

# Microflex 2240

## Rugged Pocket PC handheld Getting Started Guide



# Limited Warranty & Liability Limitations

This product is limited warranted against defects in materials and workmanship for twelve (12) months from the original date of purchase. M2240 accessories and peripherals are limited warranted against defects in materials and workmanship for ninety (90) days from the original date of purchase. If notice is received of such defects during the limited warranty period, the proven defective product(s) will either be repaired or replaced, at the manufacturer's option. Replacement products may be either new or like new.

The manufacturer does not warrant that the operation of the products will be uninterrupted or error free. If the product is not, within a reasonable time, repaired or replaced to a condition as limited warranted, the customer will be entitled to a refund of the purchase price upon prompt return of the product.

Limited warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts, or supplies not supplied by manufacturer, (c) unauthorized modification, or misuse, (d) operation outside of the published environmental specifications for the product, or (e) physical damage due to external causes, including accident, abuse, misuse or problems with electrical power. The MICROFLEX device and accessories should not be used in applications where device failure could result in physical harm or loss of life. Water damage caused by improper installation of the CF-Cap is not covered by warranty. Removal of the back case voids the limited warranty. There are important seals that will break and the M2240 will no longer be waterproof.

To the extent allowed by local law, the above limited warranties are exclusive and no other warranty or condition, whether written or oral, is expressed or implied, specifically disclaiming any implied warranties or conditions of merchantability, satisfactory quality, and fitness for a particular purpose.

**To the extent allowed by local law, the remedies in this limited warranty statement are the customer's sole and exclusive remedies. Except as indicated above, in no event will the manufacturer or its suppliers be liable for loss of data or for direct, special, incidental, consequential (including lost profit or data), or other damage, whether based in contract, tort, or otherwise.**

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## Welcome

Congratulations on purchasing the M2240™ handheld computer with Microsoft® Windows Mobile™ 2003 software for Pocket PCs. The immersible and shock-resistant design of the M2240 allows you to work in harsh outdoor environments. You can operate your M2240 in blazing heat, subzero cold, driving rain or dusty job sites -- places you previously could not use a handheld computer.

# Device Hardware

## Front Panel

Removable CF-Cap covers two CompactFlash card slots



\*Assignable application buttons; see Settings

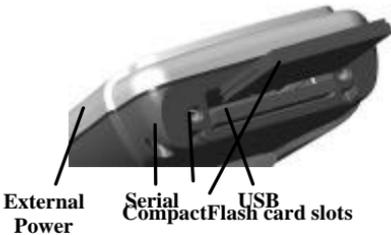
## Back Panel

CF-Cap



PowerBoot Module

## Top View- without Cap



## Bottom View



**Note:** Be sure to read the warranty and safety information in the manual prior to using your M2240.

# Setting up your M2240

## 1. Attach the PowerBoot Module

The PowerBoot Module™ is detached from the M2240 for shipment. To attach the PowerBoot, turn the latches counter-clockwise until arrows point downward towards the bottom of the PowerBoot. While applying pressure downward and forward on the PowerBoot, firmly slide it onto the main unit as shown.



Using a screwdriver or the flat head of the stylus, lock the PowerBoot latches by turning them clockwise one half turn until the arrows on the latches point away from the I/O ports.

## 2. Attach the hand strap

Hold the hand strap clip at a 45-degree angle and push the clip onto the M2240 bracket. Repeat the process with the other end of the hand strap.



## 3. Charge your M2240

Connect the AC adapter to the external power port on the M2240. Charge the PowerBoot for at least 12 hours. For faster charging, turn the M2240 off while charging the PowerBoot.



## 4. Align the touch screen

When the M2240 first turns on (or after a hard reset), the touch screen may require alignment. A series of targets are displayed in sequence on the screen. Use a stylus to tap the targets firmly and accurately to align the touch screen.

## 5. Turning your M2240 on and off

One of the most convenient features of the M2240 is “instant on”. There is no waiting for it to start up or shut down. To start working immediately, press the power button. (“Instant on” does not occur on the first boot up.) When you have finished working, turn off your M2240 by pressing the power button.

## 6. Using the CF Expansion Slots

To use the CompactFlash expansion slots, you must first remove the CF-Cap™. To do this, unscrew the two screws on the top of the CF-Cap. Slide the cap off the main unit. Gently insert a CompactFlash card or device into one of the two CF slots. **Do not force the card into the slot.** Cards must be inserted with the face toward the display side of the M2240. Replace the CF-Cap and tighten the screws to reseal.



**Note:** Be sure to reattach the CF-Cap when you are finished. The M2240 is NOT sealed when the cap is off. Water damage caused by improper installation of the cap is not covered by warranty.

# Working with your M2240

## Using the Stylus

The touch screen on your M2240 works like a mouse on a PC. Use the stylus to navigate and select objects on the screen.

**Tap:** Tap the screen with the stylus to select or open an item. Tapping is equivalent to clicking an item with the mouse on your PC.

**Touch and hold:** When you touch and hold, a circle of red dots appears around the stylus to indicate that a pop-up menu will soon appear. Touching and holding is equivalent to right-clicking your PC mouse button.

**Drag:** Hold the stylus on the screen and drag across the screen to select text and images. Drag in a list to select multiple items.

## **M2240 PowerBoot Module**

**Battery Life:** The number of hours of battery life that you will attain is very dependent upon the application and operating environment. The M2240 PowerBoot module contains a generous 3800 mAh of battery power and typically you can expect around 15 hours of battery life. Typical usage includes using the M2240 at moderate or high temperatures with default backlight settings and low power CompactFlash cards such as memory.

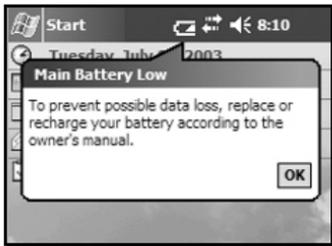
Cold temperatures, heavy use of the display light, and the use of high power consumption CompactFlash® cards (such as GPS or 802.11) will all significantly reduce the battery life. These factors can reduce battery life by up to 30% individually, and more when combined so that battery life can be reduced to significantly less than 10 hours.

Tips for extending the battery life are to:

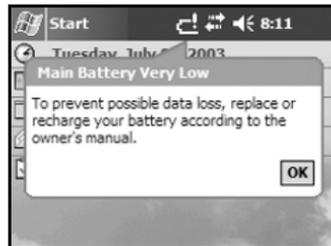
- Use the backlight only when necessary. Tap on Settings / System / Backlight to minimize the amount of time the backlight stays on when the unit is idle.
- Use the most energy efficient CompactFlash cards that are available for your application and use them only when necessary to perform the desired task.
- When working in cold temperatures, keep the M2240 as warm as possible. If feasible, keep the M2240 inside your coat or in a vehicle when not in use.

**Low Battery Warnings:** The M2240 provides two different warnings when the battery life is getting low:

Low Battery Warning



Critical Battery Warning



The Main Battery Low warning is just a reminder that you should recharge your battery at the next convenient opportunity. You have approximately 30% of your battery life remaining, so there is no imminent danger that you are about to lose your data.

The Main Battery Very Low warning means you that you have less than an hour (and possibly only a few minutes) before the M2240 will turn itself off. It is recommended that you save your work immediately and turn the M2240 off.

*Be aware that the accuracy of the battery warnings will vary depending upon temperature, power consumption, and applications. Experimentation with your particular situation will give you a better feel for how the warnings correspond to remaining battery life.*

**Changing the PowerBoot:** The PowerBoot module is designed to be quickly swapped in the field, so if your current PowerBoot runs low on power, you can replace it in seconds and continue with your work. (This assumes that you have purchased additional PowerBoot modules.)

When turned off, the M2240 saves enough power that you can swap the battery without triggering a hard reset of the unit *if you can swap in the new PowerBoot module in 30 seconds or less.* After 30

seconds, the M2240 will perform a hard reset when the PowerModule is reattached. All data not backed up onto flash memory will be lost. Therefore, *we strongly recommend that you perform a backup before swapping the PowerBoot module.* See the section “Backup and Restore” on page 9 for more information about backing up data to memory.

To exchange PowerBoot modules, perform the following steps:

1. Back up your data to built-in storage using the pre-installed backup program.
2. Press the power button and turn the M2240 **OFF**.
3. Remove the hand strap from the M2240.
4. Using a screwdriver or the flat head of the stylus, unlock the PowerBoot latches by turning them counter-clockwise until the arrows on the latches point down towards the I/O ports.
5. Remove the PowerBoot module by using your thumbs to push and slide the module down and away from the M2240, as shown in the illustration.
6. Ensuring that the latches on the new PowerBoot modules are unlocked (the arrows pointing towards the I/O ports), quickly slide the new PowerBoot onto the M2240. (Remember that you have only 30 seconds to perform this step.)
7. Lock the latches on the new PowerBoot by turning them clockwise until the arrows on the latches point up away from the I/O ports.
8. Replace the hand strap.



## M2240 Memory

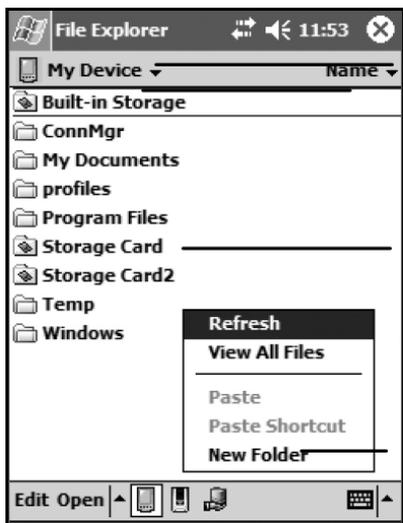
The memory in the M2240 is used to store program and data. The M2240 has two kinds of memory, flash and RAM.

Flash memory is permanent storage; the contents of flash memory are unaffected if the battery is removed or discharged. Therefore, you should keep your data and programs in the flash memory.

Depending upon the configuration of your M2240, you will have either 64 MB or 128 MB of built-in flash storage. Approximately 16 MB of this amount is used by the Pocket PC operating systems. The balance is available for your use. Third-party CompactFlash memory cards can be used to increase the amount of available flash memory. They work the same as built-in flash, except they are removable.

RAM memory is volatile. This means the contents will be lost if the battery is disconnected or discharged. RAM memory is used to run programs and is often used as the initial storage area for data. The M2240 has 64 MB of RAM memory, of which about 58 MB are available to run programs and to store data. To save RAM memory contents into flash memory, use the pre-installed backup program. See the next section "Backup and Restore" for more details about backing up data to memory. Any data in RAM that is not stored to flash will be lost if the battery is removed or discharged. **We strongly recommend regularly saving your data.**

The picture below shows the different kinds of memory as they appear within the File Explorer (Start / File Explorer). The non-volatile built-in flash storage is at the top of the list.



Tap to change folders.

**Built-in Storage:** The contents are found in this folder in File Explorer.

**Storage Cards:** If CompactFlash memory cards are present, the contents are found in these folders in File Explorer.

**RAM:** All other files and folders displayed by File Explorer are stored in RAM and will need to be backed up.

Tap and hold to create a new folder.

## Backup and Restore

Many programs must reside in RAM in order to run, and collected data is generally stored in RAM. As previously mentioned, RAM memory is volatile and all data and programs residing in RAM will be lost if the battery is disconnected or discharged.

To save the data and programs in RAM to the built-in flash memory, use the pre-installed backup program. Backup is an easy-to-use program that transfers data in RAM to the built-in flash memory. All the data and programs will be stored in an image file.

To run a backup, tap Start / Programs / Backup Now. The backup generally takes less than a minute to run, and when finished will automatically return you to the Programs screen.

We recommend that you run a backup often to ensure that you never lose any data due to an unforeseen hard reset. Because it's easy to forget to do, you can also schedule automatic backups. Tap on Start / Programs / Utilities / Pocket Backup. Access the scheduling page by tapping on the Options menu in the lower left corner, and then selecting the Scheduling option. Here you can set a single, daily, or weekly automatic backups to run at a particular time. Select the desired frequency and the backup time and tap "OK" to set the schedule. Note that while automatic backups will help protect you from data loss, even a daily restore may not be enough in an intensive work environment. When collecting a lot of data, remember to backup often.

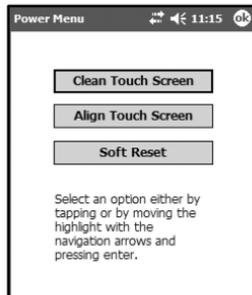
If you experience a hard reset for any reason, you can easily restore your data from your last backup by running the restore program. After a hard reset, M2240 will automatically prompt you to do a restore. To run restore manually, tap Start / Programs / Restore Now. Once the restore program is complete, it will prompt you for permission to do a soft reset. After the reset, the M2240 is restored to its pre-hard reset state.

## Power Button Features

The power button turns the M2240 on and off and performs a number of additional functions.

**Turn backlight on/off:** Hold down the power button for about 1 second. The M2240 will remain on, but the backlight will toggle on or off. (Once the backlight has been toggled off, the backlight setting that turns on when a button is pressed or the screen is tapped is disabled.)

**Power Menu:** Hold down the power button for about 3 seconds to display a countdown counter. Continuing to press the power button will cause a soft reset when the countdown reaches zero. If you release the power button while the countdown is proceeding, you access the menu shown on the next page. Tap an option or press “OK” to exit.



**Clean touch screen** - Disables the touch screen for cleaning. Press the enter button or cycle power to re-enable the touch screen.

**Align touch screen** - - A series of targets are displayed. Use a stylus to tap each target in sequence in order to align the touch screen.

**Soft reset** - This resets the M2240 hardware but does not clear the contents of RAM. It is occasionally used when installing new software.

**Hard reset:** A hard reset should be used only if a soft reset fails to resolve an issue. The contents of RAM are cleared during a hard reset. It is strongly recommended that you back up your data before doing a hard reset. See the section “Backup and Restore” on page 9 for more information about backing up data to memory.

To perform a hard reset, press the Power and the Start buttons simultaneously for eight to ten seconds. The reset menu will appear with a countdown warning. (Under certain conditions, the countdown will not appear.) Continue to hold both buttons down. When the message “Booting - - - >” appears, release both buttons.

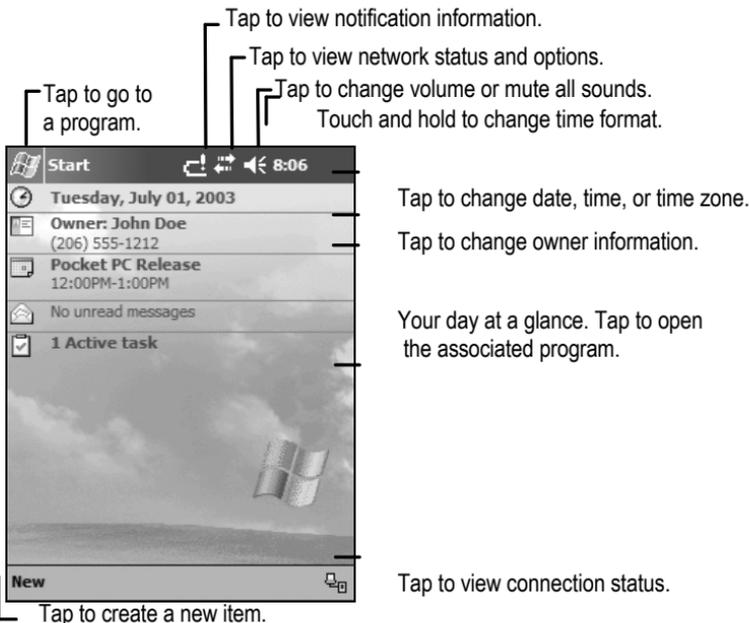
If a backup was previously performed, after re-booting M2240 will prompt you to restore the most recent backup.

## The Today Screen

At the top of the screen are status icons. Tap an icon to view details or change options. (These icons appear at the top of every screen on your M2240, and not only the Today screen.)

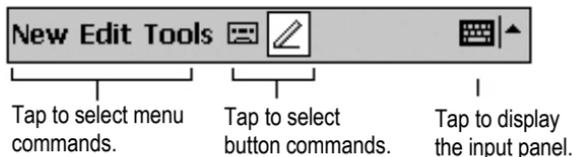
When you turn on your M2240 for the first time each day (or after four hours of inactivity), the Today screen displays. You can also view it by tapping Start and then Today.

The center of the Today screen provides information that you need for the day. Tap an item to view or edit details.



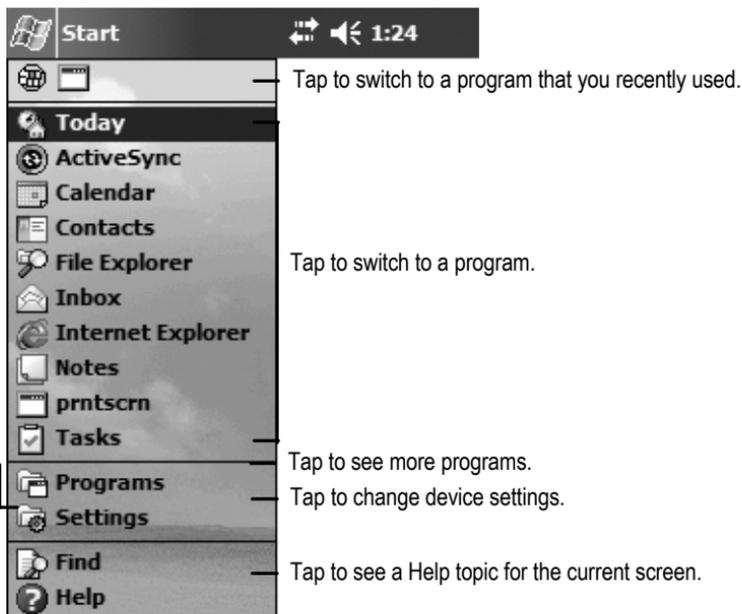
## The Command Bar

At the bottom of the screen is the command bar. You can use its menus and buttons to perform tasks in programs. Depending upon which program you are using, the buttons may vary from those depicted.



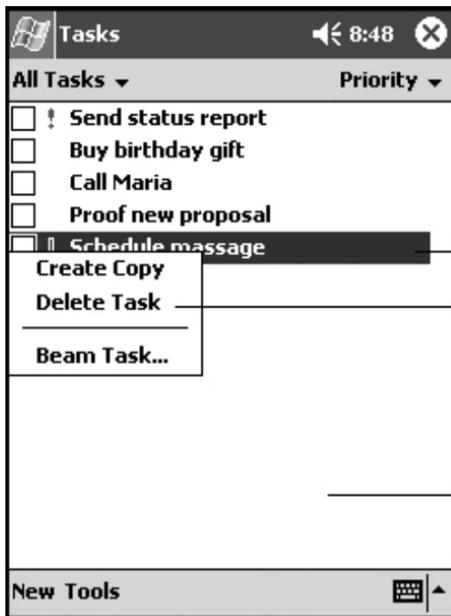
## The Start Menu

From the Start Menu, you can select programs, settings, and help topics. To display the Start Menu, from the top of any screen, tap Start.



## Pop-up Menus

You can use pop-up menus to quickly select an action for an item. To access a pop-up menu, tap and hold the stylus on an item name.



Touch and hold to display the pop-up menu.

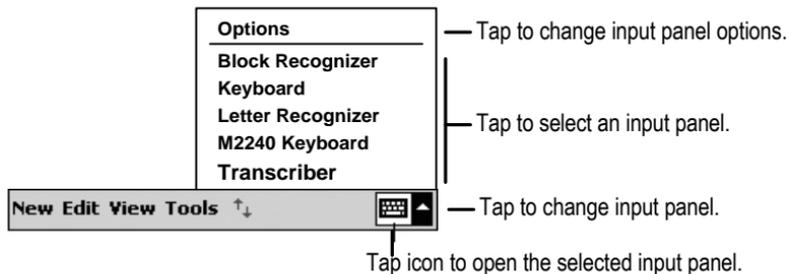
Lift the stylus and tap the action you want.

Tap outside the menu to close it without performing an action.

## Text Input Panels

Use the input panel to enter information in any program on your M2240. You can type using the standard Keyboard or the M2240 Keyboard. You can write using Block Recognizer, Letter Recognizer, or Transcriber. The characters appear as typed text on the screen. Select the input panel that is easiest for you to use.

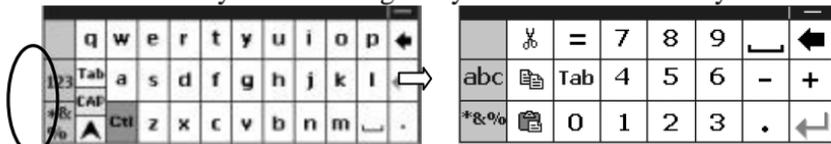
To change input panels, tap the arrow next to the Input Panel icon and then tap the input panel that you want.



When you tap in a text entry area, such as a text box or notes page, the currently selected input panel activates as shown in the example below.



The M2240 Keyboard has larger keys than the standard keyboard.



Tapping on the “123” or “\*&%”, identified in the circle above, gives additional characters.

## More information on Text Input

The M2240 help system provides much more information on Block Recognizer, Letter Recognizer and Transcriber. There are demos that show proper stylus strokes to create each alphabetic character.

**Block and Letter Recognizer help:** tap (Start / Notes). Tap  in the bottom right corner of the screen to select either the Block or Letter Recognizer. Next, tap  near the bottom right corner to see the help screen for Block Recognizer and Letter Recognizer. Tap the Demo tab to learn how to make stylus strokes for each alphabet character.

**Transcriber help:** tap (Start / Notes). Tap  in the bottom right corner to select Transcriber. Tap the Help tab to see a screen of Transcriber help topics.

## Settings on your M2240

Tap Start / Settings. You can tap any of the icons on the Personal, System, or Connections tabs to customize the M2240 settings to your own preferences. Tap “OK” to exit the settings. Here are a few of the settings on the M2240 that are worth noting.

### Buttons

Tap the Personal / Buttons. The Buttons setting allows you to assign the keypad buttons to your favorite programs. By default, these are preset to common applications such as e-mail and calendar. Re-assign them by selecting the desired program from the pull down list.

### Input

Tap Personal / Input. You can change settings related to character input, such as Block Recognizer, Keyboard, Letter Recognizer, M2240 Keyboard, and Transcriber.

## Backlight

Tap System / Backlight. Choose the settings in the Battery Power, External Power, and Brightness tabs as needed for your use of the M2240. (The display backlight has significant impact on battery life.)

## Memory

Tap System / Memory. Closing programs still leaves them resident in RAM. As more programs are started, available RAM decreases. If RAM resources become low, you can stop programs and remove them from RAM. To stop a program, tap the Running Programs tab at the bottom. You can stop individual programs or tap Stop All.

## Power

Tap System / Power. This screen allows you to view the approximate battery power remaining. Note: both the main battery and backup battery levels are shown, but the backup battery is not present in M2240. Tap the Advanced tab and choose the settings for automatic turn off.

The following features appear in the M2240 Pocket PC user interface, but are non-functional due to the special rugged design of the M2240:

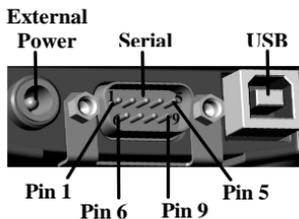
- \* Recording/Microphone functions are not available.
- \* Beam/Infrared communications are not available.
- \* Backup battery is not available.

## Connecting to your PC

### I/O ports

The M2240 has both USB and 9-pin serial ports. Connections via USB to a PC require an A-B USB cable (included with M2240). Serial connections require a 9-pin null-modem serial cable (not included).

You may also increase your connectivity options with M2240-compatible CompactFlash cards.



## ActiveSync

Using Microsoft® ActiveSync®, you can synchronize information and copy files between your computer and M2240. ActiveSync compares the data on your M2240 with the data on the PC and then updates M2240 and/or the PC with the most recent information.

ActiveSync is pre-installed on your M2240. Before connecting your M2240 to the PC, install ActiveSync on your PC from the M2240 Pocket PC Companion CD.

**Note:** If you don't have Microsoft® Outlook® 98 or later installed on your PC, please install Microsoft® Outlook® 2002 from the Companion CD. Even if you have Outlook 98 or Outlook 2000 installed, you are encouraged to upgrade. Microsoft recommends that users choosing to install Outlook 2002 from this CD do so before installing ActiveSync.

You can also download the most current version of PC ActiveSync at: [www.microsoft.com/windowsmobile/default.msp](http://www.microsoft.com/windowsmobile/default.msp). The installation instructions for ActiveSync may vary if you use a version other than the version originally shipped on the M2240 Companion CD.

### *Setting Up ActiveSync*

DO NOT connect your M2240 until the installation is complete.

When installing ActiveSync on the PC, you will see the screen "Set Up Microsoft ActiveSync". Click "Next". A screen will appear asking what folder to install to. We recommend using the default setting. Click "Next".

The “Get Connected” dialog box will automatically appear on the PC. Connect the M2240 to your PC using USB. Click “Next”.



There are two types of ActiveSync connections. The table below summarizes the advantages and disadvantages of each choice. The Standard Partnership synchronizes data and is recommended for ease of connection. Click “Next”.

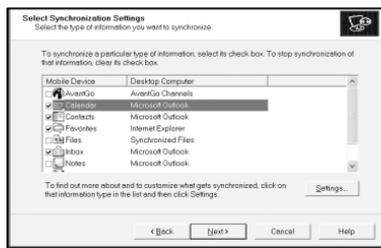


Connection	Advantages	Disadvantages
<p><i>Standard Partnership</i></p>	<p>Information is synchronized.</p> <p>Subsequent connections are automatic.</p> <p>More options for file sharing.</p> <p>Once a partnership is established, you can connect to your PC via wired or wireless LAN.</p> <p>Your M2240’s clock gets set to match your PC’s clock.</p>	<p>More questions to answer on initial connection.</p> <p>If the clock on your PC is wrong, it will make the clock on your M2240 wrong.</p> <p>Partnership will be deleted when the M2240 is hard reset, unless a backup has been run.</p>
<p><i>Guest Partnership</i></p>	<p>Use to manually move and copy files.</p> <p>Safer because synchronization cannot adversely impact data either on your M2240 or your PC.</p> <p>For use on borrowed or shared</p>	<p>Slower subsequent connections (one more step per connection that requests for partnership).</p> <p>LAN connection is not possible.</p>

	PCs.	
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*Standard Partnership* only - Choose to synchronize your M2240 with your PC. Click “Next”. You can have up to two partnerships or have a partnership only with this computer. Enter a unique name for your M2240 and Click “Next”.

Select the type of information you want to synchronize. To customize settings for each program, click on the information type and click on settings. Click “Next”.



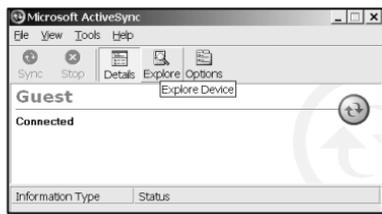
## ***Running ActiveSync***

Start ActiveSync on your PC. Connect the M2240 with the USB cable and wait while ActiveSync automatically establishes a connection. (This may require several seconds.)

*Standard Partnership* - ActiveSync will automatically synchronize the settings chosen. To change those settings, go to ActiveSync on the PC and click Tools, Options.

*Guest Partnership* - ActiveSync will ask you each time if you want the Standard or Guest Partnership.

Click on the Explore icon on the PC to view the file structure on the M2240, which now looks and acts like the Windows Explorer on your PC.



## ***Disconnecting ActiveSync***

Before removing the USB Cable from the M2240 or the PC, disconnect the ActiveSync program on the M2240 to avoid connection problems.

Tap the ActiveSync icon in the lower right corner of the Today Screen. Then tap “Disconnect”. Finally, remove the USB cable.



For additional information on using ActiveSync, visit the Microsoft web site and search for articles on ActiveSync. For information specific to the use of ActiveSync with M2240, see the web site listed under reference materials on the last page of this manual.

## Additional Connectivity

The M2240 supports several kinds of connections in addition to direct ActiveSync connections to a PC. Note that you will need to purchase third party accessories (such as CompactFlash modems or Bluetooth cards) in order to implement these connections:

- **Modem** -- The M2240 supports dial-up connections to an Internet Service Provider and sending and receiving e-mail with file attachments. (You will need to purchase a modem and cable or a CompactFlash modem.)
- **Web-enabled Cell Phones** -- The M2240 can connect to the Internet via web-enabled cell phones that are compatible with Pocket PC devices. Refer to your phone service provider for more information on establishing Internet connections via your cell phone.
- **Bluetooth** -- Pocket PC-compatible Bluetooth CompactFlash cards are supported by the M2240. Bluetooth is used for wireless communication over distances of up to 10 meters. Typical Bluetooth applications include sending files to a PC or another M2240, or communicating with a printer or cell phone.
- **Wireless LAN** -- Pocket PC-compatible Wireless LAN (or 802.11) CompactFlash cards can be used with M2240. These cards allow you to maintain a wireless connection to the LAN and the Internet while within range of an 802.11 network.

- **VPN** -- The M2240 includes support for VPN (Virtual Private Network) connections. Used together with a connection to the Internet, a VPN connection allows you to browse network files from a remote site and also supports remote synchronization with your PC via ActiveSync. Note that the network you access must be configured to allow VPN connections.
- **Ethernet** -- Pocket PC-compatible Ethernet CompactFlash cards can be used with M2240. These connections allow the M2240 to connect to a LAN and browse network file shares. You can also use ActiveSync over an Ethernet connection to synchronize with your PC. Note that the M2240 does not expose file shares and cannot be browsed by PCs on the network.

For more information on creating these connections, see the web site listed under reference materials on the last page of this manual.

## **Installing additional software on your M2240**

The M2240 can run third-party software designed for Microsoft Windows Mobile 2003 Pocket PC devices.

Most third-party software is installed by running a setup program on the PC while the M2240 is connected with ActiveSync. If prompted by the installation wizard, perform a soft reset to complete the installation.

<p><b>Note</b> Follow the setup instructions that came with your software.</p>
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# Microsoft Pocket Outlook

Microsoft Pocket Outlook includes Calendar, Contacts, Inbox, Notes and Tasks. Open the program and then tap Start / Help (?) for instructions on using the various programs. To synchronize information on your PC with your M2240, see the information on using ActiveSync.

	Calendar	Use Calendar to schedule appointments, including meetings and other events. You can check your appointments in one of several views (Day, Week, Month, and Agenda) and set the Calendar to remind you of appointments with a sound or other method. Tap the Today icon to view the current date.
	Contacts	Use Contacts to maintain a list of both business and personal information so that you can easily find the information you're looking for, whether you're at home or on the road.
	Inbox	You can send and receive e-mail by synchronizing with your PC, or by connecting to a POP3 or IMAP4 mail server. You need to set up e-mail accounts for each method that you use except for ActiveSync, which is set up by default. The ActiveSync folder on the M2240 is used to store messages that you send and receive through Synchronization with a PC. Account names appear as folders in the folder list in the Inbox message list.
	Notes	Notes helps you quickly capture your ideas, notes, and thoughts. You can create a note using written and typed text and drawings. You can also share your notes with others through e-mail and synchronization with your PC.
	Tasks	Use Tasks to keep track of things you need to do. You can use categories to help organize tasks and set reminders for them. If you use Outlook on your PC, you can synchronize tasks between the M2240 and the PC.

# Companion Programs

Your M2240 comes with the following programs installed. Open the program and then tap Start / Help ? for instructions on using the various programs.

	Pocket Excel	<p>You can use Pocket Excel much the same way you use Excel on your PC. Use split panes to view different parts of a worksheet at the same time. You can also use freeze panes to keep row and column labels or other data visible as you scroll through a sheet.</p> <p>Excel files (.xls) and templates (.xlt) created in Excel version 5.0/95 or later on the PC are converted to Pocket Excel workbook (.pxl) or template (.pxt) files when they are synchronized or copied to the M2240 or when you open an e-mail message with an Excel file as an attachment. Pocket Excel workbooks are converted to Excel workbooks when they're synchronized or copied to the PC. During conversion, some formatting attributes may be changed or lost. For more information, see ActiveSync Help on the PC.</p>
	Pocket Word	<p>You can enter information by working in different modes, which you select from the View menu.</p> <ul style="list-style-type: none"><li>• <b>Typing.</b> Using the input panel, enter typed text into the document.</li><li>• <b>Writing.</b> Use your stylus to write directly on the screen. Lines are displayed as a guide.</li><li>• <b>Drawing.</b> Use your stylus to draw directly on the screen. A drawing box appears, indicating a single object. Word documents (.doc) and templates (.dot) created in Word 6.0 or later on the PC are converted to Pocket Word documents (.psw) and templates (.psw) when they're synchronized or copied from the PC to your M2240, or when you open an e-mail message with an attached Word file on your M2240. Pocket Word documents are converted to Word documents when they're synchronized or copied back to the PC. During conversion, some formatting attributes may be changed or lost.</li></ul>

	<p>Calculator</p>	<p>Tap the Calculator buttons to enter numbers and perform calculations. To clear the current calculation, tap <b>C</b>. To clear the displayed number, tap <b>CE</b>. To clear the last digit entered in a multi-digit entry, tap the arrow to the right of the entry box.</p> <p>To store a number, tap the box to the left of the entry box. An <b>M</b> will appear in the box. To add the displayed number to the number that's already in memory, tap <b>M+</b>. To display the number in memory, tap <b>MR</b>. To clear memory, tap <b>MC</b>.</p>
	<p>MSN Messenger</p>	<p>MSN Messenger on your M2240 provides the same chat environment as MSN Messenger on your PC. You need a Microsoft Passport account or Microsoft exchange e-mail account that your employer provides.</p>
	<p>Pocket Internet Explorer</p>	<p>You can use Pocket Internet explorer to view Web pages on your M2240 in two ways: by downloading pages through synchronization or by connecting to the internet. While browsing, you can also download new files and programs to your device from the Internet. Favorites are stored in the Mobile Favorites subfolder of Favorites in Internet Explorer on the PC. This folder was created when you selected the Favorites information type for synchronization in ActiveSync on your PC. Favorites must be stored in this folder to be synchronized.</p>

# Caring for your M2240

## Cleaning the M2240

Clean the M2240 with a soft cloth dampened with either water or a diluted mild detergent. **Do not put the M2240 in the dishwasher.**

## Shock

The M2240 is designed to resist damage for drops up to 122 cm (4 ft). However, you should protect the display from impact, pressure, or abrasive substances that can scratch it or crack it. The M2240 should not be dropped unnecessarily.

## Care of the touch screen

Use only the included stylus or other devices specifically designed for use with touch screens. The use of ballpoint pens, sticks, nails or other sharp objects to operate the touch screen will scratch and/or damage the unit. Abrasives may scratch touch screens. Keep the touch screen clean by gently wiping the display, using a soft cloth dampened either with clean water or glass cleaner. **Do not apply any cleaner directly to the display. Do not use any abrasive cleaners.**

Use the screen protectors included with the M2240 to keep the touch screen clean and protected. To apply a screen protector, first clean the display thoroughly. Peel the backing from the screen protector. Align the edge, and then drop the remainder onto the display. Use a credit card, if necessary, to squeegee the air from underneath the screen protector.

# Environmental Considerations

M2240's rugged design allows you to run your Pocket PC applications in harsh outdoor environments. Here are some considerations that will help you get the most out of your M2240 when working in very wet, hot or cold conditions.

## Water

M2240 is designed to withstand accidental immersion. To maintain M2240's water resistant seal, it is important to ensure that the screws on the CF-Cap are tightened after replacing CompactFlash cards. Removal of the back case torx screws, or failure to tighten the CF-Cap screws could cause leakage, and will void your warranty.

Because the PowerBoot module is designed to easily disconnect from the unit, water can occasionally find its way onto the metal contacts between the battery and the unit. After working in very wet conditions, remove the battery and check the contacts to see if they are wet. If so, dry the contacts on both M2240 and the battery with a tissue, paper towel or clean rag before storing the unit for overnight or longer.

## Temperature Range

M2240 can be used at temperatures from -22°F to +140° F (-30C to +60C). M2240 can be stored at temperatures from -40°F to +158°F (-40C to +70C). Although M2240 is designed to be rugged, do not leave it in direct sunlight or a parked vehicle in the sunlight for extended periods.

Batteries perform best at room temperatures. The M2240 battery pack also has a very stable capacity as temperature rises above the human comfort level. However, cold temperatures cause battery life to drop. Battery life reduction will also depend upon other usage conditions, including backlight status, CPU load, temperature and whether power consuming CompactFlash devices (such as Bluetooth or 802.11) are present. Under very cold conditions (-4°F

or -20C), you can expect your battery life to be shortened by anywhere from 30 to 70 percent.

At cold temperatures (below 32°F or 0C), a battery's nominal voltage is lower than at moderate or warm temperatures. As a result, the low battery warning message (which is triggered at a fixed voltage level) appears sooner than at moderate or warm temperatures. If conditions are very cold (-4°F or -20C), as much as half of the battery life may still be available after the low battery warning message first appears.

If you anticipate working under very cold conditions, consider carrying a spare well-charged battery. M2240 is designed to make battery replacement a simple process. Anything that you can do to keep M2240 and the spare battery warm (for instance, keeping it in a pocket under your coat) will improve your battery performance. Interestingly, at extremely cold temperatures (-22°F or -30C), using the backlight has a slight warming effect and can actually increase battery life.

At moderate temperatures, you can expect your battery to last about 500 charge/discharge cycles before its performance noticeably declines. Long-term storage at very warm temperatures (over 95°F / 35C) will accelerate this aging process and should be avoided.

Do not charge the battery if the ambient temperature is below 32° (0C) or above 95° F (35C).

# Safe Use of your M2240

## Repair

Please do not attempt to dismantle the M2240 for repair. There are no user-serviceable parts inside. For service, please use the contact details listed on the last page of this manual or your local dealer for assistance.

## Battery safety

- To reduce the risk of fire or burns, do not disassemble, mutilate, or puncture the PowerBoot Module. There are no user-serviceable parts inside.
- Handle a damaged or leaking battery with extreme care. If the electrolyte comes in contact with your skin, wash the exposed area with soap and water. If it comes in contact with the eye, flush the eye with water for 15 minutes and seek medical attention.
- Do not expose the PowerBoot Module to storage temperatures above 35C (95°F) for extended periods.
- Do not charge the PowerBoot Module if the ambient temperature exceeds 35C (95°F) or is below 0C (32°F).
- Contact your local waste disposal provider regarding the disposal or recycling of the PowerBoot Module.

## Environmental Hazards

The M2240 contains no mercury or cadmium.

## AC adapter safety

- Use only AC adapters intended for the M2240. Other external power sources may damage your product and may void the warranty.
  - Make certain that the input voltage on the adapter matches the voltage in your location.
  - Make certain that the adapter has prongs compatible with your outlets.
- AC adapters are designed for **indoor use only**. Avoid using the AC adaptor in wet areas.
- Unplug the AC adaptor from power when not in use.
- Do not short the output connector.

# Troubleshooting

## **I connected my M2240 to external power and nothing happened. Is something wrong with my battery?**

Probably not. If a M2240 battery is dead, sometimes it will take a while for M2240 to respond when external power is applied. Allow up to an hour after AC power is first applied to see whether M2240 spontaneously boots to Windows – and then leave M2240 on charge for the full 12-hour charge period. Sometimes pressing the power button after M2240 has been on charge for several minutes is sufficient to restore it to working order – but still leave M2240 on charge for the full charge period. For best results, turn M2240 off while charging.

## **I am worried that my battery isn't performing as well as it should. Is there any way that I can test it to see whether it's okay?**

The M2240 operating system includes a power logging utility to help evaluate battery performance. Charge the battery for the full 12-hour period, and then configure M2240 to never go to sleep (Start \ Settings \ System \ Power \ Advanced, and uncheck the box under “On battery power”). Tap “OK”. Use File Explorer to browse for and launch `\windows\M2240batlog.exe`. This utility creates a file (`\Built-in Storage\System\pwrlog.txt`), which records the battery voltage at one-minute intervals. Disconnect external power and allow the program to run until the battery dies. Reapply AC power and soft reset M2240 to close the power logging utility. Copy `pwrlog.txt` to the PC, and then open it in any text editor. Check the time of the first and last entry in the file to determine how many hours elapsed before the battery died. If the backlight is off during the rundown and there are no power-consuming CompactFlash devices running (such as Bluetooth or 802.11), a healthy battery will last 35 hours or longer at room temperature.

**It is critically important that my battery doesn't fail during a job. Do you have any suggestions?**

Consider carrying a well-charged spare battery to the field (you can charge a M2240 battery even if it is not attached to a M2240). M2240 is designed so that battery replacement can be easily done in the field.

**My M2240 won't communicate with my PC over an ActiveSync USB connection.**

Make sure that there aren't any open applications on M2240, which may be interfering with communication. One way to immediately close all open applications is to perform a soft reset (See the section on Power Button Features).

Choose Start \ ActiveSync \ Tools \ Options \ Options, and make sure that "Enable PC sync using this connection" is checked and that "USB Default" is selected from the dropdown list.

Try disabling any personal firewall software, which is running on your PC. Firewalls may block TCP/IP from opening ports, which are required by ActiveSync.

**I am trying to connect my M2240 to the Internet using a web-enabled cell phone, but it refuses to connect.**

Confirm that your phone, cable, and login are okay by attempting to connect from a desktop or laptop PC.

If your cellular provider is also providing you with Internet access, contact your provider for information about how to connect a Windows Mobile device. Typically, the provider may require certain modem initialization strings or APN (Access Point Name) strings. If you try to establish the same connection from a PC, typically you install software from the cellular provider, which handles this configuration automatically.

If your ISP is separate from your cellular phone provider, then simply dialing the ISP from your phone should be sufficient. You will use the username and password you usually use with this ISP. Note that you may need to reduce your connection baud rate to 9600; contact your cellular provider for specifics.

### **Is there anything I can do to make the display more viewable?**

The default backlight brightness is set to about 65 percent of the maximum brightness. Choose Start \ Settings \ System \ Backlight \ Brightness, and adjust the slider to increase display brightness; however, doing this will reduce battery life.

Confirm that you have one – and only one! – screen protector in place.

## **Regulatory Information**

### **U.S.A.**

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 when the equipment is used in a commercial or residential environment. This equipment generates, uses and can radiate radio frequency energy and, if not used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment is subject to the following two conditions:

- (1) The device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

### **Canada**

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

# Declaration of Conformity

## Europe

According to ISO / IEC Guide 22 and EN 450 14

**Manufacturer's Name:** Tripod Data Systems, Inc.  
**Manufacturer's Address:** 345 SW Avery Ave.  
Corvallis, OR 97333 USA

Declares, under our sole responsibility, that the product:

**Product Name:** Field Data Collector

**Model Number:** Recon

**Product Options:** ALL

**conforms to the following Product Specifications:**

**Safety:** EN 60950: 1992 +A1, A2, A3, A4, A11

**EMC:** EN 55022: 1994 +A1, A2: 1997 EN 55022: 1998 +A1:2000

EN 61000-3-2, 1995+A1+A2: 1998

EN 61000-3-2:2000 EN 61000-3-3:1995

EN 61000-3-3:1995+A1:2001 CFR 47, Part 15, Subpart B

EN 55024:1998\*\* EN 55024:1998+A1:2001\*\*

### Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC, amended by 93/68/EEC and the EMC Directive 89/336/EEC, amended by 93/68/EEC. In addition to meeting the above EMC requirements during system test, the AC Adapter provided with this product has been certified to IEC 60950 +A1, A2, A3, A4, A11.

\* Product has less than 20-Watts active input power.

\*\* Product is battery powered.

Corvallis, OR USA

### CAUTION:

Only approved accessories may be used with this equipment. In general, all cables must be high quality, shielded, correctly terminated, and normally restricted to two meters in length. AC adaptors approved for this product employ special provisions to avoid radio interference and should not be altered or substituted.

Unapproved modifications or operations beyond or in conflict with these instructions for use may void authorization by the authorities to operate the equipment.

022604

# Reference Materials

## Contacting DAP Technologies

### Headquarters

#### **DAP TECHNOLOGIES**

(Headquarters)

955, rue Fernand-Dufour

Vanier (Quebec)

Canada

G1M 3B2

**Tel.:** +1(418) 681-9394

**Fax:** +1(418) 681-0799

E-mail: [sales@daptech.com](mailto:sales@daptech.com)

Web: [www.daptech.com](http://www.daptech.com)

Technical Support: [support@daptech.com](mailto:support@daptech.com)

### Europe

#### **DAP TECHNOLOGIES (FRANCE)**

Place du Village des Barbannières

92632 Gennevilliers Cedex

France

**Tel. :** +33 (0) 1 41 21 95 95

**Fax :** +33 (0) 1 41 21 95 65

E-mail: [salesparis@daptech.com](mailto:salesparis@daptech.com)

### United Kingdom

#### **DAP TECHNOLOGIES (UK)**

25 Nuffield Way

Abingdon

OX14 1RL

England

**Tel. :** +44 (0) 1235.540.176

**Fax :** +44 (0) 1235.540.177

E-mail: [salesuk@daptech.com](mailto:salesuk@daptech.com)

## **Windows Mobile:**

[www.microsoft.com/windowsmobile/default.msp](http://www.microsoft.com/windowsmobile/default.msp)x

## **Accessories:**

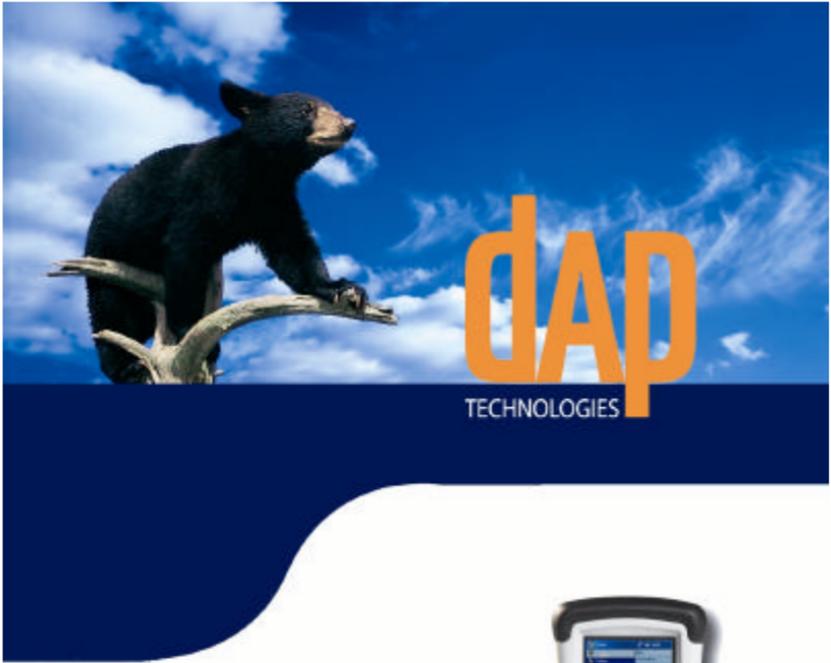
You can expand the M2240 handheld computer's capabilities by purchasing accessories.

Go to [www.daptech.com](http://www.daptech.com)

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**418-681-7833**

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