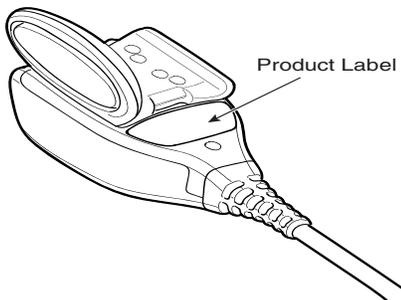


Laser Safety Label

Right Side of Scanner

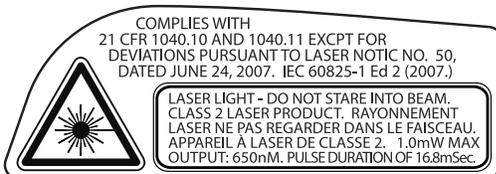


Compliance Label



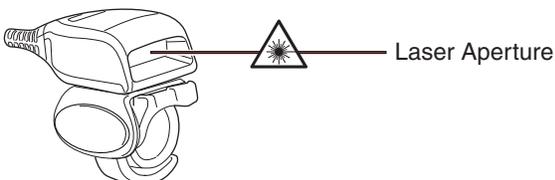
Product Label

Laser Label



Caution: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser Aperture Location



Laser Aperture



Honeywell
9680 Old Bailes Road
Fort Mill, SC 29707
www.honeywellaidc.com