1 Using the Computer

This chapter introduces the CN3 Mobile Computer, developed by Intermec to enhance wireless connectivity needs and contains hardware and software configuration information to assist you in making the most out of your CN3.
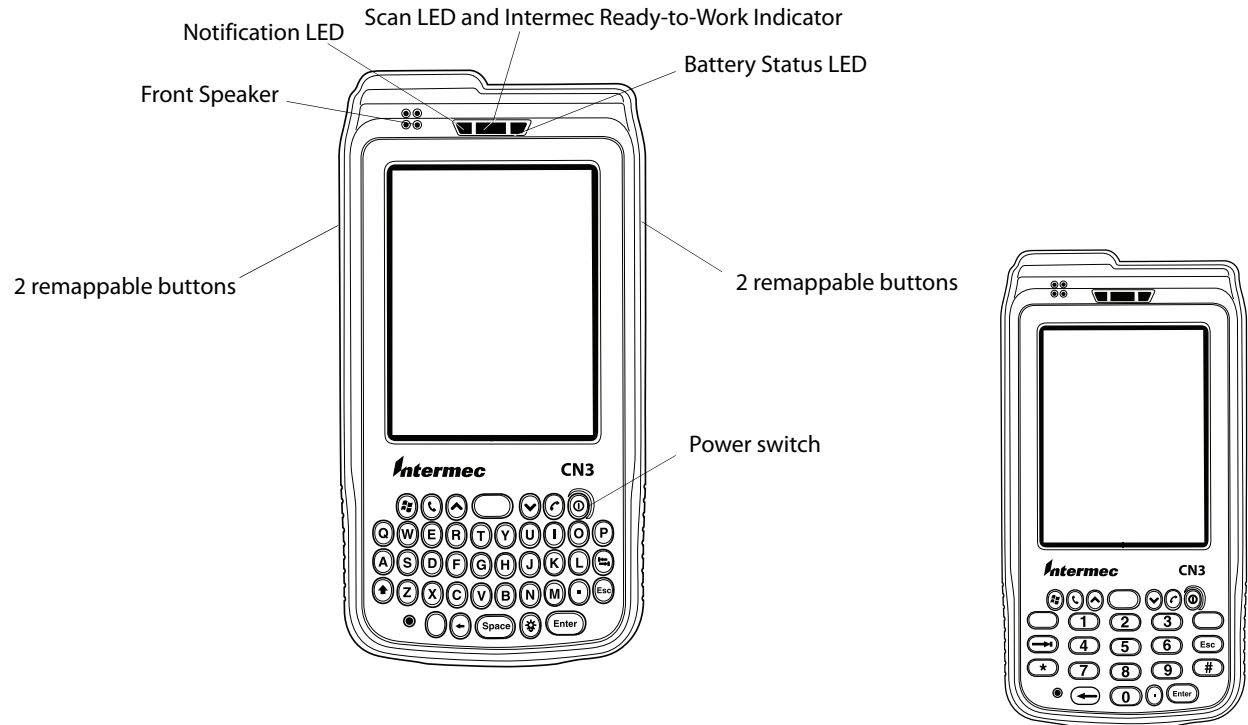
Note: Desktop icons and applet icons are shown to the left. Any place that **Start** is mentioned, tap the following Windows icon in the top, left corner of your CN3 desktop.
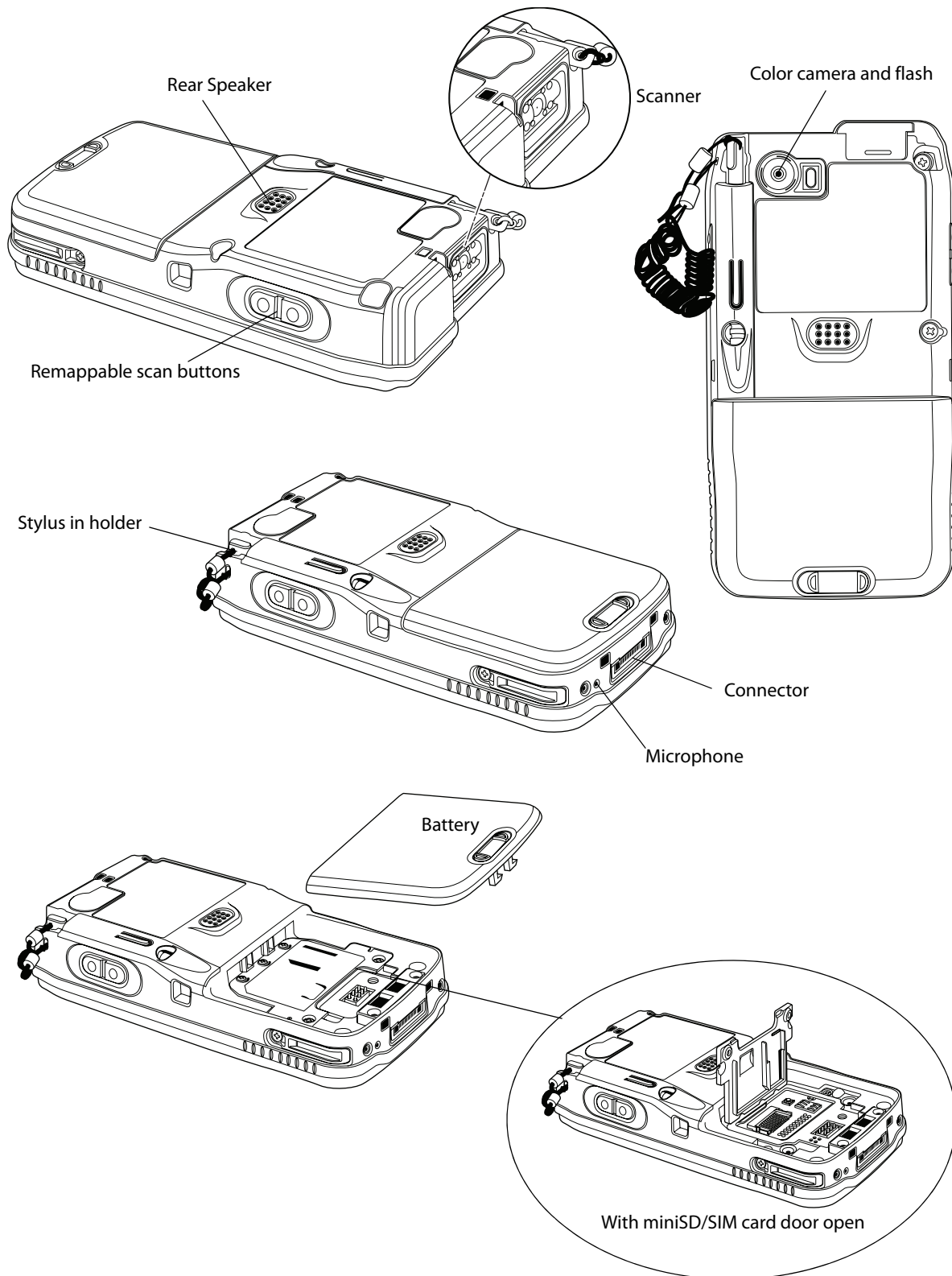
Introducing the CN3 Mobile Computer

The Intermec CN3 Mobile Computer is a small, ergonomically designed mobile computer built on the Microsoft® Windows® Mobile 5.0 operating system. It is lightweight, easy-to-use, and runs most software developed for the Windows Mobile platform, including stand-alone, client-server, and browser-based applications.

Front View

Scan LED and Intermec Ready-to-Work Indicator

Notification LED

Battery Status LED

Front Speaker

2 remappable buttons

2 remappable buttons

Power switch

Note that the QWERTY keypad is on the left and the numeric keypad is on the right.

Rear View

Rear Speaker

Scanner

Color camera and flash

Remappable scan buttons

Stylus in holder

Connector

Microphone

Battery

With miniSD/SIM card door open

Note that the scanner and the color camera cannot be on the same CN3.

Features

The CN3 is available with the following:

- 802.11b/g or WLAN radio
- Bluetooth
- 128MB RAM
- QWERTY or numeric keypad
- Imaging Options:
  - EA11 Standard Area Imager
  - EA11 High-Density (HD) Area Imager
  - Color Camera
- Wireless Wide Area Network Options:
  - GSM/GPRS/EDGE
  - CDMA/1xRTT/EV-DO

Use this manual to understand how to use the features and options available on the CN3.

CN3s with an IEEE 802.11b/g radio installed are Wi-Fi certified for interoperability with other 802.11b/g wireless LAN devices.

Learning Software Build Versions

To check to see if your CN3 has the latest SSPB or operating system build, select **Start** > **Internet Explorer** > the Intermec logo, then note the information beneath the **CN3 Version Information** title.

Resetting Your Computer

When the CN3 completely stops responding, an application is locked up and does not respond, when you upgrade the firmware, or when you reflash the CN3, it may be necessary to perform a reset.

Preferred Reset Method

The recommended method for recovering the CN3 is to press and hold the power switch on the front of the CN3 for about 10 seconds. This performs a graceful system shutdown and no data is lost in the process.

Secondary Reset Method

If performing the preferred reset method does not restore system operation, it may be necessary to press the reset button inside the battery compartment of the CN3. This method does not guarantee that cached disk data will be saved, so transactional data may be lost during the reset. All other data is preserved.

To press the reset button

1 Press the power switch to suspend the CN3.

2 Remove the battery pack from the back of the CN3.

3 With a stylus, press the reset button in the battery cavity in the back.

4 Press and hold the power switch as you put the battery back in the CN3.
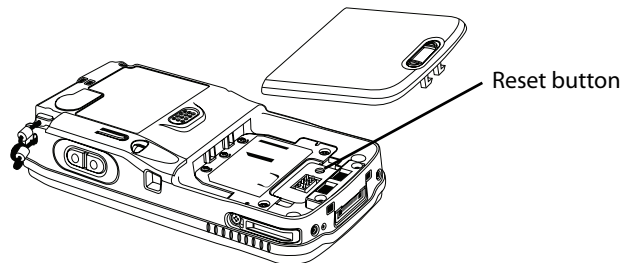
Reset button

Do not use force or a sharp object when pressing the reset button. You may damage the reset button.

Warning

Clean Boot Process

If performing either reset method fails to restore system operation, it may be necessary to perform a clean-boot. This is a boot method which formats the object store to clean data and registry information from the CN3 system and restores them to their factory-default state.

Note: This will erase the memory in the CN3, including all applications and data files found in the object store (user store). See “Packaging Applications for the Computer” on page 76 for more information.

To perform a clean-boot

1 Press the power switch to suspend the CN3.

2 Remove the battery pack from the back of the CN3.

3 With a stylus, press the reset button in the battery cavity in the back.

4 Press and hold the power switch as you put the battery back in the CN3.

5 Continue to hold the power switch until a Warning message appears on the display, release the power switch, then read the message.

6 To continue with the clean-boot, press either right side button.

To cancel the clean-boot, press either left side button.

Scanning Bar Codes

Use the area imager to scan and enter bar code data. The CN3 supports reading 1D and 2D images. These bar code symbologies are enabled by default on the CN3: Code 39, Code 128, UPC-A, UPC-E, EAN-8, EAN-13, and Datamatrix.

If you are using bar code labels that are encoded in a different symbology, you need to enable the symbology on the computer. Use the Intermec Settings applet to enable and disable symbologies. See the *Intermec Computer Command Reference Manual* (P/N 073529) available from the Intermec web site at **www.intermec.com**.
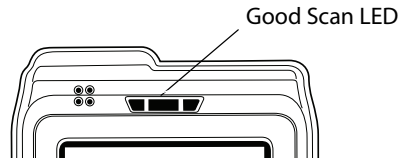
Scanning with the Area Imager

The CN3 has an area imager that can scan 1D and 2D bar code symbologies. It also supports omni-directional (360°) scanning where you can position the CN3 in any orientation to scan a bar code label. Using the 2D imager is like taking a picture with a digital camera.
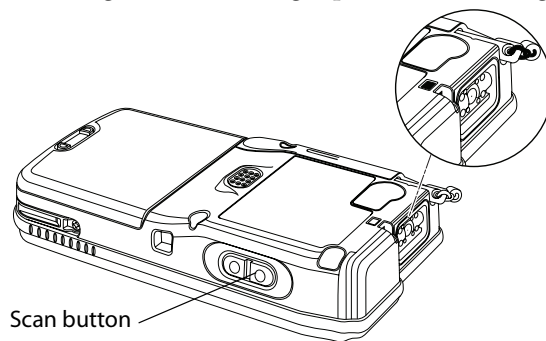
Scan button

To use the area imager

1 Press the power switch to turn on the CN3, point the scanner window a few inches from the bar code label, and hold steady.

2 Press the **Scan** button and center the red aiming beam over the bar code label. The aiming beam is smaller when the imager is closer to the bar code and larger when it is further away.

When a bar code label is successfully read, a high beep is emitted and the Good Scan LED lights briefly. Release the **Scan** button.

Good Scan LED

Improving the Performance of the Area Imager

If you have problems scanning a bar code with the 2D imager, try following some of these tips to improve the performance of your imager:

Intermec Settings

- Tap **Start** > **Settings** > the **System** tab > the **Intermec Settings** icon to access the applet.

- Tap (+) to expand **Data Collection** > **Internal Scanner** > **Imager Settings** > **Predefined Modes**, then select one of the following:
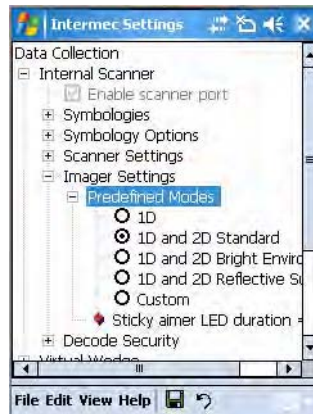
Select this option:	If you are scanning:
1D	only 1D labels
1D and 2D Standard	all other cases
1D and 2D Bright Environment	in high ambient light (like outdoors in sunshine)
1D and 2D Reflective Surface	glossy labels
Select Custom to access all standard imager settings such as "Lighting Goal" or "Lighting Mode." More information about these settings, commands, and parameters are found in the *Intermec Computer Command Reference Manual* available from the Intermec web site at **www.intermec.com**.	

- Keep your hand as steady as possible while scanning a label.

- Position the imager as close to the bar code as possible while still being able to capture the entire bar code.

- Enable only the bar codes that you need to use every day.
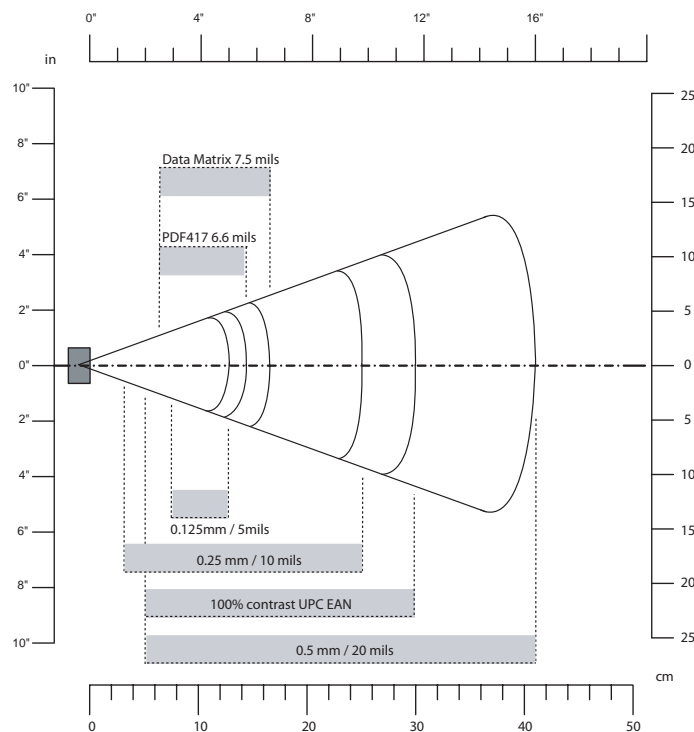
Reading Distances

Typical reading distances are done in an office environment using office lights (4 lux). Minimum distances are measured in the dark (0 lux). Both reading distances are provided in respective scan engine integration guides. Contact your Intermec representative for more information.

The minimum standard reading distances for CN3s built with integrated scan engines are shown below. When correctly mounted, an exit window (like the one the CN3 has) reduces reading distances by about 4%.

EA11 Standard Minimum Reading Distances

Symbology	Density	Minimum Distance	Maximum Distance
Code 39	0.125 mm/ 5 mil 0.20 mm/ 8 mil 0.25 mm/ 10 mil 0.50 mm/ 20 mil	7.26 cm/ 2.86" 3.96 cm/ 1.56" 3.45 cm/ 1.36" 4.98 cm/ 1.96"	12.09 cm/ 4.76" 20.98 cm/ 8.26" 25.04 cm/ 9.86" 40.28 cm/ 15.86"
UPC/EAN	0.33 mm/ 13 mil	4.98 cm/ 1.96"	29.92 cm/ 11.66"
Datamatrix	0.191 mm/ 7.5mil 0.254 mm/ 10 mil 0.381 mm/ 15 mil	3.71 cm/ 2.46" 5.98 cm/ 1.96" *	16.41 cm/ 6.46" 20.73 cm/ 8.16" 27.58 cm/ 10.86"
PDF417	0.168 mm/ 6.6 mil 0.254 mm/ 10 mil 0.381 mm/ 15 mil	6.25 cm/ 2.46" 4.47 cm/ 1.76" 4.98 cm/ 1.96"	13.87 cm/ 5.46" 21.74 cm/ 8.56" 33.43 cm/ 13.16"

* Minimum distance depends on symbology length and scan angle.

EA11 Standard Minimum Reading Distances

Using the Batteries

The CN3 uses replaceable Lithium-Ion (Li-ion) batteries. Standard packs have 8.1 Watt hours capacity and extended packs have 14.8 Watt hours capacity. You must fully charge the battery before you can use the CN3. When you change the battery, a super capacitor maintains your status, memory, and real-time clock for at least five minutes.

Warning

The battery used in this device may present a fire or chemical burn hazard if it is mistreated. Do not disassemble it, heat it above 100°C (212°F) or incinerate it.

Caution

If you fail to replace the battery immediately, you may lose important state or applications.

Note: If the CN3 is not on external power and the battery pack is removed, it will suspend when the battery pack is removed.

Li-ion

When the battery reaches the end of its useful life, the spent battery should be disposed of by a qualified recycler or hazardous materials handler. Do not mix this battery with the solid waste stream. Contact your Intermec Technologies Service Center for recycling or disposal information.

Li-ion

Note: In the U.S.A., the EPA does not consider spent Li-ion batteries as hazardous waste.

Keep away from children. Contact your Intermec representative for replacement batteries.

Several factors determine the life of your battery such as extreme temperatures, input devices, and your usage.

The CN3 contains an internal super capacitor, a temporary power storage device, that protects state for up to five minutes. This is to give you time to replace the battery pack before state is lost.

To maximize the time allowed to replace the main battery pack

• Put the CN3 in a suspend mode before removing the battery pack.

Charging the Battery

The battery pack should be fully charged before you use the CN3 for the first time. If temperatures are within the battery charging range of 0° to 45°C (32° to 113°F), the standard battery pack takes up to four hours to charge; the extended battery pack takes up to five hours.

The battery is fully charged when its battery status LED shows a steady green. You can charge the battery pack using a quad battery pack charger, a single dock spare battery pack charge slot, or a CN3 with external power applied.

The charge/operating power can be applied to the CN3 using an AC wall adapter, a magnetic card reader snap-on, a single dock with ac adapter or auto-lighter adapter attached, a multidock, either charge-only or Ethernet, or an auto lighter adapter.

For information on these accessories, see **"Accessories for the Computer" on page 190**.

Maximizing Battery Life

Note that batteries are chemical devices. If these are left setting on a shelf for long periods of time outside the CN3, the batteries slowly discharge, eventually to zero if left unchecked. The battery chemistry resists normal degradation if you store the battery in a charger as opposed to leaving the battery in a discharged state. Below are things that you can do to maximize the life of your battery.

Battery Conservation Tips

When You Want To:	Do This to Save Battery Power:
Operate the CN3 and the Low Battery status icon appears or the Battery light comes on.	Press the power switch to turn off the CN3. Remove the battery and insert another fully charged battery within five minutes or you may lose state. Or, you can connect the CN3 to an external power source.
Stop using the CN3 for five minutes or longer.	Make sure the low battery icon is not on the screen and that the Battery light is not turned on. Press the power switch to turn off the CN3.
Store CN3s for more than a day.	If you are storing the CN3 for a few days, like over the weekend, install the charged battery or attach the CN3 to a power source. If you are storing the CN3 for longer, remove and charge the battery, then store both the battery and the CN3 in a cool location. If the battery in storage is not used in several months, you should recharge the battery to keep it at its performance peak,
Store the battery outside the CN3.	Store the batteries in a charger.

Removing and Installing the Battery

To remove the battery, press the battery release tab to the left until the battery is released from the CN3, then lift it away.

Battery Release Tab
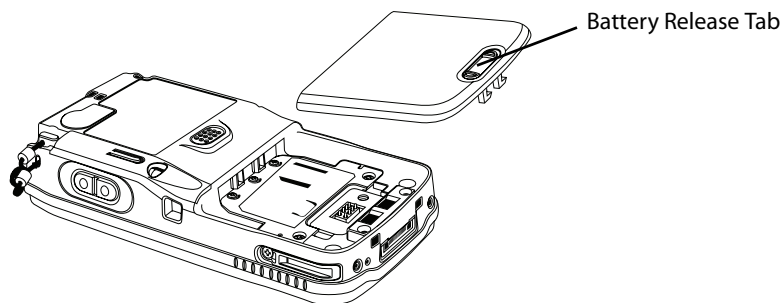
To install the battery, insert the tabs on the charged battery into the CN3 and snap the battery into place.
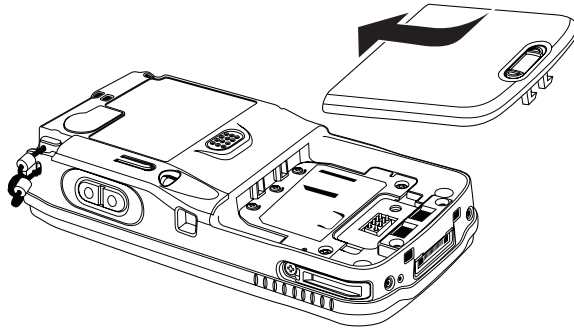
Checking the Battery Status

The Battery Status LED above your CN3 display, as shown in the following illustration, indicates the status of your battery. See the following table to understand the meanings of the lights emitted from the LED.

Battery Status LED
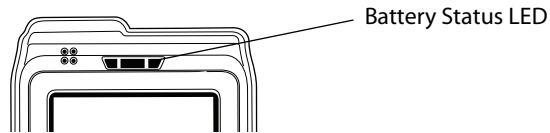
Steady Green	Battery is more than 95% charged and CN3 is on a charger.
Blinking Red	Battery is low. CN3 goes into suspend mode.
Steady Red	Battery is on charge.
Steady Amber	Either the CN3 is in a dock but is missing its battery; or the temperature of the battery pack is too hot or too cold for it to charge.

You can check the battery status by using the Power applet to check the status of the battery as indicated by the percentage of battery charge left in the battery.

To check the Power settings

- Tap **Start** > **Settings** > the **System** tab > the **Power** icon, then tap the **Battery** tab.
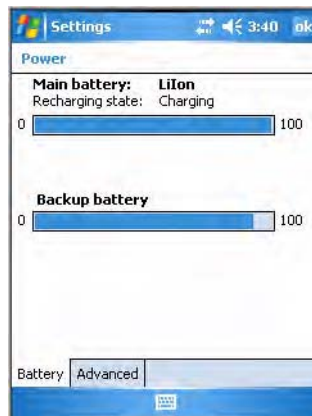
Note: The **Backup battery** option shown in the **Battery** tab refers to the super capacitor used by the CN3 to store energy.

Understanding the Low Battery Warnings

When the battery charge is getting low (approximately 6.4 to 6.5V), you will receive an audible alert and an initial pop-up "Main Battery Low" warning message.

If the warning is not dismissed, it is followed by another audible alert and a second pop-up "Main Battery Very Low" warning message.

If the battery charge continues to drop, the red battery status LED will blink and the CN3 will enter suspend mode.

Adjusting the Beeper

For information about setting volume levels for screen taps, ActiveSync alert noises, etc., tap **Start** > **Help**.

To enable the beeper

1 Tap **Start** > **Settings >** the **Personal** tab > the **Sounds & Notifications** icon, then tap the **Sounds** tab.

2 Check for which features the CN3 should enable sounds, then tap **ok** to close.
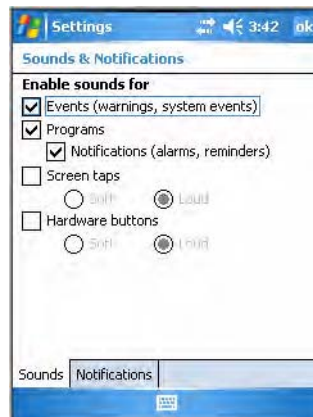
3 Tap the **Volume** icon at the top of the screen, tap **On**, then move the slider bar to your desired level. If your CN3 comes with a phone, then be sure to use the left slider bar for the volume for the rear speaker and the right slider bar for the phone via the front speaker.

Volume slider bar   Phone slider bar
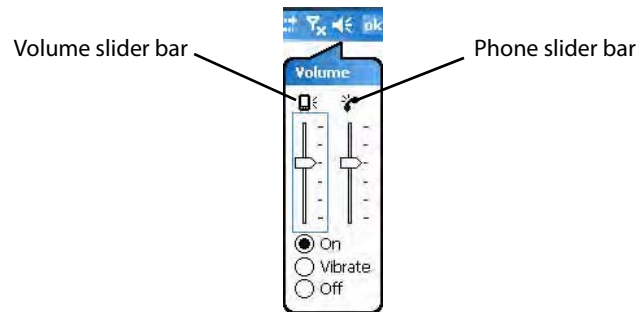
To disable the beeper

• Tap the **Volume** icon, then drag the slider to the bottom, or tap **Off**. Note the change in the **Volume** icon.
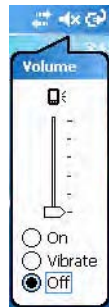
If your CN3 has a built-in phone, tapping **Off** will disable both the beeper and the phone. To disable just the beeper, drag the left slider bar to its bottom position, like in the following illustration.
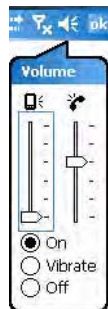
Using the Color Camera

The 1.3 megapixel color camera with flash is an optional feature that is factory-installed into the upper back of the CN3, as shown in the following illustration. You can take photos in either high-resolution or a compressed formats, with resolutions up to 1200x1024 pixels.
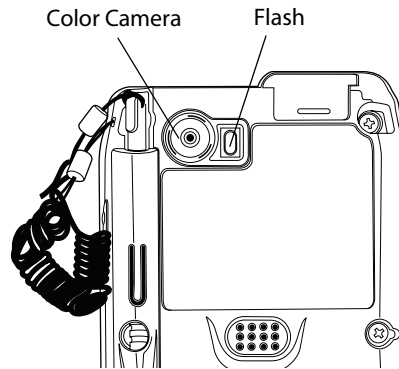
Images are saved as .jpg files and stored in the "/My Documents/My Pictures" folder.

Select **Start** > **Programs** > the **Pictures & Videos** icon, then tap the **Camera** option in the grid or tap **Camera** in the taskbar.

Using the screen display as a viewfinder, tap move the camera until you get the image you want, then press **Enter** or tap the screen to save the image, similar to the following:

Go to **"Configuring the Color Camera" on page 92** for information on configuring the color camera.

Using the Intermec Settings Applet

Use the Intermec Settings applet to gather, view, and update device configuration settings. Information about the settings you can configure with the Intermec Settings applet is in the *Intermec Computer Command Reference Manual* available online at **www.intermec.com**.

To access the Intermec Settings applet

Intermec Settings

1 Tap **Start** > **Settings** > the **System** tab > the **Intermec Settings** icon to access the applet.

2 Tap (+) to expand any of the settings, then select any of the subsequent settings to make changes via drop-down lists or fields.

3 When you are done making changes, select **File** > **Save Settings** to have your change take effect, then select **File** > **Exit** to close the applet.

Using the Keypad

The CN3 can have a QWERTY keypad, a numeric keypad, or a 10-key keypad. The available keypads are dependent on your model of CN3.

**QWERTY Keypad**
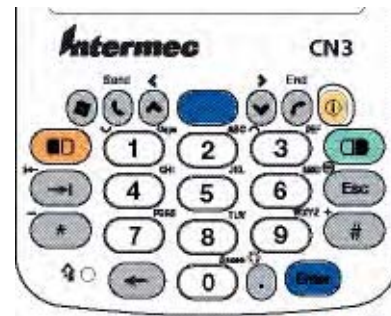
Numeric Keypad
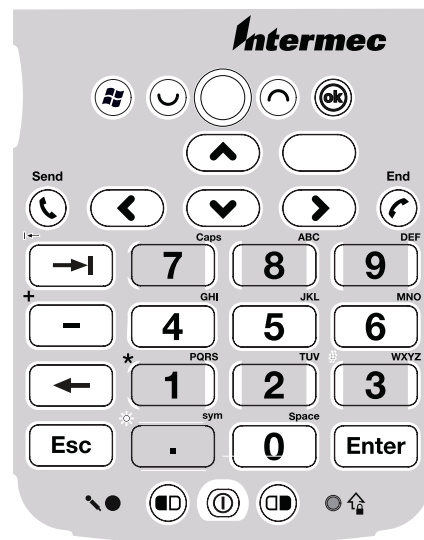

CN3e 10-Key Keypad
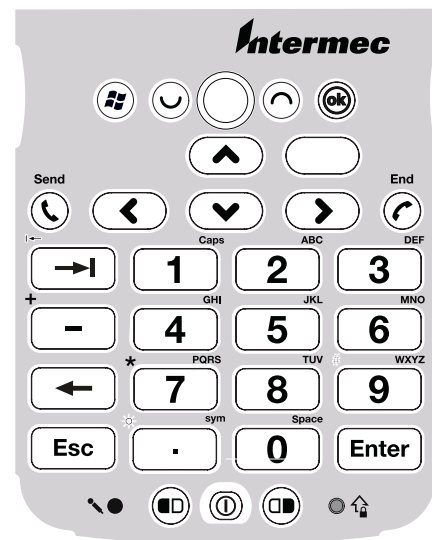
CN3e Numeric Keypad

The full alphabetic QWERTY keypad is for applications that require input of both alphabetic and numeric data. This keypad also provides special characters, symbols, and functions by pressing color-coded key sequences.

The large numeric keypad is for applications that require mainly numeric data. This keypad also lets you enter special characters by pressing color-coded key sequences. The 10-key keypad is also for applications that require mainly entering numeric data, but it is intended for customers who also use a 10-key keypad.

Using the Color-Coded Keys

Each keypad available for the CN3 provides color-coded keys to let you access additional characters, symbols, and functions printed on the keypad overlay. Once you understand how to use the color-coded keys and key sequences, you can access all of the additional features printed on the keypad overlay. There are two color-coded modifier keys on the numeric keypad: the orange ■▢ key and the green ▢■ key. The alphanumeric keypad just has the orange ■▢ color-coded modifier key.

To enter a single character from the orange plane, press the ■▢ (orange LED illuminates) then press the desired key (orange LED turns off). To enter multiple characters from the orange plane, press ■▢ twice (orange LED on) then enter the desired characters. Pressing ■▢ again turns the LED off and returns to the unshifted plane.

Capitalizing Characters

To capitalize a single character on QWERTY keypads, press the shift key, then the character. To type all alphanumeric characters as uppercase letters, you can enable the Caps Lock feature on the CN3 keypad.

To enable Caps Lock

- On the QWERTY keypad, press ■▢, then the **Shift** key. Press the same key sequence to disable the Caps Lock.

- On the numeric keypad, press ▢■, then the **[1]** key.

The Caps Lock LED lights up green to show that the CN3 is in the Caps Lock mode. The keypad stays in this mode until you press a color key again.

Entering Characters on the QWERTY Keypad

On the QWERTY keypad, to type the number "2," press ■▢ **[U]**. Press ■▢ twice to enter characters until you press ■▢ again.

QWERTY Characters

To Enter	Press the Keys	To Enter	Press the Keys
@	■▢ **[Q]**	1	■▢ **[Y]**
?	■▢ **[A]**	2	■▢ **[U]**
CapsLock	■▢ **[Shift]**	3	■▢ **[I]**
smiley	■▢ **[W]**	4	■▢ **[H]**
&	■▢ **[S]**	5	■▢ **[J]**
' (left quote)	■▢ **[Z]**	6	■▢ **[K]**
' (right quote)	■▢ **[X]**	7	■▢ **[B]**
%	■▢ **[R]**	8	■▢ **[N]**
/	■▢ **[F]**	9	■▢ **[M]**
*	■▢ **[C]**	0	■▢ **[backlight]**

QWERTY Characters (continued)

To Enter	Press the Keys	To Enter	Press the Keys
+	■▭ [**T**]	frown	■▭ [**O**]
-	■▭ [**G**]	=	■▭ [**L**]
#	■▭ [**V**]	ok	■▭ [**P**]

Entering Characters on the Numeric Keypad

On the numeric keypad, to type a lowercase "c," press ▭■ [**2**] [**2**] [**2**]. To type a letter on the same key as the last letter entered, wait two seconds, then enter the correct series of keystrokes to create the next letter.

While in the Alpha mode and you press [**1**] to initiate the CAPS mode, you will render a Caps Lock until you press [**1**] again. Once you are in CAPS mode, you stay in CAPS until it is pressed again. Press [**0**] to enter a space.

Numeric Characters

To Enter	Press the Keys	To Enter	Press the Keys
a	▭■ [**2**]	A	▭■ [**1**] [**2**]
b	▭■ [**2**] [**2**]	B	▭■ [**1**] [**2**] [**2**]
c	▭■ [**2**] [**2**] [**2**]	C	▭■ [**1**] [**2**] [**2**] [**2**]
d	▭■ [**3**]	D	▭■ [**1**] [**3**]
e	▭■ [**3**] [**3**]	E	▭■ [**1**] [**3**] [**3**]
f	▭■ [**3**] [**3**] [**3**]	F	▭■ [**1**] [**3**] [**3**] [**3**]
g	▭■ [**4**]	G	▭■ [**1**] [**4**]
h	▭■ [**4**] [**4**]	H	▭■ [**1**] [**4**] [**4**]
i	▭■ [**4**] [**4**] [**4**]	I	▭■ [**1**] [**4**] [**4**] [**4**]
j	▭■ [**5**]	J	▭■ [**1**] [**5**]
k	▭■ [**5**] [**5**]	K	▭■ [**1**] [**5**] [**5**]
l	▭■ [**5**] [**5**] [**5**]	L	▭■ [**1**] [**5**] [**5**] [**5**]
m	▭■ [**6**]	M	▭■ [**1**] [**6**]
n	▭■ [**6**] [**6**]	N	▭■ [**1**] [**6**] [**6**]
o	▭■ [**6**] [**6**] [**6**]	O	▭■ [**1**] [**6**] [**6**] [**6**]
p	▭■ [**7**]	P	▭■ [**1**] [**7**]
q	▭■ [**7**] [**7**]	Q	▭■ [**1**] [**7**] [**7**]
r	▭■ [**7**] [**7**] [**7**]	R	▭■ [**1**] [**7**] [**7**] [**7**]
s	▭■ [**7**] [**7**] [**7**] [**7**]	S	▭■ [**1**] [**7**] [**7**] [**7**] [**7**]
t	▭■ [**8**]	T	▭■ [**1**] [**8**]
u	▭■ [**8**] [**8**]	U	▭■ [**1**] [**8**] [**8**]
v	▭■ [**8**] [**8**] [**8**]	V	▭■ [**1**] [**8**] [**8**] [**8**]
w	▭■ [**9**]	W	▭■ [**1**] [**9**]
x	▭■ [**9**] [**9**]	X	▭■ [**1**] [**9**] [**9**]
y	▭■ [**9**] [**9**] [**9**]	Y	▭■ [**1**] [**9**] [**9**] [**9**]
z	▭■ [**9**] [**9**] [**9**] [**9**]	Z	▭■ [**1**] [**9**] [**9**] [**9**] [**9**]

Using the Power Switch

When you press the power switch, you actually suspend the CN3 and turn off the display and backlight. This helps to prolong battery life.

Note:

Coming Out of the Idle Mode

When there is no activity, the CN3 goes into idle mode or turns off the backlight after one minute. Press a key or tap the screen to resume activity.

To change the time when to turn off the backlight

Backlight

1 Tap **Start** > **Settings** > the **System** tab > the **Backlight** icon > the **Battery Power** tab.

2 With **Turn off backlight if device is not used for** checked, select the timeout value (10 seconds, 30 seconds, or 1-5 minutes).
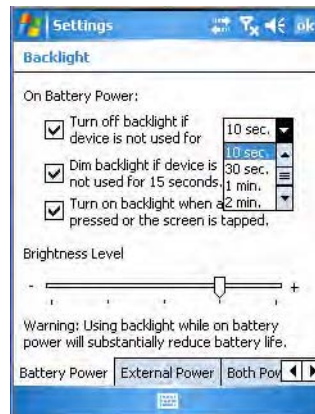
Resuming Activity after an Unattended Mode

After two minutes of no activity, the CN3 goes into an unattended mode or turns off. Press the power switch to resume activity.

To change the time when to turn off the CN3

1 Tap **Start** > **Settings** > the **System** tab > the **Power** icon > the **Advanced** tab.
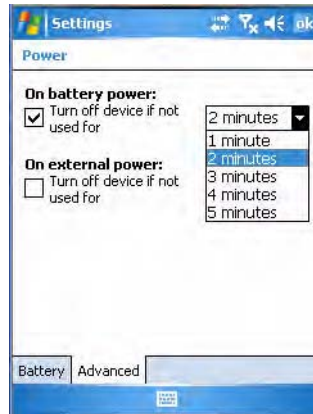
2 With **Turn off device if not used for** checked, select the timeout value (1-5 minutes).

Using the Screen

The CN3 has a 3.5" diagonal, 240x320 pixel (QVGA) transflective TFT-LCD 64K color display.

* The toolbar displays the Start flag, the connectivity icon, the volume icon, and the time and next appointment.

* The desktop displays shortcuts to some of the applications installed on the CN3.

* The taskbar displays the onscreen keyboard icon, Pocket PC links, and icons to any applications that are running, yet are hidden.

Note: Information about using the Windows Mobile operating system is in Chapter 2, "Windows Mobile".
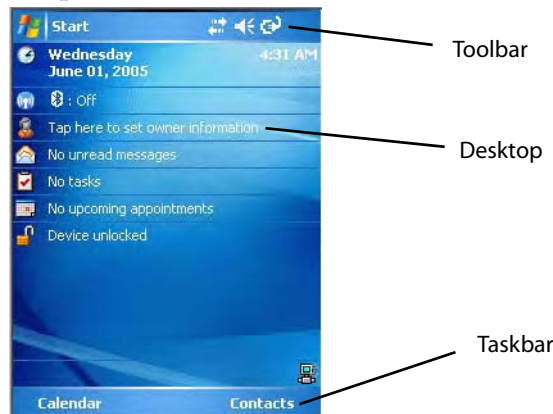
The CN3 has a stylus you can use to select items and enter information.

Tap	Touch the screen once with the stylus to select options, close applications, launch applications, or launch menus from the taskbar.
Drag	Hold the stylus on the screen and drag across the screen to select text and images.
Tap and hold	Tap and hold the stylus on an icon to see a list of actions available for the item. On the menu that appears, tap the action to perform.

Software Tools

SmartSystems Foundation Console (www.intermec.com/SmartSystems)

This free download tool includes a management console that provides a default method to configure and manage Intermec devices "out-of-the-box," without the purchase of additional software licenses. This is for configuring and deploying multiple devices or managing multiple licenses.

You can access the SmartSystems Foundation from the Intermec web site at **www.intermec.com/SmartSystems**.

SmartSystems Platform Bundles (SSPB)

SmartSystems Platform Bundles (SSPB) contains the Data Collection Engine (DCE), SmartSystems, Funk Supplicant, Intermec Settings, Intermec Developer Library (IDL) runtime, and other software.

The SSPB is stored in the "\Flash File Store" folder off the root of your CN3 and automatically installed on the device when it is initially started up. Updated bundles are available as software downloads from the Intermec web site at **www.intermec.com/SmartSystems**. Click **Downloads** on the left to access the latest.

Intermec Resource Kits (www.intermec.com/IDL)

Resource Kits provide tools that build applications using the features of Intermec devices. Resource kits include: Bluetooth, Communications, Data Collection, Device Settings, Mobile Gadgets, Printing, and RFID.

You can use resource kits, software development information, and other programming support in the Intermec Developer Library available from the Intermec web site at **www.intermec.com/IDL**.

Using the Speakers

The CN3 features two integrated speakers. You can use the smaller front speaker as a mobile phone and the larger rear speaker like a speakerphone.
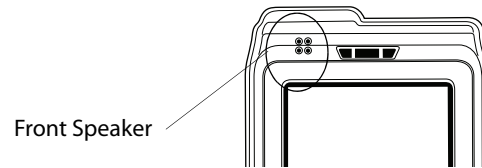
Do not place the speaker next to your ear when the speaker volume is set to "Loud" (maximum), or you may damage your hearing.
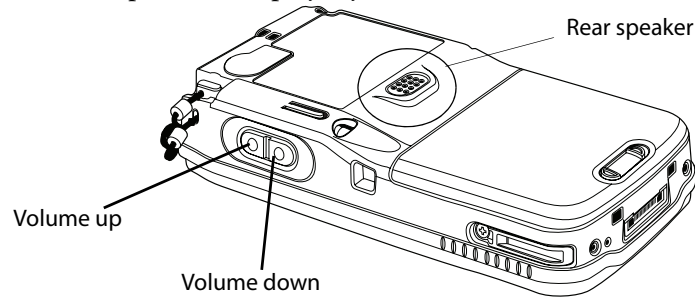
Warning

Front Speaker

The front speaker is a full-voice range speaker of cell-phone quality with a separate volume control.

Front Speaker

Rear Speaker

The rear speaker also plays system sounds.

Rear speaker

Volume up

Volume down

Adjusting the Volume

The volume is enabled when you adjust the volume. You can control the volume by pressing the two scan buttons on the right side of the CN3 as shown above, using the Volume drop-down in the toolbar, or the Intermec Settings applet.

In either situation, tap **Off** to disable the volume.

To adjust the volume for the rear speaker

1 Tap the **Volume** icon at the top of the screen.

2 Tap **On**, then move the system volume slider to the desired volume level. Up is louder, down is quieter.

If your CN3 comes with a phone, be sure to use the left slider bar for the volume for the rear speaker, and to use the right slider bar for the phone (front speaker).

Volume slider bar   Phone slider bar
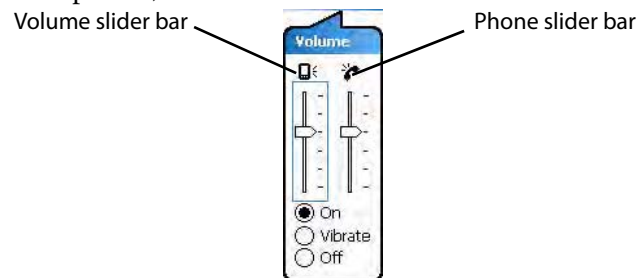
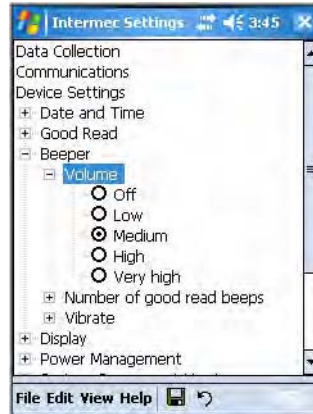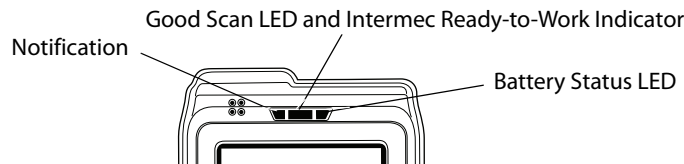**To use the Intermec Settings applet to adjust the volume**

1 Tap **Start** > **Settings** > the **System** tab > the **Intermec Settings** icon.

2 Tap (+) to expand **Device Settings** > **Beeper** > **Volume**.

3 Tap any of the options other than "Off" to enable and adjust.

Using the Status LEDs

The status LEDs above the display show the following information:

The Battery Status LED on the right alerts you to the status of your battery using any of the following codes:

Battery Status LED Descriptions

LED	Description
Blinking Red	Battery is low, needs charging
Steady Red and CN3 is on external power	Battery is charging
Steady Red and CN3 is not on charge	Software is not working properly
Yellow	Battery is missing or is unable to charge because its temperature is outside the 0° to 45°C (32° to 115°F) degree charging range
Green and the CN3 is on external power	Battery is charged
Off	CN3 is not on external power, battery operating normally

The center LED shows green (Good Scan) when the CN3 successfully decodes a bar code scan.

When the CN3 is turned on or off, a steady blue light (Ready-to-Work Indicator) may illuminate for a short time while the CN3 is suspending or

resuming with the display turned off. The blue light may stay on for up to 30 seconds, but will usually turn off after less than 10 seconds.

During this time, do not toggle the CN3 on or off and do not remove the battery, or you may corrupt the CN3.

Caution

Selected application software programs may also use the blue light, either steady or flashing, for other purposes. The previous paragraph applies only in situations where you turn the CN3 on or off while the display is off.

The center LED may show a steady blue when the CN3 has successfully loaded and activated the TE 2000 application, a blinking blue if the TE 2000 application is loaded but inactive, or be off when the TE 2000 application is disabled or is missing.

This feature is for the SmartSystems Foundation application that is part of a wireless network using all Intermec devices. See **"SmartSystems Foundation Console (www.intermec.com/SmartSystems)" on page 21** for more information or contact your Intermec representative.

The left Notification LED lights up with orange to notify you of a pending alarm or message, such as when you receive an e-mail or set a calendar reminder.

Using the Storage Card

The CN3 uses a miniSD card to increase file storage and install software. The miniSD card slot is located under a door that is beneath the battery pack. Remove the two screws holding the door to reach the miniSD card.

Warning

You can corrupt your miniSD card if you do not follow these installation and removal procedures exactly. Before installing a miniSD card, inspect the gasket on the door for any damage or wear, and contact your Intermec representative if any damage or wear is found

Note: The CN3 will reset if the miniSD/SIM door is opened. The screws to this door must be in place and torqued to 1.5 in-lbs to ensure normal operation.

To insert the miniSD card

1 Press the power switch to suspend the CN3, then remove the battery pack from the back of the CN3.

2 Remove the two screws on the miniSD/SIM card slot door.

3 Gently lift the door to the card slot, then with the metal contacts facing down, insert the miniSD card into the card slot connector until the card lifts up from the floor of the card slot.

4 Press the miniSD/SIM card slot door down, insert the two screws, reinsert the battery pack, then press the power switch.

Once the door to the miniSD is opened (for changing, installing, or removing the SIM or miniSD card); a cold-boot is performed.

miniSD/SIM door

SIM card slot
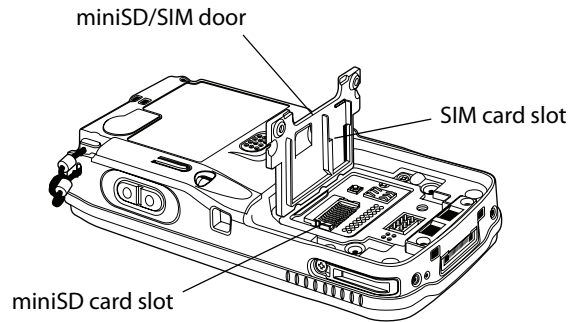
miniSD card slot

To remove the miniSD card

1 Press the power switch to suspend the CN3.

2 Remove the battery pack.

3 Remove the two screws on the miniSD/SIM card slot door.

4 Remove the miniSD card from the CN3.

Setting Vibrate Mode
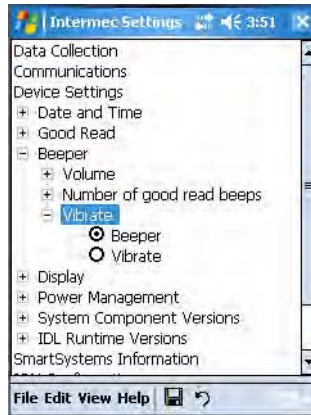
To set your CN3 to vibrate

- Tap the **Volume** icon at the top of the screen, then tap **Vibrate**. If your CN3 has a built-in phone, this sets both the volume and the phone to vibrate. Note the icon change.
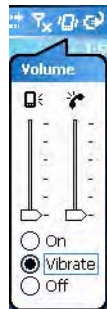
To set your CN3 to vibrate using the Intermec Settings applet

1 Tap **Start** > **Settings** > the **System** tab > the **Intermec Settings** icon.

2 Tap (+) to expand **Device Settings** > **Beeper** > **Vibrate**, then tap **Vibrate**.

3 To disable the vibrate, tap the **Beeper** option.

To set the CN3 to vibrate using the Sounds & Notifications applet

1 Tap **Start** > **Settings** > the **Personal** tab > the **Sounds & Notifications** icon.

2 Tap the **Notifications** tab, then select from the **Event** list.

3 Check **Vibrate**, then tap **ok** to close.
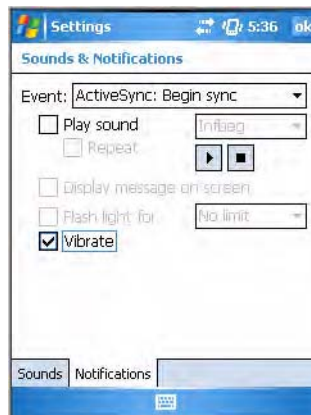
Setting Up GPS on Your CN3

If your CN3 comes equipped with an integrated Global Positioning System (GPS) receiver, it can deliver standards-based National Marine Electronics Association (NMEA) data strings to GPS applications. However, Intermec recommends that you use the GPS Intermediate Driver (GPSID) instead of directly accessing the GPS hardware. The GPSID is a Microsoft software component that interacts between applications and the GPS hardware.

Using the GPSID allows Intermec support for Extended Ephemeris, which enhances GPS performance by:

• reducing the amount of time it takes your GPS receiver to acquire a fix.

• eliminating the need to obtain precise satellite data information from the GPS satellites.

And, as a Microsoft software component, the GPSID also provides these benefits:

• Allows multiple applications to simultaneously access the GPS data stream.

• Provides access to GPS data without requiring applications to recognize and parse NMEA syntax.

Using the GPSID Installed on the CN3

To use the GPSID installed on your CN3, you need to configure the GPSID settings.

To configure your GPSID settings

1 Tap **Start**, and select **Settings**.

2 Tap the **System** tab.

3 Tap **GPS**. The GPS Settings screen appears.