

Honeywell

Dolphin[®] eBase

Communication Cradle for the
Dolphin[®] 9700 Mobile Computer

User's Guide



Introduction

The Ethernet Base (eBase) enables a single Dolphin 9700 computer to communicate with a host device over an Ethernet network.



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
- One universal AC/DC power adapter for the Dolphin eBase
- One power cord
- One Dolphin eBase User's Guide

You will also need to provide a standard CAT-5 Ethernet network cable. These items are needed to set up, configure, 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.

Software Requirements

Before you connect the Dolphin terminal to the eBase, make sure you have the most current software installed. To check the terminal's system information, tap **Start > Power Tools > SysInfo**.

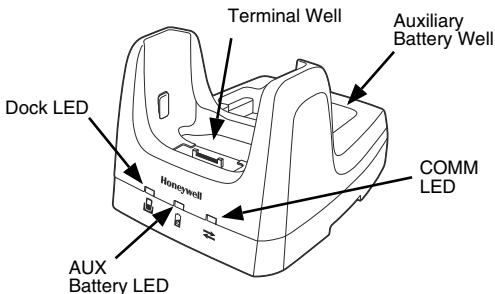
- The Kernel version must be 20.01 or later in terminals running Windows Mobile 6.5 Classic. In terminals running Windows Mobile 6.5 Professional, the kernel version must be 21.01 or later.
- The Power Tools version must be 4.12 or later.

Applications on the Dolphin Terminal

Applications running on the Dolphin terminal when it is connected to the eBase should be designed specifically for a partially connected network. For more details, please refer to the *Best Practices for Partially Connected Networks* document available at www.honeywellaidc.com.

Hardware Overview

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.

Auxiliary Battery Well

See [Auxiliary Battery Well](#) on page 6.

DOCK LED

The Dock LED turns solid green when the terminal is properly seated in the eBase.

AUX Battery LED

The AUX Battery LED indicates the status of the battery charging in the auxiliary battery well; see [Back Panel](#) on page 6.

This color means...

Orange *The auxiliary battery is charging.*

Green *The auxiliary battery has completed charging and is ready for use.*

COMM LED

The COMM LED indicates the status of data transfer between the Dolphin terminal and the eBase.

Ethernet Communication

When the Dolphin terminal is not docked:

This color and status means...

Red *Flashing* *The eBase has power but no Ethernet connection.*

Orange *Flashing* *The eBase is acquiring an IP address.*

Solid *An Ethernet connection has been established between the network and eBase.*

When the Dolphin terminal is docked:

This color and status means...

Red Solid No connection is established between the eBase and terminal.

Orange Solid RASMan is attempting to establishing a connection between the eBase and the terminal.

Green Solid RASMan has established a connection between the ebase and the terminal.

USB Communication

When the Dolphin terminal is not docked:

This color and status means...

Red Flashing The eBase has power but no USB connection.

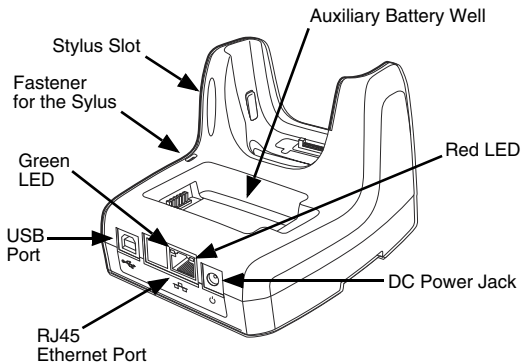
Green Solid A USB connection has been established between the ebase and the host workstation.

When the Dolphin terminal is docked:

This color and status means...

<i>Green</i>	<i>Flashing</i>	<i>Data is being transferred between the Dolphin terminal and the host terminal via the eBase.</i>
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Back Panel



Auxiliary Battery Well

The eBase enables you to charge an additional Li-ion battery pack independently of the terminal well in 4 hours. This feature ensures that you can always have a fully charged battery for your terminal.

USB Port

This USB Port is full-speed and 2.0 compliant. Using a USB cable, you can connect the eBase to a USB compliant device to facilitate USB communication to and from the terminal. 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 peripheral device via the eBase.

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. For detailed information on ActiveSync and WMDC visit [Microsoft's Windows Mobile Web site](#).

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.

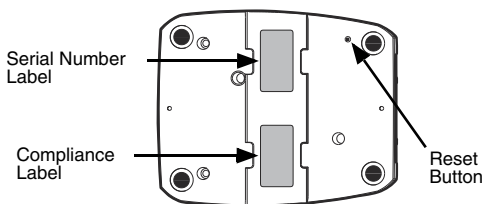
This color	and status	means...
<i>Green</i>	<i>Flashing</i>	<i>Network activity</i>
<i>Orange</i>	<i>Solid</i>	<i>Ethernet link active</i>

DC Power Jack

Use the power cable from Honeywell that comes with the ebase to supply power to this power jack. For more information, see [Power](#) on page 9.

Bottom Panel

For details on how to mount the eBase, see [Mounting](#) on page 25.



Power

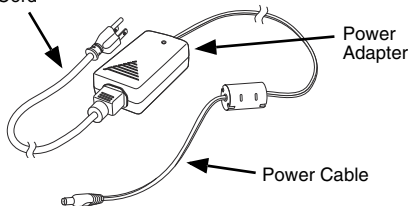
The terminal requires 9.5 Volts DC input for communications and battery charging; the power adapter on the power cable converts the voltage from the power source to 9.5 volts DC. **Only** the Honeywell 9.5 VDC, 4A power supply provided with the ebase converts the voltage appropriately.

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.

A/C Power Cord



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 standard wall outlet. The ebase is now powered. The COMM LED on the eBase flashes red.

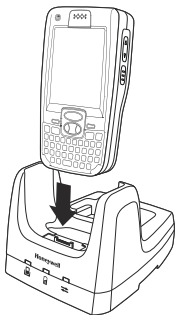
Charging the Main Battery in the Terminal



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

The eBase provides power to the Dolphin terminal and allows the charging of the terminal's main battery. The intelligent battery charging system incorporated into all Dolphin terminals prevents overcharging, which means that Dolphin terminals may be stored in the eBase indefinitely without damage to the terminals, battery packs, or the eBase.

1. Install the Li-ion battery pack into the back panel of the terminal; see the *Dolphin 9700 User's Guide* for battery installation instructions.
2. Slide the Dolphin terminal into the terminal well until the Dock LED lights green. Charging by the Dolphin terminal begins immediately if required by the Dolphin terminal.



Make sure the terminal is dry before placing it in the eBase. Do NOT place a wet terminal in the eBase! Doing so may cause damage not covered by the warranty.

Ethernet Communication

Setting up the eBase

1. Plug the power cord into the power adapter.
2. Plug the power connector cable into the power connector on the back of the eBase.
3. Plug the A/C power cord into a standard wall outlet. The COMM LED flashes red.

Note: When searching for a network, the 9700 terminal looks for a USB connection first, and then an Ethernet connection. If you only require an Ethernet connection, Honeywell recommends disconnecting the USB cable from the eBase. Remove the Dolphin terminal from the eBase before connecting or disconnecting the USB cable.

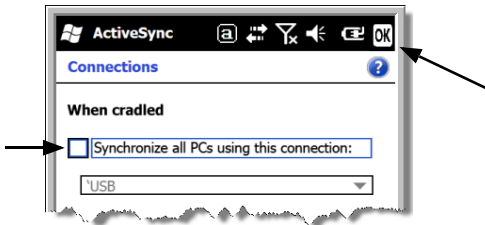
4. Plug the CAT-5 Ethernet cable into the RJ45 connector on the back of the eBase.
5. Plug the Ethernet cable into the network.
6. The COMM LED flashes orange while the eBase attempts to acquire an IP address. The COMM LED will change to a solid orange when a network connection has been established.

Connecting the Dolphin Terminal to the eBase

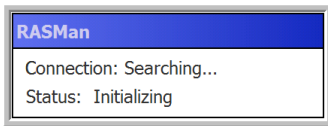
After the eBase is installed, configured, and connected to the host computer, you must connect the Dolphin terminal to the eBase.

1. Remove the Dolphin terminal from the eBase if it is docked.
2. On the Dolphin terminal, tap **Start > ActiveSync > Menu > Connections**

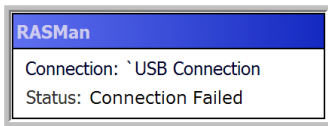
- Remove the check from the box next to, "Synchronize all PCs using this connection". Tap **OK**.






- Insert a Dolphin terminal into the terminal well. The DOCK LED lights green.
- On the Dolphin terminal, tap **Start > Power Tools**
- Click the **RASMan** icon once. The terminal starts searching for a connection.



Note: During the connection process, the following error message appears. This error message requires no action. The message disappears when the connection process is complete.



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7. When the connection is established between the Dolphin terminal and the eBase, the terminal plays a sound, and the COMM LED on the eBase lights green. The connection icon in the Dolphin's navigation bar changes from  to .
 8. Upon connection, the Dolphin terminal shares the eBase IP address. This IP address can be used by any application on the Dolphin terminal.
 9. When you disable RASMan or remove the terminal from the eBase, the terminal plays a sound and the disconnected icon  appears in the Navigation bar. The COMM LED on the ebase lights orange.

*Note: A soft or hard reset of the terminal disables RASMan and the Ethernet connection. Tap **Start > Power Tools > RASMan** to restart the program and restore the connection.*

To start RASMan automatically after each soft or hard reset, enable the RASMan Program section of the Autorun.exm file (see [AutoRun RASMan](#) on page 15).

Troubleshooting

If the COMM LED lights red while browsing a web page, refresh the page and RASMan will automatically reconnect and the LED light green.

Displaying the eBase and Terminal IP Address

Once the Dolphin terminal has been successfully connected to the eBase, the terminal shares the eBase IP address.

1. Tap **Start > Power Tools > Network Utilities > IPConfig**.
2. On the Input tab, tap the **Display full configuration** button.
3. The Dolphin terminal retrieves and displays the IP configuration for the entire terminal and eBase. Locate the **IpAddress** field in the IP configuration list.

DeviceConfig and RASMan Settings

If your application requires frequent connecting and docking/undocking to the Ethernet, and USB communication is not required, Honeywell recommends modifying the Dolphin's DeviceConfig.exm and RASMan.exm files to the following settings.

Modifying the DeviceConfig.exm ActiveSync Setting

1. Tap **Start > Power Tools > EZConfig Utilities > DeviceConfig**.
2. Locate **ActiveSync** under the *Connections* list.
3. Tap and hold the stylus on **ActiveSync**.
4. Select **Enable** from the pop-up menu.
5. Tap twice on **AutoConnect** in the Key column.
6. Select **OFF** from the value pull down menu. Tap **OK** on the Navigation bar.

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7. Tap on **Connection** in the Key column, and then tap **File > Disable**.
 8. Tap **OK**, and then tap **Yes** to save your changes.

Modifying the RASMan AutoActiveSync Setting

1. Tap **Start > Power Tools > EZConfig Utilities > RASMan**.
2. Select **Settings** from the folder tree, and then tap **AutoActiveSync** under the Key column.
3. Tap **Edit > Modify**.
4. Select **Disable** from the Value pull down menu.
5. Tap **OK** on the Navigation bar.
6. Tap **OK**, and then tap **Yes** to save your changes.

AutoRun RASMan

To start RASMan automatically after each soft or hard reset, enable the RASMan Program section of the Autorun.exm file.

1. Tap **Start > Power Tools > EZConfig Utilities > AutoRun**.
2. Locate **RASMan** under the Programs list.
3. Tap and hold the stylus on **RASMan**.
4. Select **Enable** from the pop-up menu.
5. Tap **OK** on the Navigation bar.
6. Tap **Yes** to save your changes.

Configuring the Network

By default, the eBase is configured to obtain IP addresses automatically via DHCP server. This means that in most cases you would simply plug-and-play the unit. If necessary, you can use the Cradle Manager configuration utility for dynamic network configuration.

Accessing the eBase Cradle Manager from a Host Workstation

1. Connect the host workstation Ethernet cable to a port on the same Ethernet subnet as the eBase. If the eBase is connected to a hub (or router), connect the host workstation to an available port on the same hub.
2. On your host workstation, open the web browser.
3. In the Address line, type the IP address assigned to the eBase, see [Displaying the eBase and Terminal IP Address](#) on page 14. Press **ENTER**.
4. A login prompt displays on the host workstation. Enter the user name <**Admin**> and default login password <**Dolphin**>.

Note: The user name and password are case-sensitive. For information on how to change the password, see page 18.

5. The Cradle Manager window opens.

Cradle Manager

- Status
- Configuration
- Diagnostics

Configuration

General Settings

Host Name:

Enable HTTP

HTTP Port:

Change Password

New Password:

IP Settings:

Dynamic

IP address hold time: sec

Reboot time if missing IP address: sec

Static

IP Address:

Subnet Mask:

Gateway:

Preferred DNS Server:

Alternate DNS Server:

Preferred WINS Server:

Alternate WINS Server:

Firmware upgrade

TFTP Server IP Address:

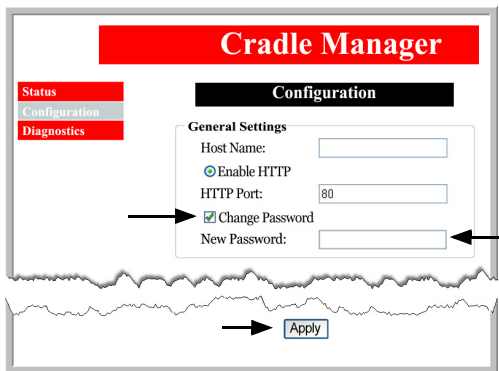
File Name:

Note: Under General Settings, the HTTP Port defaults to 80.

Changing the Password

You can change the password from the Cradle Manager window.

1. Under **General Settings**, select the check box next to, “*Change Password*”.
2. Enter the new password in the **New Password** field.
3. Click **Apply** at the bottom of the screen.



Changing the Dynamic Network Settings

You can modify the Dynamic Network settings from the Cradle Manager window.

1. Under ***IP Settings***, select ***Dynamic***.
2. Enter the new settings in the fields supplied.

Note: The default reboot time if missing an IP address is 60 seconds.

3. Click ***Apply*** at the bottom of the screen.

Changing the Static Settings

You can modify the Static Settings from the Cradle Manager window.

1. Under ***IP Settings***, select ***Static***.
2. Enter the new settings in the fields supplied.
3. Click ***Apply*** at the bottom of the screen.

USB Communication



Dolphin terminal's support USB communication out of the box. The eBase also supports USB communications using the USB port located on the back panel of the eBase. 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 ebase's USB interface allows the Dolphin terminal to communicate with a host workstation.

Setting Up and Connecting the Dolphin Terminal to the eBase

1. Plug the power cord into the power adapter.
2. Plug the power connector cable into the power connector on the back of the eBase.
3. Plug the A/C power cord into a standard wall outlet. The COMM LED flashes red.
4. Plug the USB communication cable into the USB port on the back of the eBase.

Note: The Dolphin terminal should always be removed from the eBase when connecting or disconnecting the USB cable.

5. Connect the other end of the USB cable to the host workstation. The COMM LED changes to steady green.
6. Insert the Dolphin terminal in the eBase terminal well. The DOCK LED illuminates green.
7. The Dolphin terminal activates and automatically opens ActiveSync to establish a connection. The COMM LED flashes green.

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8. The connection icon in the Dolphin's navigation bar changes from  to  it indicates a successful connection. The eBase can now transfer data between the terminal and the host device.

Switching from an Ethernet to USB ActiveSync Connection

If you have trouble switching from Ethernet to USB ActiveSync mode, then RASMan may have disabled ActiveSync. Take the following steps to recover ActiveSync.

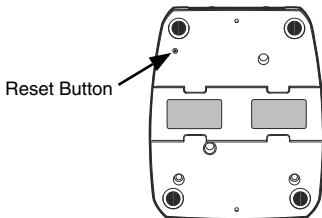
1. Remove the Dolphin terminal from the eBase.
2. Connect the USB cable to the host workstation and then the eBase.
3. On the Dolphin terminal, tap **Start > ActiveSync > Menu > Connections...**
4. Select the check box next to, *"Synchronize all host workstation's using this connection."*
5. Choose **USB** from the drop down menu.
6. Tap **OK** on the Navigation bar to exit the ActiveSync applet.
7. Insert the terminal in the terminal well. ActiveSync automatically initializes synchronization.

Restoring the eBase Factory Defaults

To return the eBase to the factory defaults:

1. Unplug the power cable on the eBase.

2. Locate the reset button on the bottom of the eBase.



3. Push in and hold down the reset button.
4. While holding down the reset button, plug in the power cable.
5. Wait 15 seconds, and then release the button.

Note: When the factory defaults are restored, the password reverts to the default password, <Dolphin>.

Upgrading the eBase Firmware

To upgrade the firmware on the 9700 eBase, you will first need a computer running TFTP server software that stores the firmware upgrade file.

Using the Cradle Manager to Upgrade the eBase Firmware

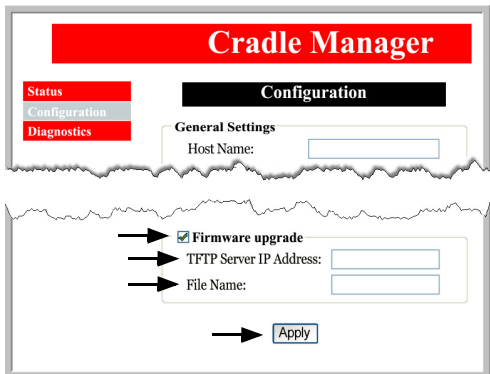
1. Verify the eBase is connected to Ethernet network.

Note: Firmware upgrades for the eBase do not require a Dolphin terminal be installed in the eBase.

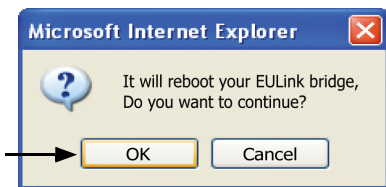
2. Connect the host workstation Ethernet cable to a port on the same Ethernet subnet as the eBase. If the eBase is connected to a hub (or router), connect the host workstation to an available port on the same hub.
3. On your host workstation, open the web browser.
4. In the Address line, type the IP address assigned to the ebase, see [Displaying the eBase and Terminal IP Address](#) on page 14. Press **ENTER**.
5. Enter the user name <**Admin**> and default login password <**Dolphin**>.

Note: The user name and password are case-sensitive. For information on how to change the password, see page 18.

6. The Cradle Manager window appears.
7. In the Cradle Manager window, check the box next to **Firmware upgrade**.



8. Enter the IP address of the server in the **TFTP Server IP Address** field.
9. Under **File Name**, enter the eBase firmware upgrade file name.
10. Click **Apply**.
11. Click **OK**, when prompted to reboot the EULink bridge. The COMM LED on the eBase flashes red during the reboot process.



12. The COMM LED flashes orange during IP verification and the firmware upgrade.
13. The eBase automatically reboots and the COMM LED illuminates green when the eBase auto-connects to the network.

Note: If the eBase does not auto-connect and COMM LED illuminates solid red after the upgrade process, remove and then reinsert the Dolphin terminal in the eBase. The COMM LED illuminates solid green when the eBase connects to the network.

Mounting

Set the eBase 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 eBase.

When choosing a location, bear in mind that:

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

Installation Hardware

Screw: 3/16 in. dia x 5/8 in. long pan head screw

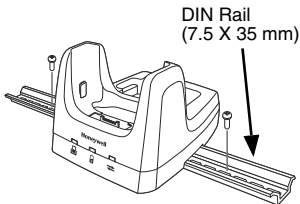
Washer: 1/2 in. OD x 7/32 in. ID x 3/64 in. thick

Nut: 3/16 in. dia

Using the DIN Rail

The DIN rail slot (7.5 X 35 mm) may be mounted on the bottom to allow for secure desk attachment of the unit if desired.

1. Slide the DIN rail along the bottom panel.
2. Then, using the appropriate nuts and bolts, secure the DIN rail to the desk or flat surface.



Technical Assistance

Contact information for technical support, product service and repair can be found at www.honeywellaidc.com.

Limited Warranty

Refer to www.honeywellaidc.com/warranty_information for your product's warranty information.

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Patents

Please refer to the product packaging for a list of patents.

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