

MX5 User's Guide

(For Microsoft Windows Pocket PC Equipped MX5's)

IMPORTANT NOTICE

LXE's MX5 running Pocket PC 2000/2002 is obsolete. This electronic LXEbook has been made available as a courtesy to LXE's customers. Please contact your LXE customer support representative for assistance and mobile device replacement.



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E-EB-MX5UG-F-ARC**

Notices

Warning: Standard MX5 units are not approved for Hazardous Location use. The unit described in this user guide is a "standard" MX5 unit.

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Note: The original equipment's User Manuals are copyrighted by Itronix® Corporation. This manual has been amended by LXE® Inc., for the MX5 and MX5 Desktop Cradle with Itronix's express permission.

Li-Ion Battery:

When disposing of the MX5 main battery, the following precautions should be observed: The battery should be disposed of properly. The battery should not be disassembled or crushed. The battery should not be heated above 212°F (100°C) or incinerated.

The user is strongly encouraged to read Appendix B, "Regulatory Notices and Safety Information". Important safety cautions, warnings and regulatory information is contained in Appendix B.

To the Reader: Declarations of Conformity for the PCMCIA Radio Transceivers and MX5 equipment, all graphics and informational tables are in the full version of the MX5 User's Guide on the LXE Manuals CD and on the LXE Website ([www.lxe.com / ServicePass](http://www.lxe.com/ServicePass)). This user guide is designed for delivery on the MX5's small screen.

Revision Notice, December 2005

- *Added WEEE statement to Appendix B.*
- *(Dec 2005) MX5 running Windows Pocket PC 2000/2002 is obsolete as of March 2005. Manuals are Archived to the LXE ServicePass website. Replacement mobile device is the MX5 CE .NET mobile device.*

Revision Notice, February 2005

- *Added "For Microsoft Windows Pocket PC Equipped MX5's" to emphasize the difference between this device and similar MX5's. Added new LXE logo.*
- *Added "Important Battery Information". Added "Identify Your Device".*
- *Clarified battery pack insert/replace process. Corrected flash part number in Accessories. Replaced Class 3A laser label with updated Class 3R laser label.*
- *Changed MIL STD to 810F in "Environmental Specifications". Changed IP65 to IP67. Updated "Cradles".*

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Introduction

The MX5 is a rugged, portable, hand-held computer that uses Microsoft® Windows® for Pocket PC 2000 or Pocket PC 2002 software. The MX5 can transmit information using a 2.4 GHz radio (with an internally mounted antenna) and it can store information for later transmission through an RS-232, InfraRed or communication port.

The MX5 is vertically oriented and features backlighting for the display and the keypad. The touch-screen display supports graphic features and icons that the Pocket PC operating system supports.

The MX5 can be scaled from a limited function batch computer to an integrated RF scanning computer. The MX5 is powered by a 2800 mAh Lithium-Ion main battery pack and an internal backup battery.

A stylus is attached to the MX5 to assist in entering data and configuring the unit.

See Also "Identify Your Device".

Warning: Standard MX5 units are not approved for Hazardous Location use.

Important: *Until the main battery and backup battery are completely depleted, the MX5 is always drawing power from the batteries (On). The MX5 is to be used with a power supply (LXE P/N MX5A305PSACUS).*

If the mobile device has AppLock installed, please refer to "MX5 Reference Guide", "Chapter 4 – AppLock" for setup and processing information before continuing.

Pocket PC Versions

Access: [the Windows icon](#) | [Settings](#) | [System tab](#) | [Handheld](#) | [Versions tab](#)

Your MX5 may be running either Pocket PC 2000 or Pocket PC 2002. This manual highlights the differences in this way:

Pocket PC 2000 The menu path or command syntax for Pocket PC 2000 units only.

Pocket PC 2002 The menu path or command syntax for Pocket PC 2002 units only.

If there is no distinction between Pocket PC 2000 and Pocket PC 2002, the instruction or information is the same for both versions.

Identify Your Device

At the front bottom of the MX5 is a label indicating the operating system resident on the mobile device. This document is one in a series covering the MX5 family of computers:

Label – Pocket PC

For MX5 computers equipped with Microsoft Windows Pocket PC 2000/2002 operating Systems:

- *MX5 User's Guide*
- *MX5 Reference Guide*
- *LXEbook -- MX5 User's Guide (can be downloaded to the MX5 Pocket PC device from the LXE Manuals CD.)*

Label – Windows CE. NET

For MX5 computers equipped with Microsoft Windows CE .NET operating System:

- *MX5 CE .NET User's Guide*
- *MX5 CE .NET Reference Guide*
- *LXEbook -- MX5 CE. NET User's Guide (can be downloaded to the MX5 CE. NET device from the LXE Manuals CD.)*

Label – I-SAFE

For MX5 Intrinsically Safe (MX5-IS) computers equipped with Microsoft Windows CE .NET operating System:

- *MX5 Intrinsically Safe User's Guide*
- *MX5 CE .NET Reference Guide*
- *LXEbook -- MX5 I-Safe User's Guide (can be downloaded to the MX5-IS device from the LXE Manuals CD.)*

The MX5 Intrinsically Safe Hazardous Location unit (MX5-IS) is distinguished from the standard MX5 by the blue keypad overlay and the safety approval labeling on the back of the MX5-IS. Please refer to the "MX5 Intrinsically Safe User's Guide" for cautions, warnings, explanation and instruction when using the MX5-IS device.

Warning: Standard MX5 units, MX5 powered cradles, tethered scanners, multichargers, USB devices and external power supplies are not approved for Hazardous Location use.

Laser Warnings and Labels

- *Do not look into the laser's lens.*
- *Do not stare directly into the laser beam.*
- *Do not remove the laser caution labels from the MX5.*
- *Do not connect the laser barcode window to any other device. The laser barcode window is certified for use with the MX5 only.*



Caution:

Laser radiation when open. Please read the caution labels.

Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Important Battery Information

Note: This mobile device's backup battery maintains its charge by drawing power from the main battery pack. Always store unused devices with a fully charged main battery pack installed. LXE recommends an in-use mobile device be frequently connected to an external power source to retain optimum power levels in the main battery pack and the backup battery. When the backup battery and main battery pack are dead, the mobile device reverts to the last saved setup default values when a fully charged main battery pack is installed and the device is powered On again.

- *Until the main battery and backup battery are completely depleted, the MX5 is always drawing power from the batteries (On).*
- *New batteries must be fully charged prior to use.*
- *Whenever possible, use the AC power adapter with the MX5 to conserve the main battery and recharge the backup battery.*
- *When a new battery is installed in the MX5 for the first time (or when the Backup battery is completely depleted), the Time and Date reverts to its default values.*

Related Manuals

The "MX5 Reference Guide" contains MX5 technical information and advanced functions.

Refer to the "MX5 Cradle Reference Guide" for technical information relating to the MX5 docking cradles.

Refer to the "MX5 Multi-charger Operator's Guide" for technical information relating to the MX5 battery charger.

Note: Until the Main Battery and Backup Battery are completely depleted, the MX5 is always drawing power from the batteries (On).

MX5 Environmental Specifications

Operating Temperature	-4°F to 122°F (-20°C to 50°C) [non-condensing]
Extended Op Temperature	-22°F to 122°F (-30°C to 50°C) [non-condensing] w/Heater option (see Note)
Storage Temperature	-22°F to 158°F (-30°C to 70°C) [non-condensing]
Rating	IEC IP67
Operating Humidity	5% to 90% non-condensing at 104°F (40°C)
Vibration	Based on MIL Std 810F
Shock	75G, 5ms duration, 100 shock impacts

Note: If the MX5 has a dead Main Battery and is as cold as the extended operating temperature's lowest value, the unit must be warmed to above -20°C (-4°F) before installing a new Main Battery pack and the system powered on.

Quick Start

This section's instructions are based on the assumption that your new system is pre-configured and requires only accessory installation (e.g. hand strap) and a power source.

Use this guide as you would any other source book -- reading portions to learn about the MX5, and then referring to it when you need more information about a particular subject. This guide takes you through an introduction to and operation of the LXE MX5.

In general, the sequence of events is:

1. Insert a fully charged battery. (Always put a fully charged battery in the MX5 at the beginning of the shift or workday.)
2. Connect an external power source to the unit (if required).
3. If the screen does not automatically display, tap the Power key.
4. Adjust screen display, audio volume and other parameters if desired.

To set up the MX5 integrated scanner **barcode reading parameters**, please refer to the "**Integrated Scanner Programming Guide**" on the LXE Manuals CD or the LXE website www.lxe.com. Your device may have a SE1223, SE1224 or SE2223 scan engine.

Troubleshooting

Can't align the screen, change the date/time or adjust the volume.	AppLock is installed and running on the mobile device. AppLock restricts access to the control panels. Contact your System Administrator.
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Accessing Files on a CompactFlash Card

Tap the Windows icon | **Programs** | **File Explorer** | **My Documents** | **My Device** | **Compact Flash** folder. The CompactFlash socket is located in a recess underneath the MX5's main battery.

About Lithium-Ion Batteries

Li-Ion batteries (like all batteries) gradually lose their capacity over time (in a linear fashion) and never just stop working. This is important to remember -- the MX5 is always 'on' even when in the Suspend state and draws battery power at all times. Tap the Windows icon | **Settings** | **System** | **Handheld Settings** tab to check the battery status and power reading.

The following chart is an approximation. Actual battery capacity will vary based on usage, ambient temperature and peripherals drawing power from the MX5:

100% capacity	2800 mAh minimum
80% capacity	2240 mAh minimum

Deciding when to put a fully charged Main Battery pack in the MX5 is difficult to quantify because it is very application specific. 1000 mAh may be the cutoff for one customer who uses the computer frequently, while 500 mAh may be perfectly fine for a customer who occasionally uses the computer. You need to determine the point at which battery life becomes unacceptable for your business practices and replace the Main Battery pack before that point.

How To

Insert Main Battery

The Battery Compartment is located at the bottom of the back of the computer. The fasteners in the main battery Pack are connected to the Battery Pack. Press the Power key after the battery is inserted into the MX5.

Note: On first use the battery pack should be charged with an external power source (i.e. AC Adapter) – 3 hours for the main battery and 7 hours for the backup battery. New main battery packs alone must be charged prior to first use -- this process takes up to four hours in an LXE Multi-Charger.

Note: Using the battery removal tool (or a coin) twist each fastener to the left to loosen the battery pack. Twist the fastener to the right to tighten the battery pack.

Place the battery in the battery well, making sure the tabs on the bottom of the battery pack fit into the slots at the bottom end of the battery well. Push the battery down into the battery well while fastening the screws.

Fasten the screws tight enough to allow the rubber gasket to create a watertight seal. If the screws do not easily twist into the threaded opening, remove the battery pack and repeat the process.

When the main battery pack is charging, the Battery Charge LED flashes green. The backup battery is trickle-charged by the main battery. There is no backup battery charging indicator.

Whenever possible, use the AC power adapter with the MX5 to conserve the main battery and charge the backup battery.

If the MX5 has a dead main battery and is as cold as the extended operating temperature's lowest value, the unit must be warmed to above -20°C (-4°F) before installing a new main battery pack and pressing the On button.

Using the Power Key

Note: Refer to the section titled "Power Modes" in the "MX5 Reference Guide" for information relating to the power states of the MX5.

The Power key is located next to the <Z> key on the keypad. When a battery is inserted in the MX5 for the first time press the Power key.

Tapping the Power key places the MX5 immediately in Suspend mode. Tapping the Power key again, or connecting to AC power, immediately returns the MX5 from Suspend.

Reboot Sequence

When the Pocket PC desktop is displayed or an application begins, the power up (or reboot) sequence is complete. If you have previously saved your settings, they will be restored on reboot. Application changes are saved when OK is clicked on an application applet.

Warm Reset

Hold down the Power key and the Orange key for 4+ seconds until the display blanks, then release the keys. A warm reset does not affect the operating system and no data loss occurs.

Cold Reset

Hold down the Power key, the Blue key and the Orange keys for 4+ seconds. The following steps will need to be performed when the MX5 powers on again:

1. Calibrate the touch screen.
2. Set the geographical Location.
3. Set the date and time.

Important:-- Because of the extreme nature of the Cold Reset, LXE recommends that the Cold Reset be used only as an emergency procedure and the Warm Reset be used whenever necessary.

LXE recommends the RegSave file be run whenever configuration changes are made.

Note: When performing a Cold Reset on a device, the system will ask if you want to overwrite files –LXE recommends selecting "No" and continuing with the Cold Reset process.

Connect External Power Supply (Optional)

The MX5 receives AC/DC power from the US AC/DC 12V Power Supply or the MX5 Cradle.

The MX5 DC power jack is located at the base of the MX5. The cradle power jack (if available) is located on the back of the cradle.

The A/C power cable is not included with the Power Supply, please contact your LXE representative for replacement power cables. When the power cable is connected to a wall outlet and the Power Supply, the ON indicator on the Power Supply illuminates green.

1. Squeeze the sides of the power connector and push the power cable connector into the MX5 power jack. The click means the connector is seated firmly.
2. The CHGR LED above the keypad illuminates when the MX5 is receiving external power through the power jack. The Main Battery recharges when the MX5 is connected to an external power source.

Note: When the MX5 is receiving power through a cradle connected to external power, the MX5's CHGR LED is illuminated. The MX5 backup battery recharges when the MX5 is connected to external power.

Connect Audio Jack (Optional)

The MX5 audio jack is located on the top of the unit next to the scan aperture. The internal speaker is disabled when the audio jack is connected.

Insert the barrel end of the connector into the MX5 audio jack and push in firmly.

Note: The audio option draws power from the Main Battery Pack.

Install Pistol Grip Handle (Optional)

The MX5 can be purchased with a customer-installable pistol grip handle. The handle enables the user of the MX5 to hold the unit while pointing and activating the scanner with one hand. Pressing the trigger activates the scanner and functions the same as the Scan key on the keypad. With the handle installed the Scan key on the keypad remains active. The trigger duplicates the operation.

The handle is built of a durable and flexible plastic that will not detach from the MX5 if the unit is dropped.

The trigger handle is a mechanical device. Battery or external A/C power is not required for operation of the trigger handle. The trigger handle does not need to be removed when replacing the Main Battery pack.

Either the trigger handle is attached to the MX5 or the handstrap is attached, not both.

Handle Installation

1. Place the MX5, with the screen facing down, on a flat stable surface.
2. Slip the L-shaped plastic hooks, at the top of the handle, into the slots on each side of the back of the MX5 and slide the handle downward until the screw holes are visible.
3. Attach the pistol grip handle to the MX5 with the set of three screws and washers provided.
4. Test the handle's connection making sure the MX5 is securely connected to the handle.

Periodically check the pistol grip handle for wear and the connection for tightness. If the handle gets worn or damaged, it must be replaced. If the pistol grip connection loosens, it must be tightened before the MX5 is placed in service.

Install Handstrap

Note: Either the trigger handle is attached to the MX5 or the handstrap is attached, not both. LXE recommends that, in the absence of a trigger handle, the handstrap be used at all times.

An elastic hand strap is available for the MX5. Once installed, the hand strap provides a means for the user to secure the computer to their hand. It is adjustable to fit practically any size hand and is easily moved to allow installation or removal of the MX5 battery pack.

Installation

1. If a handle is installed, remove it at this time. See section "Install Pistol Grip Handle."
2. Slip the strap through the upper bracket prior to securing the upper bracket to the unit.
3. When slipping the strap through the bracket make sure the closed loop fastener surface is up.
4. After slipping the strap through the bracket, fold the strap over so that the two closed loop fastener surfaces mate evenly.
5. Prior to securing the upper bracket to the unit, slide the bottom assembly into the slots at the bottom of the MX5. Insure that both ends of the bottom assembly are securely installed.

6. After securing the bottom of the strap to the MX5, loosen the closed loop fastener strap and then secure the upper bracket to the unit with a screw.

Removal

1. Separate the closed loop fastener tabs and loosen the strap through the upper bracket.
2. Using a Phillips screwdriver, remove the upper bracket screw.
3. Pull the bottom assembly from the slots in the bottom back of the MX5..

Slide the bottom bracket out and away from the MX5 when replacing the Main Battery Pack.

Periodically check the handstrap for wear and the connection for tightness. If the handstrap gets worn or damaged, it must be replaced. If the handstrap connection loosens, it must be tightened before the MX5 is placed in service.

Tap the Touchscreen with a Stylus

Note: Always use the point of the stylus for tapping or making strokes on the display. Never use an actual pen, pencil or sharp object to write on the touch screen.

Hold the stylus as if it were a pen or pencil. Touch an element on the screen with the tip of the stylus then remove the stylus from the screen. Firmly press the stylus into the stylus holder on the MX5 when the stylus is not in use.

Like using a mouse to left-click icons on a computer screen, using the stylus to tap icons on the MX5 display is the basic action that can:

- *Open applications*
- *Choose menu commands*
- *Select options in dialog boxes or drop-down boxes*
- *Drag the slider in a scroll bar*
- *Select text by dragging the stylus across the text*
- *Place the cursor in a text box prior to typing in data or retrieving data using the integrated barcode scanner or an input/output device connected to the serial port.*

An extra or replacement stylus can be ordered from LXE. See the section titled "Accessories" for the stylus part number.

Keypad Shortcuts

Use keyboard shortcuts instead of the stylus when the MX5 is running Pocket PC.

- *Press Tab and a Left or Right Arrow key to select a file.*
- *Press Shift and an Up or Down Arrow key to select several files. Press Shift+Arrow, then Shift+Arrow again for each additional file selected.*
- *Once you've selected a file, press Alt then press Enter to open its Properties*

dialog.

- *Press Orange then press numeric dot to delete the currently highlighted file(name). Or, tap and hold the stylus on the filename and a menu box with a Delete option appears.*

Toggle the Display and Keypad Backlight On and Off

When the keypad backlight option is Enabled in Windows icon | **Settings** | **System** | **Backlight** tab, both the display and the keypad backlights can be toggled on and off.

Locate the Blue key at the top of the keypad. Toggle the backlights on and off by pressing the Blue key, then the Right Scan key.

Increase or Decrease Backlight Intensity

When the backlight is on, press the Orange key and the < 7 > key to decrease the intensity of the backlight. Repeating this keypress sequence continues to decrease the intensity of the backlight until the backlight is Off.

Once the backlight is off, use the Blue key and the Right Scan button keypress to toggle the backlight on. This process returns the backlight to it's brightest intensity.

Set the Display Backlight Timer

Note: Refer to the section titled "Power Modes" later in this manual for information relating to the power states of the MX5.

Tap the Windows icon | **Settings** | **System** | **Backlight icon**. Select an option and tap OK to save the changes.

Backlight time-out always allowed

Backlight times out whether or not there is keypad or stylus activity. The blue key and the right scan key sequence toggles the backlights on and off before and after time-out expires. A key sequence toggle or Suspend / Resume cycle is the only way to turn the backlights back on after a time-out.

Backlight time-out when no keyboard/pen activity

Backlight times out when there is no keypad or stylus activity. The blue key and the right scan key sequence toggles the backlights on and off before and after time-out expires. A key sequence toggle or Suspend / Resume cycle is the only way to turn the backlights back on after a time-out.

Backlight time-out when no keyboard/pen activity and resume on activity.

Backlight times out when there is no keypad or stylus activity. The blue key and the right scan key sequence toggles the backlights on and off before and after

time-out expires. A keypress, stylus tap, key sequence toggle or Suspend / Resume cycle will all turn the backlights on after a time-out.

Keypad backlight enable/disable

When set to enable, the keypad backlight turns on and off in tandem with the display backlight. When set to disable, the keypad backlight is always off.

The default value is 2 seconds on battery and AC power. The timer can be adjusted in 2 second increments with the lowest value being 2 seconds. The backlight will remain on all the time when the backlight time-out is set to "Disabled."

Set the Power Off Timer

Note: Refer to the section titled "Power Modes" later in this manual for information relating to the power states of the MX5.

Tap the Windows icon | **Settings** | **System** | **Handheld Settings** icon. Then select the **Power** tab.

On battery power:

Turn off device if not used for

Change the parameter value and tap OK to save the change.

The default is 3 minutes. When the MX5 is connected to A/C power, the device does not go into Suspend Mode.

Note: When the Power Off timer expires, the computer enters Suspend Mode (when not connected by A/C power).

Save Current Settings

Tap the Windows icon | **Programs** | **File Explorer** | **My Documents** | **My Device** | **Compact Flash** | **RegSave**. The RegSave utility creates the RegTemp.reg registry backup file.

The registry is reloaded from the RegTemp.reg file after a Cold Reset. When returning from a Cold Reset, you are given the option to Warm Reset and invoke registry settings.

Set The Audio Speaker Volume

Note: An application may override the control of the speaker volume. Turning off sounds saves power and prolongs battery life.

The audio volume can be adjusted to a comfortable level for the user. The MX5 has an internal speaker and a jack for an external headset.

Pocket PC 2000 The volume is adjusted using Windows icon | **Settings** | **Personal** tab | **Sounds & Reminders** icon then select the Volume tab.

Pocket PC 2002 The volume is adjusted using Windows icon | **Settings** | **Personal tab** | **Sounds & Notifications** icon then select the Notifications tab.

Using the Keypad

Note: "Enable sounds for" must be enabled before the following key sequences will adjust the volume.

To adjust speaker volume, locate the <V> key and the Blue key.

Adjust the speaker volume by pressing the:

- *Blue key, then the <V> key to enter Volume change mode.*
- *Use the Up Arrow and Down Arrow keys to adjust volume until the speaker volume is satisfactory.*
- *Press the Enter key to exit this mode.*

Using the Touch Screen

Pocket PC 2000 Tap the Windows icon | **Settings** | **Personal tab** | **Sounds & Reminders** icon. Then select the Volume tab.

Pocket PC 2002 Tap the Windows icon | **Settings** | **Personal tab** | **Sounds & Notifications** icon. Then select the Notifications tab.

Change the setting and tap OK to save the change. You can also select / deselect sounds for key clicks and screen taps and whether each is loud or soft.

Sounds specific to primary events are selected using the options on the Sounds tab.

Reminder/Notifications tones are selected using the options on the Reminders/Notifications tab.

As the volume scrollbar is moved between Loud and Silent, the computer beeps each time the volume increases or decreases in decibel range.

Troubleshooting

Blue+V puts the MX5 in 'Volume Adjust' mode.

Shift+Blue+Shift puts the unit in 'Blue' Mode which, when followed by 'V', puts the unit in 'Volume Adjust' mode as well.

If the MX5 is responding to touch input, but does not respond to keypad (hard or soft) input, the MX5 may still be in Volume Adjust mode.

Press Enter to cancel (exit) Volume Adjust mode. After pressing enter, the MX5 should start responding to key input.

Entering Data

You can enter data into the MX5 through several different methods. The Scanner aperture provides barcode data entry, the RS-232 or the IR port are used to input/output data, and the keypad provides manual entry.

MX5's with a touch screen and Microsoft Pocket PC software can use a stylus to input data, the COM ports and/or the keypad. A virtual keyboard is available in applications that expect keyed input.

Keypad Entry

The keypad is used to manually input data that is not collected otherwise. Almost any function that a full sized computer keyboard can provide is duplicated on the MX5 keypad but it may take a few more keystrokes to accomplish a keyed task.

Almost every key has two or three different functions. The primary alpha or numeric character is printed on the key.

The Orange or Blue keys are pressed when you want to use a 2nd key function. For example, when you press a Blue or Orange key (the 2nd key), then press the key that has the desired second-function key. The specific 2nd character is printed above the corresponding key in either Orange or Blue.

Please refer to "Appendix A - Key Maps" for instruction on the specific keypresses to access all keypad functions.

Stylus Data Entry

Note: This section is directed to the MX5 daily user. The assumption is that the unit has been configured and the touch panel calibrated by the System Administrator prior to releasing the MX5 for daily use. The touch screen should be calibrated before initial use.

Note: Always use the point of the stylus for tapping or making strokes on the display. Never use an actual pen, pencil or sharp object to write on the touch screen.

The stylus performs the same function as the mouse that is used to point to and click elements on a desk top computer. The stylus is used in the same manner as a mouse – single tap or double tap to select menu options, drag the stylus across text to select, hold the stylus down to activate slider bars, etcetera.

Hold the stylus as if it were a pen or pencil. Touch an element on the screen with the tip of the stylus then remove the stylus from the screen. The touch screen responds to an actuation force (touch) of 4 oz. (or greater) of pressure.

The stylus can be used in conjunction with the keyboard and scanner and an input/output device connected to one of the MX5's serial ports.

- *Touch the stylus to the field of the data entry form to receive the next data feed.*
- *The cursor begins to flash in the field.*
- *The unit is ready to accept data from either the physical keypad, virtual keyboard, integrated scanner or a scanner connected to the serial port on the cradle, if the scanner applet is configured correctly.*

Scanner Entry

Read all cautions, warnings and labels **before** using the laser scanner.

To scan with the laser barcode reader, point the laser window towards a barcode and press the Scan button. You will see a red laser beam strike the barcode.

Align the red beam so that the barcode is centered within the beam. The laser beam must cross the entire barcode. Move the MX5 towards or away from the barcode so that the barcode takes up approximately two-thirds the width of the beam.

The Scanner Active LED turns red when the laser beam is on. Following a barcode scan and read the Scanner Active LED turns green for two seconds and the MX5 beeps, indicating a successful scan.

The laser and Scanner Active LED automatically turn off after a successful or unsuccessful read. The scanner is ready to scan again after the Scan key is released, or after the green LED turns off following a successful scan.

Voice Recording

In Calendar, Tasks, and Contacts, you can include a recording in the Notes tab. In the Notes program, you can either create a stand-alone recording, or include a recording in a written note.

Record a voice message within **Notes**.

- *From the Start menu select Notes.*
- *Tap the Cassette icon.*
- *Tap the red Record button.*
- *Begin speaking.*
- *End the recording session by tapping the square on the recording menu.*
- *Play your recording by tapping on the speaker icon.*

RS-232 Data Entry

The MX5 accepts input from an RS-232 device connected to either RS-232 port.

Virtual Keyboard

The virtual keyboard is always available. Tap the keyboard icon at the bottom of the screen to put the virtual keyboard on the display. Using the stylus:

- *Tap the 123 key to display either an alphanumeric keyboard or a numeric keyboard with characters usually accessed by capitalizing alphanumeric keys on a physical keyboard.*
- *Tap the Shift key to type one capital letter.*
- *Tap the CAPS key to type all capital letters.*
- *Tap the au key to access symbols.*

Touch Screen Display

The MX5 Touch Screen Display is an Active Color LCD unit capable of supporting QVGA graphics modes. Display size is 320 x 240 pixels in portrait orientation. The display covering is designed to resist stains. The touch screen allows signature capture and touch input. A pen stylus is included. The touch screen responds to an actuation force (touch) of 4 oz. of pressure (or greater).

The color display has a CCFL (Cold-Cathode Fluorescent Lighting) front light. When off, the display appears to have a greenish hue.

Display Backlight

The Display backlight is turned On when the unit returns from Suspend Mode. The display backlighting feature is programmable and activates based on power source and amount of idle time before entering the Suspend state.

See the section titled "Set the Display Backlight Timer" in the previous section "Quick Start."

Touch Screen Calibration

If the MX5 is not responding properly to pen touch taps, the touch screen may need to be recalibrated. Contact your System Administrator for assistance.

Pocket PC 2000 To recalibrate the screen, tap the Windows icon | **Settings** | **System** | **Align Screen**. To start, tap Align Screen.

Pocket PC 2002 To recalibrate the screen, tap the Windows icon | **Settings** | **System** | **Screen**. To start, tap Align Screen.

Follow the instructions on the screen and tap OK to save the new calibration settings.

Cleaning the Glass Display/Scanner Aperture

Note: These instructions are for components made of glass. If there is a removable protective film sheet on the display screen, remove the film sheet before cleaning the screen.

Keep fingers and rough or sharp objects away from the scan aperture and touch display. If the glass becomes soiled or smudged, clean only with a standard household cleaner such as Windex(R) without vinegar or use Isopropyl Alcohol. Do not use paper towels or harsh-chemical-based cleaning fluids since they may result in damage to the glass surface. Use a clean, damp, lint-free cloth. Do not scrub optical surfaces. If possible, clean only those areas which are soiled. Lint/particulates can be removed with clean, filtered canned air.

Programmable Buttons

The Scan buttons can be programmed by the System Administrator to perform the following functions:

Disabled	Key press has no effect.
Scan	Pressing this key activates the laser scanner.
Enter	Pressing this key confirms a forms entry or transmits information. See the following section titled "Enter Key Function."
Tab	Pressing this key moves the cursor to the next input field.
Field Exit	IBM 5250/TN5250 units only. Pressing this key exits an input field. See the following section titled "Field Exit Key Function."
Esc	Pressing this key cancels the current operation.

Program the Scan Buttons

[Access: the Windows icon](#) | [Settings](#) | [System tab](#) | [Scanner](#) | [Key tab](#)

Tap the desired radio button. Tap OK to close this menu option. Tap X to cancel changes. Any changes made are in effect immediately.

The default setting for the right button is Enter. The default setting for the left button is Enter.

When the MX5 does *not* have an integrated scanner, both buttons default to Enter keys and the Scan selection is greyed out. The buttons can be programmed to perform other functions when there is no internal scanner.

COM Ports

The MX5 supports three COM port options.

COM 1 port is always the left RS-232 port on the base of the MX5. COM 1 port accepts RS-232, USB and AC power connectors.

The RS-232 port on the docking cradle is "connected" to the MX5 when a tethered scanner is connected to the RS-232 port on the MX5 cradle, and the MX5 is in the cradle. The cradle must be powered by an alternate AC or DC power source to enable tethered scanner use.

The **COM 3** port is always the IR port on the base of the MX5.

COM 4 is always the right RS-232 port on the base of the MX5. COM 4 port accepts RS-232 and AC power connectors.

To edit Scanner Com Port parameters, tap the Windows icon | **Settings** | **System** | **Scanner**. Click the "**Send Key Messages (WEDGE)**" checkbox. The COM port that accepts the scanner data can be configured for data rate, parity, stop bits and data bits using the COM1 tab.

Tethered Scanners and the MX5

LXE cable number MX5A055CBL3IND26D9M must be used with PowerScan® SR, LR and XLR tethered scanners connected directly to the MX5 device. Do not connect Symbol® tethered scanners to the MX5 device or to this cable.

Both PowerScan and Symbol tethered scanners will send scanned data to the MX5 when the MX5 is in the cradle and the scanners are connected to the RS-232 port on the powered cradle.

The MX5 Scan buttons have no effect on tethered scanners. Pressing the trigger handle on tethered scanners sends the data from the tethered scanner to the MX5.

Note: When using the 8500 Series tethered scanners, the tethered scanner Power Mode must be set to "Reduced Power Mode" to conserve battery life. The reduced power mode setting will not impact performance of the 8500 series scanner. The default mode is "Continuous On". Please refer to the manufacturer's user guide for instruction.

USB Port

The USB port requires a DB26 to USB cable (available from LXE). The serial port/USB port also supports serial data transfer (using a null modem cable) and non-host USB I/O at 1.5 Mbps. The MX5 automatically detects the cable

configuration. Refer to section titled "Accessories" in this manual for part numbers for the DB26-USB cable and the null modem cable.

IR Port

The InfraRed (IR) port provides a means of transferring information to a device with a similar port and the proper software. The IR port can be used to communicate with printers or a host computer with the use of an adapter.

The IR Port is specified as COM 3 and is a bi-directional half-duplex infrared port. It supports the Slow IrDA (Infrared Data Access) PHY Layer standard that allows communication speeds up to 115k baud.

When sending data through the IR port to another MX5's IR port, make sure both units are in close proximity to each other. The IR operating envelope has a distance range of 2 cm (.79 inches) to 15 centimeters (6 inches) with a viewing angle of 30 degrees.

See the "MX5 Reference Guide" for complete instructions.

The Keypad

The keymaps (keypress sequences) are located in "Appendix A - Key Maps."

Scan Key Function

When programmed as Scan keys, either the left or right Scan key activates the scanner. The internal scanner scans only when the Scan button is pressed (or when the scan trigger is pressed on the optional trigger handle, if installed).

Enter Key Function

The Enter key is used to confirm a forms entry or to transmit information. How it is used is determined by the application running on the computer.

2nd Key Function

The Orange (*on the upper left side of the keypad*) and Blue (*on the upper right side of the keypad*) keys are 2nd keys used to activate the 2nd functions of the keypad. Printed above many keys are small characters, in either orange (on the left side of the key) or blue (on the right side of the key), that represent the 2nd function of that key. Using the 2nd key activates the second key function. Note that the 2nd key only stays active for one keystroke. Each time you need to use the 2nd function you must press the Orange or Blue 2nd key. To cancel a 2nd function before pressing another key, press the 2nd key again.

Ctrl Key Function

The Ctrl key enables the control functions of the keypad. This function is similar to a regular keyboard's Control key. Note that the Ctrl key only stays active for

one keystroke. Each time you need to use a Ctrl function, you need to press the Ctrl key before pressing the desired key.

Alt Key Function

The Alt key enables the alternate functions of the keypad. This function is similar to a regular keyboard's Alt key. Note that the Alt key only stays active for one keystroke. Each time you need to use an alternate function, you need to press the Alt key before pressing the desired key.

Shft Key Function

The Shft key enables the shifted functions of the keypad. This function is similar to a regular keyboard's Shift key. Note that the Shift key only stays active for one keystroke. Each time you need to use a Shifted function, you need to press the Shft key before pressing the desired key.

When the Shft key is pressed the next key is determined by the major key legends, i.e., the alpha keys display lower case letters -- when CAPS is On alpha characters are capitalized. For example, when CAPS is On and the Shft key and the G key are pressed, a lower case g is displayed.

Spc Key Function

The Spc key adds a space to the line of data on the display. This function is similar to a regular keyboard's Spacebar. Note that the Spc key only stays active for one keystroke.

Field Exit Function

IBM TN5250 specific keypad only. The left Scan key can be programmed as a Field Exit key. The Field Exit key is used to exit an input field. If the field is an Auto Enter field, the auto transmit function is activated. Refer to the "Programmable Buttons" section for instruction.

Mode Key Functions

Caps Key and CapsLock Mode

This function is similar to a regular keyboard's CapsLock key. Note that the CapsLock mode stays active until the CapsLock key sequence is pressed again. Each time you need to use a Caps function, you need to press the Caps key sequence first. To cancel a CapsLock function press the Caps key sequence again.

The CapsLock key sequence is Blue key then the <Tab> key.

- *No CapsLock AND No Shift keypress – result is a lowercase letter.*
- *CapsLock OR Shift – result is an uppercase letter.*
- *CapsLock AND Shift keypress – result is a lowercase letter.*

A Capital A is displayed in the taskbar when the device is in CapsLock mode or the Caps Key has been pressed and the next key (to be capitalized) has not been pressed.

External Power Supply for MX5 and Cradles

The MX5 DC adapter can be plugged into either of the D26 pin connectors on the bottom of the MX5.

The cradle power jack is located on the back of the cradle. The MX5 is to be used with a power supply.

When the MX5 is receiving power through a cradle connected to external power, the cradle's Status LED is illuminated.

Batteries

Note: On first use the MX5 batteries should be charged with an external power source (i.e. AC Adapter) – 3 hours for the Main Battery and 7 hours for the Backup Battery. New Main Battery packs alone must be charged prior to first use -- this process takes up to four hours in an LXE Multi-Charger.

The MX5 computer is designed to work with a Lithium-Ion (Li-ion) battery from LXE. Under normal conditions it should last approximately eight to ten hours before requiring a recharge. The more you use the scanner or the RF transmitter, the shorter the time required between battery recharges. The MX5 keeps date and time valid for a minimum of four days using a fully charged Backup Battery and a Main Battery that has reached the Low Warning point.

Main Battery

The main battery has a rugged plastic enclosure that is designed to withstand the ordinary rigors of an industrial environment. Exercise care when transporting the battery making sure it does not come in contact with excessive heat or any power source other than an LXE Multi-charger or MX5 unit.

The fasteners are connected to the Main Battery pack and remain with the Battery Pack through its life cycle. Contact your LXE representative if the fasteners must be replaced for any reason.

Backup Battery

The internal Nickel Metal Hydride (NiMH) coin cell backup battery provides power to the unit for up to 24 hours when the main battery has been depleted,

removed or has failed. The backup battery requires no user intervention. Replacement is performed by LXE. LXE recommends an MX5 in storage have a charged main battery pack installed.

Note: This mobile device's backup battery maintains its charge by drawing power from the main battery pack. Always store unused devices with a fully charged main battery pack installed. LXE recommends an in-use mobile device be frequently connected to an external power source to retain optimum power levels in the main battery pack and the backup battery. When the backup battery and main battery pack are dead, the mobile device reverts to setup defaults when a fully charged main battery pack is installed and the device is powered On again.

Battery Hot-Swapping

Replace the main battery pack after first pressing the power key and placing the MX5 in Suspend Mode. LXE recommends any work in progress be saved prior to replacing the main battery pack.

Simply replace the discharged main battery with a fully-charged main battery. The backup battery will retain data during a main battery hot-swap.

Place the battery in the battery well, making sure the tabs on the bottom of the battery pack fit into the slots at the bottom end of the battery well. Push the battery down into the battery well while fastening the screws. Fasten the screws tight enough to allow the rubber gasket to create a watertight seal. If the screws do not easily twist into the threaded opening, remove the battery and repeat the process.

Checking Battery Status

Tap the Windows icon | **Settings** | **System** | **Handheld** | **Power** tab. Battery level, status and charge remaining is displayed.

Tap the Windows icon | **Settings** | **System** | **Handheld** | **Battery Info** tab to view technical information and number of charge cycles for the Main Battery.

Main Battery Charging Left GREEN LED slow flashing.

Main Battery Low Low Battery Icon appears on the "Today" page.

Main Battery Fully Charged Left GREEN LED stops flashing; is solid ON.

Charge / battery fault Left GREEN LED has quick double flashes.

Backup Battery Dialog appears on the screen to alert

Critically Low the user.

Battery Chargers

Charge Battery in LXE Multi-Charger

The main battery can be charged in the LXE Multi-Charger. The Multi-charger must **not** be used in Hazardous Locations.

Insert the main battery into any charging cup in the Multi-Charger. The narrow end goes into the charging cup first. The retaining clip snaps the battery into place in the charging cup. Remove the battery pack by pulling the battery straight up and out.

Do not "slam" or drop the battery into the charging cup. Failure to follow these instructions can result in damage to the main battery or the Multi-Charger.

Note: The main battery can also be charged in the secondary battery charging pocket in the Desktop cradles. An MX5 does not need to be in the cradle at the time the secondary charging pocket is being used.

LXE Multi-Charger (Optional)

The main battery pack can be charged in the LXE Multi-Charger. Please refer to the "MX5 Multi-Charger Operator's Guide" for instruction.

The multi-charger requires an external power source before battery pack charging can commence. The external Power Supply connection for the Multi-charger is shipped with the multi-charger.

The LXE Multi-Charger is not approved for use in a Hazardous Location.

Cradles

Note: The "MX5 Cradle Reference Guide" contains cradle installation and technical information.

Important: **The cradles are not designed to secure an MX5 with protective padded case. The vehicle cradle is not designed to secure an MX5 with a trigger handle. The desktop cradles will secure MX5's with handstraps or trigger handles.**

MX5 docking cradles give the MX5 the ability to communicate with a host computer and other devices. In addition, using wall AC adapters or DC/DC

converters, the cradle charges the Main Battery. The MX5 can be either on or in suspend mode while in the cradles.

LXE offers three desktop cradles and one vehicle cradle:

<p>Standard Desktop Cradle requires AC power before main battery charging can commence. This cradle does not have an active LED on the front housing. MX5A002DESKCRADLE</p>
<p>Enhanced Desktop Cradle requires AC power before main battery charging can commence. It will charge both the main battery in the MX5 and another MX5 Battery Pack at the same time. MX5A003EDESKCRADLE</p>
<p>Enhanced Desktop Cradle with Ethernet Port requires AC power before main battery charging and host/client communications can commence. It will charge both the main battery in the MX5 CE. NET device and another main battery pack at the same time. MX5A004ETHDESKCRADLE</p>
<p>Vehicle Mount Cradle requires AC/DC power before main battery charging can commence. MX5A001VMCRADLE</p>

*Note: LXE offers a device similar in appearance to the MX5 Pocket PC device – the LXE MX5 CE. NET device. All MX5 cradles can be used by the MX5s. The Enhanced Desktop Cradle with Ethernet Port, **developed specifically for the MX5 CE. NET device**, cannot be used by the MX5 PC 2002.*

Cradle COM port and power cables are available from LXE. The RS-232 connector is located on the back of the cradle. When the MX5 is properly docked, the COM 1 RS-232 interface connects with the DA9 RS-232 port in the cup at the front of the cradle. The cup at the back of the desktop cradles accept a single Battery Pack for charging.

The Ethernet port is located at the back of the Enhanced Desktop Cradle with Ethernet Port.

MX5 cradles are not approved for use in Hazardous Locations.

Getting Help

All LXE manuals are now available on one CD and they can also be viewed/downloaded from the LXE website. Contact your LXE representative to obtain the LXE Manuals CD.

You can also get help from LXE by calling the telephone numbers listed on the LXE Manuals CD, in the file titled "Contacting LXE". This information is also available on the LXE website www.lxe.com.

Explanations of terms and acronyms used in this manual are located in the file titled "LXE Technical Glossary" on the LXE Manuals CD.

Accessories

Holding Accessories

Strap, Hand, Nylon - MX5A401HANDSTRAP
Handle, w/wrist strap - MX5A406HANDLE
Case and strap, nonhandle MX5 - MX5A402CASE1
Case and strap, handle MX5 - MX5A403CASE2
Holster, nonhandle MX5 - MX5A404HOLSTER1
Holster, handle MX5 - MX5A405HOLSTER2
Holster, MX5 w/Handle - 9000A407HOLSTERHAND
Belt, Use with Holsters - 9200L67
Belt, Heater Battery, MX5 - MX5A382HTRBATTBELT
Charger, Heater Battery Belt, MX5 - MX5A383BATTBELTCHGR
Cable, Heater Battery Belt to MX5, 12" US only - MX5A053CBLBATTBELT
Cable, Heater Battery Belt to MX5, 1.5M Non-US - MX5A054CBLBATTBELTWW

Miscellaneous

Stylus, Tethered - 9000A507STYLUS
Stylus, 6 Pack Replacement, MX5 - MX5A501STYLUS
Software, CE. NET 4.2 SDK, MX5 CE - MX5XA505CENET42SDK
Headset with microphone - MX5A502HEADSET

Battery Chargers and Battery

6 Unit Charger with US Power Cable - MX5A385CHGR6US
6 Unit Charger without US Power Cable - MX5A385CHGR6WW
Tool, Battery Removal 5 Pack, MX5 - 9000A508BATTERYTOOL
Battery, LiIon - MX5A379BATT

Cradles and Power Supplies

Vehicle Mount Cradle (Power Adapter Required) - MX5A001VMCRADLE
Standard Desktop Cradle - MX5A002DESKCRADLE
Enhanced Desktop Cradle, MX5 - MX5A003EDESKCRADLE
Enhanced Desktop Cradle, Ethernet, MX5 CE - MX5A004ETHDESKCRADLE
Power Supply, AC/DC with US Power Cable - MX5A305PSACUS
Power Supply AC/DC without Power Cable - MX5A305PSACWW
Power Supply, 12V, Bare Wire Input, MX5 Output - MX5A306PS12V
Power Supply, 12V Auto to VM Cradle - MX5A380PSAUTO12VUS

Power Supply, 12V Auto to VM Cradle (EU) - MX5A381PSAUTO12VWW

Power Supply, 24V - 72V, Bare Wire Input, MX5 Output - 9000A316PS24V72VMX5

Cables for Cradle and MX5/MX5 Serial Ports

Cable, MX5 to PC RS-232, D26 to DA9F - MX5A051CBLD26DA9F

Cable, MX5 to PC USB, D26 to USB - MX5A052CBLD26USB

Cable, MX5 D26 to Ethernet RJ45, MX5 CE - MX5A057CBLETHD26RJ45

Cable, MX5 D26 to USB Host Receptacle, MX5 CE - MX5A058CBLD26USBHOST

Tethered Scanners (requires 3" D26 to DA9M cable)

Cable, MX5 for Powerscan, 3", D26 to DA9M - MX5A055CBL3IND26D9M

Scanner, Powerscan, SR, 8' Cbl - 8300A326SCNRPWRSR8DA9F

Scanner, Powerscan, SR, 12' Cbl - 8300A327SCNRPWRSR12DA9F

Scanner, Powerscan, LR, 8' Cbl - 8310A326SCNRPWRLR8DA9F

Scanner, Powerscan, LR, 12' Cbl - 8310A327SCNRPWRLR12DA9F

Scanner, Powerscan, XLR, 8' Cbl - 8320A326SCNRPWRXLR8DA9F

Scanner, Powerscan, XLR, 12' Cbl - 8320A327SCNRPWRXLR12DA9F

Appendix A Key Maps

Keypad

Remember :

The Orange (on the left) and Blue (on the right) keys are "2nd function" keys. Ctrl, Alt, Shft, Blue and Orange keys are "sticky keys". They do not need to be held down before pressing the next (or desired) key. It is valid to use combined modifiers on specific keys.

Note: This key mapping is used on hand held computers that are NOT running an LXE Terminal Emulator.

When using a sequence of keys that includes the Orange or Blue keys, press the color key first then the rest of the key sequence.

Alphabetic keys default to lower case letters. Press the Shft key, then the alphabetic key for an uppercase letter.

Note: When the computer boots, the default condition of Caps (or CapsLock) is Off. The Caps (or CapsLock) condition can be toggled with Blue plus Tab key sequence.

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
Power / Suspend				Power
Volume Adjust	Blue			V
Backlight Toggle for Display and Keypad	Blue			Right Scan Key
Adjust Backlight Brightness Down *		Orange		7

* Backlight must be toggled On. Once the backlight is off, the Blue key / Right Scan key sequence toggles the backlight on and at it's brightest intensity.

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
Blue Mode				Blue

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
Orange Mode				Orange
Shift				Shft
Alt				Alt
Ctrl				Ctrl
Scan				Left Scan Key or Right Scan Key*

* Both Scan keys are programmable. Before using as a Scan key, make sure key has been programmed to Scan. See section titled "Programmable Buttons."

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
Esc	Blue			Alt
Space				Spc
Enter				Enter
CapsLock (Toggle)	Blue			Tab
Back Space		Orange		Spc
Tab				Tab
BackTab		Orange		Tab
Break	Blue			B
Pause	Blue			P
Print Screen	Blue			R
Scroll Lock	Blue			S
Up Arrow				Up Arrow
Down Arrow				Down Arrow
Right Arrow				Right Arrow
Left Arrow				Left Arrow
Insert	Blue			I
Delete		Orange		DOT
Home		Orange		Left Arrow
End		Orange		Right Arrow
Page Up		Orange		Up Arrow
Page Down		Orange		Down Arrow
F1		Orange		1
F2		Orange		2

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
F3		Orange		3
F4		Orange		4
F5		Orange		5
F6		Orange		6
F7		Orange		7
F8		Orange		8
F9		Orange		9
F10		Orange		0
F11	Blue			1
F12	Blue			2
F13	Blue			3
F14	Blue			4
F15	Blue			5
F16	Blue			6
F17	Blue			7
F18	Blue			8
F19	Blue			9
F20	Blue			0
F21		Orange	Shft	1
F22		Orange	Shft	2
F23		Orange	Shft	3
F24		Orange	Shft	4
a				A
b				B
c				C
d				D
e				E
f				F
g				G
h				H
i				I
j				J
k				K
l				L
m				M
n				N
o				O

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
p				P
q				Q
r				R
s				S
t				T
u				U
v				V
w				W
x				X
y				Y
z				Z
A			Shft	A
B			Shft	B
C			Shft	C
D			Shft	D
E			Shft	E
F			Shft	F
G			Shft	G
H			Shft	H
I			Shft	I
J			Shft	J
K			Shft	K
L			Shft	L
M			Shft	M
N			Shft	N
O			Shft	O
P			Shft	P
Q			Shft	Q
R			Shft	R
S			Shft	S
T			Shft	T
U			Shft	U
V			Shft	V
W			Shft	W
X			Shft	X
Y			Shft	Y
Z			Shft	Z

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
1				1
2				2
3				3
4				4
5				5
6				6
7				7
8				8
9				9
0				0
. (DOT)				DOT
<	Blue			G
[Blue			Y
]	Blue			Z
>	Blue			H
=	Blue			T
{	Blue			W
}	Blue			X
/	Blue			J
-	Blue			Spc
+	Blue			DOT
*		Orange		I
: (colon)		Orange		D
; (semicolon)		Orange		F
. (period)		Orange		K
?		Orange		L
`		Orange		N
_ (underscore)		Orange		M
, (comma)		Orange		J
` (apostrophe)		Orange		H
~ (tilde)		Orange		B
\		Orange		S
		Orange		A
"		Orange		G
!		Orange		Q
@		Orange		W
#		Orange		E

To Get This Key / Function	Press These Keys and Then ...			Press This Key
	Blue	Orange	Shft	
\$		Orange		R
%		Orange		T
^		Orange		Y
&		Orange		U
(Orange		O
)		Orange		P

Appendix B Regulatory Notices and Safety Information

FCC Information:

Note: 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 operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications to this device not expressly approved by LXE, Inc., could void the user's authority to operate this equipment.

EMC Directive Requirements:

This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Industry Canada:

This Class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada. Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux

appareils numeriques de le Class B préscrites dans le Reglement sur le brouillage radioélectrique édits par le ministere des Communications du Canada.

RF Safety Notice

Caution



This device is intended to transmit RF energy. In accordance with FCC and Industry Canada radio-frequency safety regulations, when operating this device with the Hip-Flip accessory, it should be used in accordance with the user's instructions. Additionally, the user should take care to ensure that a minimum separation distance of 15cm (6 in.) is maintained from the antenna to nearby persons. Use of this device in a manner not consistent with these instructions can increase the risk of RF exposure. This device is not to be co-located with other transmitters.

Notice:

The long term characteristics or the possible physiological effects of radio frequency electromagnetic fields have not been investigated by UL.

Li-Ion Battery

When disposing of the MX5 Main Battery, the following precautions should be observed: The battery should be disposed of promptly. The battery should not be disassembled or crushed. The battery should not be heated above 212°F (100°C) or incinerated.

R&TTE Directive Requirements (Applies only to equipment operated within the EU/EFTA)



Information to User

A label on the exterior of the device should resemble one of the labels shown below (the label contains the LXE part number of the installed radio card). The labels shown below and affixed to the device, identify where the device may be used and where its use is restricted. Use of a device is prohibited in countries not listed below or otherwise identified by the label. (May or may not include the 0560 Notified Body No.)



*Permitted for use in: Austria,
Belgium, Denmark, Finland,
Germany, Greece, Hungary,
Iceland, Italy, Ireland,
Liechtenstein, Luxembourg,
Netherlands, Norway, Portugal,
Spain, Sweden, Switzerland, and
the United Kingdom*

*Permitted for use in
France.*

MX5 Computer Approvals:

EMI / EMC Standards	Safety Standards
FCC Part 15 Subpart B, Class B EN 55022:1998, (CISPR 22:1997) Class B EN 55024:1998 Industry Canada Class B	UL 60950; CSA C22.2 No. 60950 CDRH: 21 CFR 1040.10 and 1040.11 EN 60950 IEC 60825-1 IEC 60950

Transceiver

Transceiver	RF Standards	Notes
480824-3300 (LXE Part No.) LXE 6400 System 2.4GHz Type II PCMCIA Card	FCC Part 15, Subpart C FCC Part 2 ETS 300 328 ETS 300 826 IC-RSS 210 IC-RSS 102	Unlicensed Operation Unlicensed Operation Requires License for Outdoor Use
480628-4096 (LXE Part No.) LXE 6500 System 2.4GHz Type II PCMCIA Card	FCC Part 15, Subpart C FCC Part 2 ETS 300 328 ETS 300 826 IC-RSS 139 IC-RSS 102	Unlicensed Operation Unlicensed Operation Requires License for Outdoor Use

Transceiver	RF Standards	Notes
6726 (LXE Model No.)	FCC Part 15, Subpart C FCC Part 2 EN 300 328 EN 300 826 IC-RSS 139 IC-RSS 102	Unlicensed Operation Unlicensed Operation Requires License for Outdoor Use
6816 (LXE Model No.) 2.4GHz Type II PCMCIA Card	FCC Part 15, Subpart C FCC Part 2 EN 300 328 EN 300 826 IC-RSS 139 IC-RSS 102	Unlicensed Operation Unlicensed Operation Requires License for Outdoor Use

Note: *Declarations of Conformity for the PCMCIA Radio Transceivers and MX5 equipment (noted in these tables) are available for online viewing and printing in the MX5 User's Guide on the LXE Manuals CD and on the LXE Website (www.lxe.com / ServicePass)*



Important: This symbol is placed on the product to remind users to dispose of Waste Electrical and Electronic Equipment (WEEE) appropriately, per Directive 2002-96-EC. In most areas, this product can be recycled, reclaimed and re-used when properly discarded. Do not discard labeled units with trash. For information about proper disposal, contact LXE through your local sales representative, or visit www.lxe.com.

A/C Power Supply Safety Statement – MX5 Output Rated 12 VDC, 3.75 A.

Optional A/C Power Supply:

Outside North America, this unit is intended for use with an IEC certified ITE power supply with output rated as stated at the top of this page. (US)

Laser Light Safety Statement

Warning:

This product uses laser light. One of the following labels is provided on the scanner. Please read the Caution statement. (US)

