# **MX1 User's Guide**

#### **IMPORTANT NOTICE**

LXE's MX1 is obsolete.

This electronic manual has been made available as a courtesy to LXE's MX1 customers. Please contact your LXE customer support representative for assistance and mobile device replacement.





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#### Language: English

#### Notices

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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.



**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.

D	Entire Manual	Updated structure to reflect modular style/content effective January 2004. Changed guide name to "MX1 User's Guide".
D	Features	Added 8500 series tethered scanners to "Accessories". Added section titled "MX1 Environmental Specifications".
D	Appendix B, Regulatory Notices and Safety Information	Revised Approvals table. Added 6816 Declaration of Conformity. (Rev C) Updated 6726 Declaration of Conformity. (Rev D)
Е	Entire Manual	Obsolete/Archived. Available on LXE ServicePass website only. Product's replacement device is the LXE MX7.
		Added Hungary to "R&TTE Directive Requirements." Added WEEE statement.
		Updated document presentation to reflect LXE's 2005 documentation standards. Added new LXE logo. Updated "Getting Help". Marked obsolete tethered scanners in "Accessories". Updated Manuals listing.
		Noted obsolescence of 900MHz radios and companion TE software.

#### **Revision Notice**

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### Features of the MX1 Hand Held Computer

#### Introduction

The MX1 is a rugged, portable, hand-held PC-compatible computer capable of wireless data communications while being carried. The MX1 can transmit information using either a 900 MHz or 2.4 GHz radio. It can store information for later transmission through an RS-232 or InfraRed port. The MX1 is vertically oriented and features backlighting for the display. The keypad is constructed of a phosphorescent material that needs no backlighting.

The MX1 is a DOS compatible computer designed to run as a batch unit or to run software applications such as LXE's Terminal Emulator applications (ANSI Plus, LDS Plus, DOS 5250, DOS 3270, TN3270 and TN5250).

The heart of the MX1 is an Intel® 486 processor that is PC compatible. The MX1 features a graphics screen with electroluminescent backlight. The case is constructed of high-impact plastic designed to withstand multiple drops in an industrial environment.

- *Note:* Always store unused mobile devices with a fully charged main battery pack installed. LXE recommends the mobile device be connected to an external power source periodically to retain optimum power levels in the main battery pack and the backup battery.
- *Note:* The 900MHz radios are obsolete. Terminal emulation software used by mobile devices with 900MHz radios is also obsolete, e.g. 3270 DOS TE, 5250 DOS TE.

Operating Temperature	-4°F to 122°F (-20°C to 50°C) [non-condensing]
Storage Temperature	-22°F to 140°F (-30°C to 60°C) [non-condensing]
Water and Dust	IEC IP65 (with standard endcaps)
Operating Humidity	Up to 90% non-condensing at 104°F (40°C)
Vibration	Based on MIL Std 810D
ESD	8 kV air, 4kV contact
Shock	Multiple 4 foot drops to concrete

#### **MX1 Environmental Specifications**

#### **Components**



- 1. Endcap
- 2. Scan Indicators
- 3. Beeper
- 4. Status Indicator
- 5. Display
- 6. Scan Buttons
- 7. Keypad
- 8. Power Button
- 9. IR Port





- 1. Scan Aperture
- 2. Warning Label
- 3. Upper Handstrap Connection
- 4. Handle Contacts
- 5. Battery Cover Latch
- 6. Lower Handstrap Connection



*MX1 Back:* Handle contacts (4) are covered with a label. The label must be removed before the handle is attached. When the handle is removed, the label should be replaced to keep the contacts clean.

#### **Display**



#### Figure 2 MX1 Display

The MX1 Display is a transflective monochrome backlit LCD unit capable of supporting gray scales.

#### **Cleaning the Display**

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.

#### Icons

Across the top of the display are icons that provide visual cues to current computer operation.

Icon	When highlighted
CAPS	CAPS is on when upper case letters are selected. To enable or disable CAPS, press 2nd, then SHIFT, then the left arrow key.
2nd	The 2nd functions of the keypad are active.
+ -	Low Main Battery indicator. This indicates that the Main Battery charge is low and the battery should be replaced.
AAA	The backup battery is charging. The main battery charges the backup battery. The backup battery provides power to the unit for a short amount of time when the main battery has been removed or has failed.
Alpha	<i>Numeric-Alpha keypad only.</i> The A/# key is in Alphabetic mode. Operation in Numeric Mode is indicated by the absence of the Alpha icon. Toggling between Alphabetic and Numeric modes is accomplished by pressing the A/# key.
Ctrl	The Control functions of the keypad are active.
Alt	The Alternate functions of the keypad are active.
Shift	Shift keys output between upper and lower case letters.

#### **Display Backlight**

A display backlighting feature is available and depending upon programming, will operate in one of three ways:

- **Backlighting Off.** This is the most efficient way to operate the computer with battery power.
- **Backlighting On For A Short Time.** This will provide display backlighting for a predetermined amount of time. Use of this feature will result in reduced battery life.
- **Backlighting On Whenever The Unit Is On.** This provides full time backlighting to the display whenever the unit is turned on. It greatly reduces the expected battery life.

#### **Display Backlight Timer**

When the Display Backlight Timer expires the display backlight is turned off. The default value for this parameter is 3 seconds. The value can be adjusted using the BIOS Setup. Refer to the "MX1 Reference Guide."

Any of the following will wake the display and display backlight:

- Display update by host or currently running application on the MX1
- Trigger
- Any key on the keypad

When the display wakes up, the Display Backlight Timer will begin the countdown again. When any of the above events occur prior to the timer expiring, the timer starts the countdown again.

#### Panning

The MX1 display can be panned around using keypress sequences so the user can view an entire virtual 640 x 480 pixel screen. Initially, the 20 columns and 20 rows in the top left corner of a virtual screen are displayed.

#### Full Alpha-Numeric Keypad (60 keys)

Up, Down, Left and Right	2 <sup>nd</sup> key then the arrow key
Home	2 <sup>nd</sup> and Shift key and letter I keys

#### Numeric-Alpha Keypad (41 keys)

Up, Down, Left and Right	$2^{nd}$ and Ctrl and the arrow key
Home	2 <sup>nd</sup> and Ctrl and the Enter key

When the Home key sequence is pressed, the cursor moves to the top left hand corner of the virtual screen display.

When the initial 20 row x 20 column portion of the virtual screen is displayed:

- and the Pan Right key sequence is pressed, columns 10 through 30 are shown on the display.
- and the Pan Down key sequence is pressed, rows 5 through 25 are shown on the display.

Please refer to the "MX1 Reference Guide" for technical information about the Panning function.

#### **Endcaps**

The MX1 can be configured with several different endcaps. Endcaps are mounted on the top of the computer case and contain the beeper. The endcap port is designated as COM 1.

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

Important See also section titled "Scanner Warnings and Labels."

#### **Scanner Endcap**

Several scanner endcaps are available with the MX1. These consist of a High Performance, Long Range, Advanced Long Range and 2D Decoded Raster scanner endcaps. Externally they appear similar with similar indicators. Barcode Scanner operation varies depending upon the application but, once enabled, the scanners are activated by pressing either the "Scan" button on the keypad or pressing the trigger on the handle (if so equipped).



Figure 3 Scanner Endcap

The range of a scanner 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 scanner endcap relative to the barcode label. Any of these factors may result in having to re-scan the label from a different distance or angle.



If you need to set up the integrated scanner (SE923, SE1223 or SE2223) **barcode reading parameters**, please refer to the "**Integrated Scanner Programming Guide for DOS Devices**" on the LXE Manuals CD or the LXE ServicePass website.

#### Scanner / RS232 Endcap



Figure 4 Scanner / RS232 Endcap

The Scanner / RS232 endcap is designed to serve a dual purpose, scanning barcodes and communicating with an external cabled device such as a printer. An RS-232 cable must connect the RS-232 port and the external device before data can be transferred. A data transfer application may also be required. Several integrated scanner configurations are available with this endcap: High Performance, Long Range and Advanced Long Range. The RS232 port cannot be used with a tethered scanner.

The Scanner / RS232 endcap is designed for batch or non-terminal emulation applications. The endcap types consist of a standard range scanner endcap, a long range scanner endcap, and a high visibility scanner endcap. Externally they appear similar with similar indicators.

#### **RS-232 Endcap**



Figure 5 RS-232 Endcap

The RS-232 endcap, when installed, allows the computer to communicate directly with an external device such as a printer. An RS-232 cable must connect the endcap and the external device before data can be transferred. A data transfer application may also be required. The endcap is designed for IP65 environments (with an installed radio).

#### Plain Endcap



Figure 6 Plain Endcap

The Plain Endcap is used when other endcap options are not selected. It provides a seal against dirt and moisture for the top of the computer case. The endcap is designed for IP65 environments (with an installed radio).

#### **Scanner Endcap Indicators**

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



Figure 7 Scanner Endcap LEDs and Beeper

The left LED (1 - Laser On Indicator) on the top of the laser barcode endcap illuminates red, indicating laser emission when the laser beam is being emitted. Following a good read, the right LED (3 - Good Read Indicator) flashes green, indicating a successful scan. Beeps may be heard after a good read, depending on the application running on the MX1.

The laser automatically turns off after a successful read and is ready to scan again when the Scan key (or the trigger) is pressed.

#### **IR Port**



Figure 8 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, with the use of an adapter, a host computer network.

When sending data through the IR port while the MX1 is docked, make sure the IR port on the MX1 in the docking station and the IR port on the second MX1 are in close proximity to each other.

The IR Port is specified as COM 2 and is a bi-directional half-duplex infrared port. It supports the IrDA (Infrared Data Access) standard that allows communication speeds up to 115k baud. The IrDA software restricts the baud rate to 19.2k baud for IrDA transmissions. *IrDA software is NOT installed/maintained by LXE*.

#### **Keypad Controls**

There are two keypads available for the MX1. All keypads are phosphorescent. A phosphorescent keypad does not use a keypad backlight but glows in dim/dark areas after exposure to a light source.

All keypads are installed and configured by LXE. Full alpha-numeric (60 key) keypads are available that are directly suited to ANSI, IBM 3270 and IBM 5250 host computer systems.

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

#### Full Alpha-Numeric (60 Key)



Figure 9 The Alpha-Numeric Keypads

*Note:* The 900MHz radios are obsolete. Terminal emulation software used by mobile devices with 900MHz radios is also obsolete, e.g. 3270 DOS TE, 5250 DOS TE.

#### Numeric-Alpha (41 Key)



#### Figure 10 The Numeric-Alpha Keypad

Please refer to Appendix A "Key Maps" for keypress sequences.

#### **Scan Key Function**



The Scan key activates the scanner when a scanner endcap is installed and either of the two Scan buttons is pressed. This feature accommodates both left and right handed users comfortably.

#### **Enter Key Function**

Enter

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. There are two Enter keys on all keypads except the IBM 5250 Full Alpha-Numeric keypad which has one Enter key.

#### Field Exit Key Function (IBM 5250 Only)



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. This key is present on the IBM 5250 specific keypad only.

#### **Arrow / Cursor Key Function**



The **arrow** keys (also called the cursor movement keys) are used to scroll through the active display or to move the cursor around the screen.

#### **2nd Key Function**

2nd

The 2nd key is colored yellow and is used to activate the  $2^{nd}$  functions of the keypad. Printed above many keys are yellow characters that represent the  $2^{nd}$  function of that key. Using the  $2^{nd}$  key activates the second key function. Note that the  $2^{nd}$  key only stays active for one keystroke. Each time you need to use the  $2^{nd}$  function you must press the  $2^{nd}$  key. To cancel a  $2^{nd}$  function before pressing another key, press the  $2^{nd}$  key again. When the  $2^{nd}$  function is active, the  $2^{nd}$  icon stays on the screen.

For example:

- Full Alpha-Numeric : 2nd plus the I key initiates INSERT mode.
- Numeric-Alpha : 2<sup>nd</sup> plus the SPC key initiates ALT mode.

#### **CTRL Key Function**

Ctrl

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 function key. When the Ctrl function is active, the Ctrl icon stays on the screen.

### **ALT Key Function**

Note: Full alpha-numeric keypad only.

Alt

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 function key. When the Alt function is active, the Alt icon stays on the screen.

#### **SHFT Key Function**

Shft

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 function key. When the Shft function is active, the Shft icon stays on the screen.

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 and function keys enable the shifted function key.

#### **SPC Key Function**

Note:

Numeric-alpha keypad only. SPC is a 2nd function on the full alpha-numeric keypad.

Spc

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.

#### Mode Key Functions

#### **CAPS 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. When the CapsLock mode is active, the Caps icon stays on the screen.

Caps mode on both keypads is accessed through the key sequence 2<sup>nd</sup> plus Shft plus Left arrow.

#### Alpha to Numeric Toggle with A / #

Note: Numeric-alpha keypad only.

When the keypad is in Alpha mode, the Alpha icon stays on the screen. When the Alpha icon is not displayed, the keypad is in numeric mode. Note that the Alpha or Numeric mode stays active until the A / # key is pressed again. To toggle the A / # mode press the A / # key again.

<u>The exception to this rule</u> -- when the keypad is in numeric mode and you want to type one alpha character within a sequence of numbers, pressing  $2^{nd}$  plus Ctrl and then the A / # key will toggle the keypad to alpha mode for one character – the next key pressed. Then the keypad returns to numeric mode. Likewise for toggling alpha to numeric for one key only.

#### **Keypress Sequences**

See Appendix A for key maps for the alphanumeric and numeric-alpha keypads. Key maps for the 3270 and 5250 keypads are contained in the Terminal Emulation Reference Guides.

#### **Reset Key Sequence**

Reset Key Sequence is Ctrl plus Alt plus Del.

- Del is a 2nd function on the full alpha-numeric keypad.
- Alt is a 2nd function on the numeric-alpha keypad.

The Reset Key sequence can be disabled in the BIOS Setup. See the "MX1 Reference Guide."

A/#

#### **Power Button Functions**



#### Figure 11 Location of the Power (PWR) Button

The Power button is used to turn the MX1 on and off and force it into the Suspend state. The button will beep when pressed and beep again every second while it is held down.

#### How To

•	Turn the MX1 off	Hold the Power key down for 4 beeps (signifies 3 or more seconds) then release.
•	Turn the MX1 on	Hold the Power key down until the display turns on.
•	Force the Suspend state	Tap the Power key (1 beep). The Suspend state is useful for breaks or when swapping batteries as the unit does not need to be turned off prior to replacing the Main Battery.
•	Wake from Suspend	Tap the Power key to wake the MX1 from Suspend (before the 5 minute timer expires).

#### **Off Timer and Critical Suspend Mode**

The MX1 is automatically turned off when the Off Timer expires. The Off Timer runs when the MX1 is in Critical Suspend mode. The MX1 automatically goes into Critical Suspend when the Main Battery is dead or removed. The Off Timer default is 5 minutes. The value can be adjusted using the BIOS Setup.

#### **Power Status and the Status LED**



#### Figure 12 Power Status and the Status LED

The Status LED is located next to the LXE logo on the MX1. The LED changes color and state depending on power status.

Status LED	Condition
Off	MX1 is Off.
	OR
	The MX1 is powered On and the display is On.
Steady Green	The MX1 is powered On and the display is Off. Press any key to turn the display On.
Blinking Green	The MX1 is in the Suspend state. Tap the Power key to exit the Suspend state. Hold the Power key down for 4 beeps to turn the MX1 off. There may be a brief wait while the MX1 synchronizes with the RF network.
Steady Red	Main Battery Low Warning or Low Main Battery. Replace the main battery or place the unit in a powered charging station.
Blinking Red	Main Battery Power Failure or the Main Battery is depleted, the MX1 is in Critical Suspend mode. The MX1 is drawing power from the backup battery. Replace the main battery or place the unit in a powered charging station. The MX1 will turn off in 5 minutes (default or the value selected in BIOS Setup for the Off Timer limit) if no action is taken.

#### Power Management and the Keypad

Status LED is Steady Green. When the MX1 is in the Display Off state, any keypress returns the computer to the On state and the display activates. The key pressed (key value) is not sent to the Operating System or application.

If the 2<sup>nd</sup>, Ctrl, Shift, or Alt keys were active (and the icons were on the display) when the MX1 entered Display Off or Suspend, the modifier keys and their icons are cleared from the display when the MX1 wakes up.

#### **Getting Help**

All LXE manuals are now available on one CD and they can also be viewed/downloaded from the LXE ServicePass 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.

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

#### **Manuals and Accessories**

#### **Manuals**

The following manuals for the MX1 can be found on the LXE Manuals CD. Archived manuals can be downloaded from the LXE ServicePass website:

#### **Reference Guides (for the SysAdmin)**

- ANSI Plus Reference Guide
- DOS API Programming Guide
- DOS Autoconfigurator Installation Instruction
- Integrated Scanner Programming Guide for DOS Devices
- LDS Plus Reference Guide
- LXE Computers and WaveLink Avalanche User's Guide
- SNMP Agent Reference Guide
- TN3270 Terminal Reference Guide
- TN5250 Terminal Reference Guide

#### Networking

• Telnet Manager Reference Guide

#### Peripherals

- Getting the Most from Your Batteries
- LXE Technical Glossary
- MX1 Cradle Reference Guide
- MX1 Multi-Charger User's Guide
- PCMCIA Card Management and LXE DOS Computers

#### **Obsolete / Archived (Available on the LXE ServicePass website)**

- MX1 User's Guide English (ROM-DOS)
- MX1 User's Guide German (ROM-DOS)
- MX1 Reference Guide (ROM-DOS)
- MX1 User's Guide (MS-DOS)
- MX1 User's Guide German (MS-DOS)
- MX1 Reference Guide (MS-DOS)
- ANSI Plus Reference Guide (900MHz) Rev H
- LDS Plus Reference Guide (900MHz) Rev E
- 3270 DOS TE Reference Guide
- 3270 Programmer's Reference Guide
- 5250 DOS TE Reference Guide
- 5250 Programmer's Reference Guide
- 6200 Network Management Guide

### Accessories

Tethered Scanners					
Scanner, LS3603, Std, 8' Cbl, EC (Obsolete)	8010LS3603STC08DEC				
Scanner, LS3603, Std, 8' Cbl, US (Obsolete)	8010LS3603STC08DUS				
Scanner, LS3603, Std, 20' Cbl, US (Obsolete)	8010LS3603STC20DUS				
Scanner, LS3203, Ext Rng, 8' Cbl, EC (Obsolete)	8011LS3203ERC08DEC				
Scanner, LS3203, Ext Rng, 8' Cbl, US (Obsolete)	8011LS3203ERC08DUS				
Scanner, LS3203, Ext Rng, 20' Cbl, US (Obsolete)	8011LS3203ERC20DUS				
Scanner, 5312IP, 7' Cbl, WW (Obsolete)	8101IP5312XXC07DWW				
Scanner, 530052IP, 7' Cbl, WW (Obsolete)	8104IP530052C07DWW				
Scanner, 530072IP, 7' Cbl, WW (Obsolete)	8105IP530072C07DWW				
Scanner, 530092IP, 7' Cbl, WW (Obsolete)	8110IP530092C07DWW				
Scanner, 5312IP, 15' Cbl, US (Obsolete)	8101IP5312XXC15DUS				
Scanner, 530052IP, 15' Cbl, US (Obsolete)	8104IP530052C15DUS				
Scanner, 530072IP, 15' Cbl, US (Obsolete)	8105IP530072C15DUS				
Scanner, 530092IP, 15' Cbl, US (Obsolete)	8110IP530092C15DUS				
Scanner, LS3408ER, 9' Cbl, US See Note	8520A326SCNRERDA9F				
Scanner, LS3408FZ, Fuzzy Logic, 9' Cbl, US See Note	8510A326SCNRFZYDA9F				
Cables					
Cable, Modem, DA-9F to DB-25F, 6 ft.	9000A052CBL6D9D25				
Cable, Printer/PC, DA-9F to DB-25M, 6 ft.	9000A053CBL6D9D25				
Cable, PC, DA-9F to DA-9F, 6 ft.	9000A054CBL6D9D9				
Cable, DIN to D9 for Renegade Printer	9000A055CBL6DIN8D9				
Printers					
Printer, PA400, DA9 RS-232, 120AC, Fastrap	PA400-050-11100				
Printer, PT400, DA9 RS-232, 120AC, Fastrap	PT400-050-11100				
Printer, MF4T, Std Belt Clip	MF200114-000				
Printer, MF4T, Swivel Belt Clip	MF200115-000				
PCMCIA SRAM Card, 1 MB	9000A101PCC1SRAM				
Radio Kits					
Kit Radio, 2.4GHz MX1	2330A276RADKIT24				
Canadian 900MHz Radio Kit (Obsolete)	2330A278RADKITCA				
Endcap Modules					
Endcap, Scanner SE1223 HP	MX1A332SCNR1223HP				
Endcap, Scanner SE 1223 LR	MX1A327SCNR1223LR				
Endcap, Scanner SE 1223 ALR	MX1A334SCNR1223ALR				
Endcap, RS232 MX1	MX1A351RS232				
Endcap, Plain MX1	MX1A353PLAIN				
Endcap, Scanner SE 1223 HP/RS-232	MX1A333SCNR1223HPRS				
Endcap, Scanner SE 1223 LR/RS-232	MX1A330SCNR1223LRRS				
Endcap, Scanner SE 1223 AL/RS-232	MX1A335SCNR1223ALRRS				
Endcap, Scanner SE 2223 2D	MX1A339SCNR22232D				
Batteries and Battery Chargers					

6 Unit Charger	2330A378CHGR6WW						
3 Unit Battery Analyzer	2330A379ANLZR3WW						
Battery, 1500 mAh, NiMH, MX1	2330A381BATT1500						
Portable Charger Module (Portable Charger, Clip On)	2335A376PORTACHGR						
Charging and Communications Cradles							
4 Bay Communication Multi-Dock w/ AC	2330A013MULTIDOCK						
Single Unit Power Dock (Single Comm Dock w/ AC)	2330A010ACSINGDOCK						
Single Unit Power Dock w/ DC Power	2330A011DCSINGDOCK						
Holding Accessories							
Handle, MX1	2330A401HANDLE						
Handle, Kit, MX1 RS-232 to RS-232	MX1A501HANDLEMD9KIT						
Strap, Hand, MX1, Nylon	2330A402STRAP						
Nylon Holster with Belt	2330A403HOLSTER1						
Nylon Holster with Belt (for MX1 with handle)	2330A403HOLSTER2						
Nylon Holster, Wall Mount	2330A403HOLSTER3						
Nylon Case with Shoulder Strap	MX1A405CASE1						
Nylon Case with Handle and Shoulder Strap	MX1A405CASE2						
*Nylon Case with Shoulder Strap	2335A403CASE1						
*N 1 C :4 H 11 1 C 1 1 C							

\* For MX1 with RS-232 Endcap or Plain Endcap only; also for use with MX1 shipped before February 2002 (box style endcap)

Note: When using the 8500 Series tethered scanners, the tethered scanner Power Mode must be set to "Reduced Power Mode" to conserve MX1 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.

### Operation

#### **Insert Battery Pack**

*Note:* New batteries must be charged prior to first use. This process takes approximately three hours in an LXE Battery Charger/Analyzer and eight hours with the LXE Clip-on Portable Charger attached to the MX1.



Figure 13 Open Battery Door

The MX1 Battery Compartment is located on the lower rear of the computer. Open the Battery Compartment door by pressing down on the door latch slide tab at the top of the compartment. Remove the battery door.

If a hand strap or pistol grip handle is attached to the unit, the battery compartment door latch is hidden by the hand strap. There is no need to remove the handle -- or the strap: just open the closed loop fastener on the strap. See sections titled "Attach Hand Strap" and "Install Pistol Grip Handle" for instruction.



Figure 14 Inserting Battery Pack

This illustration shows the battery compartment with the door removed. The Battery Contacts (1) provide the electrical link between the battery pack and the computer. Care should be used when inserting or removing the battery pack so that damage does not occur to the contacts. If damage does occur, cease using the unit until inspection or repair can be performed by a qualified technician.

The MX1 Battery Pack should be inserted tab (2) end first so that the tab mates with the hole at the top of the battery compartment. The battery will then lay inside the battery compartment but will not be secure. To secure the battery, the battery compartment door must be in place and the door latch locked. This provides the tension necessary to hold the battery pack in place.

#### **Attach Hand Strap (Optional)**

*Note:* An Upper Strap Bracket installation is a requirement prior to using the MX1 in a Docking Station. The strap is not a requirement.

An elastic hand strap is available for the MX1. 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 MX1 battery pack.



Figure 15 MX1 With Handstrap Installed

Tool Required: #1 Phillips Screwdriver

#### Installation

- 1. If a handle is installed, remove it at this time. See section "Install Pistol Grip Handle" for instruction.
- 2. Slip the strap through the upper bracket prior to securing the upper bracket to the unit.



Figure 16 Upper Strap Bracket

3. When slipping the strap through the bracket make sure the closed loop fastener surface is up. After slipping the strap through the bracket, fold the strap over so that the two closed loop fastener surfaces mate evenly.



Figure 17 Strap Inserted in Upper Bracket

- 4. Prior to securing the upper bracket to the unit, install the provided pin through the bottom opening of the strap. Insert the pin into the strap slot on the bottom, rear of the MX1. Insure that both ends of the pin are securely installed.
- 5. After securing the bottom of the strap to the unit, 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. Using a flat object depress either end of the pin at the bottom of the hand strap. Once the pin is depressed the pin should easily slip out of the strap slot.

#### Install Pistol Grip Handle (Optional)

The MX1 can be purchased with a customer-installable pistol grip handle. The handle enables the user of the MX1 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 is designed to detach from the MX1 if the unit is dropped.



Figure 18 Pistol-Grip Handle and Contacts on the Back of the MX1

The top of the handle features a cradle arrangement with plastic tabs on each side that are designed to mate with the MX1 and provide a firm grip on the case. The handle features an integral trigger that is connected to the MX1 unit through contacts on the back of the MX1. The trigger contacts mate with contacts on the back of the MX1 when the handle is installed. When the handle is not installed, the MX1 contacts should be covered with the protective label delivered with the MX1.

#### **Preparation**

Remove the protective adhesive Mylar label covering the handle contacts on the back of the MX1 unit. The contacts should be clean and free from obstructions. The MX1 unit must not have any other handle or strap installed. If a handle or strap is installed, remove it at this time.

#### Installation



Figure 19 Connect Handle to MX1

In one hand grasp the MX1 unit so that the keypad is facing up and the endcap away from you. In the other hand grasp the pistol-grip by the handle with the u-shaped cradle up and the trigger mechanism away from you.

Place the pistol-grip handle u-shaped cradle under the MX1 unit and align the slots (2) on the upper ends of the u-shaped cradle with the tabs (1) in the slots on the sides of the MX1 unit. Press the MX1 unit into the u-shaped cradle until one of the tabs slides into the slot. Press the other tab slot over the other tab until you feel a positive catch. You should hear a "click" as the units join. Cautiously test the handle and unit to ensure proper, secure installation.

#### Removal

Insert a strong, flat object into one of the slots and gently pry the u-shaped cradle away from the MX1 unit. *Do not drop the MX1 unit*. Once the pistol-grip handle is no longer secured to the MX1 unit pull the handle directly away from the unit. Do not slide the unit in the u-shaped cradle since that may damage the contacts of either the handle or the unit.

#### **Power On and Off**

#### **Turn On the MX1**

Press the Power button until the display turns on. The power button is located at the bottom of the keypad.



Figure 20 Location of the Power Button

When the MX1 is powered on, the display will begin scrolling power-on information as software and drivers are loaded. When the display has stopped scrolling and a DOS C: prompt is displayed or an application begins, the power on sequence is complete.

#### **Turn Off the MX1**

Hold the **Power** button down. The unit will emit three short beeps and one long beep. After the long beep the MX1 will power down. The Power button and the display will turn off. The Power key function is configured in the BIOS Setup (see the "MX1 Reference Guide.")

*Note: Quickly tapping the Power button will place the MX1 in Suspend mode.* 

#### **Cleaning the 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.

#### **Adjust Display and Volume**

#### **Set The Display Contrast**

Adjusting screen contrast lightens or darkens the characters on the screen to make them visible at a comfortable level. The contrast is incremented or decremented one step each time the contrast key is pressed.

#### **Full Alpha-Numeric**

The full alpha-numeric keypad does not have a contrast key legend. Adjust the display contrast by pressing the:

- $2^{nd}$  key, then the Shft key then the  $\langle C \rangle$  key to enter Contrast change mode.
- Use the Up Arrow and Down Arrow keys to adjust contrast until the display lightens or darkens to your satisfaction.

Press the Enter key to exit this mode.

#### Numeric-Alpha Keypad

To adjust screen contrast, locate the  $\langle F11 \rangle$  key at the bottom of the keypad. Adjust the display contrast by pressing the:

- $2^{nd}$  key, then the  $\langle F11 \rangle$  key
- Use the Up Arrow and Down Arrow keys to adjust contrast until the display lightens or darkens to your satisfaction.

Press the Enter key to exit this mode.

#### **Set The Beeper Volume**

*Note:* An application may override the control of the beeper volume.

The audible alert or "beeper" volume can be adjusted to a comfortable level for the user. The volume is increased or decreased one step each time the volume key is pressed.

#### **Full Alpha-Numeric**

The full alpha-numeric keypad does not have a Volume key legend. Adjust the beeper volume by pressing the:

- $2^{nd}$  key, then the Shft key then the  $\langle V \rangle$  key to enter Volume change mode.
- Use the Up Arrow and Down Arrow keys to adjust contrast until the beeper volume is satisfactory.

Press the Enter key to exit this mode.

#### Numeric-Alpha Keypad

To adjust the beeper volume, locate the  $\langle F12 \rangle$  key at the bottom of the keypad. Adjust the beeper volume by pressing the:

- $2^{nd}$  key, then the  $\langle F12 \rangle$  key
- Use the Up Arrow and Down Arrow keys to adjust contrast until the beeper volume is satisfactory.

Press the Enter key to exit this mode.

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#### **Enter Data**

You can enter data into the MX1 through several different methods. The Scanner Endcaps provide barcode data entry, the RS-232 or the IR port are used to input/output data, and the keypad provides manual entry.

#### Attention

# Powering off or rebooting the MX1 before a write (to disk) function has completed, may result in the corruption of the flash drive.

#### **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 MX1 Full Alpha-Numeric and Numeric-Alpha keypads but it may take a few more keystrokes to accomplish the task.

For example, when the 2nd key is selected pressing the desired second-function key will produce the 2nd character. The specific 2nd character is printed in yellow above the corresponding key.

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

#### **Scanner Entry**

To scan with the laser barcode endcap, point the laser head towards a barcode and either press the **Scan** key on the keypad or pull the trigger on the handle (if equipped). 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 MX1 towards or away from the barcode so that the barcode takes up approximately two-thirds the width of the beam.

The left LED (Laser On Indicator) on the top of the laser barcode endcap will light, indicating laser emission when the laser beam is being emitted. Following a good read, the right LED (Good Read Indicator) flashes, indicating a successful scan. Beeps may be heard after a good read, depending on the application running on the MX1.

The laser automatically turns off after a successful read and is ready to scan again when the Scan key (or the trigger) is pressed.

#### **Battery**

Note: New batteries must be charged prior to use.

The MX1 computer is designed to work with a Nickel Metal Hydride (NiMH) battery pack from LXE. Under normal conditions it should last approximately eight hours before requiring a recharge. The more you use the scanner or the transmitter, the shorter the time required between battery recharges.

#### **Battery Pack**

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

#### **Battery Hot-Swapping**

# *Note:* Unless you are hot-swapping the battery, make sure the MX1 is turned OFF before removing the battery.

When the battery power level is low, the MX1 will signal the user with a continuous, one-second beep. Beeping will continue until the battery is replaced or the battery completely depletes. You can replace the main battery without shutting the unit off. Simply remove the weak battery and install a strong battery. The backup battery will retain data, during a main battery hot-swap, for at least five minutes.

#### **Critical Suspend State**

The Critical Suspend state or mode can only be entered because of a Main Battery Power failure. A Main Battery Power failure can occur because the battery's energy has been depleted or the battery has been removed.

When the MX1 is in the Critical Suspend state the battery icon appears on the screen, the Status LED blinks red, all peripherals are shut down, the CPU clock is stopped, power is removed from the PCMCIA card and the MX1 may beep. The MX1 is saving the state prior to the main battery failing and cannot be used.

If a new main battery pack is installed before the Off Timer expires the MX1 will transition to the Suspend state. To resume operation tap the Power key for one beep.

If the Off Timer expires the MX1 will turn itself off and all unsaved information is lost. Insert a fully charged battery pack and press the Power button to turn the MX1 back on.

*Note:* The Off Timer can be configured in the BIOS Setup (see the "MX1 Reference Guide.")

#### **Battery Chargers**





Figure 22 MX1 Battery and Charging Cup

The MX1 Battery Pack can be charged in the LXE Charger Analyzer equipped with the appropriate Charging Cup.

Insert the Battery Pack with the arrow on the Battery Pack pointing **UP**, away from the charger. Make sure that the groove on the back of the battery mates with the slot on the battery charging cup.

Failure to follow these instructions can result in damage to the battery pack or the charger.

#### **Optional Clip-on Portable Charger**

The MX1 Battery Pack can be fully charged using the Clip-on Portable Charger. A complete recharge of a dead main battery with the MX1 in an Off state will take 8 hours.

Charge only at ambient temperature above 32°F / 0°C.



Figure 23 Clip-on Portable Charger

*Note:* The unit will not operate correctly on charger power without a battery installed in the *MX1*.

The Clip-on Portable Charger must be powered by one of the following:

- Cigarette Lighter Adapter
- Power Supply, External, AC, US
- Power Supply, External AC, International

#### How To

Snap the Clip-on Portable Charger to the base of the MX1 by aligning the catch pins with the notches in the Battery Door.

Plug the Wall Mount or the Cigarette Lighter adapter into a power source before connecting the Power Jack to the Clip-on Portable Charger on the MX1.

Remove the Clip-on Portable Charger from the MX1 by depressing the spring loaded arm at the base of the module.

Then remove the adapter from its power source.

#### **Clip-on Portable Charger LEDs**

The green Power LED on the Clip-on Portable Charger indicates voltage is present in the charger. The yellow Charging LED indicates the battery is being charged. When a battery is present in the MX1, the Charging LED is always lit.

The intensity of the Charging LED indicates the following states:

- Bright The Portable Charger is using its high charge rate. The charger detected a battery low state and is charging the battery until a full battery condition is detected.
- Dim The Portable Charger is using its low charge rate. The charger detected a full battery or that the battery only requires "topping off."
- Unlit There is no battery in the MX1. No charge rate is being applied. The indicator does NOT turn off when charging is complete.

#### **Optional Single and Multi Unit Communicating Charger**

*Note:* An Upper Strap Bracket installation is a requirement prior to using the MX1 in a Docking Station. The strap is not a requirement.

LXE offers several docking station configurations. The following figure shows two versions of stationary powered docking stations. The MX1 and extra batteries are charged in powered docking stations only. LXE also offers vehicle mounted powered docking stations and a vehicle printer /docking station that charge the MX1 batteries.



#### Figure 24 Multi and Single Unit Communicating Charger



For complete installation information for a Multi-Unit Communicating Charger, please refer to the "MX1 Cradle Reference Guide".



For complete installation information for a 2330 Docking Cradle Family, please refer to the "MX1 Cradle Reference Guide".



For complete installation information for Vehicle Mounted Printers, please refer to the LXE website / ServicePass / Documentation / Archives.



#### Figure 25 Insert MX1 in Cradle

Push the MX1 (with or without the hand trigger-grip) into the cradle "tail first".

Gently push the MX1 down past the spring clips until both click into place over the top of the MX1.

The MX1 can be removed or inserted with one hand.

#### **Scanner 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 MX1.
- Do not connect the laser barcode module to any other device. The laser barcode module is certified for use with the MX1 only.



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.



1. Laser Scanner Aperture

Figure 26 Scanner Module, Top



2. CDRH or IEC 825 Label

#### Figure 27 Caution Labels - Scanner Module, Back



Figure 28 Caution Labels - Scanner

### Appendix A Key Maps

#### Full Alpha-Numeric Key Map (60 Key)



#### Figure 29 Full Alpha-Numeric Keypad

The full alpha-numeric and numeric-alpha key maps that follow present the key sequences used with batch units and when running LXE's ANSI Plus or LDS Plus Terminal Emulation (TE) programs.

When running the TE programs using this keypad, please refer to the appropriate LXE terminal emulation reference guides for equivalent keys and keypress sequences:

- ANSI Plus Reference Guide
- LDS Plus Reference Guide

*Note:* LXE offers IBM specific keypads to be used with the LXE 3270 / TN3270 / 5250 / TN5250 TE software (a graphic description of the keypads is contained in this appendix).

*Note:* The 900MHz radios are obsolete. Terminal emulation software used by mobile devices with 900MHz radios is also obsolete, e.g. 3270 DOS TE, 5250 DOS TE.

#### Full Alpha-Numeric Key Map 101-Key Equivalencies for Batch Units

*Note:* The batch unit 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  $2^{nd}$  key, press the  $2^{nd}$  key first then the rest of the key sequence. Set the On/Off condition of NumLock before pressing a key sequence. There is no visual indication of the condition of NumLock.

- *Note:* When the computer boots, the default condition of NumLock is On. NumLock can be set using BIOS Setup or toggled with a 2<sup>nd</sup>-Shift-Right Arrow key sequence.
- Note: When the computer boots, the default condition of Caps (or CapsLock) is Off. The Caps (or CapsLock) condition can be set using BIOS Setup or toggled with a 2<sup>nd</sup>-Shift-Left Arrow key sequence. CAPS is displayed on the screen when CapsLock is On.

To get this key	Press this key					
. e get tills key	2 <sup>nd</sup>	Shift	Ctrl	Alt	NumLock	. 1000 tilla Key
Contrast	х	х				С
Volume	x	x				V
2 <sup>nd</sup>				<u> </u>		2 <sup>nd</sup>
Shift				Ι <u></u> Ι		Shft
Alt						Alt
Ctrl				<u> </u>		Ctrl
Scan				Ι <u></u> Ι		Scan
Enter				Ι <u></u> Ι		Enter
Esc	х			Ι I		В
Back Space	x	x		<u> </u>		В
Tab				<u>Г</u> і		Tab
BackTab	х			Ι I		Tab
Space	х			II		A
Break	x	x		<u>Г</u> і		D
Pause	x	x				Q
Up Arrow				li		Up Arrow
Down Arrow						Down Arrow
Right Arrow						Right Arrow
Left Arrow				ا <u> </u>		Left Arrow
Pan Up	х			II		Up Arrow
Pan Down	x					Down Arrow
Pan Right	x			<u> </u>		Right Arrow
Pan Left	х			۱ <u> </u>		Left Arrow
Pan Home	x	x				I
Insert	x			<u> </u>		I
Delete	х		l l	l I		DOT
Home	х	x		l l		Н

To get this key		Press	Proce this koy			
i o get tills key	2 <sup>nd</sup>	Shift	Ctrl	Alt	NumLock	. 1035 this key
End	х	х				E
Page Up	х	х				Up Arrow
Page Down	х	х				Down Arrow
NumLock (Toggle)	х	х				Right Arrow
CapsLock (Toggle)	x	x				Left Arrow
Right Shift	х		х			1
Right Alt	х		х			4
Right Ctrl	х		х			7
ScrollLock	x	х				L
PrintScrn	x	х				Р
SysReq	x	х				S
F1						F1
F2						F2
F3						F3
F4		[i				F4
F5		[i				F5
F6		[i				F6
F7						F7
F8						F8
F9						F9
F10						F10
F11	x	[i				F1
F12	x					F2
a		х				A
b		x				В
C		х				С
d		х				D
е		х				E
f		х				F
g		х				G
h		х				Н
i		x				I
j		x				J
k	[]	x	[]			К
		x				L
m		x				М
n		x				Ν
0		x		<u> </u>		0
р		x		<u> </u>		Р
q		x				Q

To not this last	To get this key							
i o get this key	2 <sup>nd</sup>	Shift	Ctrl	Alt	NumLock	Fress this key		
r		х				R		
S		х				S		
t		х				T		
u		х				U		
V		х				V		
W		x				W		
X		x				Х		
У		х				Y		
Z	x					Y CapsLock off		
А						А		
В						В		
С						С		
D						D		
E						E		
F						F		
G						G		
Н						Н		
I						I		
J						J		
К						К		
L						L		
М						М		
Ν						Ν		
0						0		
Р						Р		
Q						Q		
R						R		
S						S		
Т						Т		
U						U		
V						V		
W						W		
Х						Х		
Y						Y		
Z or Z	x or x	x				Y or with CapsLock On		
1 (alpha)						1		
2 (alpha)						2		
3 (alpha)						3		

To get this key		Press	Press this key			
i o ger uns key	2 <sup>nd</sup>	Shift	Ctrl	Alt	NumLock	. 1033 tills Key
4 (alpha)						4
5 (alpha)			[	[		5
6 (alpha)			[	<u> </u>		6
7 (alpha)			[	[		7
8 (alpha)						8
9 (alpha)		<u> </u>	l			9
0 (alpha)			[	[		0
DOT (alpha)						DOT
1 (numeric)	х	х		<u> </u>	On	1
2 (numeric)	X	x			On	2
3 (numeric)	х	х			On	3
4 (numeric)	х	х			On	4
5 (numeric)	х	х			On	5
6 (numeric)	х	х			On	6
7 (numeric)	х	х		<u> </u>	On	7
8 (numeric)	x	х	[	[	On	8
9 (numeric)	X	x			On	9
0 (numeric)	x	х	[	[ <u> </u>	On	0
DOT (numeric)	x	х	[	[	On	DOT
- (numeric)	x	х	x			Μ
+ (numeric)	x	х	х	<u> </u>		Р
/ (numeric)	х	х	х			U
* (numeric)	х	х	х			Y
Home (numeric)	х	х	х		Off	7
End (numeric)	X	x	x		Off	1
PgDn (numeric)	x	х	x		Off	3
PgUp (numeric)	x	х	x		Off	9
Lt Arrow (numeric)	х	х	х	<u> </u>	Off	4
Rt Arrow (numeric)	х	x	x	[	Off	6
Up Arrow (numeric)	х	x	x	[	Off	8
Dn Arrow (numeric)	х	x	x		Off	2
Insert (numeric)	x	x	x	[	Off	0
Del (numeric)	x	x	x	[	Off	DOT
<	x		[	<u> </u>		С
>	x		[	[		E
=	х			<u> </u>		D
: (colon)	x					F
; (semicolon)	x		[i	l		G
?	x					Н
`````````````````````````````````	x			[		J

To get this key		Press	Pross this key			
TO GET THIS KEY	2 <sup>nd</sup>	Shift	Ctrl	Alt	NumLock	Fiess uns key
{	х					К
}	х					L
- (minus sign)	х					М
_ (underscore)	х					Ν
, (comma)	х					0
+	х					Р
[	х					Q
]	х					R
(apostrophe)	х					S
~ (tilde)	х					Т
/	х					U
\	х					V
	х					W
"	х					Х
!	х					1
@	х					2
#	х					3
\$	х					4
%	х					5
٨	х					6
&	х					7
* (asterisk)	х					8
(	х					9
)	х					0

#### IBM 3270 and TN3270 Terminal Emulator Keypad



Figure 30 IBM 3270 Specific Keypad

This keypad is designed to allow the user to enter terminal emulator commands when running LXE's IBM 3270 and TN3270 Terminal Emulation (TE) programs.

When running these programs on the MX1, please refer to the following terminal emulation reference guides for equivalent keys and keypress sequences:

- 3270 DOS TE Reference Guide (obsolete)
- 3270 Programmer's Reference Guide (obsolete)
- TN3270 Terminal Reference Guide
- *Note:* The 900MHz radios are obsolete. Terminal emulation software used by mobile devices with 900MHz radios is also obsolete, e.g. 3270 DOS TE, 5250 DOS TE.



#### IBM 5250 and TN5250 Terminal Emulator Keypad

Figure 31 IBM 5250 Specific Keypad

This keypad is designed to allow the user to enter terminal emulator commands when running LXE's IBM 5250 and TN5250 Terminal Emulation (TE) programs.

When running these programs on the MX1, please refer to the following terminal emulation reference guides for equivalent keys and keypress sequences:

- 5250 DOS TE Reference Guide (obsolete)
- 5250 Programmer's Reference Guide (obsolete)
- TN5250 Terminal Reference Guide
- *Note:* The 900MHz radios are obsolete. Terminal emulation software used by mobile devices with 900MHz radios is also obsolete, e.g. 3270 DOS TE, 5250 DOS TE.

#### Numeric-Alpha Key Map (41 Key)



Figure 32 Numeric-Alpha Keypad

When running the ANSI Plus, LDS Plus, 3270, 5250, TN3270 or TN5250 terminal emulation programs with this keypad, please refer to the following terminal emulation reference guides for equivalent keys and keypress sequences:

- 5250 DOS TE Reference Guide (obsolete)
- TN5250 Terminal Reference Guide
- 3270 DOS TE Reference Guide (obsolete)
- TN3270 Terminal Reference Guide
- ANSI Plus Reference Guide
- LDS Plus Reference Guide
- *Note:* The 900MHz radios are obsolete. Terminal emulation software used by mobile devices with 900MHz radios is also obsolete, e.g. 3270 DOS TE, 5250 DOS TE.

#### Numeric-Alpha Key Map 101-Key Equivalencies for Batch Units

When using a sequence of keys that include the A/# key, first press the A/#. When CAPS is On, the CAPS icon is displayed on the screen and alphabetic characters are toggled to uppercase.

When using a sequence of keys that include the A/# key and the  $2^{nd}$  key, first press the A/# key then the  $2^{nd}$  key. When using a sequence of keys that do not include the A/# key and includes the  $2^{nd}$  key, press the  $2^{nd}$  key first then the rest of the key sequence.

*Note:* The batch unit key mapping is used on hand held computers that are NOT running an LXE Terminal Emulator.

To got this result		Pres	Droop this key			
To get this result	A / #	2 <sup>nd</sup>	Shift	Ctrl	NumLock	Press this key
Contrast		х				F11
Volume		х				F12
		х	х			Left Arrow
2 <sup>nd</sup>		х				2nd
Shift						Shft
NO						NO
YES						YES
Alt		х				Spc
A / # <sup>2</sup>						A / #
a / #		х				Enter
Ctrl						Ctrl
Scan						Scan
Enter						Enter
Esc		х				A / #
Back Space		х				Del
Forward Tab		х				Right Arrow
Back Tab		х				Left Arrow
Space						Spc
Break		х	х			Right Arrow
Pause		х	х			F3
Up Arrow						Up Arrow
Down Arrow						Down Arrow
Right Arrow						Right Arrow
Left Arrow						Left Arrow
Pan Up		х		х		Up Arrow
Pan Down		х		х		Down Arrow
Pan Right		х		х		Right Arrow
Pan Left		х		х		Left Arrow

<sup>&</sup>lt;sup>1</sup> CAPS icon is toggled on and off. When On, icon appears on the display.

 $<sup>^{2}</sup>$  Alpha icon is toggled on and off. When On, icon appears on the display.

To get this result		Press	s These K	Pross this key		
ro ger uns result	A/#	2 <sup>nd</sup>	Shift	Ctrl	NumLock	11035 UIIS KEY
Pan Home		х		х		Enter
Insert		х	x			F10
Delete						Del
Home		х	х			Up Arrow
End		х	x			Down Arrow
Page Up		х				Up Arrow
Page Down		х				Down Arrow
NumLock						Determined by BIOS Setup
CapsLock <sup>3</sup>		х	Х			Left Arrow
Right Shift		х	x			F7
Right Alt		Х	x			F8
Right Ctrl		х	x			F9
ScrollLock		х	x			F4
PrintScrn		Х	x			F6
SysReq		х	х			F5
F1						F1
F2						F2
F3						F3
F4						F4
F5						F5
F6						F6
F7						F7
F8						F8
F9						F9
F10						F10
F11						F11
F12						F12
1 (numeric)		х	х		On	1
2 (numeric)		Х	x		On	2
3 (numeric)		х	x		On	3
4 (numeric)		х	х		On	4
5 (numeric)		Х	x		On	5
6 (numeric)		х	x		On	6
7 (numeric)		х	x		On	7
8 (numeric)		х	x		On	8
9 (numeric)		х	x		On	9
0 (numeric)		X	x		On	0

 $<sup>^{3}\,</sup>$  CAPS icon is toggled on and off. When On, icon appears on the display.

To get this result		Press	Prose this key			
ro ger mis result	A/#	2 <sup>nd</sup>	Shift	Ctrl	NumLock	FIESS UIIS NEY
1 (alpha)					Off	1
2 (alpha)					Off	2
3 (alpha)					Off	3
4 (alpha)					Off	4
5 (alpha)					Off	5
6 (alpha)					Off	6
7 (alpha)					Off	7
8 (alpha)					Off	8
9 (alpha)					Off	9
0 (alpha)					Off	0
$A^4$	х	х				NO
В	х	х				YES
С	х	х				7
D	х	х				8
E	х	х				9
F	х	х				4
G	х	х				5
Н	х	х				6
1	х	х				1
J	х	х				2
К	х	х				3
L	х	х				DOT
М	х	х				0
N	х	х				Minus Sign
0	х	х				F1
Р	х	х				F2
Q	х	х				F3
R	х	х				F4
S	х	х				F5
Т	х	х				F6
U	х	х				F7
V	х	х				F8
W	х	х				F9
Х	х	х				F10
Y	х	х				F11
Z	х	х				F12
a <sup>5</sup>	х	х				NO

 <sup>&</sup>lt;sup>4</sup> To use capital letters, both the Alpha icon and the CAPS icon must be displayed on the screen.
 <sup>5</sup> To use lower case letters, both the Alpha and CAPS icon must NOT be displayed on the screen.

To get this result	Press These Keys and then				Press this key	
io get this result	A/#	2 <sup>nd</sup>	Shift	Ctrl	NumLock	
b	х	х				YES
С	х	х				7
d	х	х				8
е	х	х				9
f	х	х				4
g	х	х				5
h	х	х				6
i	х	х				1
j	х	х				2
k	х	х				3
1	х	х				DOT
m	х	х				0
n	х	х				Minus Sign (alpha)
0	х	х				F1
р	х	х				F2
q	х	х				F3
r	х	х				F4
S	х	х				F5
t	х	х				F6
u	х	х				F7
V	х	х				F8
W	х	х				F9
x	х	х				F10
у	х	х				F11
Z	х	х				F12
%		х				7
٨		х	х	х		6
&		х	х	х		7
* (asterisk)		х				0
(		х	х	х		9
)		х	х	х		0
+ (numeric)		х	х			F11
- (numeric)		х	x			F12
* (numeric)		х	x			NO
/ (numeric)		х	х			YES
DOT (alpha)		х	х	х		3
?		х	х	х		8

### Appendix B Regulatory Notices and Safety Information

#### Notice:

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

#### **FCC Information:**

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

- 1. 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: This equipment has been tested and found to comply with the limits for a Class A 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 commercial 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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 A 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 A 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 A respecte toutes les exigences du Règlement sur le matériel brouiller du Canada. Le present appareil numérique n'emet pas de bruits radioélectriques dépassant les limites applicables aux appareils numeriques de le Classe A préscrites dans le Reglement sur le brouillage radioélectrique édits par le ministere des Communications du Canada.

#### **RF Safety Notice:**



This device is intended to transmit RF energy. For protection against RF exposure to humans and in accordance with FCC rules and Industry Canada rules, this transmitter should be installed such that a minimum separation distance of at least 20 cm (7.8 in.) is maintained between the antenna and the general population. This device is not to be co-located with other transmitters.



**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.

#### **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 France.

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

#### Approvals

Product	EMI / EMC Standards	Safety Standards
MX1	FCC Part 15 Subpart B, Class A	UL 1950; CSA C22.2 No. 950
	EN 55022:1998, (CISPR 22:1997)	CDRH: 21 CFR 1040.10 and 1040.11
	Class A	EN 60825-1
	EN 55024:1998	EN 60950
	Industry Canada Class A	IEC 825-1
		IFC 950

Transceiver	RF Standards	Notes
480824-3300 (LXE Part No.)	FCC Part 15, Subpart C	Unlicensed Operation
LXE 6400 System 2.4GHz Type II PCMCIA	FCC Part 2	Unlicensed Operation
Card	ETS 300 328	-
	ETS 300 826	
	IC-RSS 210	
	IC-RSS 102	Requires License for Outdoor Use
480628-4096 (LXE Part No.)	FCC Part 15, Subpart C	Unlicensed Operation
LXE 6500 System 2.4GHz Type II PCMCIA	FCC Part 2	Unlicensed Operation
Card	ETS 300 328	
	ETS 300 826	
	IC-RSS 139	
	IC-RSS 102	Requires License for Outdoor Use
4810P3S01 (LXE Part No.)	FCC Part 15, Subpart C	Unlicensed Operation
LXE 6200 System 900MHz Type III	IC-RSS 210	Unlicensed Operation
PCMCIA Card		
6526 (LXE Model No.)	FCC Part 15, Subpart C	Unlicensed Operation
6726 (LXE Model No.)	FCC Part 2	
LXE 6500 / 6700 System 2.4GHz Type II	EN 300 328	Unlicensed Operation
PCMCIA Card	EN 300 826	
	IC-RSS 139	Requires License for Outdoor Use
	IC-RSS 102	
6816 (LXE Model No.)	FCC Part 15, Subpart C	Unlicensed Operation
LXE 2.4GHz Type II PCMCIA Card	FCC Part 2	
	EN 300 328	Unlicensed Operation
	EN 300 826	
	IC-RSS 139	Requires License for Outdoor Use
	IC-RSS 102	

#### LXE Transceiver 480628-4096 Declaration of Conformity

### An EMS Technologies Company

DECLARATION OF CONFORMITY					
according to Directives:					
	Dadia Equipment and Talaaa	mounications Terminal Fauinment and the			
1999/5/EC	mutual recognition of their conformity				
93/68/EEC	CE Marking Directive				
Type of Equipment:	Direct Sequence 2.4 GHz Wir	reless LAN Card			
Brand Name or Trademark:	LXE				
Type Designation:	480628-4096				
Manufacturer:	LXE Inc.				
Address:	125 Technology Parkway Norcross, GA 30092-2993 US	SA			
Year of Manufacturer:	2000				
The following harmoni documents have been	The following harmonized European Standards, technical specifications, or other normative documents have been applied:				
EMI / EMC Standards:					
EN 55022 : 1995 Limits and methods of measurement of radio disturbance of information technology equipment		rement of radio disturbance characteristics ipment			
EN 300 826 : 1997	Electromagnetic compatibility - Generic immunity standard, Part 1: Residential, commercial and light industrial				
EN 61000-4-2 : 1995	Electrostatic discharge immur	nity test			
EN 61000-4-3 : 1997	Radiated radio frequency electronic	ctromagnetic field immunity test			
EN 61000-4-6 : 1996	RF conducted immunity test				
Radio Frequency Standards:					
EN 300 328 : 2000	Radio Equipment and System	ns (RES);			
	Wideband transmission syste	ms;			
	Technical characteristics and test conditions for data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques				
Safety Standards:					
IEC 950-2: 1991 + Amendments A1A4	Safety of information technology equipment, including electrical business equipment				
We, LXE Inc., declare that the equip and Safety Requirements of the abo	ment specified above complies ve Directives and Standards, as	with all Essential Health s amended.			
Place I YE	Inc. Norcross GA USA	Signed: R. Smallinner			
Date of issue: 1 Ma	rch, 2000	R. Sam Wismer, RF Approvals Engineer			

### LXE Transceiver 480824-3300 Declaration of Conformity

### An EMS Technologies Company

DECLARATION OF CONFORMITY				
according to Directives:				
1999/5/EC	Radio Equipment and Telecor mutual recognition of their cor	mmunications Terminal Equipment and the nformity		
93/68/EEC	CE Marking Directive			
Type of Equipment:	Frequency Hopping 2.4 GHz	Wireless LAN Card		
Brand Name or Trademark:	LXE			
Type Designation:	480824-3300			
Manufacturer:	LXE Inc.			
Address:	125 Technology Parkway Norcross, GA 30092-2993 US	SA		
Year of Manufacturer:	2000			
The following harmoni documents have been	zed European Standards, tech applied:	inical specifications, or other normative		
EMI / EMC Standards:				
EN 55022 : 1995 Limits and methods of measurement of radio disturbance charact of information technology equipment		rement of radio disturbance characteristics		
ETS 300 826 : 1997 Electromagnetic compatibility - Generic immunity standard, Part 1 Residential, commercial and light industrial		- Generic immunity standard, Part 1: light industrial		
EN 61000-4-2 : 1995 Electrostatic discharge immunity test		nity test		
EN 61000-4-3 : 1997 Radiated radio frequency elect		ctromagnetic field immunity test		
EN 61000-4-6 : 1996	RF conducted immunity test			
Radio Frequency Standards:				
ETS 300 328 : 1996	Radio Equipment and System	ıs (RES);		
	Wideband transmission syste	ms;		
	Technical characteristics and test conditions for data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques			
Safety Standards:				
IEC 950-2: 1991	Safety of information technolc	ogy equipment, including electrical business		
+ Amendments A1A4	equipment			
We, LXE Inc., d an	eclare that the equipment spec d Safety Requirements of the a	ified above complies with all Essential Health bove Directives and Standards, as amended.		
Place: LXE	Inc., Norcross GA USA	Signed: R. Smillinner		
		R. Sam Wismer, Lead Approvals Engineer		

# LXE Transceiver LXE 6526 Declaration of Conformity

DECLARATION OF CONFORMITY					
according to Directives:					
1999/5/EC	Radio Equipment and Telecommunications Terminal Equipment and the mutual recognition of their conformity				
93/68/EEC	CE Marking Directive				
Type of Equipment:	Direct Sequence 2.4 GHz Wire	eless LAN Card			
Brand Name or Trademark:	LXE				
Type Designation:	LXE 6526				
Manufacturer:	LXE Inc.				
Address:	125 Technology Parkway Norcross, GA 30092-2993 US	A			
Year of Manufacturer:	2001				
The following harmoni documents have been	zed European Standards, tech applied:	nical specifications, or other normative			
EMI / EMC Standards:					
EN 55022 : 1995	Limits and methods of measurement of radio disturbance characteristics of information technology equipment				
EN 300 826 : 1997 Electromagnetic compatibility - Generic immunity standard, Part 1: Residential, commercial and light industrial		- Generic immunity standard, Part 1: ight industrial			
EN 61000-4-2 : 1995	Electrostatic discharge immun	nity test			
EN 61000-4-3 : 1997	Radiated radio frequency elec	tromagnetic field immunity test			
EN 61000-4-6 : 1996	RF conducted immunity test				
Radio Frequency Standards:					
EN 300 328 : 1996	Radio Equipment and System	s (RES);			
	Wideband transmission syster	ms;			
	Technical characteristics and test conditions for data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques				
Safety Standards:					
EN 60950-2: 1991 Safety of information technology equipment, including electrical tequipment + Amendments equipment A1A4		gy equipment, including electrical business			
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.					
		Signed: R. Smillimur			
Place: LXE	Inc., NORCROSS GA USA				
Date of issue: 30 M	arch, 2001	R. Sam Wismer, RF Approvals Engineer			

### LXE Transceiver LXE 6726 Declaration of Conformity

### An EMS Technologies Company

	DECLARATION OF CONFORMITY according to Directives:			
1999/5/EC	Radio Equipment and Telecommunications Terminal Equipment and the mutual recognition of their conformity			
93/68/EEC	CE Marking Directive			
Type of Equipment:	Direct Sequence 2.4 GHz Wireless LAN Card			
Brand Name or Trademark:	LXE			
Type Designation:	LXE 6726			
Manufacturer:	LXE Inc.			
Address:	125 Technology Parkway Norcross, GA 30092-2993 USA			
Year of Manufacturer:	2001			
The following harmon documents have bee	nized European Standards, technical specifications, or other normative on applied:			
EMC:				
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			
Radio:				
EN 300 328-1 and -2: 2000	<ul> <li>Radio Equipment and Systems (RES);</li> <li>Wideband transmission systems;</li> <li>Technical characteristics and test conditions for data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques</li> </ul>			
Safety:				
EN 60950-2: 1992 + A1A4	4 Safety of information technology equipment, including electrical business equipment			
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.				
Place LXE Date of issue 24.1	Inc., Norcross GA USA			
	C. Binnom Jr. RF Approvals Engineer			

LXE Inc. 125 Technology Parkway Norcross, GA 30092-2993 USA ph. 770/447-4224 fax 770/447-6928

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#### Annex to DoC for LXE 6726

With regard to the use of external antennas

The LXE 6726 can be equipped with external antennas. The antennas listed have been evaluated with the LXE 6726 pursuant to ETSI EN 300 328, and therefore meet the definition of 'dedicated antenna' per ERC/REC 70-03 Appendix 1 Table 3; thus the requirement set forth in ERC/REC 70-03, Annex 3 are met by the LXE model 6726 transceiver.

#### Dedicated Antennas for use with LXE 6726

LXE P/N	Antenna Gain	Radio Power Level	Antenna Description
152180 0001		17 dD	Omni for LVE VV series computers
153180-0001			Omni, for LXE VX-series computers
155522-0001			Omm, for LXE MX1-series computers
155814-0001	0 dBi		Patch, for LXE MX1-series computers
157368-0001	0 dBi		Patch, for LXE MX3-series computers
157399-0001	0 dBi	17 dBm	Omni, for LXE MX5-series computers
99004-0027	0 dBi	17 dBm	3 dB Omni, for LXE model 2325 computer
DAC2450CT1	2.15 dBi	17 dBm	Omni, for LXE MX2-series computers
(Toko P/N)			
153179-0001	0 dBi	17 dBm	Omni, Access Point Antenna
153325-0001	0 dBi	17 dBm	Omni, Access Point Antenna
480424-0400	0 dBi	17 dBm	Omni, Access Point Antenna
153599-0001	3 dBi	17 dBm	Omni, Access Point Antenna
153600-0001	3 dBi	17 dBm	Omni, Access Point Antenna
480424-3404	3 dBi	17 dBm	Omni, Access Point Antenna
155846-0001	3 dBi	17 dBm	Spire® Access Point Antenna
155845-0001	6 dBi	13 dBm	Spire® Access Point Antenna
155311-0001	6 dBi	13 dBm	Patch, Access Point Antenna
480424-3411	6 dBi	13 dBm	Patch, Access Point Antenna
480424-3402	6 dBi	13 dBm	Patch, Access Point Antenna
481246-2400	6 dBi	13 dBm	Patch, Access Point Antenna
480424-1702	6 dBi	13 dBm	180° Directional, Access Point Antenna
480424-0411	9 dBi	7 dBm	Omni, Access Point Antenna
480429-2703	12 dBi	7 dBm	90° Directional Access Point Antenna
480429-0411	12 dBi	7 dBm	Omni Access Point Antenna
100720 0711		/ dbm	
460601-3020	15 dBi	3 dBm	YAGI, Access Point Antenna
460602-3020	15 dBi	3 dBm	YAGI, Access Point Antenna
480429-0415	15 dBi	3 dBm	Omni, Access Point Antenna

C. Binnom Jr. RF Approvals Engineer 24 June 2004

#### LXE Transceiver LXE 6816 Declaration of Conformity

DECLARATION OF CONFORMITY					
	accord	ling to:			
the R	&TTE Directive;	99/5/EEC			
The	EMC Directive;	89/336/EEC			
The Low Vo	oltage Directive;	73/23/EEC			
and the Ma	rking Directive;	93/68/EEC			
Ту	pe of Equipment:	DSSS 2.4GHz WLAN Radio Card			
Brand Nam	ne or Trademark:	LXE			
Т	ype Designation:	6816			
	Manufacturer:	LXE Inc.			
	Address:	125 Technology Parkway Norcross, GA 30092 USA			
The following harmonized Europe	an Norms have be	een applied:			
EMC Standards:					
EN 301 489-1: 07-2000	Electromagnetic ElectroMagnetic equipment and s	compatibility and Radio spectrum Matters (ERM); Compatibility (EMC) standard for radio 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:					
EN60950-1: 2001 Safety of information technology equipment, including electrical business equipment					
The product carries the CE Mark:					
CEO					
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: June 18, 2003					
Cyril A. Binnom Jr. Regulatory Engineer					

LXE Inc. 125 Technology Parkway Norcross, GA 30092-2993 USA ph. 770/447-4224 fax 770/447-6928

#### Annex to DoC for LXE 6816

#### With regard to the use of external antennas

The LXE 6816 can be equipped with external antennas. The antennas listed have been assessed with the LXE 6816 pursuant to EN 300 328, and therefore meet the definition of 'dedicated antenna'. The table below lists the maximum output power setting for the radio module in order to result in a total EIRP of 100mW or less. Any combination of output power and a specific type of antenna resulting in an EIRP greater than 100mW is illegal for use throughout the Community and is outside the scope of this DoC. Antennas not listed below are also outside the scope of this DoC.

LXE Antenna Part Number	LXE Model Number	Antenna Gain	Max Radio Power Level	Antenna Description
153180-0001	N/A	2.2 dBi	17 dBm	Cushcraft Omni Antenna
155846-0001	6000A279ANT3SPIREL	3 dBi	17 dBm	Spire® Omni Antenna
	6000A280ANT3SPIRER			
	6000A283ANT3INDSPR			
155845-0001	6000A277ANT6SPIREL	6 dBi	13 dBm	Spire® Omni Antenna
	6000A278ANT6SPIRER			
	6000A282ANT3INDSPR			
480424-0411	N/A	9 dBi	11 dbm	Mobile Mark Omni Antenna
155104-0001	N/A	0 dbi	20 dbm	LXE Omni
154591-0001	N/A	0 dbi	20 dbm	LXE Patch
Toko DAC2450CT1	N/A	0 dbi	20 dbm	LXE Omni
157368-0001	N/A	0 dbi	20 dbm	LXE Omni
158586-0001	N/A	0 dbi	20 dbm	LXE Omni
158399-0001	N/A	0 dbi	20 dbm	LXE Omni

Cyril A. Binnom Jr. Regulatory Engineer 18 June 2003



### 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)

#### Mise én garde:

Ce produit utilise un rayon laser. L'une des étiquettes suivantes est apposée sur le scanneur. Veuillez lire l'avertissement qu'elle contient. (FR)

#### Advertência:

Este produto usa luz de laser. O scanner contém um dos seguintes avisos. Favor ler o Aviso. (PT)

#### Varning:

Denna produkt använder laserljus. En av de nedanstående etiketterna sitter på scannern. Var god läs varningstexten. (SE)

#### Advarsel:

Dette produkt anvender laserlys. En af følgende mærkater anvendes på scanneren. Læs venligst sikkerhedsforanstaltningen. (DK)

#### Varoitus:

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

#### Warnung:

Dieses Produkt verwendet Laserlicht. Eines der folgenden Etiketten befindet sich auf dem Scanner. Bitte lesen Sie den Gefahrenhinweis. (DE)

#### Attenzione:

Questo prodotto utilizza luce laser. Una delle etichette seguenti c'ubicata sullo scanner. Si raccomanda di leggere con attenzione le avvertenze riportate. (IT)

#### Advarsel:

Dette utstyret bruker laserlys. En av følgende etiketter er plassert på scanneren. Les advarselen på etiketten. (NO)

#### Advertencia:

Este producto usa luz de láser. Las etiquetas se proveen en la máquina exploradora. Por favor, lea detenidamente la explicación para las precauciones. (ES)

#### Waarschuwing:

Dit product gebruikt laserlicht. Een van de volgende labels is op de scanner aangebracht. Lees a.u.b. de waarschuwing onder Oppassen. (NL)



# Laser Light Safety Statement



Uyarý:	Προειδοποίηση:
Bu ürün lazer ýþýðý kullanýr. Aþaðýdaki etiketlerden bir tanesi tarayýcýnýn üstünde saðlanýr. Lütfen Dikkat ifadesini okuyun. (TR)	Αυτό το προϊόν χρησιμοποιεί λέιζερ φως. Υπάρχει μία από τις ακόλουθες ετικέτες στο σαρωτή. Παρακαλούμε διαβάστε τη δήλωση με τίτλο Προσοχή. (GR)
경고: 본 제품은 레이저 광선을 사용합니다. 다음 라벨 중 하나가 스캐너에 제공됩니다. 주의 사항을 읽어 주십시오. (KR)	<ul> <li>警告:</li> <li>この製品はレーザー光線を使用します。</li> <li>次のラベルのうち1つがスキャナーに</li> <li>貼られています。</li> <li>注意事項をお読みください。(JP)</li> </ul>
警告: 本产品使用激光。 下列一个标签将随扫描仪一道提供。 请阅读"当心"一栏的内容。(CN)	Legend: Chinese-CN; Danish-DK; Dutch-NL; English-US; Finnish- FI; French-FR; German-DE; Greek-GR; Italian-IT; Japanese-JP; Korean-KR; Norwegian-NO; Portuguese-PT; Spanish-ES; Swedish-SE; Turkish-TR

#### Labels - MX1 Hand Held Computer





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