

## **LXE MX3X Mobile Computers User Guide**

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**LXE MX3X Mobile Computers** 



#### IMPORTANT NOTICE.

LXE's MX3X is obsolete. This electronic guide has been made available as a courtesy to our customers. Contact your LXE representative for replacement and assistance.

#### E-EQ-MX3XOGWW-P-ARC

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**Note:** LXE recommends that installation or removal of accessories be performed on a clean, well-lit surface. When necessary, protect the work surface, the MX3X, and components from electrostatic discharge.

#### While the MX3X is in a Hazardous Location DO NOT:

- Connect an external power source to the MX3X.
- Connect a USB device or audio jack to the MX3X.
- Remove or install a battery pack in the MX3X.
- Connect a tethered scanner to the MX3X.
- Place the MX3X in a powered dock or cradle.

## **Hardware Setup**

- 1. Connect accessories.
- 2. Connect cables.
- 3. Insert/connect a fully charged battery
- 4. Secure all cables to the MX3X with the Strain Relief Cable Clamps.
- 5. Press the Power key.

## **Software Setup**

Prerequisite: Hardware setup is complete.

- 1. Calibrate Touch screen
- 2. Set Date and Time Zone
- 3. Set Power Schemes Timers
- 4. Adjust Speaker Volume
- 5. Pair Bluetooth devices
- 6. Setup Wireless client parameters
- 7. Setup terminal emulation parameters
- 8. Save changed settings to the registry
- 9. Setup the LXE AppLock parameters
- 10. Set the LXE Scanner Wedge parameters

## **Laser Warnings and Labels**

- · Do not look into the laser's lens.
- Do not stare directly into the laser beam.
- Do not remove the laser caution labels from the MX3X.
- Do not connect the laser barcode aperture to any other device. The laser barcode aperture is certified for use with the MX3X only.

## Caution:

Laser radiation when open. Please read the caution labels. Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

#### **Label Location**





## Components

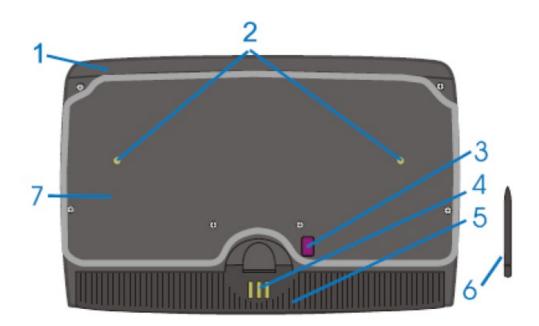
## **Front**



- 1. Endcap
- 2. Display

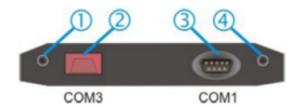
- 3. Scan, Enter or Field Exit (programmable)
- 4. Beeper
- 5. On / Off Button
- 6. 2nd LED
- 7. Alt LED
- 8. Ctrl LED
- 9. Shift LED
- 10. Caps LED
- 11. Scanner LED
- 12. Backup Battery LED
- 13. Status LED
- 14. Main Battery LED
- 15. Charger LED
- 16. Scan or Enter (programmable)

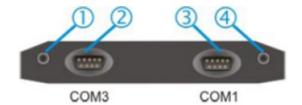
## **Back**



- 1. Endcap
- 2. Leather Handtrap Con-nector
- 3. IR Port (COM 2 Port)
- 4. Cradle Input Contacts
- 5. Main Battery
- 6. Stylus
- 7. Back Cover

## **Endcap**





- 1. DC Power Jack
- 2. Left Port
- 3. Right Port (USB-C)
- 4. Audio Jack or External Antenna Connector

**Note:** The IR port on the back of the device is COM 2.

## **Endcap Options**

Left Port (2)	Right Port (3)	See (4)
Serial COM3	Serial COM1	Audio Jack
Serial COM3	USB Client	Audio Jack
USB Host	Serial COM1	Audio Jack
USB Host	USB Client	Audio Jack
Scanner	Serial COM1	Audio Jack
Scanner	USB Client	Audio Jack
Serial COM3	Serial COM1	Antenna
Serial COM3	USB Client	Antenna
USB Host	Serial COM1	Antenna
USB Host	USB Client	Antenna

## **Batteries**

### **How To Connect or Remove the Battery Pack**

Warning: Never remove or replace any battery in a hazardous location.

The MX3X will not function unless the battery pack is in place and securely latched. Be sure to place the unit in Suspend Mode (by pressing the Power key or tapping Start | Suspend) before removing the battery. Failing to properly place the device in Suspend mode will result in a loss of all unsaved data. The main battery is located in a compartment on the back of the unit. The battery case serves as the back cover for the battery well of the MX3X. An MX3X will retain data, while the main battery is removed and replaced with a fully charged main battery, for 5 minutes. Important: When the backup battery power is Low or Very Low connect the AC adapter to the MX3X before replacing the main battery.

**Note:** The battery should not be replaced in a dirty, harsh or hazardous environment. When the battery is not connected to the MX3X, any dust or moisture that enters the battery well or connector may transfer to the battery/well terminals, potentially causing damage.

Warning: Only use LXE MX3A378BATT/158224-0001 batteries as replacements.

#### Insert/Replace Battery

#### To insert the main battery, complete the following steps:

- 1. Place the battery in the compartment, making sure the side of the battery with six contacts matches up with the battery contacts in the battery well. Do not slide the battery sideways into the battery well.
- 2. Push down on the battery until the retaining clip clicks into place.

The MX3X draws power from the battery immediately upon successful connection.

**Note:** Do not cover the vent aperture in the battery well (located in the left side of the battery well) with anything other than the main battery.

Check battery status by tapping the Start | Settings | Control Panel | Battery icon. Main battery level, backup battery level, status and other details are displayed.

### **Remove Battery**

#### To remove the battery, complete the following steps:

- 1. Place the MX3X in Suspend mode.
- 2. Detach the bottom hook of the handstrap (if installed).
- 3. Slide the battery retaining clip down to release the main battery.
- 4. Pull the battery straight up and out of the battery well.

Place the discharged battery pack in a powered battery charger. Place the discharged battery pack in a powered battery charger.

#### **Hotswap the Main Battery**

**Warning:** Never replace (hotswap) the MX3X battery in a hazardous location.

Place the MX3X in Suspend Mode. LXE recommends any work in progress be saved prior to replacing the battery pack. Simply replace the discharged battery with a fully-charged battery. An MX3X, with a fully charged backup battery, will retain data during a battery hotswap for 5 minutes.

### **Charge or Recharge the Main Battery**

**Warning**: Only use LXE MX3A378BATT/158224-0001 batteries as replacements.

**Note:** The MX3X Multi-Charger is designed for an indoor, protected environment. It is not authorized for use in areas designated as Hazardous Locations.

New batteries must be fully charged prior to use. The main battery can be recharged in an AC powered Multi-Charger after the battery has been removed from the MX3X or its packing material when new. The main battery while in the MX3X can be recharged using several different methods.

**Note:** An external power source is required before the main battery in the MX3X will recharge.

### The main battery can be recharged while it is in the MX3X:

- by docking the MX3X in a powered desk cradle
- by docking the MX3X in a powered vehicle cradle

**Note:** An uninterrupted external power source (wall AC adapters) transfers power to the computer's internal charging circuitry which, in turn, recharges the main battery and backup battery. Frequent connection to an external power source, if feasible, is recommended to maintain backup battery charge status as the backup battery cannot be recharged by a dead or missing main battery.

#### Tapping the Touchscreen with a Stylus

**Note:** Always use the point of the stylus for tapping or making strokes on the touchscreen.

Never use an actual pen, pencil, or sharp/abrasive object to write on the touchscreen. Hold the stylus as if it were a pen or pencil. Touch an element on the screen with the tip of the stylus then remove the stylus from the screen. Firmly press the stylus into the stylus holder when the stylus is not in use. Using a stylus is similar to moving the mouse pointer then left-clicking icons on a desktop computer screen.

## Using the stylus to tap icons on the touchscreen is the basic action that can:

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

A right-click can be simulated by touching the touchscreen with the stylus and holding it for a short time. A stylus replacement kit is available.

## **Backlights and Indicators**

Across the top of the keypad are LEDs (Light Emitting Diodes) that provide visual cues to current MX3X operation. When the LED is not illuminated, the function is inactive.

LED	When illuminated
2nd	The next keypress is a 2nd keypress. Amber when on. Blinks amber during configuration k ey sequence.
ALT	The next keypress is an ALT keypress. Amber when on and unlit when off.
CTRL	The next keypress is a CTRL keypress. Amber when on and unlit when off.
SHFT	The next letter is the uppercase letter on alpha keys and the shifted character on the nume ric keypad keys. Amber when on and unlit when off.
CAPS	Uppercase letters are active until the CAPS key sequence is pressed again. Amber when on and unlit when off.
STAT	Status Indicator. Amber when device is booting up. Blinking Green when display Suspend state begins.
SCNR	<ul> <li>Barcode scanner function, affected by both tethered scanners and the scanner endcap.</li> <li>Red – scanning.</li> <li>Green – good scan.</li> <li>Unlit – scanner is inactive.</li> </ul>
BATT B	Backup Battery. When illuminated, the backup battery is charging. When unlit, the backup battery is not charging.
BATT M	<ul> <li>Main Battery. When illuminated, main battery capacity is low.</li> <li>Red – low battery.</li> <li>Blinking Red – power fail.</li> <li>Unlit – Main battery is not low OR all charge is depleted in both batteries.</li> </ul>
CHGR	Charger. When on, the MX3X is receiving external power either from the DC power jack or the MX3X is seated in a powered cradle.  Red – Main battery is charging.  Amber – Fault or temporary standby (Contact your LXE representative).  Green – battery charge is complete and the MX3X is connected to external power throu gh the power jack or a powered cradle.

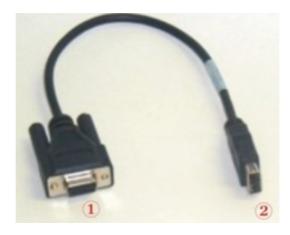
## **Connecting Cables to the MX3X**

Note: Do not connect or disconnect cables in a Hazardous location.

**Connect Cable- USB Host** 

Prerequisite: An endcap with a USB Host port (labeled USB-H).

**USB-H Cable Assembly** 



- 1. Seat the cable end connector (connector 1) firmly over the USB-H port on the MX3X endcap.
- 2. Tighten the thumbscrews in a clockwise direction. Do not over tighten.
- 3. Connecter 2 on the cable provides a USB-Host connection.

#### **Connect Cable- USB Client**

**Prerequisite**: An endcap with a USB Client port (labeled USB-C). A commercially available standard USB cable with a type A plug on one end and a type B plug on the other.

### **USB-C Cable Assembly**

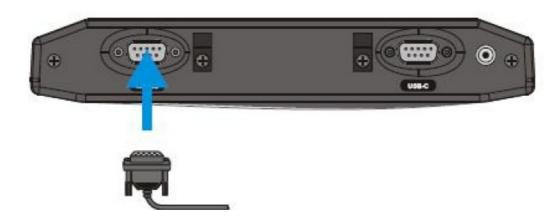


- 1. Connect to MX3X serial port
- 2. Connect to host USB port
  - 1. Seat the cable end connector (connector 1) firmly over the USB-C port on the MX3X endcap.
  - 2. Tighten the thumbscrews in a clockwise direction. Do not over tighten.
  - 3. Connecter 2 on the cable provides a USB-Host connection.

## Connect Cable - Serial

Prerequisite: An endcap with a serial port (labeled RS-232)





- 1. Seat the cable end connector firmly over the serial COM port on the MX3X endcap.
- 2. Turn the thumbscrews in a clockwise direction. Do not over tighten.
- 3. Use a strain relief clamp to secure the cable to the MX3X.
- 4. Connect the other cable end to the desired serial device.

### Connecting an AC/DC Power Supply

**Note:** The LXE-approved AC Power Supply and Adapter Cable are only intended for use in a 25°C (77°F) maximum ambient temperature environment.



- 1. AC Input Cable (US only)
- 2. DC Output Cable

In North America, this unit is intended for use with a UL Listed ITE power supply with output rated 12-80 VDC, minimum 15W75W . Outside North America, this unit is intended for use with an IEC certified ITE power supply with output rated 12-80 VDC, minimum 15W75W . The external power supply may be connected to either a 120V, 60Hz supply or, outside North America, to a 230V, 50Hz supply, using the appropriate detachable cordset. In all cases, connect to a properly grounded source of supply provided with maximum 15 Amp overcurrent protection (10 Amp for 230V circuits).

- 1. Turn the MX3X off.
- 2. Connect the detachable cordset provided by LXE (US only, all others must provide their own cable) to the

external power supply (IEC 320 connector).

- 3. Plug cordset into appropriate, grounded, electrical supply receptacle (AC mains).
- 4. Insert the barrel connector end of the AC/DC 12V power supply adapter into the power jack on the MX3X endcap and push in firmly.
- 5. The CHGR LED above the keypad illuminates when the MX3X is receiving external power through the power jack.
- 6. Turn the MX3X on.

#### **Connecting Vehicle Power**

Complete vehicle cradle mounting and power instruction is contained in the MX3X Cradle Guide. The MX3X must have a main battery installed before docking the MX3X in a cradle.

# DC to DC Power Supply Installation For use with LXE power supplies:

- 9000301PWRSPLY Power Supply, 18-60VDC with cable
- 9000302PWRSPLY Power Supply, 60-110VDC with cable

## **Connecting Electrical Cables to Power Sources**

The DC to DC power supply is used to provide vehicle power to the MX3X when placed in a DC powered vehicle dock.

## **Specifications for Electrical Supply**

Input Voltage	Always observe input voltage range specified on the DC to DC power supply
Output Voltage	12 VDC ± 10%
Power	50 W
Fuse	5 A (slow blow fuse). Fuses are USER SUPPLIED

**Note:** Refer to the Wiring Schematic for wiring colors and connections.

## Caution:



For proper and safe installation, the input power cable must be connected to a fused circuit on the ve hicle. This fused circuit requires a five Amp maximum time delay (slow blow) high interrupting rating f use. If the supply connection is made directly to the battery, the fuse should be installed in the positive e lead within 5 inches of the battery positive (+) terminal. Note: For North America, a UL Listed fuse is to be used.

### Caution:



For installation by trained service personnel only.

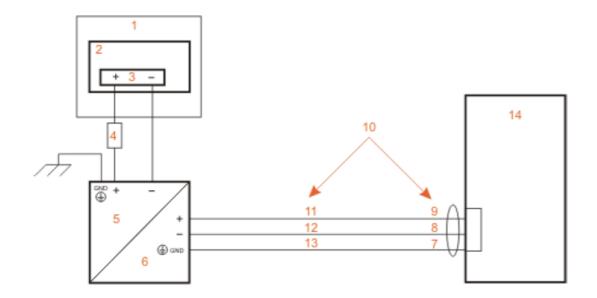
## Warning

:

Risk of ignition or explosion. Explosive gas mixture may be vented from battery. Work only in well ve ntilated area. Avoid creating arcs and sparks at battery terminals.



## Wiring Schematic



- 1. Existing Circuitry on Vehicle
- 2. Forklift Battery
- 3. Main Switch
- 4. 5A slow fuse close to power source
- 5. Power input
- 6. Isolated DC power output
- 7. Green
- 8. Red / Black
- 9. Red / White
- 10. Use color scheme corresponding to input wire provided
- 11. Brown
- 12. Blue
- 13. Green
- 14. Vehicle mounted cradle

## **How To Connect Vehicle Electrical Connection**

- 1. The vehicle cradle must be empty.
- 2. Begin by connecting the power cable to the MX3X's vehicle cradle. Work from this connection with the last connection being to the vehicle's power source.
- 3. Route the cable from the cradle to the DC to DC converter.
- 4. Cut the cable to length and strip the wire ends.
  - Route the power cable the shortest way possible. The cable is rated for a maximum temperature of 105°C (221°F). When routing this cable it should be protected from physical damage and from surfaces that might exceed this temperature. Do not expose the cable to chemicals or oil that may cause the wiring insulation to deteriorate. If the vehicle is equipped with a panel containing Silicon Controller Rectifiers (SCR's), avoid routing the power cable in close proximity to these devices. Always route the cable so that it does not interfere with safe operation and maintenance of the vehicle.
- 5. Remove the DC to DC converter lid screws. Put them in a safe place.

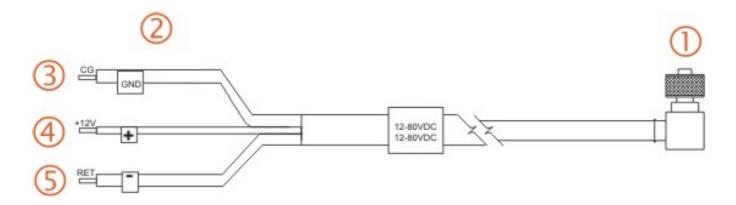
- 6. Remove the lid from the DC to DC converter.
- 7. Attach the stripped wire ends to the output side of the DC to DC converter.
- 8. Attach the stripped wire ends to the input side of the DC to DC converter.
- 9. The input and output blocks each have two + plus and two minus connectors. Either connector in the block can be used to connect the matching polarity wire. The input and output blocks also each have two chassis ground connections. When connecting the MX3X cradle to vehicle power, use one chassis ground connector in each block.



- 10. Wire colors depend on the type of device attached. Please refer to this illustration for wire colors.
- 11. Use the looms and wire ties to secure all wiring as shown above, then reattach the cover with the screws.
- 12. Connect the DC to DC converter to the vehicle's electrical system.
- 13. While observing the fuse requirements specified here, connect the power cable as close as possible to the actual battery terminals of the vehicle. When available, always connect to unswitched terminals in the vehicle fuse panel, after providing proper fusing.
  - **Note:** ATTENTION: For uninterrupted power, electrical supply connections should not be made at any point after the ignition switch of the vehicle.
- 14. Use proper electrical and mechanical fastening means for terminating the cable. Properly sized "crimp" type electrical terminals are an accepted method of termination. Please select electrical connectors sized for use with 18AWG (1mm2) conductors.
- 15. Provide mechanical support for the cable by securing it to the vehicle structure at approximately one foot intervals, taking care not to over tighten and pinch conductors or penetrate outer cable jacket.

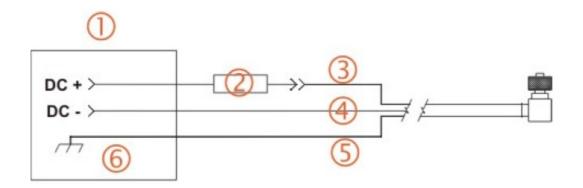
## **Vehicle Cradle 10.8-16 VDC Direct Connection**

**Direct Vehicle Power Connection Cable (12 Ft.)** 



- 1. To Vehicle Mounted Device
- 2. To Vehicle Battery
- 3. Green (Ground)
- 4. Red / White (12V +)
- 5. Red / Black (Return)

## **Connect Power Cable to Vehicle**



- 1. Vehicle Electrical System
- 2. 5 Amp Slow Blow Fuse
- 3. Red / White
- 4. Red / Black
- 5. Green
- 6. Vehicle Chassis

**Note:** Correct electrical polarity is required for safe and proper installation. Connecting the cable to the vehicle cradle with the polarity reversed will cause the vehicle cradle fuse to be blown. See the following table for wire color-coding specifics.

## Wiring color codes for LXE supplied DC input power cabling:

Vehicle Supply	Wire Color
+10.8 – 16VDC (DC +)	Red with White Stripe
Return (DC -)	Red with Black Stripe
Vehicle Chassis (GND)	Green

### **Input Power Specifications**

LXE Part Number: 9000A079CBL12ML3

Feature	Specification
DC Input Voltage	10.8 – 16 VDC
Input Current	1.25 Amps
Input Fuse	5A Time Delay

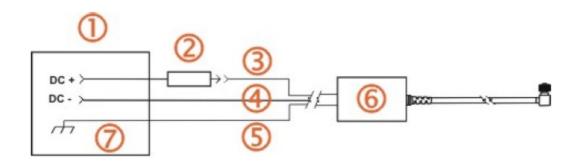
## **Vehicle Cradle 24/72 Maximum VDC Input Cable Connection Caution**

For proper and safe installation, the input power cable must be connected to a fused circuit on the vehicle. This fused circuit requires a 5 Amp maximum time delay (slow blow) fuse. If the supply connection is made directly to the battery, the fuse should be installed in the positive lead within 5 inches of the battery positive (+) terminal. Recommended for vehicle electrical systems that use between 2 and 5 twelve volt batteries in series.

## **Vehicle Power Supply, 24 – 72 Maximum VDC (Fuse Not Shown)**



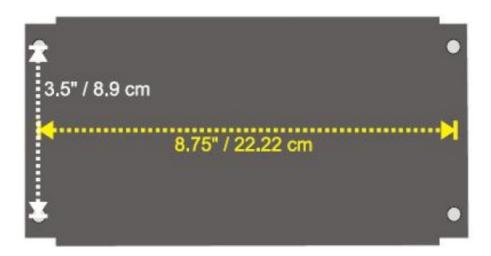
- 1. Power Switch
- 2. Power On Indicator
- 3. Output to Vehicle Cradle
- 4. Input from Vehicle Battery



- 1. Vehicle Electrical System
- 2. 5 Amp Slow Blow Fuse
- 3. Brown or White
- 4. Blue or Black
- 5. Green
- 6. DC-DC Converter
- 7. Vehicle Chassis

**LXE Part Number:** 9000A316PS24V72MX13 (Replaces 1300A301PS24WW).

### **Vehicle Power Supply Footprint**



#### DIAGRAM IS NOT TO SCALE

Power Supply Dimensions

**Length:** 9.25" / 23.5 cm **Height:** 2.5" / 6 cm **Width:** 4.7" / 12 cm

Mounting hole center Width: 3.5" / 9 cm Length: 8.75" / 22.2 cm

- 1. If the MX3X is in the cradle, it can be either On or Off during this process.
- 2. Turn the Power Supply toggle switch to the Off position.
- 3. While observing the fuse requirements specified above, connect the power cable as close as possible to the actual battery terminals of the vehicle. When available, always connect to un-switched terminals in the vehicle fuse panel, after providing proper fusing.

#### **IMPORTANT:**

For uninterrupted power, electrical supply connections should not be made at any point after the ignition switch of the vehicle.

4. Route the cable the shortest way possible. The input cable from the connection to the battery is rated for a maximum temperature of 60°C (140°F). When routing this cable it should be protected from physical damage and from surfaces which might exceed this temperature. Additionally do not expose the cable to chemicals or oil that may cause the wiring insulation to deteriorate.

**Note:** If the vehicle is equipped with a panel containing Silicon Controlled Rectifiers (SCR's), avoid routing the power cable in close proximity to these devices.

Always route the cable so that it does not interfere with the driver's safe operation and maintenance of the vehicle. Use proper electrical and mechanical fastening means for terminating the cable. Properly sized "crimp" type electrical terminals are an accepted method of termination.

Wiring color codes for LXE supplied DC input power cabling:

Vehicle Supply		Wire Color
+24-72 Max VDC	(DC +)	Brown or White
Return	(DC -)	Blue or Black
Vehicle Chassis	(GND)	Green

**Note:** The input power cord for the DC-DC Power Supply uses white, black and green wires. Some LXE products have DC input power cords with brown, blue and green wires. The previous table shows the correct electrical connection for either type of cable.

- 5. Provide mechanical support for the cable by securing it to the vehicle structure at approximately one foot intervals, taking care not to over tighten and pinch conductors or penetrate outer cable jacket.
- 6. Connect the Power Supply to the cradle by aligning the keyed water tight connector pins to the power connector; push down on the keyed water tight connector and twist it to fasten securely.
- 7. Turn the Power Supply on. The ON LED on the Power Supply illuminates when it is receiving power from the vehicle.
- 8. The Cradle Status LED illuminates green.
- 9. The MX3X CHGR LED illuminates.

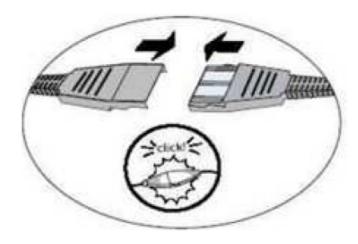
## **Connecting the Headset Cable**



## Headset

- 1. Connects to voice cable end of voice cable
- 2. Headphones
- 3. Microphone

Connect the MX3X voice cable I/O connector to the I/O port on the MX3X. The MX3X internal microphone and speaker are automatically disabled.

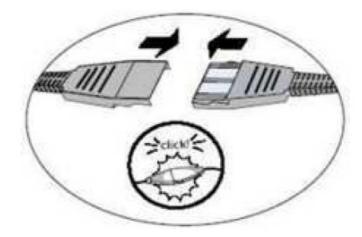


Slide the voice cable ends together until they click shut. Do not twist or bend the connectors. The MX3X is ready for voice-enabled applications.

## Adjust Headset / Microphone and Secure Cable



The headset consists of an earpiece, a microphone, a clothing clip and a cable. The headset attaches to the audio cable end of the voice cable which attaches to the MX3X. Align the audio connector and the headset quick connect cable end. Firmly push the cable ends together until they click and lock in place.



Do not twist the microphone boom when adjusting the microphone. The microphone should be adjusted to be about two finger widths from your mouth. Make sure the microphone is pointed at your mouth. Note the small "Talk" label near the mouthpiece. Make sure the Talk label is in front of your mouth. The microphone cable can be routed over or under clothing.

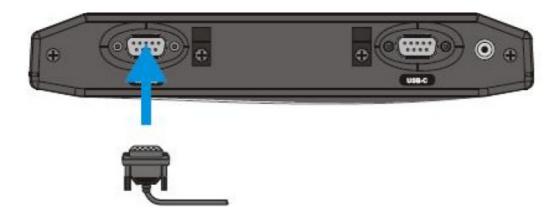
- Leave the cable exposed only at the top of the collar.
- Be sure to leave a small loop of cable to allow movement of your head.

## **Over Clothing**

- Use clothing clips to hold the cable close to your body.
- Tuck the cable under the belt, but leave a small loop where it goes under the belt.
- Do not wear the cable on the front of your body. It may get in your way or get caught on protruding objects.

## **Connecting a Tethered Scanner**

• Do not connect a tethered scanner cable to a USB-C or USB-H labeled endcap port. The USB ports cannot power a tethered scanner. The tethered scanner draws power from the MX3X. The MX3X Scan buttons have no effect on tethered barcode scanners (connected to a serial port). Tethered scanners read barcode scans only when the trigger on the tethered scanner is pressed. The tethered scanner requires power on pin 9 of the MX3X's serial port. To set the MX3X to use a tethered scanner, select Start | Settings | Control Panel | Scanner | COM1 (or 2 or 3). Tap the "Power on Pin 9 (+5V)" checkbox for the COM port selected. The COM port that accepts the scanner data can be configured for data rate, parity, stop bits and data bits.



#### Attaching the Handstrap

Note: The handstrap is pre-installed by LXE.



- 1. Place the MX3X with the screen facing down, on a flat stable surface.
- 2. Attach the handstrap retainer bracket to the MX3X with the screws and washers provided.

- 3. Fold each end of the strap over so that the closed loop fastener surfaces mate evenly.
- 4. Test the strap's connection making sure the MX3X is securely connected to each end of the handstrap's connectors.

Check the closed loop fastener, retainer bracket and clip connections frequently. If they have loosened, they must be tightened or replaced before the MX3X is placed into service again.

## **Attach Stylus Tether and Sleeve**



The stylus kit includes the stylus, tether and sleeves. The tether allows the stylus to be mounted to the MX3X and the sleeve provides storage for the stylus when not in use. Determine a convenient location for the stylus sleeve. Carefully remove the paper backing from the Stylus Clip sticky. Firmly press the sticky side of the clip onto the MX3X and hold it in place for 15 seconds. Thread the tether through the end of the stylus and tie the ends firmly to the Stylus Clip so that the ends don't interfere with placing the stylus in the Stylus Clip. Place the stylus in the Stylus Clip when not in use. An extra or replacement stylus can be ordered from LXE.

#### Set Date and Time Zone

Start | Settings | Control Panel | Date/Time icon

Set Date, Time, Time Zone, and assign a Daylight Savings location on the MX3X after a warm boot or anytime. There is very little functional change from standard desktop PC Date/Time Properties options. Adjust the settings and tap the OK button or the Apply button to save changes to the registry. Any changes take effect immediately. Double-tapping the time displayed in the Taskbar causes the Date/Time Properties screen to appear.

#### **Grab Time Utility**

The GrabTime utility can be configured to synchronize the time with a local server during each reboot function. Tap the Sync button to synchronize date and time with a networked time server. By default, the MX3X operating system first searches for a time server on the local intranet. If not found, it then searches the Internet for a time server. A connection to the Internet is required for this option.

#### **Autolaunch Time-Sync**

Start | Settings | Control Panel | MX3X Options | Communication tab By default, TimeSync does not automatically run on the MX3X. To enable TimeSync to run automatically on the MX3X using the GrabTime utility, check this checkbox.

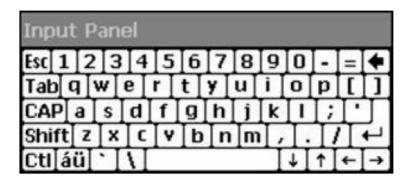
### Synchronize with a Local Time Server

By default, GrabTime synchronizes via an Internet connection. To synchronize with a local time server:

- 1. Use ActiveSync to copy GrabTime.ini from the My Device | Windows folder on the MX3X to the host PC.
- 2. Edit the copy of GrabTime.ini on the host PC. Add the local time server's domain name to the beginning of the list of servers. You can optionally delete the remainder of the list.
- 3. Copy the modified GrabTime.ini file to the My Device | System folder on the MX3X. The System/GrabTime.ini file takes precedence over the Windows/GrabTime.ini file. System/Grabtime.ini also persists after a cold boot; Win-

dows/Grabtime.ini does not persist.

## Using the Input Panel / Virtual Keyboard



The virtual keyboard is always available when needed e.g. text entry. Tap the Keyboard icon in the Taskbar to put the virtual keyboard on the display. Place the cursor in the text entry field and, using the stylus:

- Tap the Shift key to type one capital letter.
- Tap the CAPS key to type all capital letters.
- Tap the áü key to access symbols.

Some applications do not automatically display the Input Panel.

## In this case, do the following to use the Input Panel:



Input Panel icon in the taskbar

- Tap the Input Panel icon in the taskbar.
- Select Keyboard from the menu.
- Move the cursor into the text entry field when you want to enter data using the Input Panel.

Keyboard icon in the taskbar

When finished entering data, tap the icon in the Taskbar again. Select Hide Input Panel.

### **Set Power Scheme Timers**

Start | Settings | Control Panel | Power | Schemes Change the parameter values and tap OK to save the changes.

#### **Battery Power Scheme**

Use this option when the MX3X will be running on battery power only.

Switch state to <b>User Idle</b> 1	Default is After 3 seconds
Switch state to <b>System Idle</b> 2	Default is After 15 seconds
Switch state to <b>Suspend</b> 3	Default is After 5 minutes

## **AC Power Scheme**

Use this option when the MX3X will be running on external power (e.g. connected to an A/C power source).

Switch state to User Idle	Default is After 2 minute
Switch state to System Idle	Default is After 2 minutes
Switch state to Suspend	Default is After 5 minutes

The timers are cumulative. The System Idle timer begins the countdown after the User Idle timer has expired and the Suspend timer begins the countdown after the System Idle timer has expired. When the User Idle timer is set to "Never", the power scheme timers never place the MX3X in User Idle, System Idle or Suspend modes (even when the MX3X is idle).

## Because of the cumulative effect, and, using the Battery Power Scheme Defaults listed above:

- The backlight turns off after 3 seconds of no activity,
- The display turns off after 18 seconds of no activity (15 seconds + 3 seconds),
- And the MX3X enters Suspend after 5 minutes and 18 seconds of no activity.

An amount of time has passed, set by the User Idle timer, and the device shuts down a minimum number of services e.g. backlights. The System Idle timer and the Suspend timer have not expired yet. An amount of time has passed, set by the System Idle timer, and the device shuts down a few more services e.g. touch display. The User Idle timer has expired and the Suspend timer has not expired yet. Suspend mode is entered when (1) the unit is inactive for a predetermined period of time, (2) the user taps the Power key, or (3) Start | Suspend is chosen. Inactivity means that no internal devices are causing interrupts to reset the power state.

## **Adjust Speaker Volume**

• The speaker, also called the beeper, is located below the left scan button. Speaker volume can be adjusted to a comfortable level for the listener by using the keypad or by changing parameters in the Volume & Sounds control panel.

### **Using the Keypad**

**Note:** Volume & Sounds (in Settings | Control Panel) must be enabled before the following key sequences can adjust the volume.

The volume is increased or decreased one step each time the volume key sequence is pressed. To adjust speaker volume, locate the <F8> key at the top of the keypad.

#### Adjust the speaker volume by pressing the:

- 2nd key then the <F8> key to enter Volume change mode.
- Use the Up Arrow and Down Arrow keys to adjust volume until the speaker volume is satisfactory. Press the Enter key to exit this mode.

The LED for the 2nd key blinks until the special editing mode (set audio speaker volume) is complete. Volume control using a keypad key press has six volume settings that match those supported by the Volume and Sounds Control panel. Volume does not "roll-over" from minimum to maximum or from maximum to minimum. Continuously holding down the up or down arrow keys does not cause an automatic repeat of the up (or down) arrow key.

#### **Using the Control Panel**

Start | Settings | Control Panel | Volume & Sounds | Volume

Change the volume 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. As the volume scrollbar is moved between Loud and Soft, the MX3X emits a tone each time the volume increases or decreases in decibel range.

#### **Touchscreen**

## **Calibrating the Touchscreen**

If the touchscreen is not responding properly to stylus taps, you may need to recalibrate the touchscreen. Recalibration involves tapping the center of a target. If you miss the center, keep the stylus on the screen, slide it over the target's center, and then lift the stylus. To recalibrate the screen, select Start | Settings | Control Panel | Stylus | Calibration tab. To begin, tap the Recalibrate button on the screen with the stylus. Follow the instructions on the screen and press the Enter key to save the new calibration settings or press Esc to cancel or quit.

#### **Adjusting the Display Backlight Timer**

Start | Settings | Control Panel | Display | Backlight

The backlight settings use the LXE set of default timeouts and are synchronized to the User Idle setting in the Schemes tab in the Power control panel. When the backlight timer expires, the display backlight is dimmed, not turned off. When both checkboxes are unchecked, the backlight never turns off (or dims). Default values are 3 seconds for Battery, 2 minutes for External and both the check boxes are enabled.

## **Apply the Touchscreen Protective Film**

First, clean the touchscreen of fingerprints, lint particles, dust and smudges. Remove the protective film from its container. Remove any protective backing from the film sheet by lifting the backing from a corner of the film. Discard the backing. Apply the film to the touchscreen starting at one side and smoothing it across the display. If air bubbles appear, raise the film slightly and continue smoothing the film across the display until it covers the glass surface of the display. If dust, lint or smudges are trapped between the protective film and the glass display, remove the protective film, clean the display and apply the protective film again.

#### Cleaning the Touchscreen and Scanner Aperture

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

Keep fingers and rough or sharp objects away from the scanning aperture and the mobile device touchscreen. If the glass becomes soiled or smudged, clean only with a standard household cleaner such as Windex® without vinegar or use Isopropyl Alcohol. Dampen the cloth with the cleaner and then wipe the surface. 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 and particulates can be removed with clean, filtered canned air.

### **Setup Terminal Emulation Parameters**

Before you make a host connection, you will, at a minimum, need to know:

- the alias name or IP address (Host Address) and
- the port number (Telnet Port) of the host system to properly set up your host session.
  - 1. Make sure the mobile client network settings are configured and functional. If you are connecting over wireless LAN (802.11x), make sure your mobile client is communicating with the Access Point.
  - 2. From Start | Program, run LXE RFTerm or tap the RFTerm icon on the desktop.
  - 3. Select Session | Configure from the application menu and select the "host type" that you require. This will depend on the type of host system that you are going to connect to; i.e. 3270 mainframe, AS/400 5250 server or VT host.
  - 4. Enter the "Host Address" of the host system that you wish to connect to. This may either be a DNS name or an IP address of the host system.
  - 5. Update the telnet port number, if your host application is configured to listen on a specific port. If not, just use the default telnet port.

- 6. Select OK.
- 7. Select Session | Connect from the application menu or tap the "Connect" button on the Tool Bar. Upon a successful connection, you should see the host application screen displayed.

To change options such as Display, Colors, Cursor, Barcode, etc., please refer to these sections in the RFTerm WebHelp for complete descriptions of these and other features.

## Using the AppLock Switchpad

**Note:** The touchscreen must be enabled. Select Start | Settings | Control Panel | MX3X Options | Misc. tab to verify touchscreen status.



#### Switchpad Menu



#### Switchpad Icon in Taskbar

A checkmark indicates applications currently active or available for Launching by the MX3X user. When Keyboard, on the Switchpad Menu, is selected, the default input method (Input Panel, Transcriber, or custom input method) is activated.

## **Using the Keypad**

One switch key sequence (or hotkey) is defined by the Administrator for the end-user to use when switching between locked applications. This is known as the Activation key. When the switch key sequence is pressed on the keypad, the next application in the AppLock configuration is moved to the foreground and the previous application moves to the background. The previous application continues to run in the background. MX3X key presses affect the application in focus only.

## **Using the Touchscreen**

The figure shown above is an example and is shown only to aid in describing how the user can switch between applications using a stylus. When the user taps the Switchpad icon with the stylus, a menu pops up listing the applications available to the user. The user can tap an application name in the popup menu and the selected application is brought to the foreground. The previous application continues to run in the background. Stylus taps affect the application in focus only. When the user needs to use the Input Panel, they tap the Keyboard option. Input Panel taps affect the application in focus only.

### **Connecting to Bluetooth Devices**

#### **Prerequisites:**

- The system administrator has discovered and paired (using LXEZ Pairing Control Panel) Bluetooth devices for each MX3X: one mobile Bluetooth scanner and one Bluetooth printer.
- The system administrator has enabled and disabled LXEZ Pairing parameters for the MX3X.
- The system administrator has also assigned a Computer Friendly Name using LXEZ Pairing Control Panel for the MX3X.

To connect Bluetooth devices, the MX3X should be as close as possible and in direct line of sight with the targeted Bluetooth device during the discovery and pairing process. If the devices are in Suspend, tap the power key to wake the MX3X. Using the correct procedure, wake the targeted Bluetooth device if necessary. There may be audible or visual signals as both devices discover and pair with each other.

#### **Taskbar Connection Indicator**



Bluetooth module is connected to one or more of the targeted Bluetooth device(s).



MX3X is not connected to any Bluetooth device. MX3X is ready to connect with any Bluetooth device. MX3X is out of range of all paired Bluetooth device(s). Connection is inactive.

There may be audible or visual signals from paired devices as they move back into range and re-connect with the Bluetooth hardware in the MX3X.

#### Reboot

When the Windows CE desktop is displayed or an application begins, the power up (or reboot) sequence is complete.

## **Cold Boot**

Start | Run

The Cold Boot function reboots the device, erases all registry data, and user-specified settings. The factory default settings are restored when the MX3X powers on again. Passwords are lost upon cold boot. If a password is set, that password must be entered to begin the cold boot power cycle process. Tap Start | Run and type COLDBOOT. This command is not case-sensitive1. Tap the OK button.

**Note:** Because of the extreme nature of cold boot, LXE recommends using this command only as an emergency (or when instructed to do so as part of a specific MX3X procedure).

The text typed in the text box can be upper or lower case or a combination of upper and lower case letters.

## **Troubleshooting**

Can't change the date/time or adjust the volume.	AppLock is installed and may be running in User Mode on the MX3X. AppLock user mode restricts access to the control panels.
Touchscreen is not acceptin g stylus taps or needs recalibration.	Press <ctrl>+<esc> to force the Start Menu to appear. Use the tab, backtab and cursor keys to move the cursor from element to element.</esc></ctrl>
MX3X seems to lockup as s oon as it is warm booted.	There may be slight delays while the wireless client connects to the network, authorization for voice-enabled applications complete, Wave link Avalanche man agement of the MX3X startup completes, and Bluetooth relationships establish or re-establish. When the desktop appears or an application begins, the MX3X is re ady for use.
New MX3X main batteries don't last more than a few h ours.	New batteries must be fully charged prior to first use. Li-lon batteries (like all batt eries) gradually lose their capacity over time (in a linear fashion) and never just st op working. This is important to remember – the MX3X is always 'on' even when in the Suspend state and draws battery power at all times.

#### Continuous Scan Mode

If Continuous Scan Mode has been enabled (factory default setting is 'Disabled'), the laser (or imager) is always on and decoding.

Caution: Laser beam is emitted continuously. Do not stare into the laser beam.

## **Regulatory Notices and Safety Information**

# Class A Digital Device NOTICE

This device complies with FCC Rules, part 15. 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.

**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.

## **NOTICE**

Changes or modifications made to this equipment not expressly approved by LXE, Inc., may void the FCC authorization to operate this equipment.

## **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.

## **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.

#### **Lithium Ion Battery**

When disposing of the 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.

## Waste Electrical and Electronic Equipment (WEEE) 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 your LXE representative, or visit <a href="https://www.lxe.com">www.lxe.com</a>.

#### **RF Notices**

This device contains transmitter Module FCC ID: KDZLXE4830P

## RF Safety Notice (Summit Client - 4830)



#### Caution:

This portable device with its antenna complies with FCC and Industry Canada RF exposure limits set for an uncontrolled environment. This equipment has shown compliance with FCC and Industry Canada Specific Absorption Rate (SAR) limits. Highest reported SAR for the MX3X is 1.176W/kg on body. Any accessories not provided by LXE should not be used with this device. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

This device contains transmitter Module FCC ID: KDZLXE4831P

RF Safety Notice (Summit Client – 4831)

#### Caution:

This portable device with its antenna complies with FCC and Industry Canada RF exposure limits set for an uncontrolled environment. This equipment has shown compliance with FCC and Industry Canada Specific Absorption Rate (SAR) limits. Highest reported SAR for the MX3X is 0.543W/kg on body. Any accessories not provided by LXE should not be used with this device. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

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 Number. Substitute 4 digit Notified Body Number may also be applied.)





Complies with IDA Standards DA103458
Republic of Singapore – LXE Dealer
License Number DA103458 complies with IDA Standards.

#### **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)

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



## **Vehicle Power Supply Connection Safety Statement**

Vehicle Power Supply Connection: If the supply connection is made directly to the battery, a 5A slow-blow fuse should be installed in the positive lead within 5 inches (12.7 cm.) of the battery positive (+) terminal. (US)

## **Revision History**

Revision / Date	Location	Change
M / Aug 2009 - Initial Release		Formatted for browser delivery
N / Oct 2009	Cover page	Apply Marketing Color Scheme
P / Jan 2010 Archived/Obsolete	Components	Added Component pages.

## **Documents / Resources**



**LXE MX3X Mobile Computers** [pdf] User Guide MX3X Mobile Computers, MX3X, Mobile Computers, Computers

#### References

User Manual

Manuals+, Privacy Policy

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