

Data Collection Terminal

- PA400 -



User's Manual

Version 1.0

Preface

About This Manual

This manual explains how to install, operate and maintain the PA400 Data Collection Terminal.

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Regulatory Compliance Statements

FCC Warning Statement

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

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
 2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with FCC RF exposure requirements, avoid direct contact to the transmitting antenna during transmitting.
 3. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC Label Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

RF Radiation Exposure Statement

For body contact during operation, this phone has been tested and meets FCC RF exposure guidelines when used with an accessory that contains no metal and that positions the handset a minimum of 1.5 cm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Canadian Compliance Statement

This Class B Digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte les exigences du Règlement sur le matériel brouilleur du Canada.

European Conformity Statement

Declaration of Conformity with regards to the R&TTE 1999/5/EC and EMC 89/336/ EEC directives.

RoHS Statement

This device conforms to RoHS (Reduction Of Hazardous Substances)



European Union regulations that set maximum concentration limits on hazardous materials used in electrical and electronic equipment.

TaiwanNCC Warning Statement

交通部電信總局低功率電波輻射性電機管理辦法 (930322)

根據交通部低功率管理辦法規定：

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Laser Information

The Unitech PA400 series is certified in the U.S. to conform to the requirements of DHHS/CDRH 21CFR Subchapter J and to the requirements of IEC 825-1. Class II and Class 2 products are not considered to be hazardous. The PA400 series contains internally a Visible Laser Diode (VLD) whose emissions do not exceed the maximum limits as set forth in the above regulations. The scanner is designed so that there is no human access to harmful laser light during normal operation, user maintenance or prescribed service operations.

The laser safety warning label required by the DHHS/IEC for the PA400 series' optional laser scanner module is located on the memory compartment cover, on the back of the unit.

CAUTION! Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light. Use of optical instruments with the scanner, including binoculars, microscopes, and magnifying glasses, with will increase eye damage. This does not include eyeglasses worn by the user.

Battery Notices

The PA400 is equipped with a Lithium-Ion battery pack and backup battery. Both batteries will discharge after an extended period of not being used.

When both batteries are discharged, recharge the unit for 4.5 hours in order to fully charge the main battery and backup battery. Recharge the PA400 through the following:

1. Plug the USB charging cable to the PA400 and plug the 5V/3A AC-DC adapter to the power jack of the USB charging cable.
2. Place the PA400 into the docking station and plug the 5V/3A AC-DC adapter to the power jack of the docking station.

If the main battery is removed, the backup battery ensures the data on SDRAM is safe for up to 2 hours. To prevent data loss, do not leave the PA400 uncharged with the main battery removed for an extended period. For more details, refer to the section titling Charging the Battery.

NOTE: Rechargeable batteries are advised to replace every year or when 500 charge/discharge cycles achieved to guarantee optimal performance. It is normal that the battery balloons or expands beyond one year or the maximum of 500 cycles. Although it does not cause harm, it cannot be used again and must be disposed of according to the location's safe battery disposal procedures.

If the performance decrease is greater than 20% in a Lithium-Ion battery, the battery is at the end of its life cycle. Do not continue to use, and ensure the battery is disposed of properly.

The length of time that a battery power lasts depends on the battery type and how the device is used. Conserve the battery life through the following:

- Avoid frequent full discharges because this places additional strain on the battery. Several partial discharges with frequent recharges are better than a deep one. Recharging a partially charged lithium-Ion battery does not cause harm because there is no memory.
- Keep the lithium-Ion battery cool. Avoid a hot car. For prolonged storage, keep the battery at a 40% charge level.

- Do not leave the lithium-Ion battery discharged and unused for an extended period because the battery will wear out and the longevity of the battery will be at least shorter than half of the one with frequent recharges.

Battery charge notice

It is important to consider the environment temperature whenever the Lithium-Ion battery pack is charged. Charging is most efficient at normal room temperature or in a slightly cooler environment. It is essential that batteries are charged within the stated range of 0°C to 40°C. Charging batteries outside of the specified range could damage the batteries and shorten their charging life cycle.

CAUTION! Do not charge batteries at a temperature lower than 0°C, which will increase the internal resistance to cause heat and make the batteries unstable and unsafe. Please use a battery temperature-detecting device for a charger to ensure a safe charging temperature range. Further, to protect and avoid battery from inflating, the battery is detected for thermal protection and will not be charged when the temperature of battery is over 50 degrees.

Storage and safety notice

Although charged Lithium-Ion batteries may be left unused for several months, their capacity may be depleted due to build up of internal resistance. If this happens they will require recharging prior to use. Lithium-Ion batteries may be stored at temperatures between -20°C to 60°C, however they may deplete more rapidly at the higher temperature ranges. It is recommended to store batteries within normal room temperature ranges.

Warranty

The following items covered under Unitech Limited Warranty are free from defects during normal use:

- PA400 – 1-year limited warranty.
- Lithium-Ion battery – 6-month limited warranty.

Warranty becomes void if equipment is modified, improperly installed or used, damaged by accident or neglect, or if any parts are improperly installed or replaced by the user.

Use only the adapter supplied. Using the wrong adapter may damage the unit and will void the warranty.

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Chapter 1

Getting Started

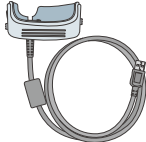
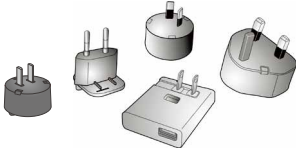
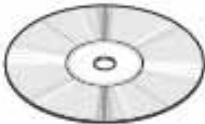
Introducing the PA400

Thank you for purchasing the PA400 Data Collection Terminal. Your PA400 was designed for users who need a compact and durable portable computer for data collection and real time transactions. The unitech PA400 Data Collection Terminal is a compact mobile computing device designed for maximum durability.

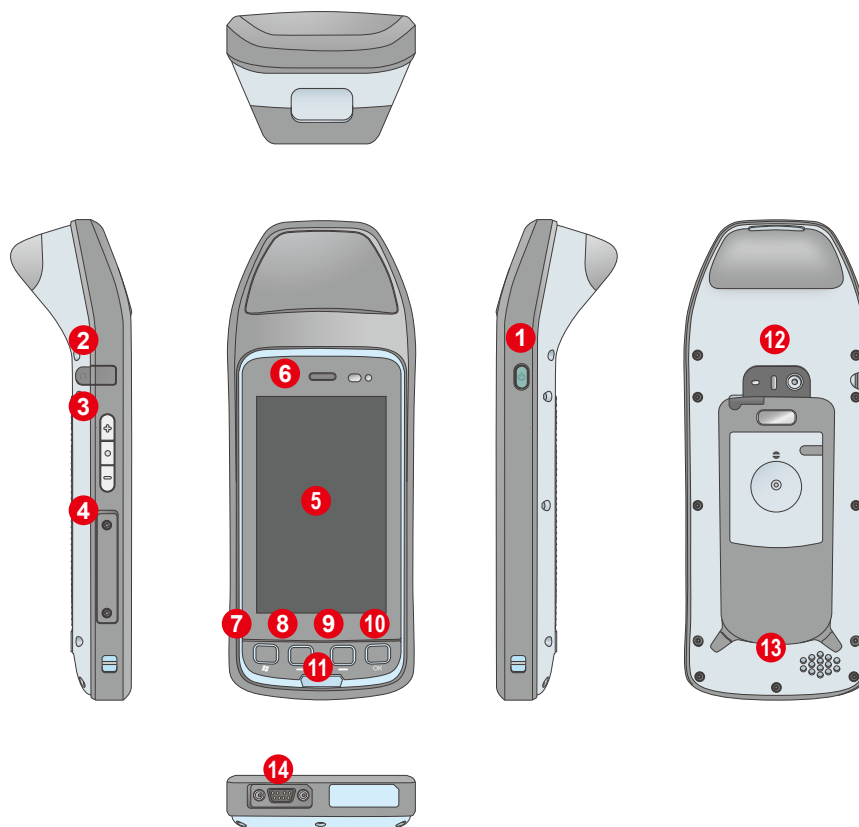
Easy to Use

The unit is equipped with a color display with touch screen, a five-way directional key, and six application keys. The PA400 supports integrated long range scanners for fast and accurate data collection. The device also supports infrared interface, Bluetooth, and wireless communication capability for exchanging information in a computing communication system.

Package Contents

		
PA400 Terminal	USB Cable	Wrist Strap
		
Power Adapter / Plugs	QRG/UM CD-ROM	

Device components



No.	Component	Description
1	POWER button	- Press and hold to turn on / off your device. - When the device is on, press to suspend / resume your device.
2	Headphone connector	Connect to 3.5mm stereo headphone (microphone-in function not supported), which allows you to listen to audio media or use the hands-free kit. To record, tap START / Notes (or hold down the Fn key and the 5 key). If you do not see the Recording toolbar, tap Menu / View Recording Toolbar. Tap the round Record symbol on the screen. The unit will record until the square Stop symbol is pressed. The recorded file will be saved in the Notes folder.
3	VOLUME control and ACTION buttons	Press the + / - button to increase/decrease the volume for your device. Press the ENTER button (between the + / - buttons) to select an option.

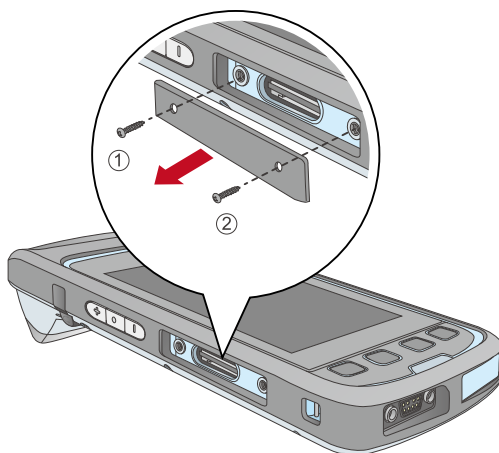
No.	Component	Description
4	Memory card and SIM card slots	Insert the memory card and SIM card in the respective slots: • Insert the memory card to expand the storage space. • Insert the SIM card to access the 3.75G network, allowing you to make phone calls, receive emails, surf the Internet, and more.
5	Notification LED	The Notification LED lights on to indicate the status of the internal battery: • Green - battery full • Orange - battery charging
6	START (Windows) key	Press to access the Programs screen.
7	UP key (Up Arrow)	Press to perform the command above the button.
8	DOWN key (Down Arrow)	Press to perform the command below the button.
9	OK key	Press to confirm your selection.
10	Microphone	Speak here when receiving / making a phone call.
11	Camera and Flash	• The camera lets you take pictures and record videos. • The flash lets you take pictures in low-light conditions.
12	Speaker	Listen to audio media or a phone call from here.
13	PA400 Custom IO Port	Connect to the PA400 USB Client Cable, PA400 USB Host cable or PA400 9 Pin Serial

Inserting the memory card and the SIM card

You need to remove the cover on the left panel using a Phillips-0 screw driver before you can install the memory card and the SIM card on your device.

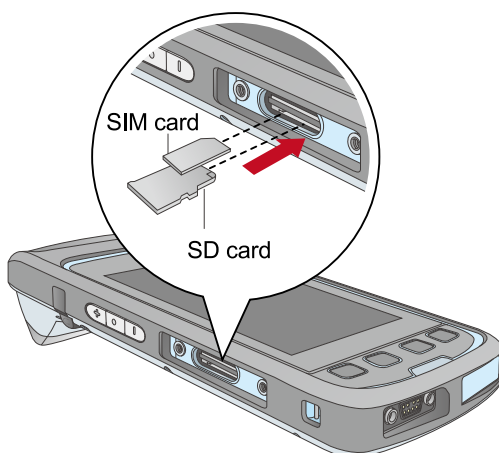
NOTE: The device supports up to 32GB microSD memory cards with minimum 48MHz clock rate.

1. Remove the cover on the left panel of the device by unscrewing the screws.

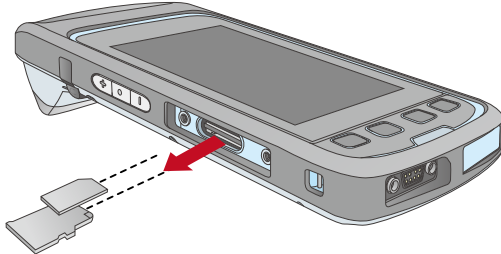


2. Follow the illustration below to insert the memory card and the SIM card:

- To insert the SIM card: push the card into the slot with its golden contacts facing the back of your device.
- To insert the memory card: hold the card by the edges and gently insert it into the slot with the label facing the front of your device. Do not apply pressure to the center of the memory card while inserting the card.

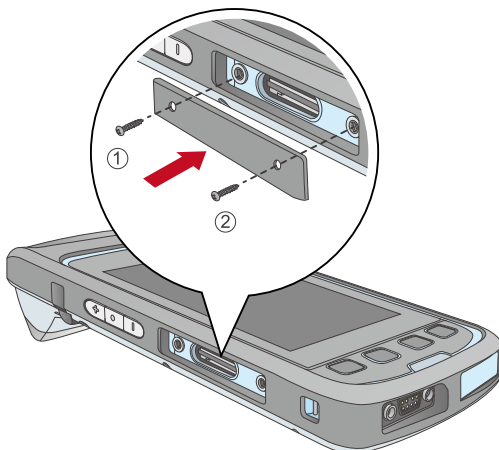


3. To remove a card, push the card to release from the slot.



NOTE: Make sure you have saved any data in open programs before removing the memory card.

4. Replace the cover and then secure it with the screws.



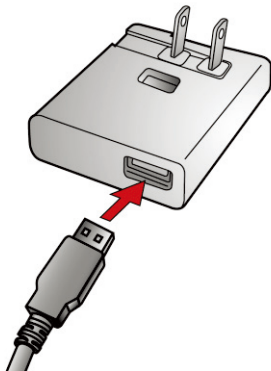
Charging the battery

IMPORTANT: Fully charge the battery at least 4 hours. The battery LED will turn green when fully charged.

CAUTION: Extreme Heat

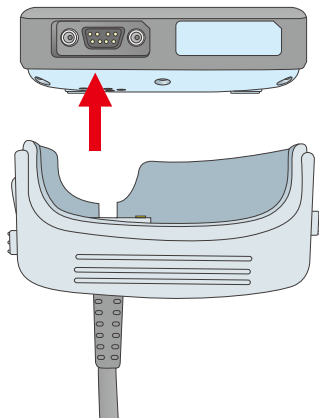
- Extreme heat: The battery is designed to stop operating at or above the extreme heat of +149°F (+65°C). If this icon  appears, the battery has overheated to +140°F (+60°C).
- If the battery temperature exceeds 158°F (70°C) it will be disabled and will need to be replaced.

1. If needed, attach country specific converter onto the AC charger.

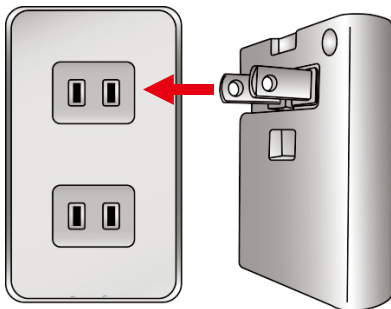


NOTE: The converter plug varies with the region of your purchase.

2. Locate the PA400 Custom IO Connector on the bottom of the device.
Connect the custom end of the PA400 Custom USB Client cable to the connector on your device.



3. Plug the other end of the AC charger into a wall outlet.

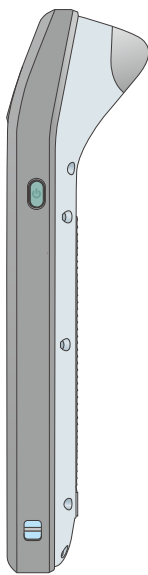


Turning your unit on and choosing your language

WARNING! BEFORE TURNING THE DEVICE ON, THE DEVICE MUST BE PLUGGED IN TO AN EXTERNAL POWER SOURCE.

Once you have started to charge your device, you can turn it on.

1. Press the POWER button on the right panel of the device for about 5 seconds. The device is turned on.



2. The Welcome Wizard will lead you through the setup process.
3. Select your preferred language by using the + or - buttons on the left side of the device, then press the ACTION button to choose the language (the touch screen is not enabled yet).
4. Use the + button to highlight the box next to 'Yes, I want to use English (used as an example) as the language on the device.'
5. Press the ENTER button to place a check in the box.
6. Press the - button 2 times to highlight the Next > box.
7. Press the ENTER button to select Next.
8. Wait while your unit is being configured for the language you selected.

9. The only way to change the language you have selected is to reinstall the firmware using the Firmware update utility.
10. **NOTE:** Only Microsoft applications and messages will be translated into languages other than English. All other error messages, notifications and other applications may appear in English.
11. When the handheld has been configured for the language you selected, the next step is to calibrate the touch screen.
12. Tap the screen to set up your Windows Embedded Handheld.
13. On the align screen window, use your finger to touch the series of targets, a stylus will not work on this screen. You may need to repeat the alignment procedure more than once to provide a satisfactory alignment.

Chapter 2

Operating Basics

Home screen

The Home Screen is an easy way to launch your favorite programs.

You can view high-level information at a glance, with notifications for Live services, e-mail and SMS/MMS.



To navigate the Home screen, slide your fingertip up/down on the screen; or simply drag the highlighted bar to the desired item on the screen. The programs provided on the Home screen include:

- **pictures:** You can select your photos from this menu.
- **music:** You can select your music from this menu.
- **getting started:** You can set up your device using the wizard.
- **phone:** You can use the device's phone function by selecting this item.
- **voicemail:** You can use the device's voicemail function by selecting this item.
- **time:** You can select your time zone, set the time and date to the correct values and set alarms.

- **text:** If you have the phone feature set up on your unit, you can send and receive text messages from this menu.
- **e-mail:** Email can be set up and launched here.
- **calendar:** Appointments can be managed from here.
- **favorites:** Internet Explorer can be launched from here.

You can change to the classic Today Screen by tapping START (Windows logo) / Settings / Home / Items. Unselect Windows Default and select the items that you would like to appear on the Today Screen.

Status indicators

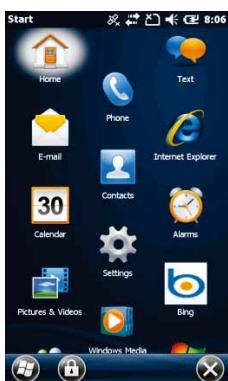
The following table lists common status indicators.

Icon	Description	Icon	Description
	Battery power is low		Other networks are detected. Tap to access an available network
	Battery power is very low		Wireless network connected
	Battery communication error		Active connection, but not currently synchronizing
	Battery charging		Inactive connection to computer or wireless network
	Battery level		Synchronizing
	Battery warning out of temperature range		Synchronizing error
	Instant messages received		Pending alarm
	Speaker is on		Phone is turned on and signal strength
	Speaker is off (or in mute position)		Phone is turned off. To turn it on, tap this icon
	SIM card missing		No signal
	Faulty SIM card		No service. Phone connection unavailable or network error.
	E-mail has been received		Lost signal. The unit is searching for a signal.
	Tap to view more notifications		EDGE network is available
	Data call is in progress		EDGE network connected

Icon	Description	Icon	Description
	Roaming mode		GPRS network available
	3G connected		GPRS network connected
			HSDPA network available

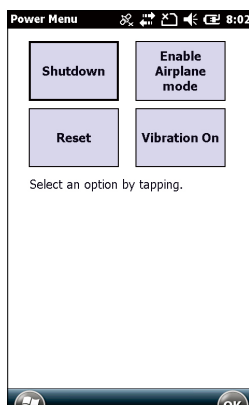
Programs screen

Press the START () button to access the Programs screen. The main features of the Programs screen are listed below. Slide your fingertip up/down on the Programs screen to browse more items and then access an item by tapping on the item.



Power menu

Press and hold the POWER button for about 3 seconds. Continuing to press the POWER button will cause a reset when the countdown reaches zero. If you release the POWER button while the countdown is proceeding, you access the following menu. Tap an option or OK to exit.



- **Shutdown:** Turn off the device.
- **Enable Airplane mode:** Enable the Airplane mode for the device.
- **Reset:** Restart the device.
- **Vibration On:** Enable the Vibration mode for the device.

NOTE: If the countdown or the Power menu does not appear when the POWER button is held down, continue to hold down the POWER button for at least 8 seconds to start the reset. It may take up to 10 seconds for the unit to start after the POWER button has been released.

Perform a Clean Boot / Factory Reset

WARNING: Application software installed by the customer and some licenses, settings and user data will be cleared if this function is performed!

Reset the unit. As soon as you see the Trimble screen, press and hold the START (⌨) key and then press the Right Soft Key (⏏) while still holding the START (⌨) key. Let go of both buttons. Press the ACTION button on the left side of the unit to clear the persistent store. Press any other button to cancel.

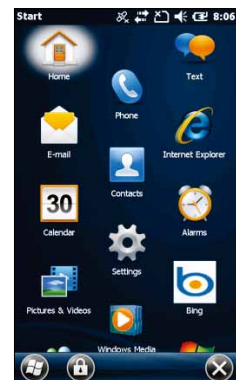
Securing your device

You can customize the level of security you want to have on your device by locking the keypad, the entire device, or the SIM card.

Lock the keypad

The keypad lock turns off the keypad functionality. This is a helpful feature if, for example, your device is turned off and in your pocket, and you want to prevent accidental keypresses from pressing a button.

To lock the keypad, press the START (⌨) key to access the Programs screen. Press the lock icon at the bottom of the screen to lock the keypad.



You will then see the following screen:

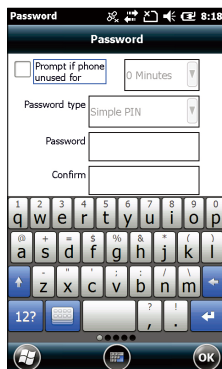


To unlock the keypad, slide the lock symbol.

Lock your device

Locking your device prevents access to personal data. When you enable this feature, your device will automatically lock after a specified time of inactivity. A screen will be displayed requiring your device lock password before access is granted.

To access the Lock menu, tap Start (Windows logo) / Settings / Lock



WARNING: BE CERTAIN TO REMEMBER THE PASSWORD.

The only way to recover from a forgotten password is to perform a Clean Boot. However, you will LOSE all application software, licenses, settings and data on your unit. For instructions on how to Perform a Clean Boot, see page 12.

Chapter 3

Using the Phone

Before using your phone, purchase an AT&T GSM 3G cellular voice or data plan from your local AT&T carrier.

You can use Phone to make phone calls, set up speed dials, keep track of calls, and send SMS messages just like all the standard features of a mobile phone. Also, there are several dialing features unique to your device. For example, you can take notes while talking, dial directly from Microsoft Contacts and easily transfer contacts between your SIM card and the RAM of your device.

The Phone screen lets you open, call, or find a contact, and even save a new number in Contacts. To open the Phone screen, tap the phone option on the Home screen.

Making a call

You can make calls from the Phone screen, from Contacts, Speed Dial, and Call History.

Making a call from the Phone screen

1. Open the Phone screen.



2. Enter the phone number by tapping keys on the keypad.
3. Tap the BACK key () if you need to delete a number.
4. Tap Talk icon.

TIP: When you tap a key on the keypad, a list of names and numbers is displayed as your device searches Contacts, Call History, and Speed Dial to find a matching name or number. The next key you tap continues to narrow the search. When you see the name of the person you want to call, select it, and tap Talk icon.

Making a call from Contacts

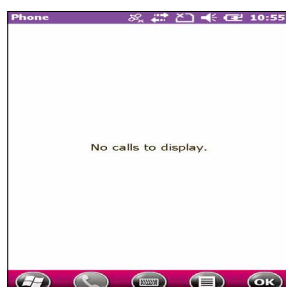
1. Launch Contacts (from the bottom bar of the HOME screen).



2. Select the desired contact.
3. Select the number to call, and then tap .

Making a call from Call History

1. Open the Call History screen (from the phone screen).



2. Select the number to call, and then tap .

Making an international call

Tap and hold the 0 (Zero) key on the keypad until “+” symbol appears.

Enter the full phone number you want to dial, and tap Talk icon.

The full phone number includes the country code, area code (without the leading zero, if any), and phone number.

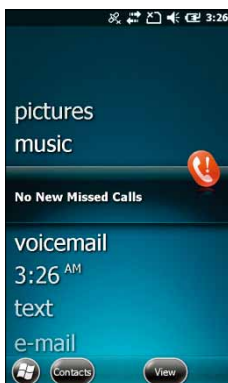
Making an emergency call

Enter the emergency number for your locale and then tap the Talk icon.

Receiving and ending a call

When you receive a phone call, an incoming call message appears on the screen and you are given the option to answer or ignore it.

- To answer the call, tap 
- To reject the call, tap 



TIP: To adjust the in-call volume, press the VOLUME + / - button on the left side of the device.

Ending a call

When a call is in progress, tap the End button to hang up.

Speed dial

You can create speed dial entries for frequently-called numbers so you can dial a number by tapping a single key.

Using speed dial

1. Launch Contacts.
2. Select a contact to view the contact details.
3. Select the desired phone number and tap Menu () / Add to Speed Dial.
4. Specify the Name, Number, and Location assignment of the Speed Dial entry.
5. When done, tap OK.

NOTE: The first speed dial location is generally reserved for your voicemail. Speed Dial uses the next available location by default. If you want to place a number in a location that is already used, the new number replaces the existing number.

6. If you have assigned a speed dial (for example, the number 2 key) to a contact in Speed Dial, you can simply tap and hold the 2 key to dial the contact's number.

Chapter 4

Connecting to a PC and Synchronizing Information

You can take information from your computer wherever you go by synchronizing them to your device. The following types of information can be synchronized:

- Microsoft Outlook® information, which includes Outlook e-mail, contacts, calendar, tasks, and notes
- Notes, which are created using Microsoft® Office OneNote® 2007
- Media, such as pictures, music and video
- Favorites, which are the bookmarked links to your favorite web sites
- Files, such as documents and other files

Before you can synchronize, you will first need to install and set up either ActiveSync or Windows Mobile Device Center on your computer.

After installing the synchronization software on your computer, connect the phone to your computer using the USB sync cable. Upon connecting the sync cable to your device and your computer, choose to start the synchronization process.

ActiveSync or Windows Mobile Device Center only synchronizes data on your computer and phone. If you have installed a storage card and you want to back up files from the storage card, use Windows Explorer on your computer to copy files from the storage card to your computer.

If you are sending your device for repair or performing a hard reset, data from your device will be lost. It is recommended that you sync your device to your computer to back up your files. To back up files from the storage card to your computer, use Windows Explorer to copy files from the storage card to the computer.

Setting up Windows Mobile® Device Center on

Windows Vista® and newer Microsoft Windows Mobile® Device Center is the replacement for Microsoft® ActiveSync® on Windows Vista® and newer. Some versions of Windows Vista® come with Windows Mobile Device Center already installed. If Windows Mobile Device Center is not available on your Windows Vista®, you can download it from the Microsoft website. Go to <http://www.microsoft.com> and search for Windows Mobile Device Center. When you connect your device to your computer and start Windows Mobile Device Center for the first time, you are asked to create a Windows Mobile partnership with your device. To create a partnership:

1. Connect your device to your PC. Windows Mobile Device Center configures itself and then opens.
2. You are given the option to Register Online, Remind me Later, or Don't Register.
3. On the Windows Mobile Device Home screen, click Set up your device.

NOTE: Choose Connect without setting up your device if you only want to transfer media files, check for updates, and explore your device but not sync Outlook information.

4. Select the information types that you want to synchronize then click Next.
5. Enter a name for your device and click Set Up.

When you finish the wizard, Windows Mobile Device Center synchronizes your device automatically. Notice that Outlook e-mail messages and other information will appear on your device after synchronization.

Using Windows Mobile Device Center

To open Windows Mobile Device Center, click Start () / All Programs / Windows Mobile Device Center on your Windows Vista or newer computer.

On Windows Mobile Device Center, you can do the following:

- Click Mobile Device Settings to change synchronization settings.
- When you click **Pictures, Music and Video / XX new pictures/ video clips are available for import**, a wizard guides you to tag and transfer photos

from your device to the Photo Gallery on your computer.

- Click **Pictures, Music and Video / Add media to your device from Windows Media Player** to synchronize music and video files using Windows Media® Player.
- Click **File Management / Browse the contents of your device** to view documents and files on your device.

NOTE: See Windows Mobile Device Center Help for more information.

Setting up ActiveSync® on Windows® XP and older

On a Windows® XP computer, you need to use Microsoft ActiveSync® 4.5 or later. If you do not have this software on your computer, you can download it from the Microsoft website. Go to <http://www.microsoft.com> and search for ActiveSync.

Setting up synchronization in ActiveSync

1. Connect your device to your computer. The Synchronization Setup Wizard automatically starts and guides you to create a synchronization partnership. Click Next to proceed.
2. To synchronize your device with your computer, clear the Synchronize directly with a server running Microsoft Exchange check box, and then click Next.
3. Select the information types that you want to synchronize, then click Next.
4. Select or clear the Allow wireless data connections check box according to your preference.
5. Click Finish.

When you finish the wizard, ActiveSync synchronizes your device automatically. Notice that Outlook e-mail messages and other information appear on your device after synchronization.

Synchronizing with your computer

Connect your device to your PC to synchronize the information between your device and PC. While your device is connected, ActiveSync (or Windows Mobile Device Center on your PC) synchronizes every time you make a change on either the PC or your device.

Starting and stopping synchronization

You can manually synchronize either from your device or computer.

From your device:

1. Click **Start** () / **ActiveSync**, and then click Sync.
2. To end synchronization before it completes, click Stop.

TIP: To delete a partnership with one computer completely, disconnect your device from that computer first. In ActiveSync on your device, tap Menu / Options, select the computer name, then tap Menu / Delete.

From Windows Mobile Device Center:

1. Click **Start** () / **All Programs** / **Windows Mobile Device Center**.
2. Click  at the lower left of the Windows Mobile Device Center.
3. To end synchronization before it completes, click .

From ActiveSync on your computer:

When you connect your device to your computer, ActiveSync automatically opens on your computer and synchronizes.

1. To manually start synchronization, click .
2. To end synchronization before it completes, click .

Selecting information to synchronize

You can change the information types and the amount of information to synchronize for each type either on your device or your computer. Follow the steps below to change synchronization settings on your device.

Before changing synchronization settings on your device, disconnect it from your computer.

1. In ActiveSync on your device, tap Menu / Options.

2. Select the check box for any items you want to synchronize. If you cannot select a check box, you might have to clear the check box for the same information type elsewhere in the list.
3. To change synchronization settings for an information type, for instance, E-mail, select it and tap Settings.
4. You can then set the download size limit, specify the time period of information to download, and more.

Some information types such as Favorites, Files and Media cannot be selected in ActiveSync Options on your device. You can only select or clear these items from your computer's Windows Mobile Device Center or ActiveSync.

A computer can have sync partnerships with many different Windows Mobile powered phones, but a phone can have sync partnerships with at most two computers. To ensure that your device will synchronize properly with both computers, set up the second computer using the same synchronization settings you used on the first computer.

Outlook e-mail can be synchronized with only one computer.

Troubleshooting sync connection problems

In some cases, when the computer connects to the Internet or a local network, it may disconnect the connection with your device in favor of the Internet or network connection.

If this happens, on the handheld, click Start (Windows logo) / Settings / Connections / USB to PC, then clear the Enable advanced network functionality check box. This makes your computer utilize a serial USB connection with your device.

Chapter 5

Managing Your Device

Changing basic settings

Personalizing the Home screen

The Home screen is the starting place for most of the tasks you perform on your device and gives you access to all the features and programs of your device.

1. On the Home screen, tap Start (🏠) / Settings / Home / Appearance tab.
2. Select the available option from the list.
3. When done, tap OK.
4. To set a picture as the Home screen background:
 - a. Select the Use this picture as the background option.
 - b. Tap Browse to select the picture you want to use.
 - c. When done, tap OK.

Setting the date, time, and alarms

1. On the Home screen, tap Start (🏠) / Settings / Clock & Alarms / Time tab.
2. Set the Time zone, Date, and Time.
3. When done, tap OK.
4. To set an alarm:
 - a. On the Clock & Alarms screen, select the Alarms tab.
 - b. Select the available alarm item.
 - c. Tap on the alarm item to display the Alarm Settings screen, allowing you to change the Alarm settings you want. When done, tap OK.
 - d. When you enable an alarm, an Alarm icon appears on the Home screen

Setting regional options

Your device comes with the regional settings that are appropriate for your locale.

1. On the Home screen, tap Start (🪟) / Settings / System / Regional Settings.
2. On the Regional Settings screen, select the Region tab and then select your preferred language from the list.
3. If desired, you can specify the locale, date and time style, as well as number and currency formatting options applicable to your region.
4. When done, tap OK.

Customizing sounds and notifications

You can choose how to be notified for incoming calls, reminders, new messages, alarms, and more.

Specifying the sound for an event

1. On the Home screen, tap Start (🪟) / Settings / Sounds & Notifications.
2. From the Sounds tab, select the desired sound for each event.
3. When done, tap OK.

Setting the ring tone for incoming calls

1. On the Home screen, tap Start (🪟) / Settings / Sounds & Notifications.
2. From the Notifications tab, select a ringtone in the Ring tone list.
3. When done, tap OK.

NOTE: If you select Vibrate, the sound mutes and the phone will vibrate when you receive a call. The Vibrate icon appears in the title bar.

Copying a sound to your device

You can use a .wav, .mid, .wma, or .mp3 audio file on your device as a ring tone, notification, or reminder.

1. Connect the device to your PC using the PA400 Custom USB client cable.
2. On your PC, copy the sound file you want.
3. Explore the phone's contents:

- In Windows Mobile Device Center, tap **File Management / Browse** the contents of your device.
 - In ActiveSync on your PC, tap Explore and double-tap My Windows Mobile-Based Device.
4. Navigate to your device's **Application Data / Sounds** folder and then paste the audio file.

Managing memory and battery power

Battery Life

The Lithium-Ion (Li-Ion) battery life is dependent upon the application and operating environment. For example, estimated battery life will be approximately xx hours with the unit turned on but idle, with the backlight on, all radios and compass off when using a new battery.

Tips for extending the battery life:

- **Display backlight:** Tap  / **Settings / System / Backlight** to minimize the amount of time the backlight stays on and dim it to only as bright as required to view the display.
- **Wi-Fi, Bluetooth, or camera:** Turn off when not needed.
- **Flashlight:** Minimize the use of the flashlight.
- **WWAN:** Turn the phone off when not in use.
- **Cold temperatures:** Keep the unit as close to room ambient temperature (77 °F or 25 °C) as possible. If feasible, keep it inside your coat or a vehicle when not in use.
- **GPS:** Ensure that the GPS-aware applications that communicate with the GPS are closed when not in use.
- **Auto features:** Tap  / **Settings / Power / Advanced**. Specify your unit to turn off in a short time if not in use. Tap  / **Settings / Bluetooth / Wake Settings**. Turn off Allow Bluetooth activity to turn the device on. Bluetooth could turn on your unit, transfer data and drain the battery.
- Heavy processing by the CPU may have some impact on battery life, but is typically less significant.

Checking the phone memory

1. On the Home screen, tap Start (🏠) / **Settings / System / Memory**.
2. From the Main tab and Storage Card tab, check the available memory and the available storage on your device.

Changing the power management settings

You can use Power Management to check the battery, and configure settings that prolong battery life.

1. On the Home screen, tap Start (🏠) / **Settings / Power**.
2. On the Power screen, you can:
 - Select the Battery tab to check the amount of battery life remaining.
 - Select the Advanced tab to change the screen off settings.
3. To optimize battery usage, you can adjust the backlight settings:
 - a. On the Home screen, tap Start (🏠) / **Settings / System / Backlight**.
 - b. From the Brightness tab, adjust the proper backlight level.
 - c. From the Battery Power tab and External Power tab, set the backlight off settings
4. When done, tap OK.

Managing low battery

When the low-battery warning appears, do the following:

1. Immediately save your current data. All of your data is stored in non-volatile persistent storage memory. Losing power will not impact saved data or configurations other than the real-time clock, As with any computer system, we recommend that you regularly backup your data to removable media or to a PC.
2. Synchronize with your PC or use the AC adapter to charge the battery.
3. Turn off your device. Turn it back on only when you need to use it.

Working with files

You can copy files between your device and computer, or copy files to a storage card installed on your device. You can also efficiently manage your files and folders using File Explorer.

Copying files to your computer

1. Connect your device to your PC.
2. Do any of the following:
 - In Windows Mobile Device Center, tap **File Management / Browse the contents of your device**.
 - In ActiveSync on your PC, tap Explore. This opens the Mobile Device folder for your device.
3. Browse your device for files that you want to copy to your PC.
4. Select and copy the files [Ctrl + C] and then paste them [Ctrl + V] to the destination folder in the PC.

Using File Explorer

File Explorer provides many easy-to-use features for file and folder management. File Explorer lets you browse and manage the contents of your device.

1. On the Home screen, tap **Start (Windows icon) / File Explorer**. The root folder on the device is named My Device, and contains the following folders: My Documents, Program Files, Windows, and more.
2. Tap a folder or file to open it.
3. To return to an upper level folder, tap Up and select the folder.
4. To copy files to a storage card:
 - a. Make sure that the storage card is properly installed on your device.
 - b. On the File Explorer screen, navigate to the appropriate folder.
 - c. Select the file you want to copy, and then tap **Menu / Edit / Copy**.
 - d. Tap **Menu / Storage Card**.
 - e. Tap **Menu / Edit / Paste**.

NOTE: Unlike PC's, Windows Embedded Handheld does not support a Recycle Bin. Once a file is deleted, it cannot be recovered.

Adding and removing programs

Before you purchase additional programs for your device, make sure that they are compatible with the Windows Embedded Handheld operating system. Also, before you launch the program installer, check first whether the installer can directly run on Windows Embedded Handheld or needs to be run on a computer.

Installing a program directly on your device

1. If the installer is a .cab file, directly download or copy it to your device.
2. On your device, open File Explorer and navigate to the installer file.
3. Tap the file to launch the installer.
4. Choose whether to install the program into the main memory or your storage card, if you have the storage card inserted on your device.
5. Wait for the installation to complete.

Installing a program from your computer

1. If the installer is an .exe file such as Setup.exe, most likely, the installer needs to be run on a computer. Download or copy it to your computer.
2. Connect your device to your computer using the USB cable, and then double-click the installer file on your computer to launch the installer.
3. Follow the on-screen instructions on your computer and your device to complete the installation.

Removing a program

1. On the Home screen, tap **Start (Windows icon) / Settings / System / Remove Programs**.
2. Scroll to the program to remove and then tap Remove.

Using Task Manager

Task Manager allows you to view or stop the programs currently running on your device.

1. On the Home screen, tap **Start (Windows icon) / Task Manager**.
2. On the Task Manager screen, select a program on the list and then tap End Task.
3. To stop all running programs, tap **Menu / End All Tasks**.
4. Tap Menu to open a menu where you can change the view, sorting order, refresh the screen, and more.

Chapter 6

Using Additional Hardware Features

Flashlight

The LEDs for the camera flash can also be used as a flashlight. Tap Start () / Torch to toggle the Flashlight on and off.

Assigning Buttons (hardware keys)

Tap Start () / Settings / Personal / Buttons. Under Program Buttons, your favorite programs can be assigned to several of the keypad buttons. The list of assignable buttons is shown on the left hand side with the program that is assigned by default on the right. To reassign a button, select the button in section 1 and change to the desired program or action from the pull-down list in section 2.

You can customize the way your Up/Down control repeats by changing the settings under the Up/Down Control tab.

Compass Calibration

To re-calibrate the compass, tap  / Settings / System / Compass Calibration. Tap on Calibrate to begin.

1. Hold the unit level and press the Enter key. Press Enter key.
2. Rotate the unit 180 degrees (while keeping it horizontal) and press the Enter key again. Rotate and press Enter key.
3. Rotate the unit upside down and press the Enter key again. Rotate upside down and press Enter.

Working with Bluetooth

All units have embedded Bluetooth capability—a short-range wireless communication technology that exchanges information (beam) over a distance of up to 30 feet (10 meters), without requiring a physical connection.

Bluetooth settings: tap  / Settings / Bluetooth.

Mode: To enable Bluetooth, select the check box Turn on Bluetooth. If you want other Bluetooth devices to find your unit, also select the check box make this device visible to other devices.

Devices: Tap Add new device to search for other Bluetooth devices. For enhanced security, use passcodes.

COM Ports: Available only for Bluetooth-connected devices that support serial (COM) connections.

Wake Settings: Allow Bluetooth activity to turn the device on. When this check box is selected, another Bluetooth device can send data and your unit will turn on and reply if necessary.

NOTE: It is recommended that your unit be configured to automatically turn off when not in use. (See the Power section on page 13.) Otherwise, another Bluetooth device could turn on your unit, transfer data and if it does not turn off again, drain the battery.

Receiving Beams: To allow the unit to receive incoming beams, navigate to the Connection Settings dialog. Choose Beam and check the Receive all incoming beams checkbox.

Creating a Bluetooth Partnership: Bluetooth partnerships are required for connections to some PC's, printers, and headphones.

Configuring Bluetooth connections vary depending upon how each Bluetooth device works. Refer to all device documentation.

1. Tap  / Settings / Bluetooth / Mode. Ensure that both devices have Bluetooth turned on in the Mode area, are visible and within close range.
2. Tap Devices / Add new device... Wait a few moments while your unit searches for Bluetooth devices.

3. Tap the name of the other Bluetooth device and tap Next. For enhanced security, use passcodes. Enter the same passcode on the other unit.
4. Under Advanced, you can change the name of the other device and add additional services, if available. Tap Save.

Bluetooth connection with a PC

1. Ensure that your PC has connectivity software installed.
2. Set up a partnership between your unit and the PC. Refer to your PC documentation for instructions.
3. Once shown, select the PC from the Device list and tap Next.
4. Enter the passcode, if necessary and tap Next.
5. Confirm that ActiveSync service is available and place a check in the check box and tap Finish.
6. Tap  / ActiveSync / Menu / Connect via Bluetooth.

Bluetooth-enabled headphone: You can use a Bluetooth stereo A2DP headphone only. Many Bluetooth headphones will not require a passcode to pair with your unit.

Troubleshooting Bluetooth connection problems: If your unit cannot find another Bluetooth device, confirm that the device is within range (less than 30 feet / 10 meters) and no large objects obstruct the path of other Bluetooth-enabled devices. Confirm that the device is turned on and has been configured to be discoverable.

Working with Wi-Fi

If your unit comes with built-in Wi-Fi capability (Wi-Fi is a trademark of the Wi-Fi Alliance), you can wirelessly transmit data to and from your unit by connecting to available access points or hot spots. To find out if you have Wi-Fi installed in your unit, tap  / Settings / System / System Information / Wireless.

The Wi-Fi is off by default; however the on/off state will persist after a reset. To turn the Wi-Fi on or off, go to the top of the Home Screen and tap on Wireless Manager or tap  / Settings / Connections / Wireless Manager and tap Wi-Fi. Once the Wi-Fi is turned on, it detects the wireless networks in the vicinity and

gives you the option to connect to one. Turn Wi-Fi off when not in use to save battery power and possibly speed up other processes.

NOTE: If your unit is connected to a PC that is connected to the Internet, the unit will use the PC's Internet connection and Wi-Fi will not show up in the Wireless Manager screen. You may allow the simultaneous use of the PC and the Wi-Fi module by tapping the checkbox next to Allow wireless connection on the device when connected to the desktop under File > Connection Settings in the ActiveSync UI.

To change the Wi-Fi settings, tap Menu / Wi-Fi Settings.

1. Wi-Fi by default is disabled. Tap Menu / Turn on Wi-Fi.
2. Tap the network you want to connect to. The networks with three or four bars provide a better connection. Tap OK.
3. Tap Connect to begin using an open network. If the network does not require passwords, no changes are required.
4. If the network requires authentication, a Network Authentication dialog will open. For networks that require network keys, enter the network key into the dialog box and tap Connect to begin using the network.
5. Under Network Adapters tab, changes can be made to what your network card connects to and to modify adapter settings.

Advanced: You can set specific Wi-Fi settings required by some networks. Administrators can also set a password to limit access to configuration settings.

Exchange ActiveSync: Exchange ActiveSync, a component of Exchange Server, facilitates data synchronization between your unit and an Exchange server. This synchronization can occur over a network connection, allowing you to update calendars, contacts, tasks and the Inbox on your unit without directly connecting to a PC. The server must be running Exchange Server 2003 SP2 or later.

To use Exchange ActiveSync, confirm with your system administrator that an Exchange Server is available. The administrator will provide you with a login name, password, server name, and domain name. To configure Exchange ActiveSync on your unit, tap  / ActiveSync / Menu / Add Server Source. Enter the user name, password and domain and tap Next. Choose the data types you want to synchronize and tap Finish. Enter the server address and confirm

with your administrator whether the Exchange server requires an encrypted (SSL) connection. Tap Next.

Troubleshooting Wi-Fi connection problems: If the unit seems to be connected to the network, but you are having difficulty using the network connection, tap  / Settings / Connections / Wi-Fi. The Network Cards window will open and allow you to confirm that the connection is appropriately configured as either a Work or Internet connection. If you are unable to connect to a network, try connecting to another network without any security, such as a Wi-Fi hotspot, to determine if the issue is the hardware or the network.

Installing additional software on your unit Third-party software designed for Microsoft Windows Mobile® is installed by running a setup program on the PC while the unit is connected over

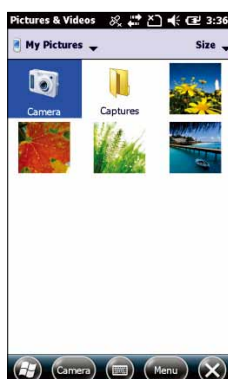
ActiveSync or Windows Mobile Device Center®. Some programs are CAB files that need to be transferred to your unit and executed from the unit.

Follow the setup instructions that came with your software. If prompted, perform a reset to complete the installation.

Working with the Camera

Follow the steps to launch the camera of the device:

1. On the Home screen, tap Start > Pictures & Videos.
2. Tap Camera.

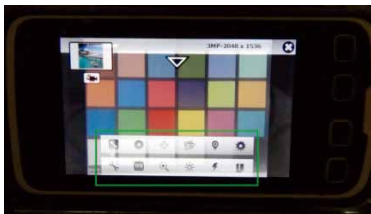


The camera application would start by displaying progress icon on the window and shortly the camera preview would be available on view finder in full screen either in Portrait or Landscape mode as per the camera settings defined in the application and the Device orientation. Taskbar and start menu will not be visible.

User Interface

A tap on the preview screen shows the buttons over the preview.

A tap on the LEFT soft key () will show the pull up menu with the list of icons on it. It would be semi-transparent over the preview stream. Refer the figure for menu icons and its transparency.



NOTE: A tap on the Right Soft key () should exit the menu and display preview in full screen.

Thumbnail Preview

A thumbnail image would be shown on tap of the preview screen (along with the UP arrow icon). The thumbnail image is placed on the top left corner of the preview. A tap on the thumbnail should open the Microsoft Pictures & Videos window and would display the thumbnail preview of saved still and video files.



Also, we are able to switch the still mode to video mode by tapping the video icon () below the thumbnail window. From video mode, the icon is used to switch to Still mode.

Capturing Still/Video

When buttons are viewable over the preview, a tap on the camera () icon displayed on the screen captures a still image.

If preview not focused, a quick double-tap on the preview screen would focus the object (if focus is enabled in settings menu). The still can be captured after this by tapping on the Camera icon.

Focus success is indicated by a GREEN BOX displayed at center of the screen. (figure below)



If video has to be captured, the mode has to be switched from Still to Video as explained in the previous section. A tap of the capture/ record button () will start capturing the video.

Captured still images are saved with the file extension of .JPG and video files are saved with the file extension of .WMV



Closing application

A tap on the close (X) mark at top right corner of the preview closes the camera application.

Features in the menu

The features in the Menu screen is explained in this section.

- White Balance ()

A tap on the White Balance icon, displays the following options.

- Auto: Select this option, adjust the White Balance automatically while

taking still/Video in different light conditions.

- Sunny: Select this option when taking Still/Video in Day/Light places.
- Incandescent: Select this option when taking Still/Video in Incandescent light places.
- Fluorescent: Select this option when taking Still/Video in Fluorescent light places.

Selection of any one of the option should immediately apply that setting to camera preview on view finder. This setting would also be applied to the Still image is taken.

- Zoom Levels (🔍)

A tap on the Zoom icon displays the various zoom levels supported by camera application.

- 1.0x [Minimum Zoom]
- 1.5x
- 2.0x
- 2.5x
- 3.0x
- 3.5x
- 4.0x [Maximum Zoom]

Selection of any one of the option should immediately apply that setting to camera preview on view finder. This Zoom setting would also be applied to the Still image is taken.

- Brightness (☀️)

A tap on the Brightness icon displays the various Brightness levels supported by camera application.

- +3 [Maximum Brightness]
- +2
- +1
- 0 [Normal Brightness]
- -1
- -2

- -3 [Minimum Brightness]

Selection of any one of the option should immediately apply that setting to camera preview on view finder. The positive values increase and negative values decrease brightness accordingly. Captured still images/Video should save with the selected Brightness level.

- Flash Settings (⚡)

A tap on the Flash Settings icon displays the following options.

- On: Selection of this option should enable the flash icon (⚡) on the screen and flash light will GLOW while capturing still images.
- Off: Selection of this option Flash light will be always OFF while capturing the still images.
- Auto: Selection this option should enable the auto flash icon (⚡) on the screen and automatically Flash light will GLOW while taking still at low light conditions and flash light will be OFF while capturing the still in sufficient lighting conditions.

- Image Quality (📷)

A tap on the Image Quality icon displays the following options.

- Economy: Select this option should save the captured image with low quality.
- Normal: Select this option should save the captured image with Medium quality.
- Fine: Select this option should save the captured image with Good quality.
- Super Fine: Select this option should save the captured image with Very Good quality.

Captured still images will save the image with the selected Quality options and file size of the image will increase when quality of the image is increased.

- Still Settings (🔧)

A tap on the Settings icon displays the sub menu which has still resolution, Storage selection, Focus settings, Image Review, Image Tagging, Application settings options. The above mentioned features are explained

in-detail below.

- Still Resolution 4:3 ()

The 4:3 options on the Still Resolution menu, should display the supported image resolutions.

- 1280x960 (1.3MP)
- 2048x1536 (3MP)
- 2560x1920 (5MP)
- 3264x2448 (8MP)

Selection of any one of the resolution will apply to the view finder immediately in case of aspect ratio change. The size displayed on the top right corner area of the preview is updated with the new setting. The images captures would be of size that was selected.

- Still Resolution 5:3

Select 5:3 options on the Still Resolution menu, should display the supported image resolutions.

- 800x480 (WVGA)
- 1280x768 (WXGA)
- 2000x1200 (2.4MP)
- 2560x1536 (3.9MP)
- 3264x1960 (6MP)

Selection of any one of the resolution will apply to the view finder immediately in case of aspect ratio change. The size displayed on the top right corner area of the preview is updated with the new setting. The images captures would be of size that was selected.

- Storage Select ()

A tap on the Storage Select icon will display the following options.

- Main Memory: Select this option should save the Still/Video in Main memory of the device.
- SD Card: Select this option should save the Still/Video in SD Card mounted in the device.

The option selected would indicate the storage location where the captured

Still image/Video to be stored.

- Focus Settings ()

A Tap on the Focus Settings icon, will display the following options.

- Enable: This enables the AF feature with double-tap of preview.
- Disable: This disables the AF Feature.

- Image Review ()

A tap on the Image Review icon will display the following options.

- 2seconds: Image review will be displayed for 2 seconds after a still capture.
- 3seconds: Image review will be displayed for 3 seconds after a still capture.
- User Prompted: Image review will be displayed till user prompts after a still capture.
- Off: Image review is turned OFF.

- Image Tagging ()

A tap on the Image Tagging icon will display the following sub menu and options.

- Date

Date Source:

- Device Date-Time: To select the option used to fetch the current device date-time and display it on the screen.
- GPS Date-Time: To select the option used to fetch the current GPS date-time and display it on the screen.

Stamp Settings:

- Image Stamp: To select image stamping options on the JPG image.
- EXIF: Selection of this option will have date information embedded in the JPG image as EXIF data.
- Both: Selection of this option will have date information embedded in the JPG image as EXIF data and stamped over the still image.
- Off: Selection of this option will turn OFF stamping.

- GPS
Format:
 - Deg/Min/Sec: Option to select the GPS information format.
 - Decimal Degree: Option to select the GPS informationformat.
- APP Settings ()
A tap on the APP Settings icon displays the sub menu andoptions mentioned below.
 - UI Orientation
 - Rotation on Tilt: This option would enable the automatic rotation of UI screen based on device orientation/tilt.
 - Fixed Landscape: This option would have the camera application in landscape mode irrespective of device orientation.
 - Fixed Portrait: This option would have the camera application in portrait mode irrespective of device orientation.
 - Sounds
 - Enable: This option enables the beep sound while focusing and click sound for capturing the images.
 - Disable: This option disables the sound while focusing and capturing the images.
 - Modify Prefix
Selection of the Modify Prefix option will display the prefix window and provide the option to the user to edit the prefix of Image and video files. By default, Image file is appended with prefix IMG and video files is VID. The file is saved with a name that is auto generated with predefined prefix followed by a four digit number. The number is sequential.

Image Delete and Switch to Camera in Image review mode

Image that is being displaying the review mode (after still capture) can be deleted by using the delete icon in the Review screen.

- DELETE ()
A tap on the delete button in the review screen would delete the image from the storage.

- CAMERA ()

A tap on the camera icon on the review screen would take the application to camera mode.

- Video Settings ()

- Resolution ()

A tap on the Video Resolution icon, will display the following options.

- 320x240 (QVGA)
- 640x480 (VGA)
- 800x480 (WVGA)

Selection of any one of the resolution will apply to the view finder immediately. The size displayed on the top right corner area of the preview is updated with the new setting. The video captured would be of size that was selected.

- Video Review ()

A tap on the Video Review icon, should display the following

- On: If selected, this option enables the video review mode.

After video capturing is completed, video review window enables the user to review the capture video by playing it back. Also, DELETE and VIDEO options enabled in this window. A tap on the Delete () icon, will delete the video file and exit the video review window. A tap on the Video () icon will save the video file and exit the video review window.

- Off: This option is used to switch OFF the review mode. The application will return to Preview mode after the capture of video and storing is complete.

- Audio settings ()

A tap on the Audio Settings icon will display the following options.

- Enable: Audio is enabled while recording. So all MIC audio is added to the video that is recorded.
 - Disable: The video that is recorded does NOT include any sound. The MIC input is ignored.

- Pause Time-out (🕒)

A tap on the Pause Time out option will display the following options. Selection of any of the options will decide the timeout of the PAUSE feature while recording.

The video while being recorded has the option to be STOPPED (and saved) or being PAUSED and continued. If paused, the video recording would wait for timeout (mentioned below) seconds, complete recording and then save the video file.

- 10seconds
- 20seconds
- 60seconds
- Disable

Working with GPS

Tap Start > Settings > System > System Information > Wireless to see if your unit has GPS installed. COM2 is the dedicated hardware port for the built-in GPS (COM1 is dedicated to the external 9-pin).

The GPS is compatible with applications that accept the NMEA position information using a default baud rate of 9600.

GPS settings:

If you are using only one GPS-aware application, these settings do not need to be changed. However, to use multiple GPS-aware applications, tap Start > Settings > System > GPS and select the following tabs:

- Access: The GPS Intermediate Driver allows multiple applications to access the GPS receiver. To manage the GPS Intermediate Driver, uncheck the check box.
- Hardware: COM2 is the hardware port dedicated for the built-in GPS. Verify that COM2 is selected. The internal GPS communicates at 9600 baud by default. If it has been modified by a third-party program, adjust to match the receiver baud rate.
- Programs: Programs that use GPS need to know which port to use to

access GPS data. When using more than one GPSaware application, the same GPS program port must be used in each application. Ensure that the COM port on the GPS-aware application(s) is set to the same GPS program port as shown in the Programs tab of the GPS applet. The program port must be a different port than the hardware port. By default, this is COM3.

NOTE: Some GPS-aware applications may not communicate over GPS ports.

SatViewer

(Optional on certain device offerings; may not be installed.)

If your unit has the built-in GPS, it may have SatViewer™ installed. External GPS receivers, Bluetooth GPS receivers or other external GPS devices (including other SiRF II or SiRF III GPS receivers) are not supported and may not work correctly with SatViewer. See Appendix A for more instructions on using SatViewer.

Exiting GPS applications

Any time you exit a GPS application (such as SatViewer) it is advisable to close the port gracefully, e.g. tap Disconnect from GPS and exit the application. Failure to do so may leave the port open and hinder the next GPS operation.

Working with WWAN (the Phone)

Depending upon the configuration of your unit, it may have the additional 3G wireless wide area network (WWAN) feature. After purchasing a data connection plan from your local GSM cellular provider, you can communicate from field to office, send e-mail messages and send text messages.

NOTE: When browsing the internet using the cellular connection, you must turn off the Wi-Fi (802.11) or the unit will default to the Wi-Fi to browse.

CAUTION:

- DO NOT use your unit while driving a moving vehicle.
- DO NOT remove the WWAN antenna unless directed by support personnel.
- When you are on a plane, in a medical facility or at a gas station where

wireless communication devices are not allowed, go to Wireless Manager to TURN OFF all wireless communications. Simply turning the Power key off does not turn off these communications.

Installing (or changing) the SIM card

1. Hold down the Power key for about 3 seconds and release to display the power menu. Tap Replace Battery/SIM to ensure the alarms will not wake up the unit.
2. Remove the hand strap.
3. Turn the latch located above the battery counterclockwise.
4. Remove the battery from the unit.
5. Lift up the plastic regulatory label.
6. Slide the white SIM carriage to the unlocked position (to the right).
7. Gently open the hinged SIM carriage door, and place the SIM card (purchased from your cellular service provider) into the SIM carriage door that lifts up. The golden contacts should be facing down.

Also ensure that the notched corner aligns with the angled corner on the SIM carriage.

8. Close the SIM carriage and then slide it to the locked position (to the left).
9. Close the plastic regulatory label.
10. Place the battery into the unit.
11. Turn the latch located above the battery clockwise.
12. Replace the hand strap.

Setting up the cellular data connection using CellStart (Optional on certain device offerings; may not be installed.)

1. Tap  / CellStart. (You may need to tap OK to agree to the terms to open the program.) Under Available Settings, tap the [+] by your country to expand carriers.
2. Tap the [+] by the carrier you have signed up with and highlight Typical and tap New. (If using multiple configuration settings, you can tap on the primary setting and tap Default.)
3. Ensure the phone is turned on. Tap  / Settings / Connections / Wireless

Manager / Phone.

4. Test the settings by tapping / Internet Explorer and then browse to a web page. The phone will automatically start dialing when you try to open a web page.
5. If the phone will not connect, try other settings before calling the carrier technical support.
6. You can also manually change modem settings by tapping / Settings / Connections / Connections.

NOTE: Once connected, G (GPRS) or E (EDGE - a faster form of GPRS) or H (HSDPA) will automatically appear in the notification bar depending on the network capabilities in that area; some service providers may only provide GPRS.

Removing cellular data settings

1. Tap  / CellStart.
2. Tap Refresh to see the current list of configurations.
3. Select the configured data setting you wish to remove.
4. Tap Remove and OK.

NOTE: After removing a default configuration, the top setting will become the new default.

To access the detailed settings for each configuration, tap Menu / Open Connections Applet to change the modem connections.

Customizing your phone

Tap  / Settings / Personal / Phone. The SIM card must be installed and the phone turned on to view the settings.

Sounds: Tap to make changes.

- Phone Number: The SIM card phone number is displayed.
- Ring type, Ring tone and Keypad sounds: Choose the sounds you want for text messaging notifications.

Security: A PIN can be set or changed to block unauthorized access to your data connection.

Services: This unit is data-only and dialing controls are not available. Settings can be changed for Call Barring, Caller ID, Call Forwarding, Call Waiting, Fixed Dialing and Voicemail and Text Messages.

Network: Find and set your preferred networks.

Version: View the RIL, MUX, RHA and AUD versions, as well as the manufacturer, model and revisions number of the WWAN module.

Info: Find and set your preferred networks.

- **IMEI:** The unique number that identifies the phone module that is embedded in the unit. (If you purchase a SIM card separately, the phone service provider may want your IMEI number. It is located on this screen as well as in the battery compartment.
- **IMSI and ICCID:** Unique numbers embedded on the SIM card.
- **Signal Strength, Cell ID, Location Code and Network Code** are also listed under the info tab.

Band: Leave all the settings selected unless there is a good reason to make adjustments.

Browsing the Internet

Tap  / Internet Explorer, and enter the address of one of your favorite web sites.

Internet Sharing

The Internet service from your unit can be shared with a computer.

Tap  / Internet Sharing. You can connect either through USB or Bluetooth.

Using the WWAN features

NOTE: The Wireless WAN features of this unit are used only for data communication and do NOT have voice capability or the ability to send MMS messages (Multimedia Messaging Service).

Voicemails left on this number can be retrieved only by using another phone, depending upon the plan you purchased from your service provider. It is recommended to request the data-only plan from your service provider and

have a “voice restriction” placed on your line.

Use the Wireless Manager to turn on the phone and wait at least 30 seconds before using the phone. The unit may say the phone is on, but it needs to register with your service provider before it works properly. To save battery power, turn off the phone feature when not in use.

SMS messages

You can send a SMS (short message service) in exactly the same way as a normal mobile telephone. Each SMS text message can contain a maximum of 160 characters or less, depending on your service provider. To send a message from the Home Screen, simply hover over the bar Text and tap Compose.

Sending and receiving e-mail

E-mail setup: Tap  / E-mail. Follow instructions to set up the email service. You can synchronize with a POP Mail server, or with a Microsoft Exchange® server.

Sending and receiving messages: Tap  / E-mail and select an email account. Tap New to compose a message and tap Send. Input the contact information. Depending on your account settings, your unit will check for new e-mail periodically. You can force a download of new messages, by tapping Menu / Send/ Receive.

System information

Tap Start () / Settings / System / System Information. Firmware version, serial number, processor speed, RAM and Flash size, wireless configurations, battery and card port information can be found here.

Caring for your Unit

Cleaning the unit: Use a soft, dampened cloth with either water or a diluted mild detergent. If a mild detergent is used, ensure all soap residue is removed. Do not use any chemical cleaners and do not put the unit in the dishwasher.

Care of the touch screen: Use only the PA400 stylus or other devices specifically designed for use with touch screens.

The use of ballpoint pens, nails or other sharp objects to operate the touch screen will scratch and/or damage the unit. Keep the touch screen clean by gently wiping the display, using a soft, dampened cloth with either clean water or glass cleaner.

Do not use abrasive cleaners directly on the display. Doing so may void your warranty. Use the screen protectors included with the unit to keep the touchscreen clean and protected, following the instructions provided on the screen protector package.

Mechanical shock: The unit is designed to resist damage for drops up to 4 ft (1.22 meters). However, you should protect the display from impact, pressure, or abrasive substances that can scratch it or crack it. The unit should not be dropped unnecessarily.

Appendix I

System Specification

System	CPU: TI OMAP DM3730 1 GHz Memory: 512 MB RAM, 32GB eMMC Flash OS: Windows Embedded Handheld 6.5 Language: Simp. Chinese, Traditional Chinese, English, French, German, Italian, Japanese, Korean, Russian, Spanish, or Portuguese (Brazilian)
Display	Multi-touch 4.3 inch Capacitive WVGA sunlight-readable Gorilla® glass display. TFT (480 x 800 pixel)
Keypad	4 physical keys
Indicator	1 LED indicate charge/Message, Vibrator
Audio	Built-in microphone and speaker (that can output a SPL of greater than 74dBC at one meter at a test frequency of 1000 Hz), record and playback utilities
Regulatory Approvals	CE, NCC, CCC, RoHS, WiFi b/g/n. Bluetooth
Communication	Camera: 8MP color with geotagging External storage: MicroSD card slot (32GB) USB: USB 2.0 OTG WLAN: IEEE 802.11 b/g/n Bluetooth: v2.1 + EDR WWAN: UMTS / HSPA+, GSM / GPRS / EDGE UMTS Bands (WCDMA/FDD) : 800/850/1900, AWS and 2100 MHz GSM Bands: 850/900/1800/1900 MHz (data and voice, Juno 5D only) Other sensors: GPS, e-compass, G-sensor, and Light & Proximity sensor 2D Barcode imager (Optional): Intermec EA31 with ED30 decoder
Power source	Built-in battery: 3.7 V, 3.3 Ah, 12.2 Wh, Lithium-ion polymer
Enclosure	

Enclosure	Weight: 0.4 kg (0.84 lb) with battery Size: 15.5 cm x 8.2 cm x 2.5 cm
Environmental (MIL-STD-810G)	Operating temp: –30 °C to +60 °C (–22 °F to +140 °F) Storage temp: –40 °C to +70 °C (–40 °F to +158 °F) Humidity: 90% relative humidity with temperatures between 30 °C and 60 °C (22 °F and 144 °F) Method 507.5, Procedure II Sealing: IEC-60529 IP68 Drop: 1.22 m (4 ft.), Method 516.6, Procedure IV, Transit Drop Vibration: Vibration resistant, Method 514.6, Procedure I & II, Category 5 Altitude: 4,572 m (15,000 ft) at 23 °C (73 °F) to 12,192 m (40,000 ft) at –30 °C (–22 °F) Method 500.5, Procedure I, II & III
Accessories	External battery pack with the capacity of 3.3Ah Vehicle docking station (Basic/Advanced) USB communication cable Power adapter with universal plugs RS232 communication cable USB host cable Hand strap

Appendix II

Worldwide Support

Unitech's professional support team is available to quickly answer questions or technical-related issues. Should an equipment problem occur, please contact the nearest Unitech regional service representative. For complete contact information please visit the Web sites listed below:

Region	Web Site
Global Operation Center	http://www.ute.com
Unitech Taiwan	http://tw.ute.com
Unitech Asia Pacific & Middle East	http://apac.ute.com http://india.ute.com
Greater China Division	http://cn.ute.com
Unitech Japan	http://jp.ute.com
Unitech North America	http://us.ute.com ; http://can.ute.com
Unitech Latin America	http://latin.ute.com
Unitech Europe	http://eu.ute.com