# **MX6** User's Guide





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LANGUAGE: ENGLISH

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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.

Initial Release Dec 2003

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### Introduction

### **Overview**

The MX6 is a lightweight hand-held computer that uses Microsoft® Windows® for Pocket PC 2002 software and a powerful, battery-saving Xscale™ processor. The MX6 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 MX6 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 MX6 is powered by a 2000 mAh Lithium-Ion main battery pack and an internal backup battery. A stylus is attached to the MX6 to assist in entering data and configuring the unit.

The MX6 with a 35-key keypad is slightly different from the MX6 with a 56-key keypad creating differences in keymapping. Portions of this guide will be split between the the 35-key device and the 56-key device. Sections that do not differentiate between one or the other contain instructions or information that is applicable to both devices.

### **Important Battery Information**

- Until the Main Battery and Backup Battery are completely depleted, the MX6 is always drawing power from the batteries (On).
- New batteries must be fully charged prior to use.
- When a new battery is installed in the MX6 for the first time (or when the Backup battery is completely depleted), the Time and Date must be re-set.

#### **Li-Ion Battery**

When disposing of the MX6 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 "MX6 Reference Guide" contains MX6 technical information and advanced functions. Please refer to the reference guide when preparing to dock the MX6 or communicate with the host.

Please refer to the "MX6 Dock Reference Guide" when using the MX6 with a desktop or vehicle mounted docking cradle.

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2 Overview

### **Document Conventions**

ALL CAPS	All caps are used to represent disk directories, file names, and application names.
Start   Programs	Rather than use the phrase "tap the Start icon then select Programs", this guide uses the convention "tap Start   Programs".
"Quotes"	Indicates the title of a book, chapter or a section within a chapter (for example, "Document Conventions").
	Indicates a reference to other documentation.
ATTENTION	Keyword that indicates vital or pivotal information to follow.
$\wedge$	Attention symbol that indicates vital or pivotal information to follow. Also, when marked on product, means to refer to the user's guide.
	International fuse replacement symbol. When marked on the product, the label includes fuse ratings in volts (v) and amperes (a) for the product.
Note:	Keyword that indicates immediately relevant information.
CAUTION	Keyword that indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
WARNING	Keyword that indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
DANGER	Keyword that indicates a imminent hazardous situation which, if not avoided, will result in death or serious injury.

## **MX6 Environmental Specifications**

Operating Temperature	14°F to 122°F (10°C to 50°C) [non-condensing]
Storage Temperature	-22°F to 176°F (-40°C to 80°C) [non-condensing]
Rating	IP64
Operating Humidity	5% to 95% non-condensing
Shock	Multiple 5 ft (1.2cm) drops to concrete

### **Quick Start**

This section's instructions are based on the assumption that your new MX6 is pre-configured and the trigger handle or handstrap (optional) are installed.

#### In General

**First** – charge the Main Battery pack and the internal backup battery completely. A main battery pack charge takes *four hours* and the backup battery charges takes *8 hours (new batteries only)*.

The main battery can be charged in one of three ways –

- either while in the MX6 in a powered docking cradle, or
- with the main battery in a powered MX6 battery charger, or
- in-unit battery charging using the Communications cable with power supply.

The sequence of events for a new MX6 is:

- 1. Insert a fully charged battery. (Always put a fully charged battery in the MX6 at the beginning of the shift or work day.)
- 2. Turn the MX6 on by pressing the Power key.
- 3. Align (calibrate) the touchscreen.
- 4. Complete the simple exercise showing how to use the stylus and pop-up menus.
- 5. Set the time zone for your location. Please wait while programs install.
- 6. When the Today screen is displayed, tap the Clock icon and set the correct date and time.
- 7. Set the wireless radio parameters, if necessary. Refer to the MX6 Reference Guide.
- 8. Edit the terminal emulation parameters, if necessary. Refer to the RFTerm Reference Guide.
- 9. Tap **Start | HHP Utils | RegBackup** to permanently save your settings.

If you remove the battery or the battery fails, there is a 30 minute window in which to insert a charged main battery before the backup battery fails and the contents of the Flash memory are lost.

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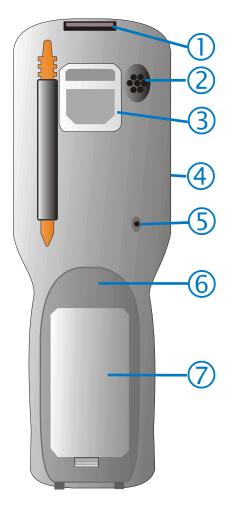
### **Components**



- 1. Scan LED
- 2. Decode LED
- 3. Touchscreen Display
- 4. Power key
- 5. Scan key
- 6. Cursor keys
- 7. Backlight Toggle key on the 56-key keypad

Figure 1 Front of MX6

Components 5



- 1. Image Aperture
- 2. Speaker
- 3. Handstrap Connector
- 4. Stylus (No Trigger Handle)
- 5. Microphone
- 6. Battery Well
- 7. Battery

Figure 2 Back of MX6

6 Components

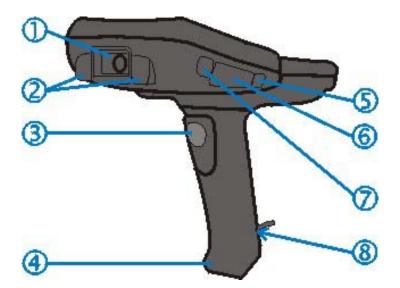


Figure 3 Trigger Handle Installed

- 1. Scan Aperture
- 2. Rubber Nose Bumpers
- 3. Scan Trigger
- 4. Rubber Bumper
- 5. Headphone Jack
- 6. Secure Digital Access Door
- 7. IrDA Port
- 8. Stylus and Tether (storage inside base of handle)



Figure 4 RS-232/USB Communications and Charging Port

### **Insert Fully Charged Battery**

Note: The unit will not function unless the battery compartment cover is in place and securely latched. Be sure to place the unit in suspend before removing the battery. If you don't, you may lose all unsaved data.

The main battery is located in a compartment on the back of the unit. To insert or replace the battery, complete the following steps:

- 1. Turn the MX6 off.
- 2. Detach the bottom hook of the elastic handstrap (if installed).
- 3. Press the battery locking tab up to release the Main Battery pack. The battery case serves as the back cover for the battery well for the MX6.
- 4. Pull the battery up and out of the battery well with a hinge motion. Place the discharged battery pack in a powered charging cradle or charger.
- 5. Tilt the end (without the latch) of the fully charged battery pack into the upper end of the battery compartment, and firmly press the other end (with the latch) until it is fully inserted into the battery compartment.
- 6. Push down on the battery pack until it clicks into place.
- 7. Replace the handstrap hook in its holder.

Note: The battery should not be replaced in a dirty or harsh environment. When the battery is out of the MX6, any dust or moisture that enters the battery compartment can get into the main unit, potentially causing damage.

### **Low Battery Condition**

When the Main Battery is low, a dialog box pops up and alerts the user to charge the battery. The user may close the window, but the dialog box will continue to pop up before the battery reaches the Battery Dead/Off condition.





Icons are visible in the taskbar indicating battery strength.

When the battery reaches the Battery Dead condition, the battery sensor initiates a shutdown of all applications and closes the RF network connection. When the battery is replaced with a fully charged battery, the MX6 will resume as before.

8 Power Key

### **Power Key**



The Power key is located in the top left corner of the keypad. Press the Power key to turn the MX6 on, place it into Suspend or to wake it from Suspend modes.

You can also use the Scan key (or trigger if installed) to wake the MX6 from Suspend.

#### **Reset or Reboot**

#### **CAUTION**

LXE recommends that you always attempt a Warm reset before initiating a Cold reset. Once you initiate a hard reset, all applications are forcibly closed and working RAM and files are cleared. It is a good idea to store important data in the MX6's Flash memory for this reason.

#### **Soft Reset**

A warm (soft) reset closes all applications, clears the working RAM, and preserves the file system.

To initialize a soft reset press and hold the Control CTRL and Shift SFT keys for approximately 10 seconds.

Release the keys and the MX6 resets. The red and green LEDs blink for approximately three seconds.

#### **After a Warm Reset**

The Today screen appears. The custom settings in the registry are persistent. An installed RF Network PC Card connects to the network system.

#### **Hard Reset**

A hard reset is a complete reset in which all applications are forcibly closed and working RAM and files are cleared.

To perform a hard reset, press and hold the Control CTRL key and the Escape ESC key for approximately 10 seconds.

Note: The Start Menu will repeatedly appear and disappear and the keys will click repeatedly. This is intended to alert the user that a drastic action is about to occur.

Release the key and the MX6 resets. The red and green LEDs blink for approximately three seconds.

When the MX6 power key is pressed, to turn the unit on, it will need to be configured once again. See the section titled "Quick Start".

Caution: A hard reset erases all the data stored in RAM memory and all RAM installed applications.

See the section titled "The IPSM Folder" for a list of files that are saved over a hard reset.

Using the Stylus 9

### **Using the 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. Use only the supplied stylus or plastic-tipped pens intended for use with a touchscreen display.

The stylus is located on the back of an MX6 without a handle, and in the back of the handle of an MX6 with a handle. A tether is connected to the stylus in the handle.

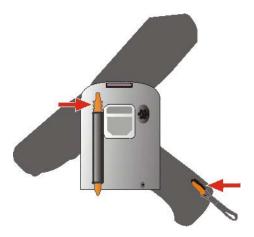


Figure 5 Stylus Storage Locations

Pull the stylus straight out of the Stylus holder and 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. Slide the stylus into the stylus holder on the MX6 when the stylus is not in use.

Like using a mouse to left-click icons on a desktop computer screen, using the stylus to tap icons on the MX6 display is the basic action that can:

- Open applications
- Choose menu commands
- Select characters in the Soft Input Panel
- 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 imager 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.

### **General Windows Keyboard Shortcuts**

Use the keyboard shortcuts in the chart below to navigate the 35 and 56-key keypads. These are standard keyboard shortcuts for WIndows applications.

Press these keys	То
CTRL + C	Сору
CTRL + X	Cut
CTRL + V	Paste
CTRL + Z	Undo
DELETE	Delete
SHIFT with any of the arrow keys	Select more than one item in a window or on the desktop, or select text within a document.
CTRL+A	Select all.
ALT+ESC	Cycle through items in the order they were opened.
CTRL+ESC 1	Display the Start menu.
ALT+Underlined letter in a menu name	Display the corresponding menu.
Underlined letter in a command name on an open menu	Carry out the corresponding command.
ESC	Cancel the current task.

<sup>&</sup>lt;sup>1</sup> Holding this key sequence (CTRL+ESC) down longer than needed to display the Start menu will cause a Hard Reset.

Align the Touchscreen 11

### **Align the Touchscreen**

Access: Start | Settings | System tab | Screen | Align Screen

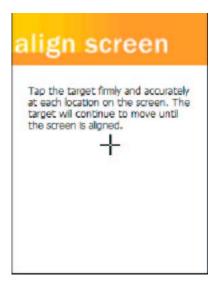


Figure 6 Align the Touchscreen

To start, tap the target (+) with the stylus.

Follow the instructions on the screen. Carefully press and briefly hold the stylus on the center of the target (+) as the target moves around the screen.

When alignment is complete, press the Enter key (or tap the OK icon) to save the new alignment settings. You can also press the Esc key sequence to cancel or quit.

### **Cleaning the Touch Screen and Scan Aperture**

Keep fingers and rough or sharp objects away from the scan aperture and display. If the glass becomes soiled or smudged, clean only with a standard household cleaner such as Windex® 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.

12 Set the Date and Time

#### Set the Date and Time

Access: Start | Settings | Systems tab | Clock

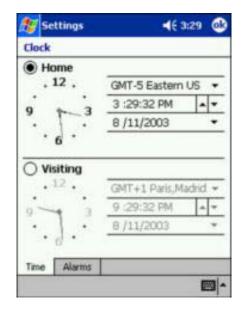


Figure 7 Set the Date and Time

- 1. Select your correct time zone from the pull-down list.
- 2. To change the *time*, select the hour, minute, seconds, or AM/PM and select the up arrow to increase the value; select/tap the down arrow to decrease the value. Or you can type a new time value in the field.
- 3. To change the *month*, tap the month to open a calendar. Tap the month again and choose from the drop down list. Or select the left and right arrows to select the month and year. Or you can type a new month value in the field.
- 4. To change the *year*, tap the year to open a calendar. Tap the year again and select the up arrow to increase the value; select/tap the down arrow to decrease the value. Or select the left and right arrows to select the month and year. Or you can type a new year value in the field.
  - Select OK and select Yes to save your changes or select No to exit without saving your changes and exit Clock.
  - Select Cancel to return to Clock Properties.

### **Setting Display Backlight Action**

#### Access: Start | Settings | System | Backlight tab

The parameter settings in **Start | Settings | System | Backlight** tab establish when the display backlight is turned on and off. The Keypad Backlight key (located at the lower right of the 35-key keypad and below the Power key on the 56 key keypad) has no effect on display backlight settings. The display backlight settings have no effect on the keypad Backlight setting.

Exit and save any changes by tapping OK on the command bar, or pressing Enter on the keypad.

When the MX6 is not in the Suspend state, and the display backlight is off, the display backlight is toggled on when any key, including the keypad backlight key, is tapped (if "Turn on backlight when a button is pressed or the screen is tapped" is checked).

If the MX6 is in Suspend, pressing the keypad backlight key has no effect – the MX6 remains in the Suspend state.

#### Dim Backlight if device is not used for:

When "Dim Backlight if device is not used for:" is checked and a time delay is set, the backlight on the display dims to the minimum value in Backlight Intensity when the timer expires.

- Tapping the screen after the time delay timer expires, undims the screen backlight.
- Tapping any key after the time delay timer expires, turns the screen backlight on if "Turn on backlight when a button is pressed or the screen is tapped" is checked.

When unchecked, the display backlight does not dim to the minimum level.

If the unit is in the Suspend state, pressing any key (other than the Power key) or tapping the screen have no effect. Wake the MX6 from Suspend by tapping the Power key, pressing the trigger on the handle or by pressing the Scan button.

#### Turn off backlight if device is not used for:

When "Turn off backlight if device is not used for:" is checked and a time delay is set, the display backlight turns off when the timer expires.

- Tapping the screen after the time delay timer expires, turns the screen backlight on.
- Tapping any key after the time delay timer expires, turns the screen backlight on if "Turn on backlight when a button is pressed or the screen is tapped" is checked...

When unchecked, the display backlight does not turn off.

If the unit is in the Suspend state, pressing any key (other than the Power key) or tapping the screen have no effect. Wake the MX6 from Suspend by tapping the Power key, pressing the trigger on the handle or by pressing the Scan button.

#### Turn on backlight when a button is pressed or the screen is tapped

When this option is unchecked, the MX6 backlight utility ignores key taps and screen taps. If the backlight is allowed to go off, the backlight remains off until the unit returns from the Suspend state. If the backlight is not allowed to go off, the backlight remains on.

Note: Refer to the section titled "Power Modes" later in this guide for information relating to the power states of the MX6.

14 Set the Power Off Timer

### **Backlight Intensity**

You can set a different level for the intensity of the display backlight when the MX6 is running on battery power and a different level to use when the MX6 is running on external power.

Backlight intensity has no effect on the keypad backlight.

### **Set the Power Off Timer**

Note: Refer to the section titled "Power Modes" later in this guide for information relating to the power states of the MX6.

Tap the Start | Settings | System | Power icon.

#### 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. Selections are 1, 2, 3, 4, or 5 minutes.

#### On external power:

Turn off device if not used for

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

The default is 5 minutes. Selections are 1, 2, 5, 10, 15, or 30 minutes.

*Note:* When the Power Off timer expires, the computer enters Suspend Mode.

### **Accessing Files in Flash Memory**

### **The Storage Card**

#### Access: Start | Programs | Storage Card

Select the file with the stylus and double-tap to run the file. Secure Digital (SD) cards are neither installed nor supported by LXE.

### The IPSM Folder

### Access: Start | Programs | File Explorer | My Device | IPSM

Programs and files located in the IPSM folder are saved through a hard reset.

CAB files stored in the AutoInstall folder within the IPSM folder are automatically unpacked following a hard reset.

Backed up registry settings are automatically restored after a hard reset.

To restore default registry settings, delete the RegBackup file in the IPSM folder and perform a hard reset.

### **Connect the Audio Jack (Optional)**

The MX6 audio jack is located on the side of the unit next to the scan aperture and the SDA door (Secure Digital Access). The internal speaker is disabled when the audio jack is connected.



Figure 8 Audio Jack Location

Lift up the protective audio jack cover and insert the barrel end of the connector into the MX6 audio jack and push in firmly.

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

### **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 MX6 has an internal speaker and a jack for an external headset.

The volume is adjusted using **Start | 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. The Volume icon in the system bar can also be used to adjust the system sound volume.

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### **Connect External Power Supply (Optional)**

The MX6 connector is located at the base of the MX6. The Main Battery recharges when the MX6 is connected to an external power source and the "Main Batteries are Charging" icon is displayed in the toolbar.



Figure 9 AC/DC 12V External Power Supply Kit

Push the 17-pin power cable connector into the MX6 serial port. When the connector is seated over the pins, twist the cable fasteners to the right to secure the cable to the MX6. Twist to the left to loosen and remove the cable. Insert the barrel end of the AC/DC Power adapter into the short cable end on the power cord connected to the MX6.

18 Adjust the Handstrap

### **Adjust the Handstrap**



Figure 10 Handstrap

The MX6 has an integrated elastic hand strap that provides a comfortable, secure grip on the unit. It is attached to the MX6 with a clip on the bottom panel. The handstrap should be disconnected from the bottom clip when the Main Battery is to be removed or replaced. The handstrap can be removed from the MX6 if desired.

Prior to adjusting the handstrap, pull down on the handstrap and insert the bottom assembly into the slot at the bottom of the MX6. Insure that both ends of the bottom assembly are secure.

Open the closed loop fastener tabs and adjust the handstrap for a comfortable, secure fit. Press the closed loop fastener ends together.

### Using the MX6

#### **Enter Data**

You can enter data into the MX6 through several different methods. The Scanner aperture provides barcode data entry, the RS232 or the IR port are used to input/output data, and the keypad provides manual entry.

MX6'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 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 Red or Blue keys are pressed when you want to use a  $2^{nd}$  key function. For example, when you press a Blue or Red key (the  $2^{nd}$  key), then press the key that has the desired second-function key. The specific  $2^{nd}$  character is printed above the corresponding key in either Red or Blue.

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

### **Stylus Data Entry**

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, integrated imager and an input/output device connected to the MX6's serial port.

- 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, and the integrated imager.

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20 Enter Data

### The Integrated Imager

Use the MX6 imager to scan, decode, and store information from barcodes. The barcoded data must be "read" into an application or field or the imaged data will be lost.

Do not pour, spray, or spill any liquid on the imager. The Integrated Imager contains the circuitry, scanning motor and imager. Handle with appropriate care.

Read all cautions, warnings and labels before using the imager.

### **Preparation**

Note: If you are **NOT** using LXE's RFTerm application to manage barcode scanning, select **Start | Programs | HHP Utils | ScanWedge** before scanning a barcode.

When the barcode reader program is active, an icon resembling a barcode is located in the Toolbar

#### **Using the Imager**



Figure 11 Scan and Decode LEDs

To use the imager, aim the top of the MX6 at a barcode and press the Scan key or press the trigger on the handle. The imager scans as long as the key or the trigger is held down before the 10 second timeout occurs.

- Scan LED is on the right. When illuminated red, the MX6 is scanning a barcode.
- Decode LED is on the left When illuminated green, the MX6 scan algorithm accepts the barcode as a "good scan".

The imager turns off automatically when a barcode is read successfully.

#### **Distance from Label**

Large barcodes can be scanned at the maximum distance. Hold the imager closer to small barcodes (or with bars that are very close together).

#### Successful Scan

When the scan is successful, the Scan LED turns green, then switches off, and the currently running application may produce a distinctive audible tone.

Enter Data 21

#### **Unsuccessful Scan**

When the scan is unsuccessful, the Scan LED remains red until the 10 second timeout occurs or the Scan key/trigger is released. The currently running application may produce distinctive audible tones. Check the following:

- Check the barcode for marks or physical damage e.g. ripped label, missing section, etc.
- Try scanning test symbols of the same code type at different distances and angles.
- Is the imager aperture unscratched and unsoiled?

### **Aiming the Barcode Imager**

Aim the imager away from you, direct it at the barcode and press the trigger or button (as applicable) to scan. The Scan LED (scan indicators are located above the display) turns red to indicate the imager is on.

Adjust the aim so that the green aiming beam is centered on the barcode.

The scan beam emitted from the imager must cover every bar and space on the barcode.

When scanning a 2D Matrix barcode, the scan beam must cover the entire barcode.

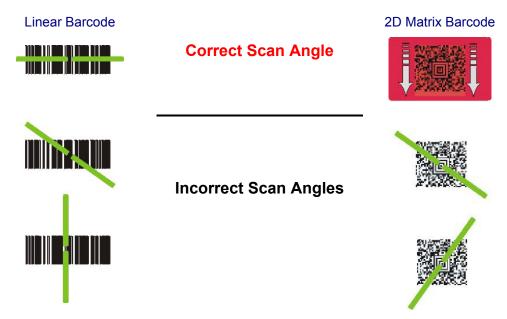


Figure 12 Scan Beam

Make sure the barcode is within the scanning range.

The range of a imager is dependent upon many outside influences including size of the barcode, quality of the barcode printing, material the barcode is printed on, and angle of the imager beam relative to the barcode label. Any of these factors may result in having to re-scan the label from a different distance or angle.

E-EQ-MX6OGWW-A

### **Touch Screen Display**



Figure 13 Tapping with the Stylus

The MX6 Touch Screen Display is a color TFT VGA display with a user programmable backlight.

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.

### **System Tray Icons**

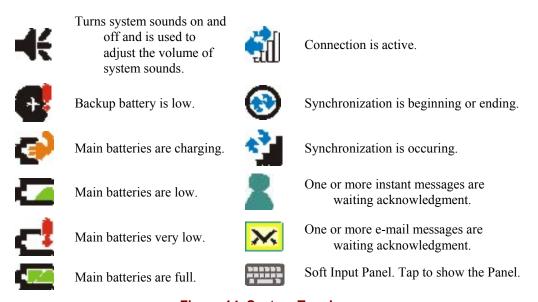


Figure 14 System Tray Icons

Soft Input Panel 23

### **Soft Input Panel**

The Soft Input Panel (SIP) is always available by tapping the SIP icon in the system tray when the MX6 is powered On. It is always available with one exception – when the Today screen is displayed.

To show or hide the input panel, tap the Input Panel button (the icon looks like a keyboard and is shown in the System tray). Tap the arrow next to the SIP icon to see the soft input panel Choices menu

When you use the input panel, the word completion program anticipates the word you are typing or writing and displays it above the input panel. When you tap the displayed word, the word is inserted into your text at the insertion point.

To change word suggestion options, such as the number of words suggested at one time, tap **Start** | **Settings** | **Personal** | **Input** | **Word Completion** tab.

Use the input panel to enter information in any program. You can either type on the soft keyboard or write on the touch screen using Letter Recognizer or Block Recognizer. In either case, the characters appear as typed text on the screen.

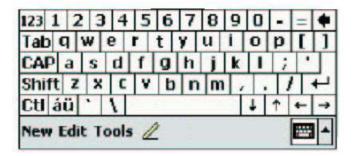


Figure 15 Soft Input Panel

- 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 CAP key to type all capital letters.
- Tap the au key to access symbols.

24 Soft Input Panel

### **Entering Text**

Use the input panel to enter information in any program. You can either type on the soft keyboard or write on the touch screen using Letter Recognizer or Block Recognizer. In either case, the characters appear as typed text on the screen.

To show or hide the input panel, tap the Input Panel button (the icon looks like a keyboard and is shown in the System tray). Tap the arrow next to the Input Panel button to see the soft input panel Choices menu.

When you use the input panel, the word completion program anticipates the word you are typing or writing and displays it above the input panel.

When you tap the displayed word, it is inserted into your text at the insertion point.

To change word suggestion options, such as the number of words suggested at one time, tap **Start> Settings>Personal >Input> Word Completion** tab.

### **Repeating Keystrokes**

The Soft Input Panel does not support repeating keystrokes. The MX6 keypads allow repeating keystrokes.

#### **International Characters**

Use the Soft Input Panel and the stylus to add International Characters to data entries. Open the Soft Input Panel by tapping the Input Panel icon in the system tray.

Tap the áü key on the Soft Input Panel to enable international characters.

Keypads 25

### **Keypads**

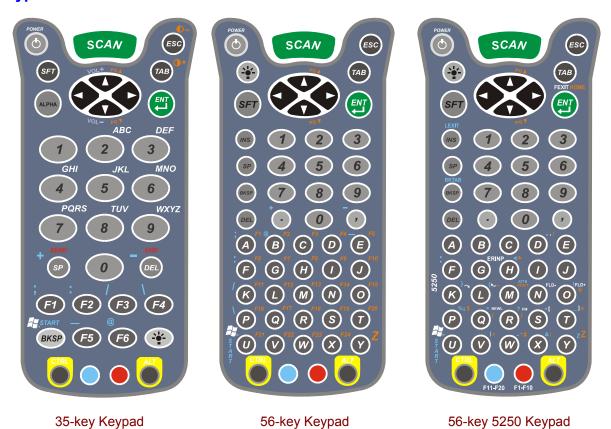


Figure 16 The 35-key and 56-key Keypads

See also: Appendix A "Key Maps".

Keys shown on the 35-key keypad that are inactive:

Contrast Up	<b>①</b> +
Contrast Down	0-
Volume Up	VOL+
Volume Down	VOL-
Send and End	

26 Keypads

### **Special Keys**

### **SCAN Key**

The SCAN key activates the image-taking and/or barcode decoding scan engine. It also "wakes" the MX6 from sleep mode.

### **Power Key**

The Power key puts the MX6 into and wakes the MX6 from suspend mode.

### Shift (SFT)

The Shift key toggles the keypad from upper case alphabet mode to lower case alphabet mode and back. Caps Lock may also be toggled by pressing the red modifier key followed by the Shift key or by double-tapping the Shift key. When Caps Lock is toggled on, the Shift key makes characters upper case; when it is toggled off, the Shift key makes keys lower case.

#### **Enter (ENT)**

The Enter key confirms data entry.

#### Escape (ESC)

The Escape key performs a cancel action.

#### **Tab**

The Tab key moves the cursor to the next tab stop or the next control on a form.

#### **Backlight**



The Keypad Backlight key turns the keypad backlight on and off. The keypad backlight turns off after 5 seconds if there is no keypad or touch screen activity. The Backlight key is located at the lower right of the 35-key keypad. It is located below the Power key on the 56 key keypad. The keypad backlight key is the only keypress used to turn the keypad backlight on and off.

### Alpha Lock (ALPHA)

This key is included only on the 35-key keypad. Alpha defaults to numeric mode. The Alpha key toggles between the numeric and alphabetic modes.

### **Backspace (BKSP)**

The Backspace key moves the cursor back one space for each time the key is pressed. To delete a single character, press Red key + SP. To delete multiple characters, press Red key + SP and hold down the SP key.

#### Delete (DEL)

The Delete key deletes one character for each time the key is pressed.

Keypads 27

### **Arrow Keys**



Press the arrow (or cursor key) to move the cursor or highlighted text entry during a menu/list selection. In Normal mode:

- The Up arrow moves the cursor up one row or line.
  - The Right arrow moves the cursor to the right one character.
  - The Down arrow moves the cursor down one line or row.
  - The Left arrow moves the cursor to the left one character.

### **Modifier Keys**



Figure 17 Modifier Keys

The Ctrl and Alt keys are located on the bottom row of the keypad. Functions of the Ctrl and Alt keys depend on the software application in use.

The blue and red keys (blue is to the left and red is to the right) are used in conjunction with other keys to type the corresponding color-coded characters and functions. The Red and Blue keys modify only the next key pressed; these keys must be pressed and released before each key to be modified to the Blue or Red case.

28 The IR Serial Port

### The IR Serial Port



Figure 18 IR Port Location

The serial port is a half duplex IR (Infrared) port. Through software commands, the port may be set up for IR or a modified RS-232 serial communication.

In general, the IR mode is used when communicating to other IR devices (printers, computers, etc.) and the modified RS-232 mode is used to communicate with the dock for host communications.

In IR mode, all physical communications meet the IrDA physical layer specification. In the modified RS-232 serial mode, the IR port is used to transmit RS-232 level data out the IR port. The third pin along the bottom of the MX6 is used to receive RS-232 level data while in the dock.

When transferring files using the IR port, flow control must be the same on both sides of the transmission (specifically, with Zmodem: both must use Xon/Xoff).

Power Modes 29

#### **Power Modes**

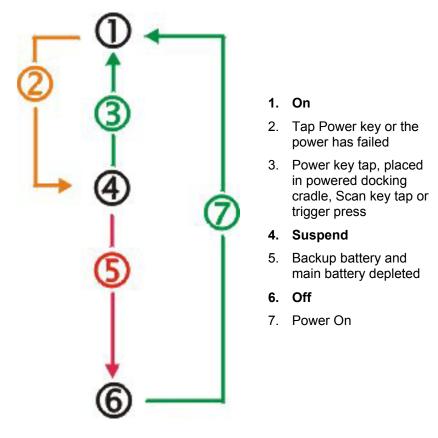


Figure 19 Power Modes - On, Suspend and Off

### **On Mode**

### **The Display**

When the display is On:

- the keyboard, touchscreen and all peripherals function normally
- the display backlight is on until the Backlight timer expires
- when the Main Battery is hot-swapped, the display is turned Off.

#### The MX6

#### **New Unit**

After a new MX6 has been received, a charged Main Battery inserted, and the Power key tapped, the MX6 is always On until both batteries are drained completely of power.

#### **Both Batteries Dead**

When the Main Battery and Backup Battery are drained completely, the unit is in the Off mode. The unit transitions from the Off mode to the On mode when a charged Main Battery is inserted,

30 Power Modes

the MX6 is placed in a powered docking cradle, or external power is applied to the MX6. The unit performs a Hard Reset upon receiving power from a charged Main Battery pack.

#### **Main Battery Hot-swapped**

The MX6 automatically enters Suspend mode when the Main Battery is removed while the backup battery has adequate power to maintain the MX6 operating system. To wake the unit after the Main Battery has been replaced, press the Power key or the Scan key.

### **Suspend Mode**

#### The MX6

The Suspend mode is entered when the unit is inactive for a predetermined period of time or the user taps the Power key. The MX6 does not enter Suspend when it is connected to AC power or when it is connected via ActiveSync unless it has been configured to do so. When connected to ActiveSync, the unit will enter Suspend if the Power key is tapped.

MX6 Suspend timers are set using Start | Settings | System | Power tab.

A Power key tap wakes the unit and resets the display backlight timers.

A touch screen tap or any key tap wakes the unit and resets the display backlight timers.

Placing the MX6 in a powered dock wakes the unit and resets the display backlight timers.

When the unit wakes up, the Display Backlight and the Power Off timers begin the countdown again. When any one of the above events occurs prior to the Power Off timer expiring, the timer starts the countdown again.

### **Off Mode**

The unit is in Off Mode when the Main Battery and the Backup Battery are depleted. Insert a fully charged Main Battery and press the Power key to turn the MX6 On.

Batteries 31

### **Batteries**

When the main battery has lost most of its charge, an icon of an "empty" or "half-empty" battery appears.

The MX6 also may be programmed to emit a beep at intervals when the battery is low. When you see the empty-battery icon or hear the warning beeps, you should turn the unit off and recharge or replace the battery as soon as possible. The backup battery will retain all data in memory for 30 minutes while the main battery is out of the unit.

After you recharge or replace the battery and turn the unit back on, it returns to wherever you were in your application when you turned it off.

## **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 MX6 is always 'on' even when in the Suspend state and draws battery power at all times. Tap **Start** | **Settings** | **System** | **Power** 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 MX6:

100% capacity 2000 mAh minimum 80% capacity 1600 mAh minimum

Deciding when to put a fully charged battery in the MX6 is difficult to quantify because it is very application specific. 1600 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 battery before that point.

## **Main Battery**

The MX6 uses a 2000 mAh Li-Ion battery. The main battery is 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 the LXE MX6 dock. This product is not designed to use alkaline batteries.

# **Backup Battery**

The MX6 has a rechargeable lithium battery installed to maintain time, date and setup information. It is charged off the main battery. The lithium battery is not user serviceable and should last five years with normal use before it requires replacement.

Note: This battery should only be changed by authorized service personnel.

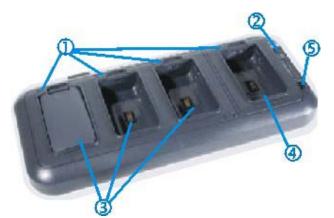


This product contains a lithium battery. There is a danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the battery manufacturer's instructions.

32 Battery Chargers

# **Battery Chargers**

# Four Bay Charger/Analyzer (Optional)



- 1. Status LEDs
- Battery Capacity Indicator LED
- 3. Charging Slots
- 4. Charge/Analyze Slot
- 5. Analyze Button

Figure 20 Multicharger / Analyzer

Use the multicharger to charge battery packs outside of the MX6. A complete single battery charge using the charger takes three (3) hours. As soon as the battery is placed in the slot, charging begins.

The multicharger must be connected to AC power before charging can begin. The Charge/Analyze slot begins charging a battery as soon as it is inserted. Pressing the Analyze button starts the battery analyze cycle on the battery in the Charge/Analyze slot.

The Status LED indicates the charge status of the battery in the slot. Green: has completed charging. Orange: charging. Red: encountered an error (battery pack may be outside temperature range).

Lower the battery pack straight into the battery charger pocket and push it down firmly. Do not "slam" the battery into the charging bay or drop it into the bay. Failure to follow these instructions can result in damage to the main battery or the charger.

# **Charging a Battery Using the Desktop Docking Cradle**

The Desk Mount Cradle has an Auxiliary Battery Well that is used to charge a single Li-Ion battery in the charged desk mount docking cradle. The MX6 unit does not have to be in the main charging well because each charger operates independently of the other. The spare battery will charge in four hours. The cradle senses when a battery pack is fully charged and automatically switches to maintain the battery at full capacity indefinitely.

### **How To Charge a Spare Battery Pack**

- 1. Insert the end of the battery without the locking tab into the bottom of the auxiliary well opening.
- 2. Snap the battery into place with a hinging motion.
- 3. Once the battery is inserted, observe the Aux Battery LED to monitor the charging process.

See the following section titled "Docking Cradles" for further information.

Docking Cradles 33

## **Docking Cradles**

Note: The "MX6 Cradle Reference Guide" contains docking cradle installation and further information.

The docking cradles give the MX6 the ability to communicate with a host computer and other equipment. The MX6 can be either On or in Suspend mode while in the cradles.

Using wall AC adapters the desktop docking cradle transfers power to the internal charging circuitry of the MX6 and, in turn, the MX6 recharges the Main Battery. The desktop docking cradle recharges both the MX6 Main Battery and an Auxiliary Battery at the same time.

The vehicle docking cradle uses a 12V cigarette lighter adapter or a bare wire 12-48V power supply to transfer power to the internal charging circuitry of the MX6 and, in turn, the MX6 recharges the Main Battery. A powered vehicle docking cradle gives the MX6 the ability to communicate with a host computer and other equipment.

A complete battery charge of the Main Battery pack and an extra battery pack using the desktop docking cradle takes less than four hours. The vehicle cradle completely charges the Main Battery in the MX6 is less than four hours.

The cradles require an external power source, before communications or battery charging is available.

When the desktop cradle is receiving external power, and the MX6 is properly seated in the charging bay, the DOCK LED is green.

## **Indicators and LEDs**

### **Powered Desktop Cradle**

Label	Color	Explanation
DOCK	Solid Green	MX6 is properly seated in the charging bay and the Main Battery in the MX6 is charging.
AUX Battery	Orange Green	The spare battery is charging. The spare battery has completed charging and is ready for use.
COMM w/serial port	Red Green Orange	Serial data is being sent to the MX6 from the host. Serial data is being sent from the MX6 to the host. Serial data is being sent at high data rates.
COMM w/USB port	Green	USB connection is established with the host. (using ActiveSync)

34 Docking Cradles

# **Powered Vehicle Cradle**

Label	Color	Explanation
DOCK	Solid Green	MX6 is properly seated in the charging bay and the Main Battery in the MX6 is charging.
COMM w/serial port	Red Green Orange	Serial data is being sent to the MX6 from the host. Serial data is being sent from the MX6 to the host. Serial data is being sent at high data rates.

Getting Help 35

# **Getting Help**

LXE user guides are now available on 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 "Glossary" on the LXE Manuals CD and on the LXE website.

## **User Guides**

The following guides are available on the LXE Manuals CD:

- MX6 Reference Guide
- MX6 Dock Reference Guide
- RFTerm Reference Guide

### **Accessories**

Batteries and Battery Charger/Analyzers	
Main Battery, Lithium Ion	MX6A380BATT
4 Unit Main Battery Charger (US power cord), Includes analyzing capabilities	MX6A383CHGR4US
4 Unit Main Battery Charger (no power cord), Includes analyzing capabilities	MX6A384CHGR4WW
Carrying Cases, Holsters, Hand Straps	
Replacement MX6 Hand Strap	MX6A411HANDSTRP
Holster for MX6 without handle	MX6A409HOLSTER
Holster for MX6 with handle	MX6A410HOLSTERHAND
Case for MX6 without handle, Includes a protective plastic covering over keyboard	MX6A407CASE1
Case for MX6 without handle, No protective plastic covering	MX6A408CASE2
Case for MX6 with handle	MX6A409CASEHANDLE
Wrist Strap/lanyard for MX6 with handle	MX6A412WRISTSTP
Holster belt	9200L67
Vehicle Mount Cradles	
MX6 Vehicle Cradle, For use with a Standard MX6	MX6A007VMCRADLE
MX6 Vehicle Cradle, For use with Handle	MX6A008WHVMCRADLE
12V Vehicle Cradle Power Supply, Cig Lighter Adapter	MX6A382PSVEHMT12V
24-48V Vehicle Cradle Power Supply	MX6A383PSVEHMT24V
Desktop Cradles	
MX6 Single Unit Desktop Cradle, USB/RS232, Includes a single unit battery charging slot, US	MX6A005DESKCRADLEUS
MX6 Single Unit Desktop Cradle, USB/RS232 Includes a single unit battery charging slot, WW (No Power Cable)	MX6A006DESKCRADLEWW
MX6 4-Bay Docking Cradle, US (Power Cord Included)	MX6A012MULTIDOCKUS
MX6 4-Bay Docking Cradle, WW (No Power Cable)	MX6A013MULTIDOCKWW

Getting Help

MX6 4-Bay Comms Docking Cradle, US (Power Cord Included),	MX6A010NETCRADLEUS
Includes Ethernet capabilities	
MX6 4-Bay Comms Docking Cradle, WW (No Power Cable), Includes	MX6A011NETCRADLEWW
Ethernet Capabilities	
USB Cradle to PC Interface Cable, 6ft	MX6A057CBL6USB
RS-232 Cradle to PC Interface Cable, 6ft	MX6A059CBL6RS232
Interface Cables	
MX6 Charge/Comm Interface Cable, RS232	MX6A054CBLD17RS232
MX6 Charge/Comm Interface Cable, USB	MX6A055CBLD17USB
Charge/Comm Cable Power Supply, Includes US Power Cable	MX6A307PSACUS
Charge/Comm Cable Power Supply, No Power Cable Included	MX6A308PSACWW
Miscellaneous Accessories	
Replacement Stylus Kit, 3-pack	MX6A510STYLUS
Replacement Stylus Kit, w/ Tether, 3-Pack, For with MX6 w/ Handle	MX6A511STYLUS
Universal Vehicle Docking Cradle Mounting Bracket – Clamp Style	MX6A015MTGBRCKT
MX6 Desk Top Cradle Replacement Power Supply (No Power Cord)	MX6A310PSACWW
Replacement US Power Cord	MX6A067CBLPWRAC
MX6 Software Development Kit (HHP Branded)	P9500049-01

# **Appendix A Key Maps**

# 35-Key Numeric-Alpha Keypad

Use the soft keypad to enter characters that are not available using the 35-key keypad.

To Get This Key / Function		Press					
	Blue	Red	Ctrl	Alpha	Sft	Caps Lock	Press This Key
Power / Suspend							Power
Windows Start Menu	Х						Bksp
Keypad Backlight Toggle							Backlight
Blue Mode							Blue
Red Mode							Red
Shift							Sft
Alt							Alt
Ctrl							Ctrl
Scan							Scan
Esc							Esc
Space							Space
Enter							Ent
CapsLock (Toggle)		х			х		<i>OR</i> double-tap the Sft key
Back Space							Bksp
Tab							Tab
BackTab							N/A
Break							N/A
Pause							N/A
Up Arrow							Up Arrow
Down Arrow							Down Arrow
Right Arrow							Right Arrow
Left Arrow							Left Arrow
Insert							N/A
Delete							Del

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		Press					
To Get This Key / Function	Blue	Red	Ctrl	Alpha	Sft	Caps Lock	Press This Key
Home							N/A
Page Up		Х					Up Arrow
Page Down		Х					Down Arrow
F1							F1
F2							F2
F3							F3
F4							F4
F5							F5
F6							F6
а				х			2
b				х			2,2
С				х			2,2,2
d				х			3
е				х			3,3
f				х			3,3,3
g				х			4
h				х			4,4
i				х			4,4,4
j				х			5
k				х			5,5
I				х			5,5,5
m				х			6
n				х			6,6
0				х			6,6,6
р				х			7
q				х			7,7
r				х			7,7,7
S				х			7,7,7,7
t				х			8
u				х			8,8
٧				х			8,8,8
W				x			9
Х				х			9,9
у				х			9,9,9

To Get This Key / Function	Blue	Red	Ctrl	Alpha	Sft	Caps Lock	Press This Key
Z				х			9,9,9,9
Α					<b>x</b> 2	х	2
В					х	х	2,2
С					х	х	2,2,2
D					х	х	3
E					х	х	3,3
F					х	х	3,3,3
G					х	х	4
Н					х	х	4,4
I					х	х	4,4,4
J					х	х	5
К					х	х	5,5
L					х	х	5,5,5
M					х	х	6
N					х	х	6,6
0					х	х	6,6,6
Р					х	х	7
Q					х	х	7,7
R					х	х	7,7,7
S					х	х	7,7,7,7
T					х	х	8
U					х	х	8,8
V					х	х	8,8,8
W					х	х	9
Х					х	х	9,9
Υ					х	х	9,9,9
Z					х	х	9,9,9,9
1							1
2							2
3							3
4							4
5							5
6							6

 $<sup>^{2}\;</sup>$  Either press SFT or activate CapsLock when capital letters are needed.

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		Press					
To Get This Key / Function	Blue	Red	Ctrl	Alpha	Sft	Caps Lock	Press This Key
7							7
8							8
9							9
0							0
<							Use Soft Keypad
[							Use Soft Keypad
]							Use Soft Keypad
>							Use Soft Keypad
=							Use Soft Keypad
{							Use Soft Keypad
}							Use Soft Keypad
1	х						F3
-	х						Del
+	Х						Space
: (colon)	Х						F2
; (semicolon)	х						F1
. (period)							Use Soft Keypad
?							Use Soft Keypad
•							Use Soft Keypad
_ (underscore)	х						F5
, (comma)							Use Soft Keypad
' (apostrophe)							Use Soft Keypad
~ (tilde)							Use Soft Keypad
\	Х						F4
							Use Soft Keypad
и							Use Soft Keypad
!					Х		1
@					Х		2 or Blue+F6
#					Х		3
\$					Х		4
%					х		5
۸					Х		6
&					х		7
*					Х		8

		Press					
To Get This Key / Function	Blue	Red	Ctrl	Alpha	Sft	Caps Lock	Press This Key
(							Use Soft Keypad
)							Use Soft Keypad

# **Inactive Keys on the 35-key Keypad**

Contrast Up	+
Contrast Down	<b>O</b> -
Volume Up	VOL+
Volume Down	VOL-
Send and End	

# 56-Key Full Alpha Numeric Keypad

Use the soft keypad to enter characters that are not available using the 56-key keypad. Keypress Sequences for Batch Units

		Press	Press This Key				
To Get This Key / Function	Blue	Red	Ctrl	Alt	Shift	Caps Lock	
Power / Suspend							Power
Windows Start Menu	х						U
Keypad Backlight (Toggle)							Backlight
Blue Mode							Blue
Red Mode							Red
CapsLock (Toggle)		Х					Sft
Shift							Sft
Alt							Alt
Ctrl							Ctrl
Scan							Scan
Esc							Esc
Space							Sp
Enter							Ent
Back Space							Bksp
Tab							Tab
BackTab							N/A
Break							N/A
Pause							N/A
Print Screen							N/A
Scroll Lock							N/A
Up Arrow							Up Arrow
Down Arrow							Down Arrow
Right Arrow							Right Arrow
Left Arrow							Left Arrow
Insert							Ins
Delete							Del
Home							N/A
Page Up		Х					Up Arrow
Page Down		х					Down Arrow
F1		х					А

		Press		Press This Key			
To Get This Key / Function	Blue	Red	Ctrl	Alt	Shift	Caps Lock	
F2		х					В
F3		Х					С
F4		Х					D
F5		Х					Е
F6		Х					F
F7		Х					G
F8		Х					Н
F9		Х					I
F10		Х					J
F11		Х					К
F12		Х					L
F13		Х					М
F14		Х					N
F15		Х					0
F16		Х					Р
F17		Х					Q
F18		Х					R
F19		Х					S
F20		Х					Т
F21		Х					U
F22		Х					V
F23		Х					W
F24		Х					Х
a							А
b							В
С							С
d							D
е							E
f							F
g							G
h							Н
i							I
j							J
k							К

		Press	These K	Ceys and	I Then		Press This Key
To Get This Key / Function	Blue	Red	Ctrl	Alt	Shift	Caps Lock	
I							L
m							М
n							N
0							0
р							Р
q							Q
r							R
S							S
t							Т
u							U
V							V
W							W
Х							Х
у							Υ
<b>Z</b> 3		Х			х		Y
A					х		Α
В					х		В
С					х		С
D					х		D
E					х		E
F					х		F
G					х		G
Н					х		Н
I					х		ı
J					х		J
K					х		K
L					Х		L
M					Х		М
N					Х		N
0					Х		0
P					Х		Р
Q					Х		Q
R					х		R

<sup>&</sup>lt;sup>3</sup> Press Sft, then Red, then "y"

		Press	These K	Ceys and	Then		Press This Key
To Get This Key / Function	Blue	Red	Ctrl	Alt	Shift	Caps Lock	
S					х		S
Т					х		Т
U					х		U
V					х		V
W					х		W
Х					х		Х
Υ					х		Y
Z 4		Х					Υ
1							1
2							2
3							3
4							4
5							5
6							6
7							7
8							8
9							9
0							0
. (DOT)							DOT
<							Use Soft Keypad
[							Use Soft Keypad
]							Use Soft Keypad
>							Use Soft Keypad
=							Use Soft Keypad
{							Use Soft Keypad
}							Use Soft Keypad
1							Use Soft Keypad
-	х						, (comma)
+	х						. (DOT)
*					х		8
: (colon)	х						F
; (semicolon)	х						Α
. (period)							. (DOT)

<sup>&</sup>lt;sup>4</sup> Caps Lock must be On.

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		Press	These k	Ceys and	Then		Press This Key
To Get This Key / Function	Blue	Red	Ctrl	Alt	Shift	Caps Lock	
?							Use Soft Keypad
`							Use Soft Keypad
_ (underscore)	х						Е
, (comma)							Comma key
' (apostrophe)							Alt+39 <sup>5</sup>
~ (tilde)							Use Soft Keypad
\							Use Soft Keypad
							Use Soft Keypad
и							Alt+34 <sup>6</sup>
!					х		1
@	х						B or Sft + 2
#					Х		3
\$					Х		4
%					х		5
۸					Х		6
&					Х		7
(					Х		9
)					Х		0

Hold down the Alt key while typing 39
 Hold down the Alt key while typing 34

# **Appendix B Regulatory Notices and Safety Information**

### **FCC Information:**

This device complies with FCC Rules, part 15. Operation is subject to the following conditions:

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

**Note**: In accordance with FCC 15.21, changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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 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.

### **RF Safety Notice**

Caution



This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. For body worn operation, to maintain compliance with the FCC RF exposure guidelines, use only accessories that contain no metallic components and provide a separation distance of 15mm (.06 inches) to the body. Use of other accessories may violate FCC RF exposure guidelines and should be avoided.

### **Industry Canada:**

This Class B digital apparatus complies with Canadian ICES-003. Operation is subject to the following two conditions: 1. Devices may not cause harmful interference. 2. Devices must accept any interference received, including interference that may cause undesired operation. To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

## 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 the label shown below. The product is marked with the label below in accordance with the Class II product requirements specified in the R&TTE Directive, 1999/5/EC.



The equipment is intended for use throughout the European Community. Its authorization for use in France is restricted as follows:

PAN European Frequency Range: 2.402 – 2.480 GHz

Restricted Frequency Range for use in France: 2.448 – 2.480 GHz



The CE mark on this product indicates that the system has been tested to and conforms with the provisions noted with the 89/336/EEC Electromagnetic Compatibility Directive and the 73/23/EEC Low Voltage Directive.

### **Approvals:**

Product	EMI / EMC Standards	Safety Standards	RF Standards
MX6	FCC Part 15 Subpart B		FCC 15.247
	EN 55022 Class B	EN60950	RSS 210
	EN55024		ETS 300 328

### **Transceiver**

Transceiver	Specifications
MX6 with 802.11b	EN 300 328-2:2000
	EN 301 489-1:2000
	EN 301 480-17:2000
	EN 60950:2000
	EN 50361:2001

The following is the required safety label that appears on the back panel of the MX6 RF terminal equipped with an 802.11 radio.



# **LXE MX6 Declaration of Conformity**



### **DECLARATION OF CONFORMITY**

according to:

The Low Voltage Directive; 73/23/EEC

The EMC Directive; 89/336/EEC and the Marking Directive; 93/68/EEC

Type of Equipment: Hand Held Computer

Brand Name or Trademark: LXE

Type Designation: MX6

Manufacturer: LXE Inc.

Address: 125 Technology Parkway

Norcross, GA 30092 USA

The following harmonized European Standards, technical specifications, or other normative documents have been applied:

**EMC Standards:** 

EN 55022: 1998 Limits and methods of measurement of radio disturbance

characteristics of information technology equipment

EN 55024: 1998 Information Technology Equipment - Immunity characteristics -

Limits and methods of measurement

Safety Standards:

EN60950: 2000 Safety of information technology equipment, including electrical

business equipment

The product carries the CE Mark:

 $\epsilon$ 

We, LXE Inc., declare that the equipment specified above complies with all Essential Health and Safety Requirements of the above Directives and Standards, as amended.

Date of issue: October 20, 2003

Cyril A. Binnom Jr. EMC Approvals Engineer

LXE Inc. 125 Technology Parkway Norcross, GA 30092-2993 USA

ph. 770/447-4224 fax 770/447-6928

# **LXE 802.11b WLAN Declaration of Conformity**



#### **DECLARATION OF CONFORMITY**

according to:

the R&TTE Directive; 99/5/EEC
The EMC Directive; 89/336/EEC
The Low Voltage Directive; 73/23/EEC
and the Marking Directive; 93/68/EEC

Type of Equipment: DSSS 2.4GHz WLAN

Brand Name or Trademark: LXE

Type Designation: MX6 with 802.11b WLAN

Manufacturer: LXE Inc.

Address: 125 Technology Parkway Norcross, GA 30092 USA

The following harmonized European Norms have been applied:

**EMC Standards:** 

EN 301 489-1: 07-2000 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic

Compatibility (EMC) standard for radio equipment and services; Part 1: Common

technical requirements

EN 301 489-17:07-2000 Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic

Compatibility (EMC) standard for radio equipment and services; Part 17: Specific

conditions for Wideband data and HIPERLAN equipment

EN 55022: 1998 Limits and methods of measurement of radio disturbance characteristics of

information technology equipment

Radio Standards:

EN 300 328-1 and -2: 2000-7 Radio Equipment and Systems (RES);

Wideband transmission systems;

Technical characteristics and test conditions for data transmission equipment operating in the 2.4 GHz ISM band and using spread spectrum modulation

techniques

Safety Standard:

EN60950: 2000 Safety of information technology equipment, including electrical business equipment

The product carries the CE Mark:

 $C \in \mathbb{O}$ 

We, LXE Inc., declare that the equipment specified above complies with all Essential Health and Safety Requirements of the above Directives and Standards, as amended.

Cyril A. Binnom Jr. EMC Approvals Engineer

Date of issue: October 20, 2003

LXE Inc. 125 Technology Parkway Norcross, GA 30092-2993 USA

ph. 770/447-4224 fax 770/447-6928



# **Lithium Battery Safety Statement**



#### **Caution:**

Lithium battery inside. Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by battery manufacturer. (US)

### **Attention:**

Contient une pile de lithium. Risque d'explosion dans le cas où la pile ne serait pas correctement remplacée. Remplacer uniquement avec une pile semblable ou equivalente au type de pile recommandé par le fabricant. (FR)

### Forsigtig:

Indeholder lithiumbattterier. Risiko for eksplosion, hvis batteriet udskiftes forkert. Må kun udskiftes med samme eller tilsvarende type, som anbefalet af fabikanten. (DK)

#### Varoitus:

Tämä tuote käyttää laservaloa. Skannerissa on jokin seuraavista tarroista. Lue Huomio-kohta. (FI)

### Vorsicht:

Enthält Lithium-Batterie. Bei unsachgemäßem Ersatz besteht Explosionsgefahr. Nur durch gleichen oder vom Hersteller empfohlenen Typ ersetzen. (DE)

### **Attenzione:**

Batteria al litio. Pericolo di esplosione qualora la batteria venga sostituita in maniera scorretta. Sostituire solo con lo stesso tipo o equivalente consigliato per il fabbricante. (IT)

#### Atencão:

Contém pilha de lítio. Há perigo de explosão no caso de uma substituição incorreta. Substitua somente pelo mesmo tipo, ou equivalente, recomendado pelo fabricante. (PT)

#### Varning

Innehåller litiumbatteri. Fara för explosion om batteriet är felaktigt placerat eller av fel typ. Använd endast samma eller motsvarande typ batterier rekommenderade av tillverkaren. (SE)

#### Advarsel:

Innmontert Lithium batteri. Eksplosjonsfare ved feil montering av batteri. Benytt kun batteri anbefalt av produsent. (NO)

### Cuidado:

Pila de litio adentro. Peligro de explosión si la pila se reemplaza incorrectamente. Reemplace solamente con el mismo tipo o equivalente recomendado por el fabricante. (ES)

#### Oppassen:

Bevat Lithium-batterij. Incorrrecte plaatsing van batterij kan leiden tot explosiegevaar. Alleen vervangen door hetzelfde of door fabrikant aanbevolen gelijkwaardig type. (NL)



# **Lithium Battery Safety Statement**



## Προσοχή:

Υπάρχει μπαταρία από λίθιο εσωτερικά.

Υπάρχει κίνδυνος έκρηξης εάν η μπαταρία αντικατασταθεί με λανθασμένο τρόπο.

Αντικαταστήστε μόνο με τον ίδιο ή ισοδύναμο τύπο που συνιστάται από τον κατασκευαστή.

### 주의:

리튬 배터리 내부. 배터리가 잘못 설치되었을 경우 폭발의 위험이 있습니다. 동일한 배터리, 또는 배터리 제조업체가 권장하는 배터리로 교체하십시오.

(KR)

### 注意:

リチウム電池が入っています。間違った 種類の電池を使用すると、破裂する恐れ があります。同じ電池、または電池製造 元が推奨する同等の電池を使用してくだ さい。

(JP)

(GR)

### 小心:

内装锂电池。如电池更换不当,则有发生爆炸的危险。只能用电池制造商推荐 的相同或同等电池进行更换。

(CN)

### Dikkat:

İçinde lityum bataryası bulunur.

Bataryanın yanlış değiştirilmesi patlama tehlikesi yaratır.

Aynısıyla veya üreticinin önerdiği eşdeğer tiple değiştirin.

(TR)

Legend:

Chinese	CN	Italian	IT
Danish	DK	Japanese	JP
Dutch	NL	Korean	KR
English	US	Norwegian	NO
Finnish	FI	Portuguese	PT
French	FR	Spanish	ES
German	DE	Swedish	SE
Greek	GR	Turkish	TR

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