

Empower the Bar Code



User's Manual TPC7050 Mobile Computer

(WinCE 4.2 version)

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1. Introduction

Congratulations on purchasing the TPC7050, a Microsoft Windows®CE .Net Mobile Computer. Its special combination of features makes it perfect for use in a wide range of applications.

These features as:

- Microsoft Windows CE. Net operating system
- Robust expansion capability
- Wireless mobility via 802.11b
- Long battery life
- Transflective type color LCD display
- Backlit keypad

1.1 About this Manual

The chapters contained in this manual are:

Chapter 1: Introduction – Presents general information about the TPC7050

Chapter 2: Getting started – Describes basic use of the TPC7050

Chapter 3: Operating the Mobile computer – Describes customizing the TPC7050

Chapter 4: Scanning

Chapter 5: Useful Utilities

Chapter 6: Software Applications

Chapter 7: Communication – Describes using the TPC7050 for different types of communication

Chapter 8: Overview of Microsoft Windows CE 4.2

Chapter 9: Troubleshooting

Chapter 10: Appendix

1.2 User and Product Safety

- Never use strong pressure on the screen or subject it to severe impact, as the LCD panel can crack and possibly cause personal injury. If the LCD panel is broken, never touch the liquid inside, for such contact can irritate the skin.
- Although the TPC7050 mobile computer meets IP54 standards for water and dust resistance, avoid prolonged exposure to rain or other concentrated moisture. Conditions exceeding IP54 standards could result in water or other contaminants entering the TPC7050.
- Use only the approved AC Adapter with the TPC7050. Use of an unapproved AC Adapter could result in electrical problems, or even cause a fire or an electrical shock to the user.
- Be sure that only authorized suppliers are allowed to disassemble and reassemble the device. If the device or parts are damaged due to wrong handling, the product and parts warranty is void.
- Always make back-up copies of all important data. This is easily done using a cable or single cradle (optional) to transfer data to the computer. The manufacturer is not liable for any data damage or data loss caused by deletion or corruption while using this device, or due to a drained battery.
- Lithium-ion battery packs may get hot, explode, ignite and/or cause serious injury if abused. Please follow the safety warnings listed below.

-
- Warnings:**
- ◆ Do not place the battery pack in fire or heat the battery.
 - ◆ Do not install the battery pack backwards so the polarity is reversed.
 - ◆ Do not carry or store battery pack together with metal objects.
 - ◆ Do not pierce the battery pack with nails, strike the battery pack with a hammer, step on the battery pack or otherwise subject it to strong impacts or shocks.
 - ◆ Do not solder directly onto the battery pack.
 - ◆ Do not expose battery pack to liquid, or allow the battery contacts to get wet.
 - ◆ Do not disassemble or modify the battery pack. The battery pack contains safety and protection devices, which, if damaged, may cause the battery pack to generate heat, explode or ignite.
 - ◆ Do not discharge the battery pack using any device except for the specified device. When it is used in devices other than the specified devices, the battery pack can be damaged or its life expectancy reduced. If the device causes any abnormal current to flow, it may cause the battery pack to become hot, explode or ignite and cause serious injury.
 - ◆ In the event the battery pack leaks and fluid gets into the eyes, do not rub the eyes. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause eye damage.
-

To avoid malfunctions and to ensure years of trouble-free operation, pay attention to the following:

General Use



Do not expose the mobile computer to areas subject to extreme heat such as direct sunlight, near a heater, or in a car – or in areas that are very cold, humid, moist, or dusty.



Do not expose the product to rain or water



Do not subject the product to strong impact, or throw or drop the mobile computer from large heights. Do not allow other mechanical shocks to the product.

Cleaning Instructions



Clean the exterior by wiping it with a soft, dry cloth. Do not use much water.



Do not use thinner, white spirit or other solvents. These can discolor the case and the keys and it has a negative effect on the lifetime of the keys.

Cleaning the Mobile Computer

Clean the scan window periodically for better reading performance, but pay attention to not scratching the window

Cleaning the Cradle

Avoid touching the contacts in the cradle. The contacts must stay as clean as possible to maintain optimal charging capacity. Do not use water when cleaning the cradle. This can cause malfunction of the chargers.

Using the Mobile Computer



Avoid temperature changes. Sudden temperature changes can cause condensation to form on the mobile computer. Using the mobile computer while condensation is present can cause malfunction. Always wait until the condensation clears naturally before attempting operation.



Do not leave the mobile computer in an area where static charge is accumulated or near devices where electromagnetic emission is generated.

Do not place any object on top of the mobile computer. Do not lay the mobile computer face down. Doing so can cause accidental operation of the power key or [ENT] key, which can discharge your batteries or change settings you do not want changed.

Using the Cradle

Do not place any product other than the TPC7050 mobile computer in the cradle.

Maintenance



There are no user-serviceable parts inside the mobile computer or the cradle. So do not try to take it apart. The manufacturer will not be liable for any damage caused by customers. In case of a malfunction that can not be solved by the troubleshooting instructions in this manual, please consult our service department.

1.3 Specifications

Performance

OS	Windows CE .NET 4.2
CPU	Intel PXA-270 (520 MHz)
RAM	64MB SDRAM
ROM	128MB

Display

LCD	3.5" Color TFT LCD with touch panel
Resolution	240 x 320

Scanner

Scanner system	Long range CCD scanner 2048 pixels
Resolution	4 mil (0.10mm) min. at PCS 90%
Depth of field	15.5" (UPC/EAN, 13 mil at PCS 90%)
Scanning rate	400 scans/sec
PCS	≥ 30%
Ambient light	0~20,000 lux
Readable barcode	Code 39, Code 93, Code 11, Code 128, EAN-128, Codabar, UPC A/E, EAN 8/13, UK Plessey, MSI/Plessey, Standard 2 of 5, Interleaved 2 of 5, Telepen, Matrix 2 of 5, China Post Code

Keypad

23 keys with back light

Communication Interface

Standard Interface	RS232 & USB
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Power supply

Main power	Rechargeable Li-ion Battery 3600mAH, 3.7Vdc
Power input	Via cradle or direct charging

* Batteries must be charged at a temperature ranging from 0~+45°C (+32°F to +113°F). At temperatures below 0°C and above +45°C display or battery performance degradation may occur.

Expansion slot

CF type II slot (for memory expansion and WLAN card)

SD/MMC card (for memory expansion)

Physical and Environmental

Operation Temperature -10~50°C

Storage Temperature -20~60°C

Battery Charging Temperature 0~45°C

Humidity Max 95% RH at 40°C

Weight Approx. 485 g

Drop test 1.2 meters to concrete (Handset)
0.9 meters to concrete (Cradle)

ESD +/-15kVDC air discharge
+/- 8kVDC direct discharge (contact)
+/- 8kVDC indirect discharge (H & V)

Sealed standard IP54

Agency Listing

CE, UL (including battery), FCC class B, BSMI, CCC

Win-CE AP

MS Web Browser(Internet Explorer), Media Player, Microsoft WordPad, Remote Connection, Transcriber, Windows Explorer

Developing Tools

SDK Microsoft Visual tool for VB and VC programming

2. Getting Started

This chapter describes the TPC7050 physical characteristics, how to install and charge the batteries, how to remove and replace the strap assembly and how to start the TPC7050 for the first time.

2.1 Check the package

Carefully remove all protective material from around the TPC7050 and save the shipping container for later storage and shipping.

Depending on the configuration ordered, the TPC7050 shipping container may include:

2.1.1 *Compact Package*

- v TPC7050
- v Battery pack
- v USB Sync cable
- v Power supply
- v Hand strap
- v Quick Reference Guide
- v CD ROM
- v Thread
- v Stylus



Figure 2-1 Compact Package

2.1.2 *Deluxe Package*

- v TPC7050
- v Battery pack
- v Cradle
- v USB Sync cable
- v Power supply
- v Hand strap
- v Quick Reference Guide
- v CD
- v Thread
- v Stylus

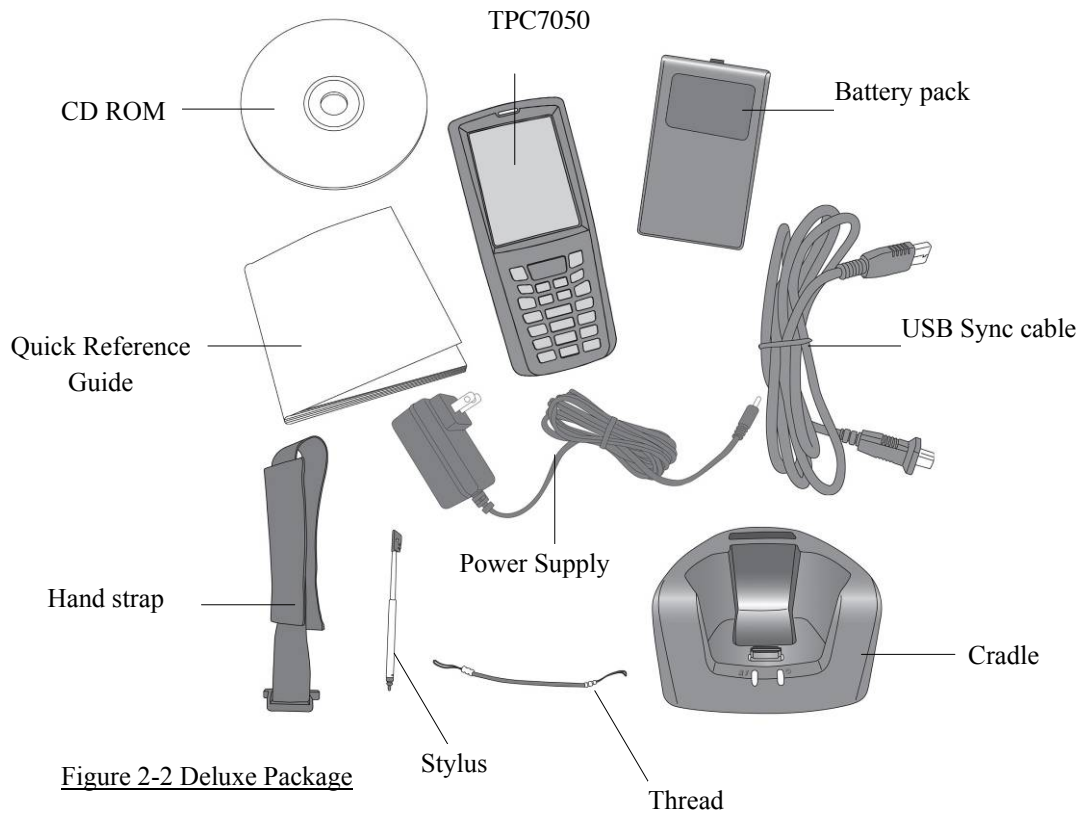


Figure 2-2 Deluxe Package

Inspect the package contents for damage. If any item is missing or damaged, please contact the POSline Technical Support Center immediately.

2.2 Detailed View

The pictures below provide information on the TPC7050's various buttons, ports and other functions.

2.2.1 *TPC7050 Mobile Computer*

Dimensions of the TPC7050

180mm (L) x 82mm (W) x 43.5mm (H)

Details of the TPC7050

Front

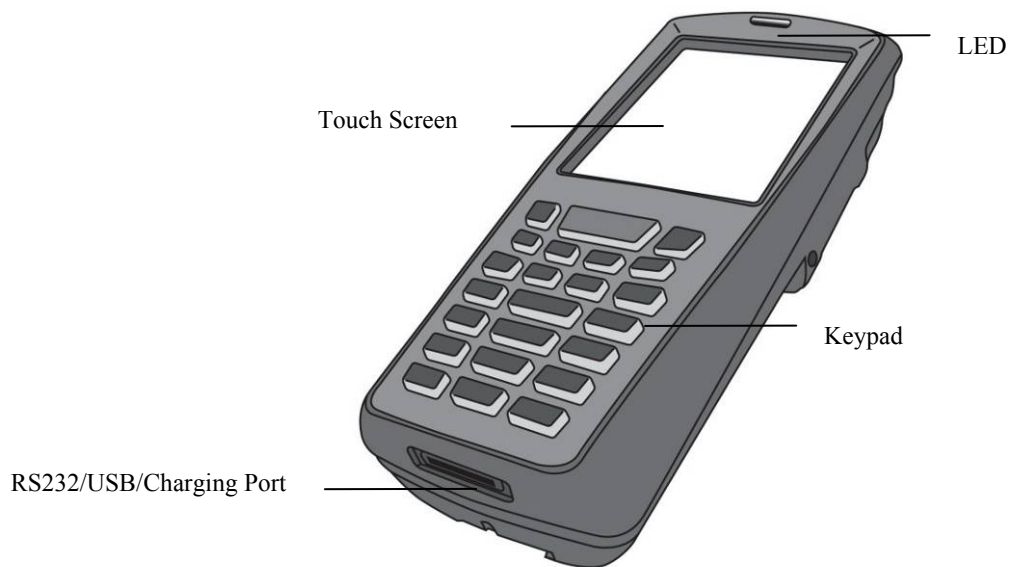


Figure 2-3 The Front of the TPC7050

Back

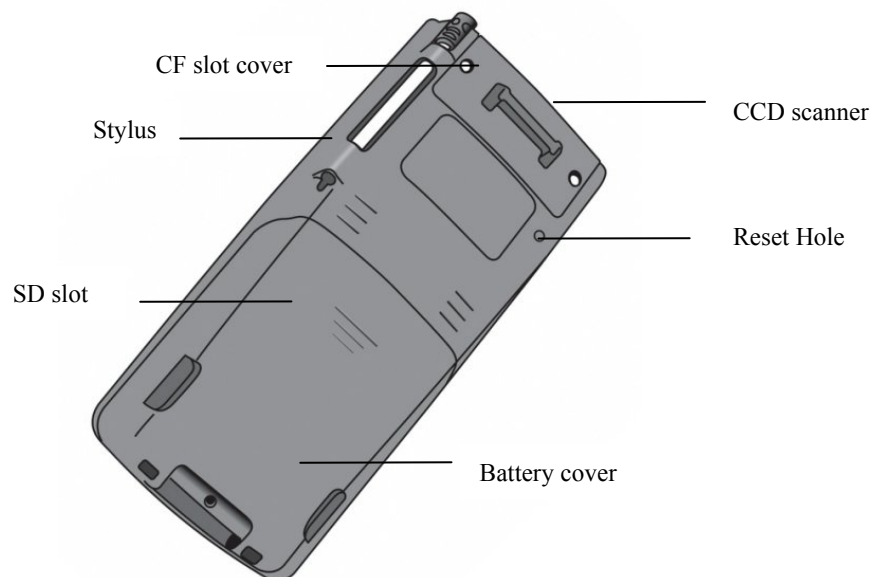


Figure 2-4 The Back of the TPC7050

1. Touch Screen

Use the stylus to perform specific actions on the touch panel.

2. RS232/ USB Charging Port

The USB port enables sending and receiving files and data with a desktop PC. To transmit files and data, ActiveSync must be installed on the PC.

3. LED Indicators:

LEDs show the current status of the TPC7050. LED indicators signal the following:

LED status	Description
Green	The scanner is reading barcodes Charge complete
Red	Charging

4. Stylus

Use the stylus for selecting items and entering information.

5. CF Cover

The CF Cover protects the CF connector from dust and water.

6. Battery Cover

The battery cover protects the battery pack. Attach the battery cover to leave suspend mode.

7. CCD scanner

The CCD scans barcode.

8. Reset Switch

Use this to reboot OS when a system crash.

2.2.2 *Cradle*

Dimensions of the CRD-80 Cradle

117.5mm (L) x 113.5mm (W) x 70.5mm (H)

Details of the CRD-80 Cradle

Front

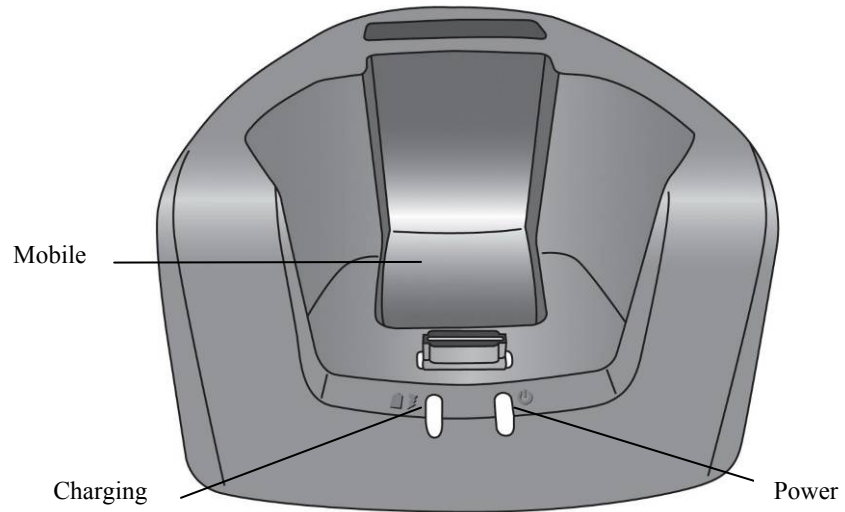


Figure 2-5 The Front of the CRD-80

Back

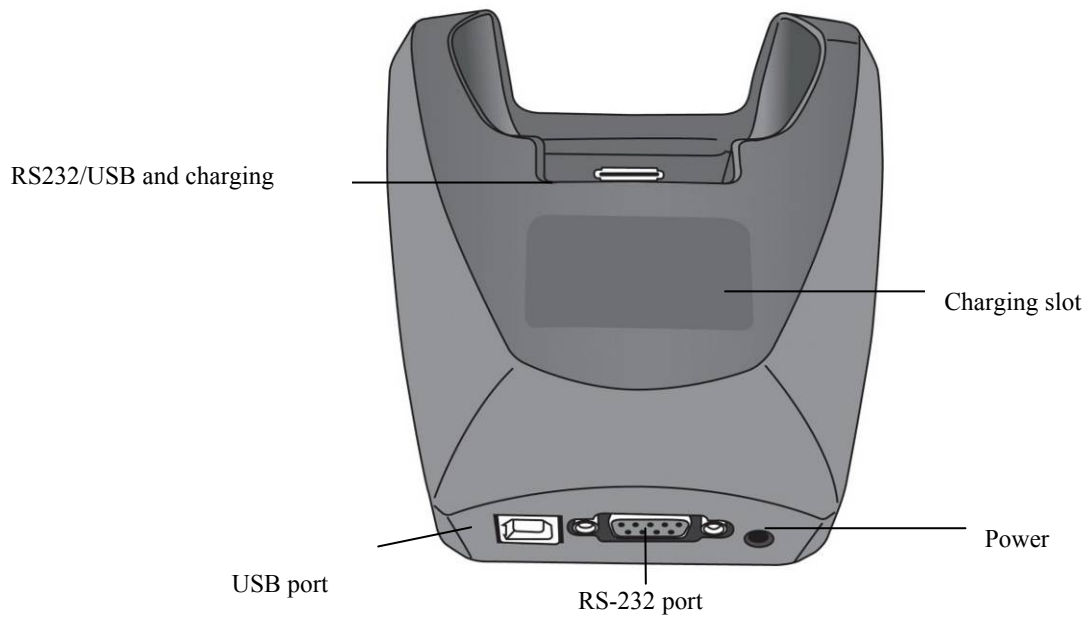


Figure 2-6 The Back of the CRD-80

1. Mobile Computer Slot

Put the mobile computer in the cradle slot for data transmission or charging

2. Power LED Indicator

LED status	Description
Green	Power on (mobile computer not in cradle)

3. Charging LED Indicator

LED status	Description
Red	Charging
Green	Charging complete

4. RS232 / USB and Charging Connector

Connects the multiple function socket on the mobile computer for data transmission and charging

5. Charging Slot

For charging a spare rechargeable battery pack

6. RS-232 C Socket

For connecting to PC serial port through standard RS232 cable

7. USB Socket

For connecting to PC USB port through a standard USB cable

8. DC Input Socket

Input for AC adapter

2.3 Installing, Replacing and Charging Batteries

Wrong use of batteries may cause serious damage to the mobile computer or to the cradle. To avoid damage, it is important to follow the instructions.

-
- Caution:**
- ▶ **Insert a fully-charged battery pack before use of the mobile computer.**
 - ▶ **Never remove the main batteries while the mobile computer is turned on.**
Doing so may lose data in the mobile computer.
 - ▶ **Use only recommended batteries.**
When other batteries are used, defects or other problems can occur. Before installing (new) batteries, please make sure you are using the recommended batteries.
 - ▶ **Use the right charger for batteries.**
The rechargeable [Li-ion](#) battery pack from POSline can be charged in the cradle when either it is in the mobile computer or alone in the charging slot in the back of the cradle.
 - ▶ **The life of a battery pack is limited, and charging a battery pack causes it to gradually lose its ability to maintain a charge. If your battery pack requires frequent charging, it probably means it is time to purchase a new one.**
 - ▶ **A fully charged backup battery can maintain memory (RAM) contents for about 10 minutes, even when the battery pack is removed.**
 - ▶ **Strictly follow the instructions for installing, charging, and removing the batteries.**
The products are not warranted for damage, defects, malfunction, or loss of data, resulting from incorrect use of batteries.
-

Required batteries:

The mobile computer needs both main battery and backup battery for operation.

Main Battery

The rechargeable battery pack is for normal operations and data storage. When the battery pack power goes low, immediately charge it or replace it with a charged battery pack.



Backup Battery


The built-in battery is for memory backup.

How to charge the POSline rechargeable battery pack in the cradle

1. Make sure that the POSline rechargeable battery pack is inserted in the mobile computer. When the mobile computer is placed in the cradle, the rechargeable battery pack charges automatically.
2. If you have a spare POSline battery pack, you can replace the empty battery pack with a full battery pack for continuous mobile computer operation. Put the empty battery pack in the charging slot of the cradle. The LED (CHG) on the cradle flashes Red and turns Green when the battery is fully charged.

When to replace or recharge the main battery

There are two conditions that you need to replace the main battery.

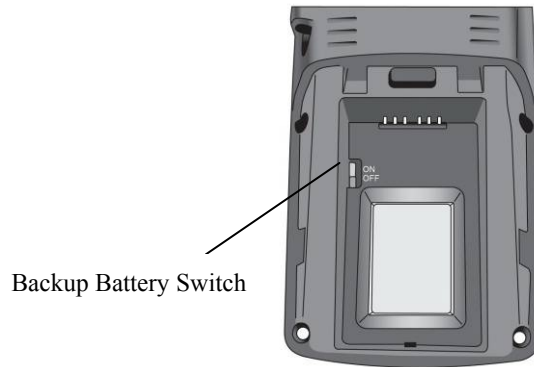
1. As soon as possible after the battery indicator  appears on the display.
2. Before using the mobile computer when it has not been used for an extended period.

Notes:	<ul style="list-style-type: none">◆ Charging the Main and Backup Batteries for the First Time It may take up to 16 hours to fully charge the empty backup battery. The first time charge should be for at least 16 hours to insure a proper charge.◆ When charging the battery pack, the Power LED on the Mobile computer turns Red. After the battery pack is fully charged, the Power LED turns green.
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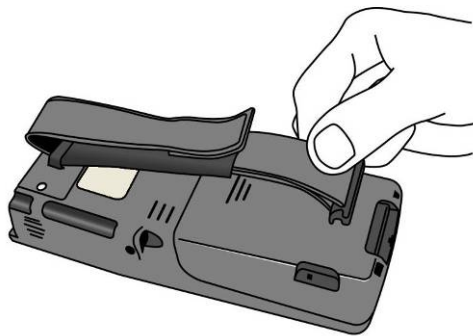
2.3.1 Installing / Replacing the Battery Pack

How to install or replace the main battery in the mobile computer

Important: Data you enter may not be properly stored until the built-in backup battery has been adequately charged. Please turn on the back up battery switch before you charge the mobile computer.

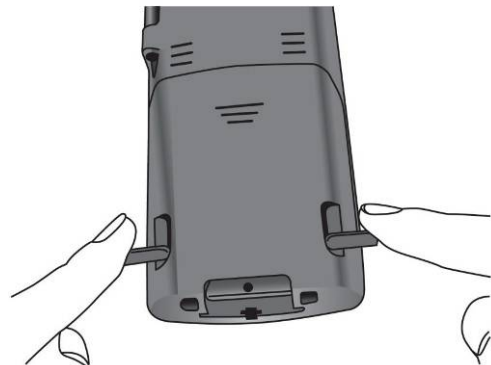


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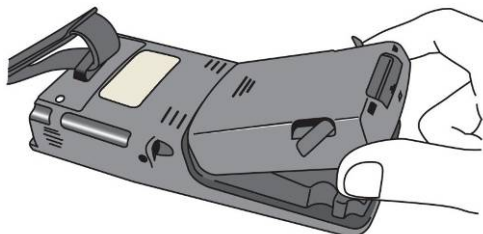
If the Mobile Computer has a hand-strap, detach and loosen the hand-strap

2



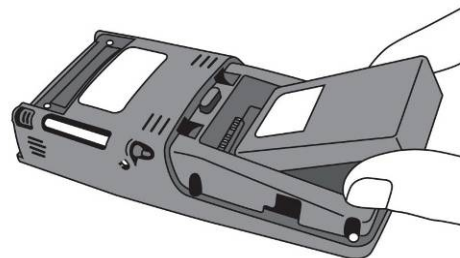
Rotate the latches to the open position

3



Remove the battery cover.

4



Position the battery pack with the label side toward you

Figure 2-7 Installing / Replacing the Main Battery

Note: Please follow the above procedure in reverse to reassemble the battery cover.

2.3.2 Charging the Battery Pack with a Power Adapter

a) Using a RS232/Charging Cable or USB/Charging Cable

1. Plug in the RS232/Charging cable or the USB/Charging cable to the TPC7050
2. Connect the AC adapter to the cable's power jack and an electrical outlet.



Figure 2-8 Supplying Power

b) Using a DC-IN Converter

1. Plug in the DC-IN Converter to the PDA bottom connector
2. Plug in the connector of the power adapter with DC-IN Converter
3. Connect the power adapter to a power source

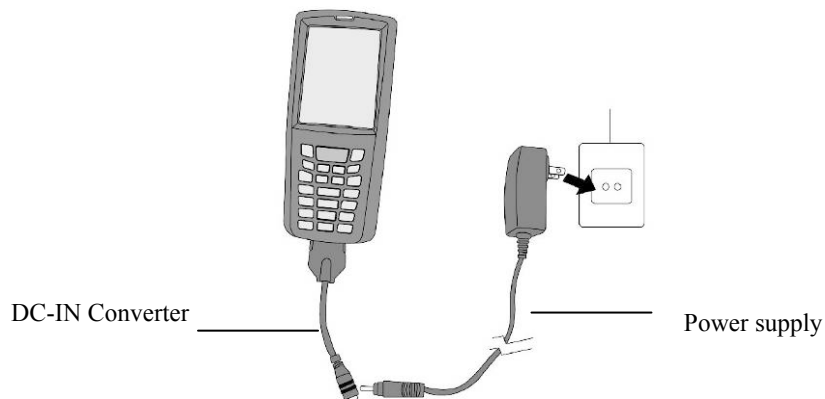


Figure 2-9 Charging with Power Adapter

-
- Notes:**
- ◆ When charging the battery pack, the Power LED on the Mobile computer is Red.
 - ◆ When the battery pack is fully charged, the Power LED turns to green.
-

2.3.3 Charging the Battery Pack with Cradle

a) Leaving the battery pack inside the Mobile computer

1. Connect the power adaptor to a power source
2. Plug in the connector of the power adapter to the Cradle
3. Insert the Mobile computer into the Cradle



Figure 2-10 Charging with Cradle

Note: ♦ When charging the battery pack, the Power LED on the Mobile computer turns Red. After the battery pack is fully charged, the Mobile Computer Power LED turns green.

b) Placing the spare battery pack into the Cradle's spare battery charging slot

1. Connect the power adaptor to a power source
2. Plug in the connector of the power adapter with Cradle
3. Insert the battery pack into the Cradle's spare battery slot

Note: ♦ When charging the battery pack in the Cradle's spare battery slot, the Cradle charging LED is Red. After the battery pack is fully charged, the LED turns green.

Caution: Do not remove the Battery pack for too long from TPC7050 once you have already fully-charged the Battery pack and the backup battery pack and have started to use the TPC7050. Otherwise data stored inside SDRAM memory will be lost. Please keep in mind to turn off the power on Mobile computer when changing the main Battery pack.

2.4 Installing in a System

- Notes:**
- ◆ Exercise caution at all times when working with AC-powered equipment.
 - ◆ Turn off your devices before installation.
 - ◆ Because of the special pin-out of the connectors, use the cables supplied by the manufacturer.
 - ◆ Do not modify the cable provided by the manufacturer. If you need a special cable for some cases, contact your supplier to purchase the right cables or technical support.
-

System Connection (Data Communication)

The PT series portable data mobile computers let you link to a host computer through an RS-232 cable or the CRD-80 cradle for data communication.

2.4.1 *Via USB Cable*

The PT series connects directly to the serial port of a host computer via the USB cable.



Figure 2-11 Communication through Cable

2.4.2 *Via CRD-80 Cradle*

The CRD-80 cradle provides two methods for data transmission: through an RS-232 cable (9-pin connector for PC and 9-pin connector for mobile computer) and through a USB cable.

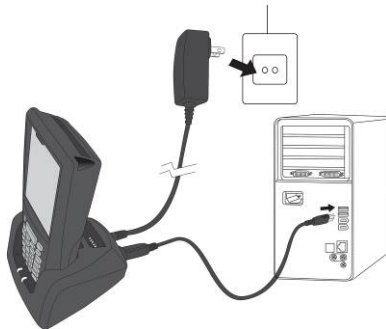


Figure 2-12 Communication through Cradle

3. Operation of the Mobile Computer

3.1 Keypad Description

The TPC7050 keypad consists of 23 rubber keys, including Cursor key, 0-9, Alpha key, Function, Escape, Backspace, TAB and Enter key. Please refer to the picture below.



Figure 3-1 Keypad Layout

Key Define	Function
Function Key	The Function key is used to perform alternative key function
Scanning	Enable scanner, only if the scan function is required.
Power Switch	When the unit is off, pressing the Power key turns the unit on. Alternatively, when the unit is on, this key must be pressed and held down for about two seconds in order to turn the unit off.
Shift Left	Cursor moves left
Shift Up	Cursor moves up
Shift Down	Cursor moves down
Shift Right	Cursor moves right
Esc	Exit and back to the last layer.
Back space	The Backspace key is used to erase previously input characters.
TAB	The Tab key is used to toggle between data fields or to place the cursor at pre-determined places in a programming or word processing application.
Enter	Item selection confirmed or data input completed
Alpha Switch	Transform alphabet and numeral mode. This Alpha key is also used to toggle CAPS at Alpha Mode

Alpha key

The default when the TPC7050 boots is Numeric Mode on. When you toggle to Alpha Mode, the default condition is CAPS mode off.

Alpha Mode Press alpha to alpha mode, the default condition is CAPS off.

CAPS Press Alpha key twice to toggle CAPS

Key in Press Cursor-UP to enter selected character



default

Number (0~9 and .)



Press once


English lowercase letter (a~z)



















Press twice

English capitalization (A~Z)

3.2 Function Key Description

- The function key  is specially designed for quick access (Hot-key) to some functions. The function key combines with other keys.

- Available function key combinations

Key Define	Function
 + [1]	Reserve (user define)
 + [2]	Reserve (user define)
 + [3]	Reserve (user define)
 + [4]	Reserve (user define)
 + [5]	Reserve (user define)
 + [6]	Reserve (user define)
 + [7]	Reserve (user define)
 + [8]	Reserve (user define)
 + [9]	Reserve (user define)
 + [0]	INS Key
 + [.]	DEL Key
 + [up]	Volume +
 + [down]	Volume –
 + [Left]	Increase screen brightness
 + [Right]	Decrease screen brightness
 + [TAB]	Calibration Screen

3.3 Install CF and SD card

Caution: Make sure you have fully charged the battery before turning the unit on.

3.3.1 *Inserting a CF Card into the TPC7050*

1. Open the CF slot cover with a screw driver.
2. Insert a correctly oriented CF card.
3. Close the CF slot cover and fix two screws.

Insert the CF card face side down

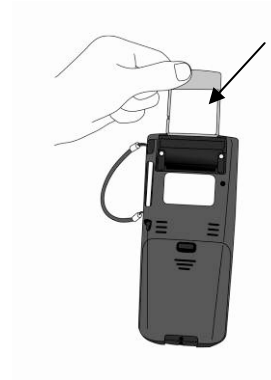


Figure 3-2 Inserting a CF Card

Note: If the CF card is inserted incorrectly, the CF card unit and its internal data maybe damaged.

3.3.2 *Inserting an SD card into the TPC7050*

1. Open the battery cover.
2. Take out the battery pack.
3. Insert a correctly oriented SD card.
4. Insert the battery pack.
5. Close the battery cover.

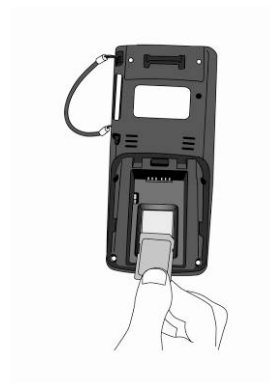


Figure 3-3 Inserting an SD Card

Note: When removing an SD card, please press “push” first.

3.4 Configuring TPC7050 Settings

3.4.1 Calibrating Touch Screen Alignment

Pressing the Power key

The TPC7050 welcome screen appears. The Windows CE® screen appears shortly after.



Figure 3-4 Calibration

Calibrating the TPC7050

This screen automatically appears when the unit is powered on for the first time or after the system is reset. This screen can be accessed at any time by pressing the hot key “FN” and “TAB” key. Or by accessing the menus and tab in order of Start" # Settings" # Stylus" # Calibration.

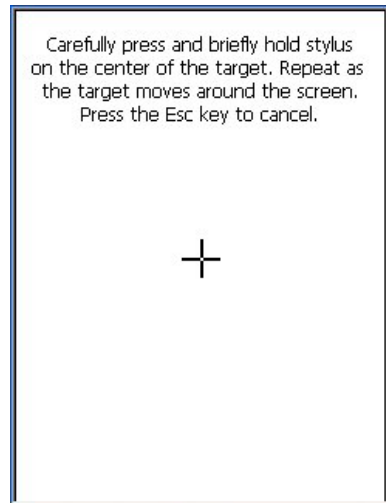


Figure 3-5 Calibration

Whenever the response of the touch screen is poor, or the operations executed do not match your tapping on the touch screen, please recalibrate the alignment of the touch screen using the following method.

1. Press the stylus against the center of the target mark (+ mark) as indicated on the screen. The screen shown to the right appears after you press the stylus against the target at five different locations.
2. Press the Execute key or tap anywhere on the touch screen

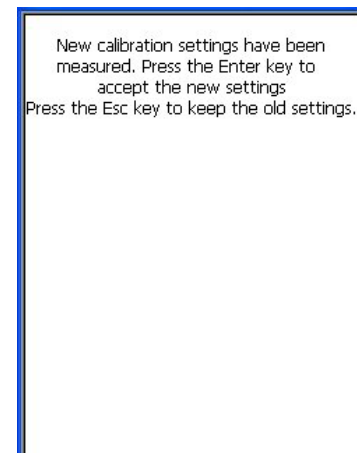


Figure 3-6 Calibration

3.4.2 Adjusting Brightness

You can use the following procedures to adjust display brightness to make it easier to read under different lighting conditions.

- Press the “FN” key and then press the “→” or “←” key. Press the “→” key adjusts brightness for a lighter display, while pressing the “←” key adjusts brightness for a darker display.
- To continue making adjustments, press the “→” or “←” after pressing the “FN” key.
- Brightness settings are also made by accessing the menu and tab in order of Start → Settings → Touch Panel → Backlight setting.

3.4.3 Muting Sound

You can use the following procedures to adjust sound to make it easier to hear under different working conditions.

- Press the “FN” key and press the “↑” or “↓” key. Press the “↑” key adjusts for a louder sound, while pressing the “↓” key adjusts for a softer sound.
- To continue making adjustments, press the “↑” or “↓” after pressing the “FN” key.
- Sound settings are also be made by accessing the menu and tab in order of Start → Settings → Touch Panel → Volume & Sounds

3.4.4 Using the Stylus

The stylus is located next to CF cover or hand-strap on the rear of the TPC7050 as illustrated in figure 2-3 TPC7050 Back view (page 8). The stylus functions the same as a mouse on a PC. Use the stylus to:

- Navigate the display, select menu items and open optional applications.
- Tap the characters on the soft keyboard panel
- Hold the stylus on the screen and drag across the screen to select a list of multiple items.

Caution: Never use a pen, pencil, or other sharp object on the display to avoid damaging the touch screen.

3.5 Entering Information

To enter information:

- Use the keypad
- Use the keyboard input panel (soft keyboard) to enter text.
- Scan bar code data into data fields.
- Use Microsoft ActiveSync to synchronize or copy information from the host computer to the TPC7050. For more information on ActiveSync, refer to Chapter 6.

3.5.1 *Entering Information Using a Keypad*

The alphanumeric keypads produce the 26-character alphabet (A-Z), numbers (0-9), function keys and assorted characters. The keypads default characters/functions are printed white.

3.5.2 *Entering Information Using the Keyboard Input Panel*

Use the keyboard input panel (soft keyboard) to enter information in any program. To launch the keyboard input panel, press the button on the taskbar. Tap a key to enter a value. Tap a keyboard input panel button to display or hide the keyboard input panel.



3.5.3 *Entering Data via the Bar Code Scanner*

The sample bar code scanner application scans data into data fields in the same way data is entered via the keypad.

3.6 Power Management

3.6.1 *Power Status Indication*

Checking main and Backup Battery Status

Enter “Power Properties”

If the above mentioned “Plug” or “Battery” icon is displayed, double tap this icon to bring up the “Power Properties” screen.

Or, select **Settings/ Control Panel** from the **Start** menu and then double tap the “**Power**” icon to display “**Power Properties**”.



Figure 3-7 Power Properties

Check Battery Status:

The battery menu item shows the status of the main and backup batteries.

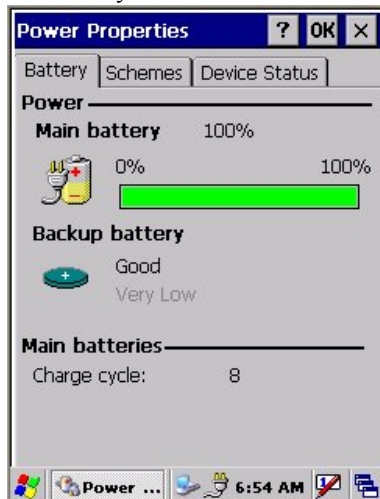






Figure 3-8 Power Properties

Five different icons are displayed on the status bar to indicate the on-board power status.

Icon	Description
No icon:	Indicates there is no external power supply to the TPC7050 but the battery power status is good.
“Plug” icon  :	Shows external power is in use. The TPC7050 is either plugged-in via the DC 5V/2.5A power adapter or in the cradle.
“Charging” icon  :	Indicates that the battery is charging.
“Battery Low”  ” icon:	Shows there is no external power supply, the battery charge is low.
“Battery Very low”  ” icon:	Indicates the battery is very low. Stop operation and charge the TPC7050 immediately.

You must charge the battery when the battery “Very Low” icon is displayed. If the “Very Low” icons still show after charging, please contact POSlineTechnical Support.

3.6.2 *Saving Battery Power*

Automatic shut-down of the TPC7050

The TPC7050 enters idle mode when there is no task or if all tasks are waiting for input. In default setting, the TPC7050 automatically turns itself off if idle for 3 minutes and when there is no external charging power. Press the power button to return the TPC7050 to the same point at the time of automatic shutdown.

In Power Properties, select “Schemes”. Customize automatic shut off time by tapping the arrow to select from a list of time periods. The available time periods are 1, 2, 3, 4, 5, 10, 30 minutes and never.

Activate this function when the TPC7050 is plugged into the power adapter or placed in its cradle by tapping the check box and then tapping the arrow to select from a list of time periods. The available time periods are 1, 2, 3, 4, 5, 10, 30 minutes and never.

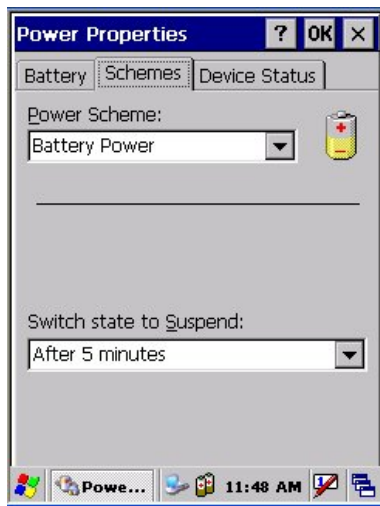
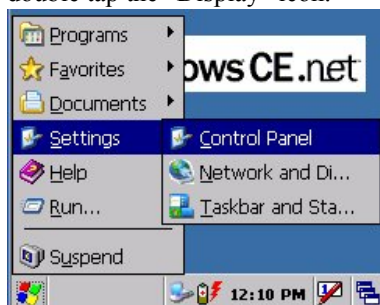


Figure 3-9 Power Properties

Backlight Setting

Because the power consumption of the LCD backlight is high, turn off the backlight function when it is not necessary. If a backlight is required, set “automatically turn off the back-light.”

To change the backlight setting, select Settings / Control Panel from the Start menu, and then double tap the “Display” icon.



Tap the “Backlight” menu item to display the following 3 selections:

Automatically turn off the backlight when using battery power:

Tap the check box to toggle this function. Available idle times are: 15 and 30 seconds, and 1, 2, and 5 minutes.

Automatically turn off the backlight when using external power:

Tap the check box to toggle this function. Available idle times are: 15 and 30 seconds, and 1, 2, 5, 10, 15 and 30 minutes.

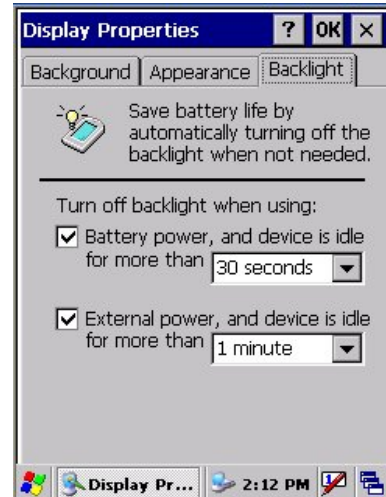


Figure 3-10 Display Properties

3.6.3 Suspend Mode

The TPC7050 will go into suspend mode when it is idle for a period of time. Customize the idle duration using the Power control panel (refer to Figure “Schemes Tab”). Suspend mode

appears just like you have turned the unit off. Press the  key to suspend the TPC7050.

Press the  key again for the TPC7050 to resume its previous state.

Use the Battery Power control panel to set the duration to switch to Suspend mode when the system uses battery power. This saves battery power when the TPC7050 is not in use.

Entering Suspend Mode:

The following puts the TPC7050 in suspend mode:

- Press <Power> key while the unit is on.
- The duration timer for “Switch state to Suspend” expires, which indicates that there has been no use for a specified of time.
- The battery pack discharges completely.
- Tap Start > Suspend

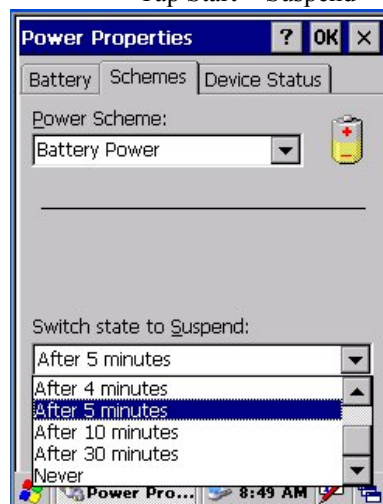


Figure 3-11 Suspend Mode



Tap here to put the TPC7050 into suspend mode

3.6.4 *Resume*

Press <Power> key to suspend or resume (wake up)

Waking the TPC7050

The default wakeup conditions define what actions wakeup the TPC7050. These setting are configurable and the factory default settings are subject to change / update.

Status	Description	Condition for Wakeup
Power Off	When the TPC7050 is set to suspend mode by pressing Power , this action wakes the TPC7050.	Press Power button
Auto Off	When the TPC7050 enters suspend mode by automatic power-off, this action wakes the TPC7050.	Press Power button

3.7 Resetting the TPC7050

If the TPC7050 stops responding to input, reset it. There are two reset functions, warm boot and cold boot. A warm boot restarts the TPC7050 by closing all running programs. All data that is not saved is lost.

A cold boot also restarts the TPC7050, but erases all stored records and entries from RAM. In addition it returns formats, preferences and other settings to the factory default setting.

Perform a warm boot first. If the TPC7050 still does not respond, perform a cold boot.

3.7.1 *Performing a Warm Boot*

To perform a warm boot:

1. Press “Reset”. Do not hold down any other keys or buttons.
2. The TPC7050 demo window appears.

Caution: Files that remain open during a warm boot may not be retained.

3.7.2 *Performing a Cold Boot*

A cold boot restarts the TPC7050 and erases all user stored records and entries from RAM. Only perform a cold boot if a warm boot does not solve the problem.

Caution: Cold boot resets the TPC7050 to the default settings. All added applications and all stored data are removed. Do not cold boot without support desk approval.

To perform a cold boot:

1. Press the “Reset” and “Power” keys together. Do not hold down any other keys or buttons. As the TPC7050 initializes the POSline welcome screen appears for about a minute.
2. Calibrate the touch screen. See instructions on calibrating the TPC7050 screen in chapter 3.

3.8 Disk on Chip

Flash memory is a re-writable location in which to store up to 128MB of programs and data files. The benefit of this feature is that files and programs saved in Flash Memory are unaffected by the TPC7050's power status.

Note: The DiskOnChip storage memory persists for all reset (warm/cold reboot) conditions and software/firmware updates. We strongly recommend installing all applications, applets, programs, and important data files to the DiskOnChip Flash location.

Caution: If an application or a data file is installed or saved in RAM, a cold reset will result in the loss of that application or data file.

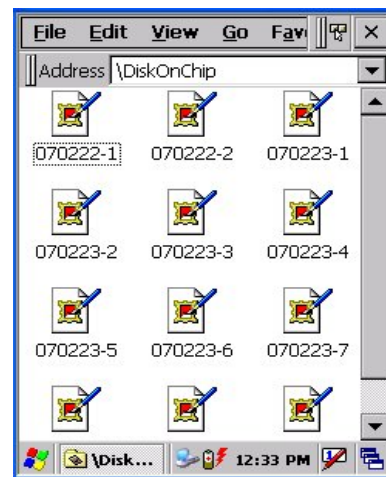
3.8.1 *DiskOnChip Location*

To access the contents of DiskOnChip storage:

- Double-tap the **My Computer** icon on the desktop
- Double-tap the **DiskOnChip** icon to view **DiskOnChip**



Figure 3-12 DiskOnChip



3.8.2 *Saving to Flash*

To save an application or data to Flash Memory from your current application, select File → Save As → navigate to the DiskOnChip location and save it.

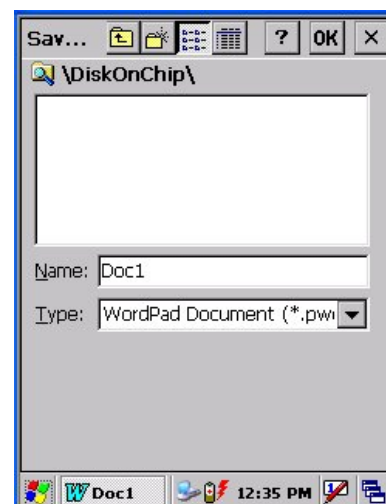


Figure 3-13 DiskOnChip

3.8.3 *DiskOnChip Size*

The size of the DiskOnChip varies depending on the size of the system firmware.

- Inside the DiskOnChip directory, tap File → Properties
- The DiskOnChip Properties dialog:

The number following Free is the amount of memory currently available on your device.

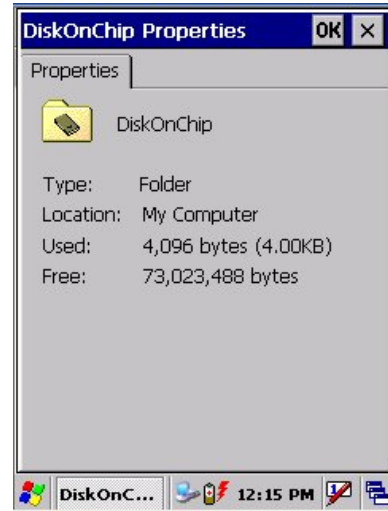


Figure 3-14 DiskOnChip

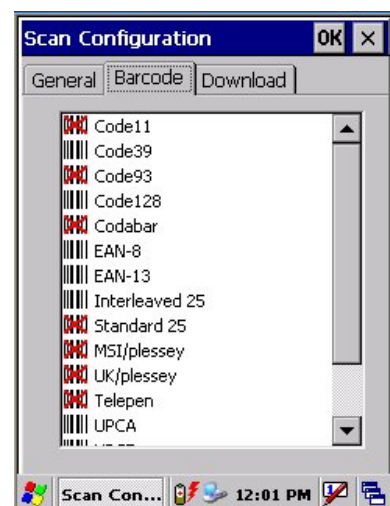
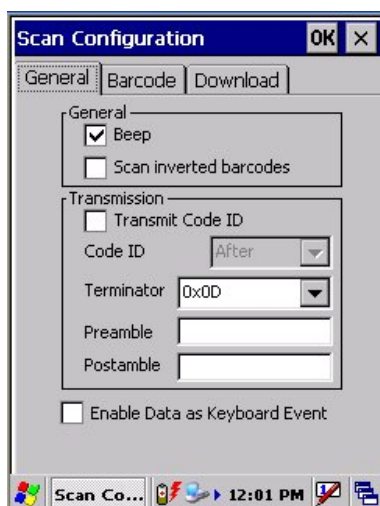
4. Scanning

The TPC7050 has an integrated CCD scanner that reads all major bar code labels with excellent performance. The trigger key is located in the middle of the unit. Press this key to activate the CCD scanner.

4.1 Scan Configuration

When it is necessary to change the default barcode symbology for a different application, use **Scan Configuration** to change default symbology, place delimiter characters behind scanned data, and save the settings.

Run this program from \Programs\Scanner\Scann Configuration.exe which is also accessible via “Setting\Control Panel” on the Start menu.



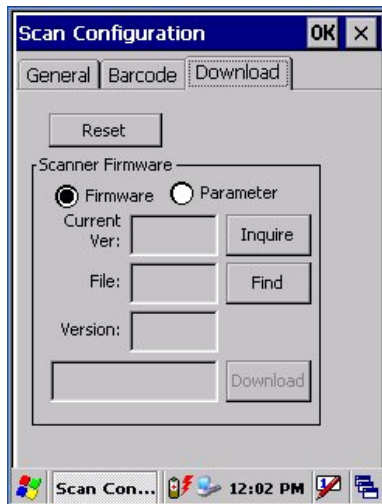


Figure 4-1 Scan Configuration

After you change settings, go to the “Setting” page and press the “Commit” button to configure, or press “Reset” to return to the scan default settings. The “Download” page allows you to update scan firmware.

4.2 Scan driver

Scan driver lets you put data into Microsoft Wordpad. Open scan driver and the scan module powers on the scanner. You can then scan barcode. To turn off the power, press “Exit” on the task bar.

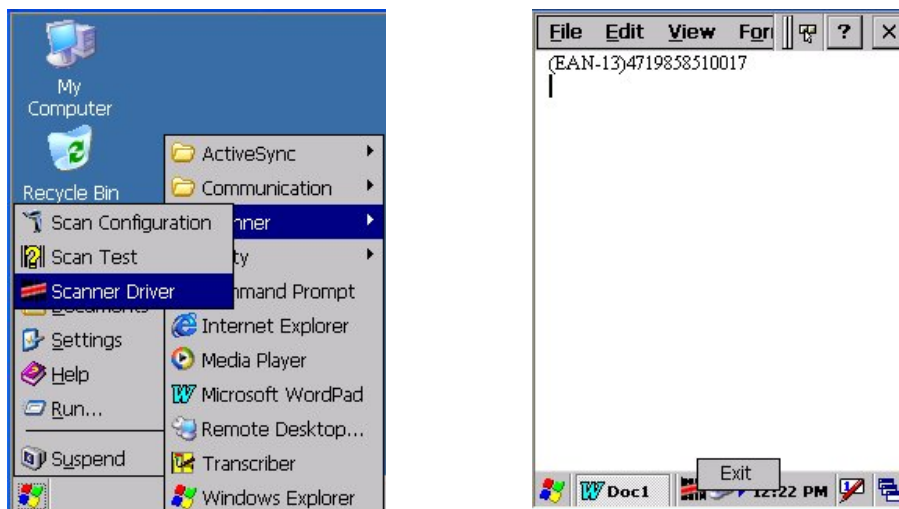


Figure 4-2 Scan Driver

4.3 Scan test

The TPC7050 has a built-in Scan Test.exe program that allows you to test the barcode scan function. Scan Test.exe is located in directory \Programs\Scanner\Scan Test.exe.

This program shows barcode type and barcode data when pressing the “Scan” key.

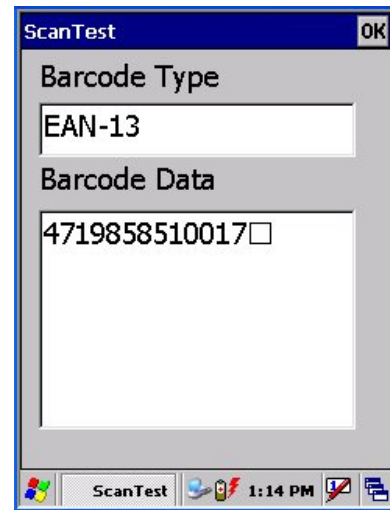
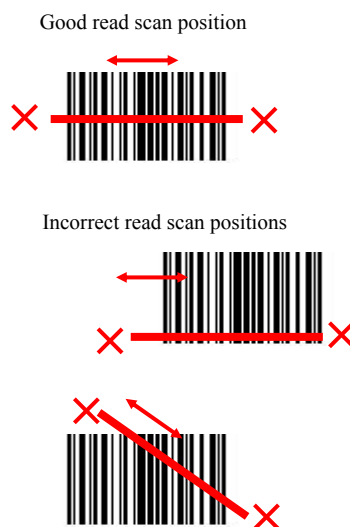


Figure 4-3 Scan Test


4.4 Reading barcode

- Note:**
- ◆ Observe handling precautions.
 - ◆ Make sure the mobile computer is installed according to instructions.
 - ◆ Never remove the main batteries or battery pack while the mobile computer is turned on. Doing so can cause loss of data in the mobile computer.
 - ◆ Avoid looking directly into the LED light beam emitter, or pointing the LED light beam directly into someone's eyes.

Position the LED light beam over the bar code from margin to margin and pass the scanner downward over the bar code, as shown in the scan position illustration



The scanning sequence is defined by the user's application. A typical sequence is:

- Point the mobile computer at the barcode and press the Trigger key .
- Point the LED lightbeam at barcode as shown in the scan position illustration above.
- The scanner reads the barcode and the results are indicated.

A "Good Read" means that the scanner has effectively recognized and decoded the bar code. In most cases, the application program provides an indicator signal to indicate a good read.

If the read is incorrect, try again paying close attention to the instructions.

When reading a small bar code, decrease the distance between the mobile computer and the bar code. For larger bar codes, position the mobile computer so that the bar code fits into the LED light beam. When reading a very high density bar code, decrease the distance between the mobile computer and the bar code. For a low density bar code, increase the distance between the mobile computer and the bar code.

4.5 Barcode reading problems

When the barcode can not be read, try the following:

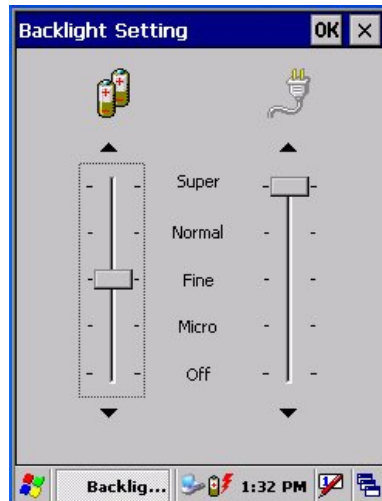
- Change the angle between the bar code and the mobile computer.
- Change the distance between the bar code and the mobile computer.
- If the bar code is larger than the LED light beam, try moving the mobile computer a bit further away from the bar code.



5. Utilities

5.1 Backlight Setting

Backlight setting is a tool for changing the LCD backlight. If you wish to save power use this program to change LCD backlight settings. This application supports battery power backlight and external power backlight.



5.2 Function Key Setting

AP Settings Tab

To assign your favorite application program to F1, F2, F3 and F4 hot keys:

1. Choose F1, F2, F3 or F4 from pull-down list.
2. Tap “**Open**” inside the “**Assign program**” applet.
3. Select the application program you want from program list, and then choose “**OK**”.
4. Tap the **Default** tab to return to default setting.

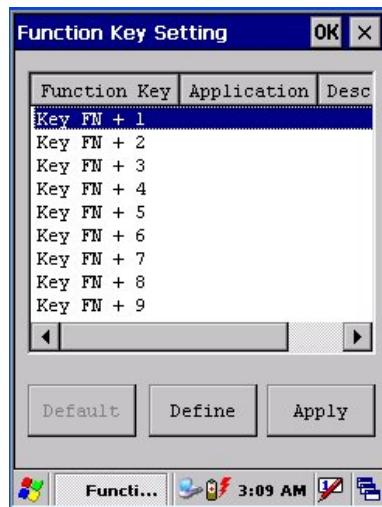


Figure 5-1 Function Key Setting

5.3 Keypad LED Setting

Set the keypad LED for application requirements. This controls the keypad LED's timing.

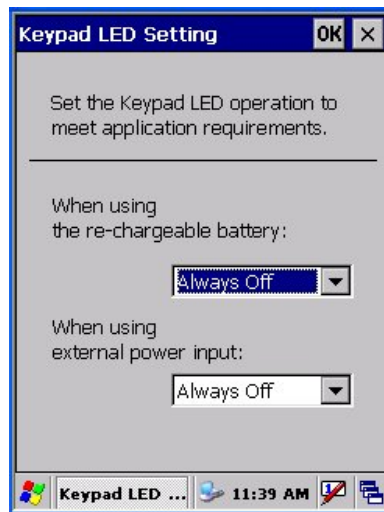


Figure 5-2 Keypad LED Setting

5.4 System Restore

System Restore is a tool that lets you backup register keys. For any changes on TPC7050, you can backup changes via this program. The backup file will be deleted while you format DiskOnChip.



Figure 5-3 System Restore

Note: Please close all applications before running this program.

6. Software Applications

The TPC7050 includes software applications such as Internet Explore, Media player, Microsoft WordPad, Remote Connection, Transcriber, and Windows Explore.



6.1 Internet Explorer

With Internet Explorer, you can view Web or intranet Web pages on your device. You will need to use WLAN to connect to an Internet server provider (ISP) or network.



Figure 6-1 Internet Explorer

6.2 Media Player

The TPC7050 comes with Media Player for Windows CE.NET installed.

- Open Media Player by selecting Start → Programs → Media Player from the desktop.
- Select File → Open to open a new media file.
- Please refer to www.microsoft.com for additional information and help with your Microsoft Windows Media Player.



Figure 6-2 Media Player

6.3 Microsoft WordPad

You can create and edit documents and templates in WordPad, using buttons and menu commands that are similar to those used in the desktop version of Microsoft Word. You can work with files Normal or Outline view.

WordPad documents are usually saved as **.pwd** files, but you can also save documents in other file formats, such as **.rtf** or **.doc**.



Figure 6-3 Microsoft Wordpad

6.4 Remote Desktop Connection

Using Remote Desktop Connection, you can log on to Windows Mobile computer Server and use all programs installed on this server. For example, instead of running Microsoft Pocket Word, you can run the desktop version of Microsoft Word.



Figure 6-4 Remote Desktop Connection

6.5 Transcriber

Features:

- Microsoft Transcriber is the natural handwriting recognition solution for your Windows CE device. It recognizes words from its integrated dictionary, and allows you to write in cursive, print or mixed handwriting.
- The **letter Shapes Selector** (note 1) is for optimizing recognition to your own handwriting style
- Transcriber works transparently in the background of all Windows CE applications providing handwriting input, while taking away no precious screen space.

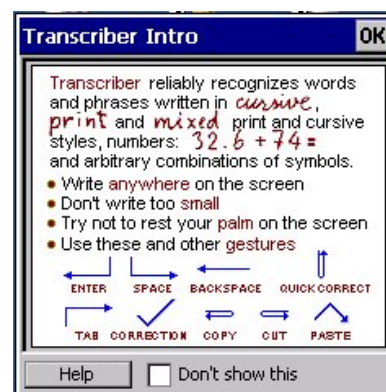


Figure 6-5 Transcriber

6.6 Windows Explorer

Windows Explorer works almost the same on your PDA as it does on your PC. See the topics below for information about the difference in Windows Explorer on your device.

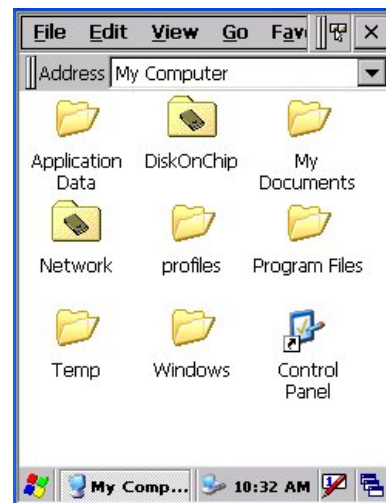


Figure 6-6 Windows Explorer

7. Communication

The POSline TPC7050 lets you link to a host computer via RS-232 or USB port for data communication. This chapter gives an overview of the TPC7050's communication capabilities.

7.1 ActiveSync

To exchange data between your desktop computer and the TPC7050, Microsoft ActiveSync must be installed on your desktop computer.

With Microsoft ActiveSync you can:

- Transfer data
- Back up and restore TPC7050 data.
- Add programs to and remove programs from the TPC7050.

This chapter introduces Microsoft ActiveSync version 4.5. ActiveSync provides a user-friendly interface and it can be downloaded free of charge from Microsoft's Website.

7.2 Installing Microsoft ActiveSync

Before beginning installation, carefully read the following:

Because you will restart your computer during installation, save your work and quit all programs before you begin.

To set up your communication settings, a TPC7050 serial cable is required to connect the TPC7050 to your host computer.

If you run the Windows NT operating system with a service pack, you will be informed during setup that you may need to reinstall the service pack. Try connecting first, and if unsuccessful, reinstall the latest service pack.

Basic PC specifications for the installation of ActiveSync are as follows:

OS	Microsoft Windows XP/ 2000/ME/98, or higher version program than SP6 Windows NT Workstation 4.2
Application	To be able synchronize data such as email, calendar tasks and notes between OT-80 and a desktop or notebook, you need to have a higher version than Microsoft Outlook 2000
Browser	Microsoft Internet Explore 4.21 SP1 or higher
Hard disk	Free hard disk space more than 65MB (Actual required space is according to selected functions and your current system configuration)
Communication port	9 pin or 25 pin communication port (for adapter, 25-pin port is needed)
USB port (available only for Windows 98/Me/2000/XP)	
Graphic card	VGA graphic card or compatible video graphic adapter supporting resolution of 256 colors or higher
Keyboard	
Microsoft mouse or compatible input devices	
CR-ROM drive	

Installation

Follow the installation procedure below to install Microsoft ActiveSync, connect your TPC7050 to your desktop computer, and establish a partnership for synchronization (if desired):

1. Download the executable program “mswrd832.cnv” from CD. Execute this program.
2. Select the folder into which Microsoft ActiveSync will be installed. If you choose not to download into the displayed default folder, click the **Change** button.
3. After you’ve selected the folder, click **Next** to set up Microsoft ActiveSync. After you’ve installed Microsoft ActiveSync and restart your computer.

7.3 Connecting the TPC7050 to ActiveSync

Connect the TPC7050 to a desktop PC using a USB cable. Make the partnership between the desktop PC and TPC7050 through ActiveSync, and then proceed with the synchronization of the desktop PC and TPC7050. Use a USB cable to link the TPC7050 to the desktop PC.

The table below shows available communication devices (USB, serial) according to operating system.

<i>Supporting operating system</i>				
Connection methods	Desktop PC OS			
	Windows 95	Windows 98	Windows 2000/XP	Windows NT
USB	Not available	Available	Available	Not available
Serial	Not available	Available	Available	Available

Connect a desktop PC and the TPC7050 with a cable as follows:

1. Connect a USB cable to the USB port of the desktop PC.
2. Insert the cable into TPC7050 mobile computer. The TPC7050’s PC connection program runs automatically and Microsoft ActiveSync in the desktop links them together.
3. To set up a connection, the “**New Connection**” set-up wizard appears on the desktop computer. Set-up methods are discussed in the following section.

7.4 Setting up a Partnership

When you first connect the TPC7050 to the desktop computer, Microsoft ActiveSync asks if you are going to set up a partnership. Once the partnership set-up is finished, you can synchronize data with the TPC7050. While the TPC7050 can set up the partnership with two desktop computers, email messages can be received only through one computer.

To set-up a partnership:

1. Insert the TPC7050 into the docking cradle connected to the desktop PC. It automatically starts the New Partnership wizard on the desktop PC screen. When it asks if you would like to set up the partnership, select **Yes** and click **Next**.



2. Key in the name of the device (for instance, Windows CE1, MyPDA, etc.) then click **Next**.
3. If the TPC7050 has already set up a partnership with another desktop computer but no longer uses it, select **“Yes, I want to synchronize with only this computer”** in the dialog box named “Select Number of Partnerships.” It removes the other partnership set-up so that the TPC7050 no longer recognizes the previous desktop computer. Click **Next**.
4. The window for setting up synchronization appears. To synchronize specific kinds of data, select the item then click **Next**. Most popular items include Calendar, Contacts, Tasks, and Inbox. We recommend you select and use these items. In the item list, two types of email items are available: Inbox and Inbox. While the inbox is an email program provided by Microsoft Corporation, Inbox is offered by a software provider. In the TPC7050, Inbox offers special functions such a connecting to “Today” set-up function button, etc.
5. Complete the set-up process by clicking **End**.

When the partnership set-up between desktop PC and TPC7050 is completed, ActiveSync automatically synchronizes the selected data.

7.5 Connecting the TPC7050

7.5.1 *Synchronizing Data*

If the Microsoft ActiveSync window appears in the desktop PC, click the option icon and “Sync Options,” “Sync Mode,” and “Rules” appears.

“Sync Options” lets you select an item to synchronize. “Sync Mode” enables you to choose synchronization methods. According to the selected mode, there are 3 methods:

1. **Continuously while the device is connected:** (Default) Connect the TPC7050 to the desktop computer. ActiveSync immediately starts synchronization and synchronizes according to the user’s input of changes in the desktop computer or TPC7050.
2. **Only upon connection:** Connect the TPC7050 to the desktop computer. ActiveSync immediately starts synchronization. If you want to carry out the synchronization after the first synchronization on a manual basis, click Sync.
3. **Manually:** ActiveSync will not run automatically. For synchronization, click Sync.

Synchronization is the process of updating TPC7050 and desktop PC after comparing data. Any files including personal organizer management data, email message, etc. in the TPC7050 can synchronize with files in the desktop PC.

7.5.2 *Solving Problems during Synchronization*

When a problem occurs during the synchronization process, it is marked as “Not completed” in both ActiveSync and the TPC7050. You can solve the problem at your convenience.

There are various reasons for failure of ActiveSync to carry out synchronization. For instance, if the computer cannot access Microsoft Outlook information due to a server failure, ActiveSync cannot synchronize items such as Calendar, Contacts, Tasks, and Inbox. Or else the problem stems from changed items in the TPC7050 and the desktop PC.

By modifying the problem-solving settings, you can have ActiveSync not register the problem as “not completed item” instead, if you select the TPC7050 or desktop PC as default version, ActiveSync automatically updates the information contained in the other computer. If you do not want to solve the problem manually, you can modify the problem-solving setting to have ActiveSync always use the TPC7050 or desktop PC version.

1. Click Options then click tap Rules.
2. Select the item of choice from Conflict Resolution.

For those items that cannot complete synchronization without user intervention, ActiveSync and portable device display them as “not completed”.

1. Connect TPC7050 to the desktop computer and carry out synchronization.
2. When there are no complete items, click Resolve in the Tools menu.
3. Follow instructions on the screen. The dialog box differs depending on the problem.

7.5.3 *Searching TPC7050 Contents from a Desktop PC*

If the TPC7050 is connected to a desktop PC, you can use ActiveSync on the desktop PC to see the contents of the TPC7050. Click Explore from the file menu of ActiveSync. The content of the TPC7050 is displayed on the window of Mobile Device.

Use ActiveSync to see the files in the TPC7050 as follows:

1. Connect the TPC7050 to the desktop PC
2. Explore in ActiveSync. It open the Mobile Device folder in Windows Explorer
3. Applying the same method, check the files in the device in other Windows Explorer

If you double click folders in Mobile Devices, it may take several seconds to open the folder.

While browsing the folders, you can carry out cut, paste, and copy by dragging file icons. In the desktop PC, you can get access to the content of the TPC7050 using Windows Explorer. If you choose Files during the partnership set-up, **Windows CE My Documents** is created in the My Documents folder. If you use **Windows CE My Documents** in the desktop PC, you can easily access the My Documents folder in the TPC7050.

8. Overview of Microsoft Windows CE 4.2

This chapter describes Microsoft Windows CE 4.2, the operating system for the TPC7050

This introduction to Microsoft Windows CE 4.2 includes:

- How to use the main Windows
- How to use a taskbar
- How to use settings

8.1 Main Windows

When you turn on TPC7050, you will see the main Windows of Window CE 4.2, which is similar in appearance to Windows XP. The main window consists of a background screen and taskbar.



Figure 8-1 Main Window

The screen shows short cut icons for the main programs of Microsoft Windows CE 4.2. A description of the icons follows:

My Computer:

Shows the internal configuration of the TPC7050 and the folders and files it contains.



Figure 8-2 My Computer

Recycle bin:

Completely delete or restore files and data. This folder saves deleted files from Windows Explorer or the background screen. You can completely empty or restore files in the recycle bin.

Caution: Once you have emptied the recycle bin, you cannot restore the files and data previously in the recycle bin.

Internet Explorer:

Search the web or intranet. Microsoft Internet Explorer can search the web or a company's intranet. The TPC7050 uses Microsoft Pocket Internet Explorer 6.0.

Media player:

This application plays digital audio or video files. If you use Microsoft Windows Media player, you can enjoy a range of digital audio/video files. Media player supports files with ASF, WMA, MP3, WAV formats. For detailed information on the media player, refer to chapter 5 software applications.



Figure 8-3 Media Player

Microsoft WordPad:

The application lets you create and manage documents. Microsoft WordPad is compatible with Microsoft Word on the desktop PC, so it is easy to access your documents. For detailed information on Microsoft WordPad refer to chapter 5 software applications.

With the TPC7050 you can use the same functions such clicking the right button of the mouse on a desktop PC. If you press and hold the LCD touch panel with the stylus pen, the right button menu appears.

Using the right button menu, you can carry out various tasks such as icon arrangement, the renewal of the background screen, copy / cut / paste of files and data, creating new folders, set-up features.

Taskbar

Windows CE 4.2's taskbar is designed to be simple and user-friendly. The picture below shows the configuration of the taskbar.



Start Icon

Start icon is the starting point for the TPC7050 program. If you point at the start menu with the stylus pen, you can see various menus including program, bookmark, document, setting, help, and operation. If you choose each menu, detailed executable programs appear as in the picture below. If you choose and press, you can run the program of your choice. Windows CE 4.2's start menu is similar to that of Windows on a desktop PC.



Figure 8-4 Start Icon

8.2 Taskbar

Taskbar shows a variety of information including keying in characters, battery, network connection, status of running programs, etc.

If you press and hold the taskbar with the stylus, the right button function menu appears.

The right button function menu is composed of task manager and features. If you select the taskbar and start menu feature, general option menus such as “always place above,” “automatic hiding,” “Watch display”, etc. You can choose the check box of desired options and use them.

The following explains the function of icons appearing on the taskbar.



Transcriber:

When you want to key in characters when making a document or setting, start Transcriber. Using the stylus to draw characters you want on the input panel, this program recognizes the characters and transform them into typeface characters. To start the Transcriber, run the program as the following order: start → program → Transcriber.

The picture below shows how the Transcriber works in keying in characters on Microsoft Word Pad. When Microsoft Transcriber is running, you will see the “hand with a pen” icon located in the taskbar. When Microsoft Transcriber is active the “hand with pen” icon shows a dark background.

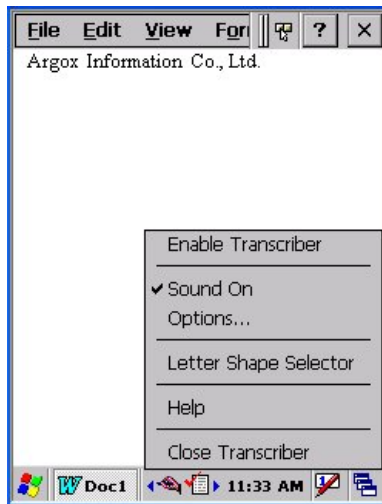
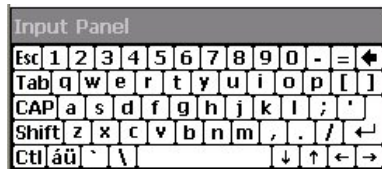


Figure 8-5 Transcriber

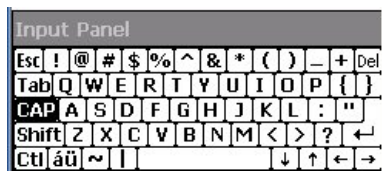


Keyboard: Press this icon to activate the keyboard input



Upper / lower case Selection:

Press this icon to select upper and lower case letters. If you select upper case, capital letters and characters appear on the number key pad. It serves the same function with the Shift key.



Hot key Selection:

If you use hot key such as “z”, “x”, “c” and “v”, you can carry out Cancel, Cut, Copy, and Paste, respectively. To change the features of the soft keyboard, select keyboard in Go to Start → Setting → Control Panel → Input Panel and click the option you wish to set up.

Input Method:

To carry out character key-in using [keyboard] input, press keyboard icon on the taskbar. You can also key in by activating Transcriber in the following order: Start → program → Transcriber. Press the keyboard once, it appears on the screen. Press again and it disappears.

Status Indicator Icon:

The following is a list of icons that appear in the taskbar’s status area.

Icon	Description
	Battery capacity is low
	Battery is charging
	Linked to desktop PC through USB
	Show network connection status. Show Internet connection status via WLAN

8.3 Setting up the TPC7050

You can set up various configurations of the TPC7050 such as date/time, Network, Display, Volume, Power, System, etc. at the control panel.



If you press Start → Setting → Control Panel, the control panel window appears. In the View option in the menu, you can change the view mode into large icons, small icons, details or to arrange icons. The control panel appears as below:

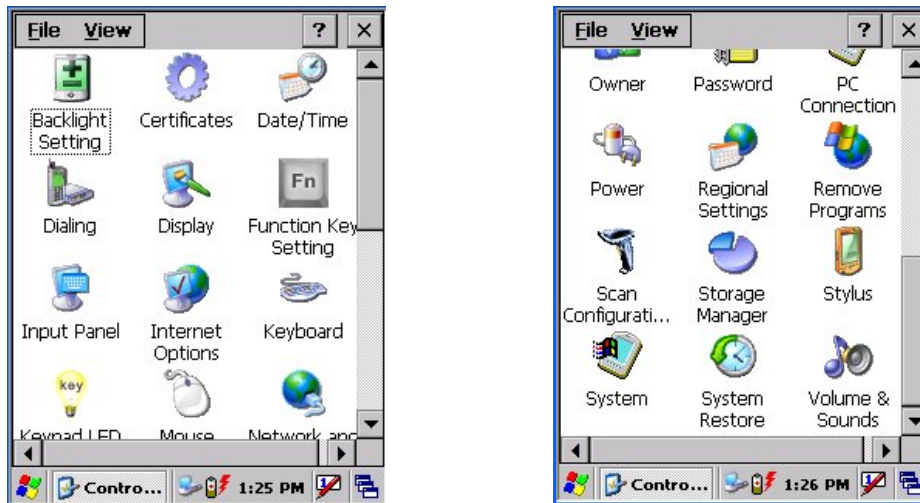


Figure 8-6 Control Panel

8.3.1 Backlight Settings

Please refer to the previous section on Backlight Setting.

8.3.2 Certificates

Application programs use certificates to ensure reliability and safe communication.



Figure 8-7 Certificates

Authorized certificate providers issue certificates that are valid for a specified period. Windows CE.NET manages several certificate storages.

1. Select Go to Start → Setting → Control Panel.
2. Double click a certificate to run.
Select certificate storage for browsing or correcting through the storage tap list.
My certificate: This saves the user's personal certificate to identify the user.
Other certificate providers: Middle certificate providers establish chains of reliability.
Reliable certificate providers: Includes the top quality certificates.
3. To add certificates or secret keys in the selected storage, press the **Bring** button then select the way to bring certificates or keys. You can select them from files or a smart card.
4. To see details of selected certificates such as extension, expiration date, etc. press the **View** button.
5. To delete the selected certificate from storage, press **Delete** button.

8.3.3 *Date/Time*

This screen sets date, time, standard time zone, watch and alarm.

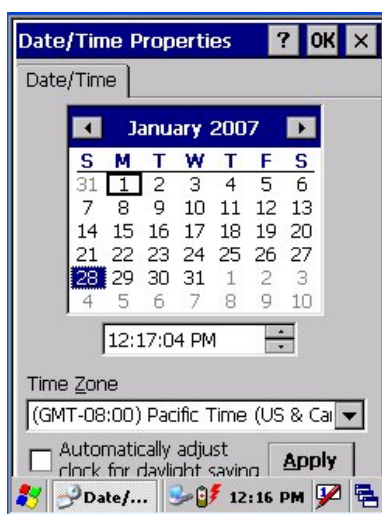


Figure 8-8 *Date/Time*

Date/Time

You can set standard time zone, year, day and time. Set as follows:

1. Press the down arrow in the standard time zone until it reaches your location. If the previously set value is appropriate, move on to the following.
2. Select year and month in the calendar. If the current year is not correct, press year and adjust. You can select the month using left and right arrows or the monthly tab that pops up when pressed.
3. Press the correct date on the calendar.
4. Set time by keying in correct time in the current time box. The box shows AM/PM: hour: minutes: second. Press each and adjust time with arrows on the right.
5. Press **Apply** to save the changes. Confirm if the time is correct.

8.3.4 *Dialing*

Dialing Properties

1. In the **When dialing from** list, select the “**Location**” where you want to change settings.
2. To create a new location, select “**New**”. Enter the name of the location, and then select “**OK**”
3. Enter or edit the area code and local country code as needed.
4. In **Dial using**, select “**Tone dialing**” or “**Pulse dialing**”. Most phone lines are tone.
5. To automatically disable call waiting, select “**Disable call waiting by dialing**,” select the appropriate number sequence in the list, or enter a new sequence.

Editing dialing patterns

1. Using the codes listed, revise the dialing patterns as needed.

-
- Notes:**
- ◆ If you need to use characters other than the ones listed here, use manual dialing.
 - ◆ Hyphens and spaces in dialing strings are ignored.
 - ◆ Some modems may not respond to the some characters, even though your device lets you add them to the dial string.
-

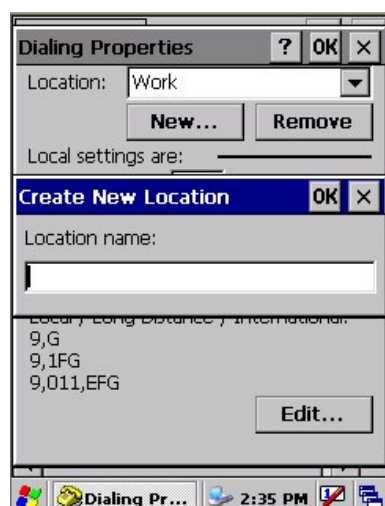


Figure 8-9 Dialing

8.3.5 *Display*

This screen lets you set the wallpaper image of the TPC7050, change the color of the background screen, or change the backlight setting. Call up the right button menu and select “properties” and you can check the Display Properties window.

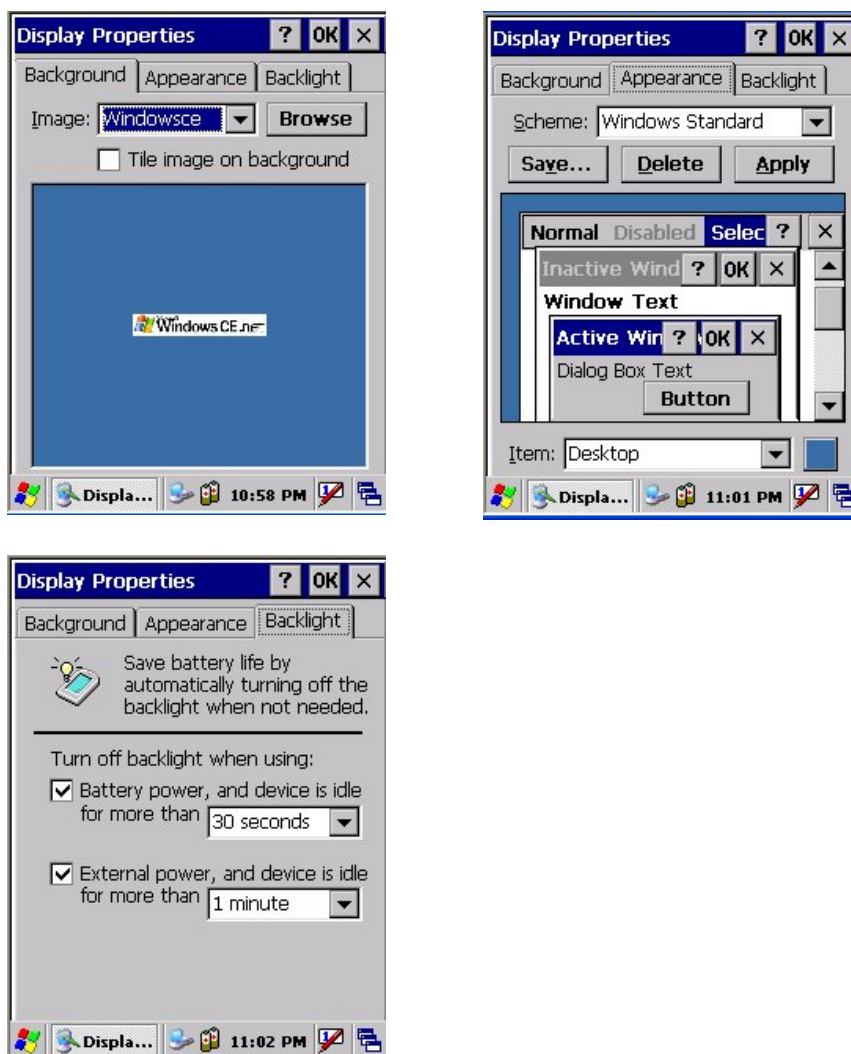


Figure 8-10 Display Properties

Desktop

Change the desktop image of the background screen as follows:

1. Select the desktop with a tap.
2. Select an image to use for your background from the image list. The image list shows you image files in a Windows folder. If you want to use images from other folders, click Search.
3. To arrange the desktop image in a checked format, choose a checkered pattern.

Setting

You can adjust the contrast and brightness of the LCD screen.

8.3.6 *Hot Function Key*

Please refer to Function Key Setting above.

8.3.7 *Input Panel*

You can set up the input method and options.

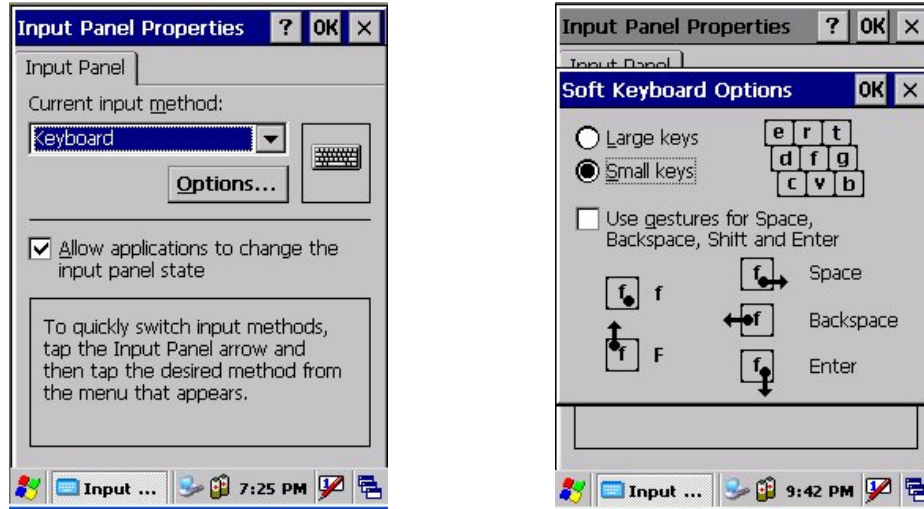


Figure 8-11 Input Panel Properties

1. Select keyboard and press Options. The Soft Keyboard Options window appears.
2. Select the size of the keys.
3. To use gestures for Space, Backspace, Shift and Enter, click the gestures check box.
4. Click OK to save the changes.
5. Select the handwriting recognition as the current input method and click Options. The handwriting recognition features window appears.
6. Set time needed to recognize handwriting.
7. Click OK to save the setting.

8.3.8 *Internet Options*

To use the Internet Explorer program, make the following settings.

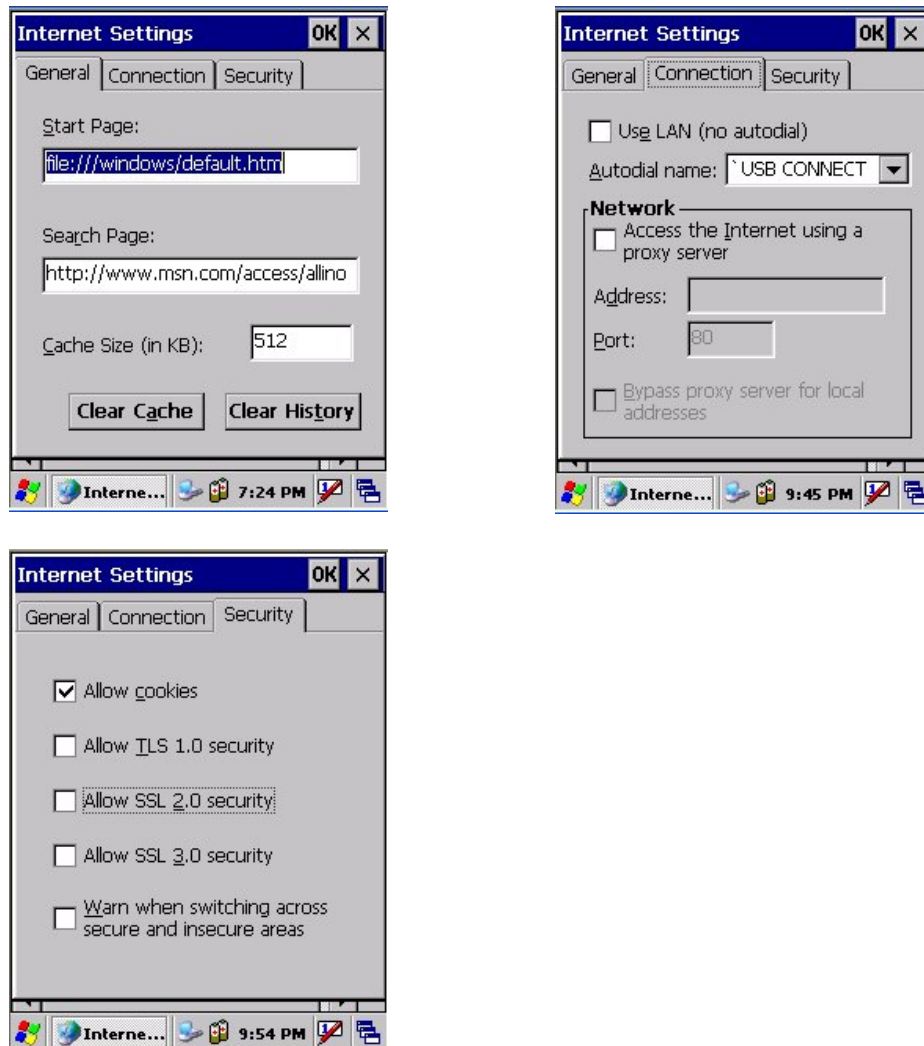


Figure 8-12 Internet Settings

General

Click the General tab.

1. Enter a webpage for the Internet Explorer start page.
2. Enter a Search Engine page.
3. Set the cache size
4. To clear the cache in the system, click Clear Cache.
5. To clear opened web pages, click Clear History.

Connection

Click the connection tab and set Internet connection methods.

1. To use a proxy server, click [Internet Connection by Proxy Server] check box and enter the proxy address and port.
2. To ignore the proxy server when making access to local address, click [No proxy server for local address] check box. This option is available only for the proxy server use. If you use a wireless LAN card, click the [LAN User manual dial] check box.

Security

Click the security tab to set up a security option.

1. To allow cookies, click the Cookies check box.
2. Click an appropriate security option among TLS 1.0, SSL 2.0, SSL 3.0, etc.
3. Click “When Switching to Secure and Non-Secure Area”. If you select this option, Internet Explorer issues a warning when you access non-secure websites.

8.3.9 *Keyboard*



Keyboard

Repeat Tab

1. To change the amount of time between taps before repetition starts, adjust the **Repeat delay** slider
2. To change the repeat rate, adjust the **Repeat rate** slider.
3. Test your new setting.
4. Tap “**OK**” to exit the “**Keyboard**” Tab.

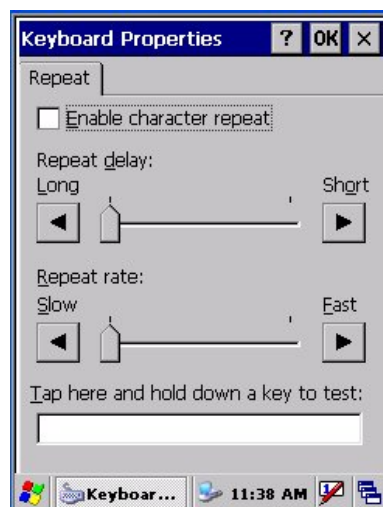


Figure 8-13 Keyboard Properties

8.3.10 Keypad LED

Refer to the previous section on Keypad LED Setting.

8.3.11 LCD PWM Setting

Refer to the previous section on Power Management.

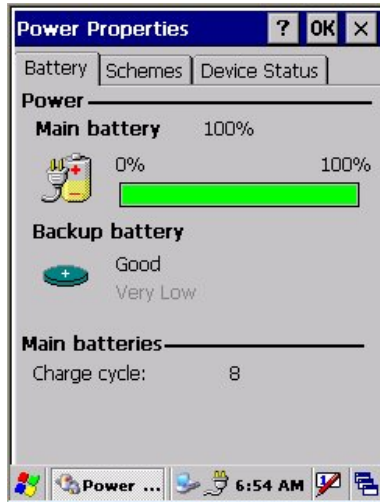


Figure 8-14 Power Properties

8.3.12 Mouse



Mouse

1. Double-click the checkerboard grid at a comfortable speed.
2. Double-click the Test icon to test your setting.
3. Tap “OK” to exit the Mouse tab.

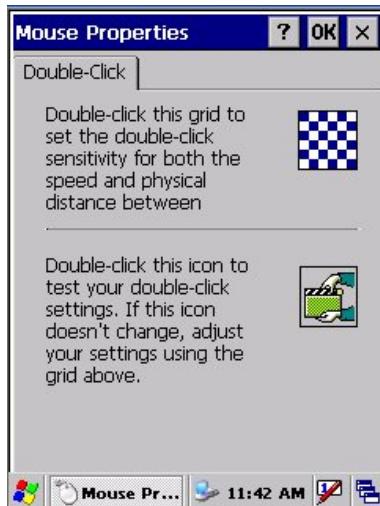


Figure 8-15 Mouse Properties

8.3.13 *Network and Dial-up Connection*

You can directly link to the network via network (Ethernet, LAN) or phone (modern) connection. You can send or receive emails or access available files on the network server or search the Internet or Intranet.

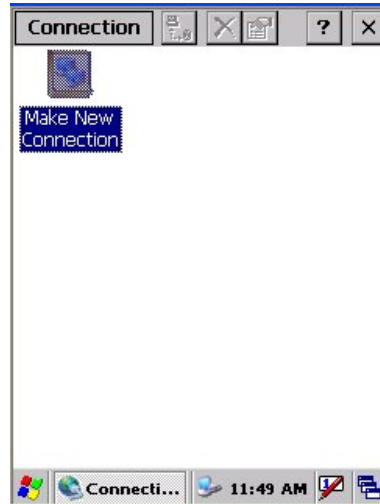


Figure 8-16 Network and Dial-up Connection

8.3.14 *Owner*

This function lets you set the TPC7050 to display user information at start up, add information on the user, and set up a network ID.



Figure 8-17 Owner Properties

Identification

Enter information such as name, company, address, company phone number, home phone number in the user information tab. To display the owner information on the start screen for system start, click the “Show User Information” check box.

Notes

Enter additional user information or other information in the Notes box. To show notes on the initial screen when the system starts, click “Show User Information” check box.

Network ID

Windows CE 4.2 gains access to Network resources using the owner information. Enter the information provided by Network manager such as user name, password, and domain.

8.3.15 *Password*

You can set a password to keep unauthorized users from using the TPC7050.



Figure 8-18 Password Properties

To set up a password:

1. Select the password setting tab.
2. Enter the password in the password box.
3. Re-enter the password in the password confirmation box.
4. To enable the password protection when the system starts, click the “Use Password for While System starts” check box.

If you touch the screen with a stylus pen to input the password in the initial screen, a keyboard appears. After keying in the password, press enter on the keyboard to go to the main screen. You may encounter a request to enter the password again on the initial screen if you have turned off the TPC7050’s power after activating password or have done a software reset. If you forget the password and cannot boot the system you may have to do a hardware reset. A hardware reset erases all files, data, as well as programs. Please consider using a password that is easy to remember and leave a record easy to access. To deactivate a password, delete the password in the password feature window.

8.3.16 *PC Connection*

You can set up a PC connection to synchronize the device with a desktop PC or other devices. You can set desktop USB and serial port connections. The following is the procedure required for changes in PC connection.

Begin with Windows CE.NET 4.2. The TPC7050 basically supports the Internet functions via USB. If you set up a partnership with PC during ActiveSync, it provides “USB@PocketPDA” link items that enable an Internet connection through the cradle:

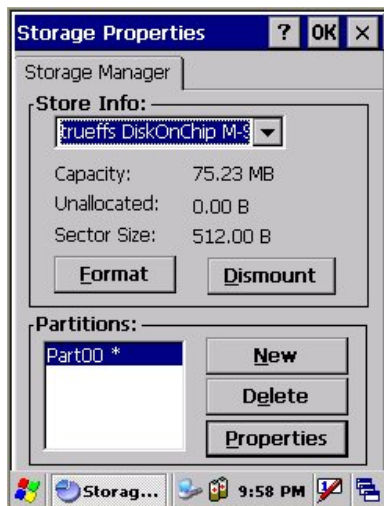


Figure 8-19 Storage Properties

1. Create a new connection in Go to Start → Setting → Network. Choose the direct connection as connection format. For detailed information, refer to the “Network and Dial-up Connections” section.
2. Select Go to Start → Setting → Control Panel → PC connection.
3. Select Connection Change icon.
4. Select the connection mode.
5. Connect to a desktop PC.

To connect the TPC7050 to a desktop PC, you must have Microsoft ActiveSync 3.7 or higher on your desktop PC.

8.3.17 *Power*

Please refer to the previous section on Power Management.

8.3.18 *Regional Settings*

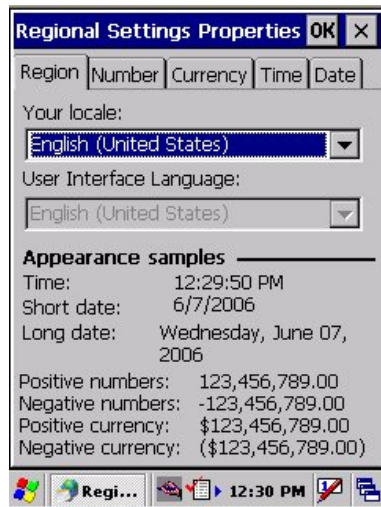


Figure 8-20 Regional Setting Properties

You can set up region, numbers, currency, time, and date.

1. Select Go to Start → Setting → Control Panel.
2. Open regional setting icon.
3. Select the tab for information to change.
4. Select the preferred option. Available features are dependent on which region you have chosen in the region tab.

8.3.19 *Remove Programs*



Figure 8-21 Remove Programs

To remove installed programs:

1. Select Go to Start → Setting → Control Panel.
2. Open the Program removal icon.
3. Select the program to delete from the program list.
4. Click Delete.

Note: You can only remove programs installed in RAM. If you cannot delete a program, see detailed information in Windows CE Help on the TPC7050 or in the program documents.

8.3.20 *Scan Configuration*

Please refer to the previous section on Scan Configuration.

8.3.21 *Storage Manager*

The storage manager lets you manage flash ROM (Disk 1). Disk 1 is used to back up personal organizer management. You can create / eliminate disk partitions or format a disk. Disk 1 is installed as one of the basic options.

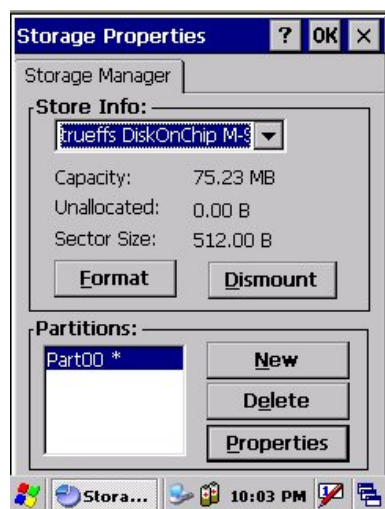


Figure 8-22 Storage Properties

1. Select the built-in **Disk 1** from the storage information dropdown list.
2. To format the partitions of the selected disk, click Separate icon and choose Format icon. If you execute the format, the partition names in the partition list disappear.
3. After clicking the Create New icon, key in the new partition names. The system automatically creates new partitions to set up.
4. To dismount a partition, select a partition to delete then click the Separate icon and press the Delete button.
5. To see the features of the selected partitions, click the Properties icon.
6. You can back up personal organizer data in the partition.

Caution: Formatting a disk erases all data, files, and programs.

If you insert external extension memory CF or SD*MMC memory cards, CF memory shows as “Storage Card”, while SD*MMC memory shows as “SDMMC Storage Card”.

8.3.22 *Stylus*

This screen sets double-tap sensitivity and calibration.

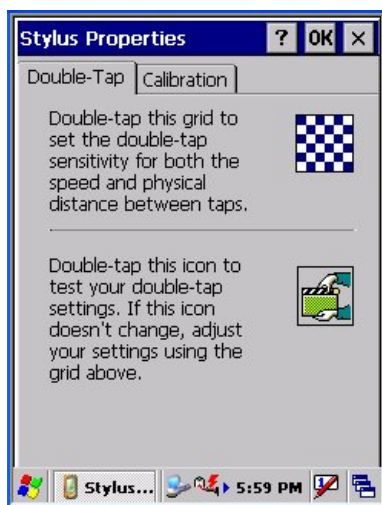


Figure 8-23 Stylus Properties

Double Tap

To set double-tap sensitivity:

1. Select Go to Start → Setting → Control Panel.
2. Activate the stylus and select Double Touch-Tap. Tap the grid and the color of the grid changes.
3. It automatically records the speed of the Double-Tap.

To test the sensitivity of double touch:

1. Select Go to Start → Setting → Control Panel.
2. Activate the stylus and select Double Touch-Tap.
3. Touch the icon twice. The icon changes.
4. If the icon does not change, adjust the setting using the grid above.

Calibration

If the TPC7050 screen does not respond properly, adjust the screen with the calibration function.

To start calibration:

1. Select Go to Start → Setting → Control Panel.
2. Activate the stylus and select calibration tap.
3. Press calibration again and the adjustment process begins.

Caution: Sometimes touching the screen with the stylus triggers the right mouse function. You can solve this problem by adjusting the double touch sensitivity.

8.3.23 *System*

The system properties window displays device information such as system, memory, the names of devices, copyright and version details.

General information contained in the window includes operating system data such as software version, processor, memory, user information, etc.

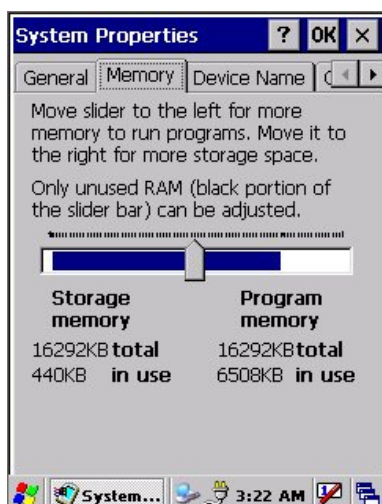


Figure 8-24 System Properties

The memory of the TPC7050 is used for data storage and programs. Basic memory capacity is 128MB. You can set the size of the memory cache used for running programs or storing data.

To set the memory:

1. Select Go to Start → Setting → Control Panel.
2. Run the system and select the memory tab.
3. The blue part of the slider indicates the available memory capacity.
4. Move the slider. Left of the slider is storage memory while the right is program memory.
5. As memory storage capacity increases, you can save more data and files. If you find a program is running too slowly, move the slider to the left to secure more program memory capacity.

The device name indicates the TPC7050's partnership relation when linked to the desktop through ActiveSync.

To set up device ID:

1. Select Go to Start → Setting → Control Panel.
2. Run the system and select the name of the device.
3. Enter the name of the device and its details.

8.3.24 *System Restore*

Please refer to the previous section on System Restore.

8.3.25 *Volume and Sound*

Adjust volume and select sound

Volume

To adjust the volume of the system:

1. Select Go to Start → Setting → Control Panel.
2. Open volume and sound icons and select the volume tab.
3. Press the left / right arrow icon or move the slide bar to adjust a volume.
4. Click all items to activate the sound such as event (warning, system events), application program, reminder (Alarm, notice).

Sound

To set the sound:

1. Select go to Start → Setting → Control Panel.
2. Open volume and sound icons and select volume tab.
3. Select an event from the event list.
4. Select a sound from the event sound list.
5. To remove the sound from the selected event, choose (None).
6. To save the changes in another scheme, select save in another name and name the sound scheme.
7. To remove the sound scheme, select the scheme and then Delete.

9. Trouble Shooting

This chapter contains information on solving problems you may encounter when using the mobile computer and/or cradle. If problems occur, first carry out general checks before comparing the problem with the descriptions in this chapter.

9.1 General Checks

- Make sure everything is installed properly
- Check the power supply (including the main battery or battery pack in the mobile computer) of all devices
- Is the reading window of the mobile computer clean?
- Is the interface connector properly connected with the cable?
- Are the bar code labels readable, e.g. not damaged or poorly printed?

If the problem persists after these checks are performed, please check the problem descriptions below. If the suggested solutions below do not resolve the problem, please contact your local supplier or POSline for technical support: <http://www.posline.com.mx>

If the TPC7050 mobile computer needs repair, please ensure that the label with the serial number is present. If sending the mobile computer or cradle back to your local supplier or POSline, please use the original package to minimize the chances of damage during shipping.

9.2 Read Operation Problems

If the mobile computer has a problem reading barcode labels

Barcode reading problems

- ◆ Make sure the scanning application is loaded and operational.
- ◆ Run “Scanning Setting” program to modify barcode read setting.
- ◆ Barcode may be distorted and should be replaced.
- ◆ Battery needs recharging or replacing

9.3 Mobile Computer Problems

Mobile computer does not power on.

- ◆ Battery needs recharging or replacement.
- ◆ Insure that battery is installed correctly.

Mobile computer shuts itself down

- ◆ Adjust “Power Properties”
- ◆ Battery needs recharging.

Mobile computer will not shut off

- ◆ If the mobile computer is processing data, attach a charging cable to insure the battery isn't depleted.
- ◆ If the mobile computer is connected to AC power, disconnect.
- ◆ Perform a warm boot – **WARNING** – Unsaved data will be lost.
- ◆ Perform a cold boot – **WARNING** – The mobile computer is reset to default settings and data will be lost

Screen is blank

- ◆ Make sure mobile computer is powered on.
- ◆ Adjust screen brightness.

Mobile computer either doesn't respond, or responds inaccurately to touch screen input

- ◆ Calibrate touch screen.
- ◆ Perform a warm boot – **WARNING** – Unsaved data will be lost.
- ◆ Perform a cold boot – **WARNING** – The mobile computer is reset to default settings and data will be lost

Battery life is short

- ◆ Adjust "Power Properties" especially if peripherals are used.
- ◆ Adjust backlight of LCD or keypad.
- ◆ Replace battery pack if old (battery can be recharged approximately 500 cycles.)

"Low Backup Battery" message

- ◆ Charge mobile computer for 10 hours

10. Appendix: Updating the OS via CF Card

To upgrade or reinstall the TPC7050 OS via Compact Flash, you need the 420S.bin file (available from POSline Technical Support):

Note: The file name must be “420S.bin” – do not rename it.

Caution: Users files will be erased!

1. Copy file “420S.bin” from the PC to the root directory of the Compact Flash card
2. Insert the Compact Flash Card into the TPC7050
3. Plug the power adapter into the TPC7050
4. Please use hot key function to update (FN+Dot.)
5. Press OK.
6. The TPC7050 displays a screen
7. Press the “2” key to select “OS Image Update”. FlashRom’s content is erased and the new OS is written to FlashRom. The system automatically runs the following steps.
 - (1). Image going to Flash
 - (2). Erasing Flash
 - (3). New programming Flash

After the OS successfully update, the TPC7050 automatically cold-starts with the new OS.