RX2 User's Guide

(Microsoft® Windows® CE .NET Equipped)

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

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.

Revision Notice

RX2 User's Guide
Upgrade From Revision A to Revision B

Section	Explanation
Notices	Updated Trademarks.
Accessories	Revised list based on currently available items.
Internal Battery Pack (Optional)	Revised section.
Vehicle 12VDC Direct Power Connection	Revised section with new graphics.
DC to DC Power Supply	Revised section.
Appendix A – Regulatory Notices and Safety Information	Revised Transceiver table.

Note: *A complete revision history is included in Appendix A, "Regulatory Notices and Safety Information".*

Table of Contents

Illustrations

Introduction

Overview

The LXE RX2 is a rugged, vehicle mounted Microsoft® Windows® CE .NET equipped mobile computer capable of wireless data communications and equipped with an RFID module.

The RX2 does not feature a display or keypad. Configuration is performed via the USB port using Microsoft ActiveSync and other utilities. Please refer to your system administrator for details on configuration and application operation.

Document Conventions

ALL CAPS	All caps are used to represent disk directories, file names, and application names.
Menu | Choice	Rather than use the phrase "choose the Save command from the File menu", this guide uses the convention "choose File | Save".
"Quotes"	Indicates the title of a book, chapter or a section within a chapter (for example, "Document Conventions").
< >	Indicates a key on the keypad (for example, <Enter>).
📖	Indicates a reference to other documentation.
ATTENTION	Keyword that indicates vital or pivotal information to follow.
⚠	Attention symbol that indicates vital or pivotal information to follow. Also, when marked on product, means to refer to the user's guide.
⊟	International fuse replacement symbol. When marked on the product, the label includes fuse ratings in volts (v) and amperes (a) for the product.
Note:	Keyword that indicates immediately relevant information.
Caution ⚠	Keyword that indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
Warning ⚠	Keyword that indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
Danger ⚠	Keyword that indicates a imminent hazardous situation which, if not avoided, will result in death or serious injury.

RX2 Environmental Specifications

Operating Temperature	-13°F to 122°F (-25°C to 50°C) (non-condensing)
Storage Temperature	-40°F to 122°F (-40°C to 50°C) (non-condensing)
Water and Dust	IEC IP66
Operating Humidity	5% to 95% non-condensing at 104°F (40°C)
Vibration	Based on MIL Std 810F
ESD	8 kV air, 4kV contact
Shock	14G, 10ms, ½ Sine

Battery Charger Environmental Specifications

Operating Temperature	32°F to 104°F (0°C to 40°C) (non-condensing)
Storage Temperature	14°F to 158°F (-10°C to 70°C) (non-condensing)
Operating Humidity	5% to 95% non-condensing

Components

1. Power Switch (Battery Powered Units Only)
2. Input Power/Battery Charger Connector
3. USB Client Connector
4. COM3/RS232 Connector
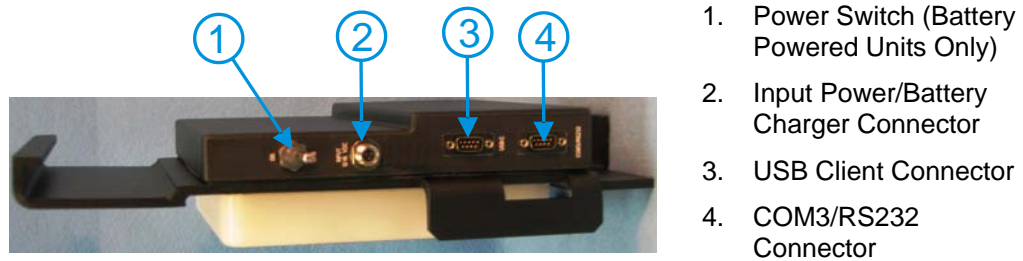
Figure 1 RX2 Connector Panel

1. RX2 Computer
2. Fork Truck Mounting Bracket
3. Power LED
4. Antenna Enclosure
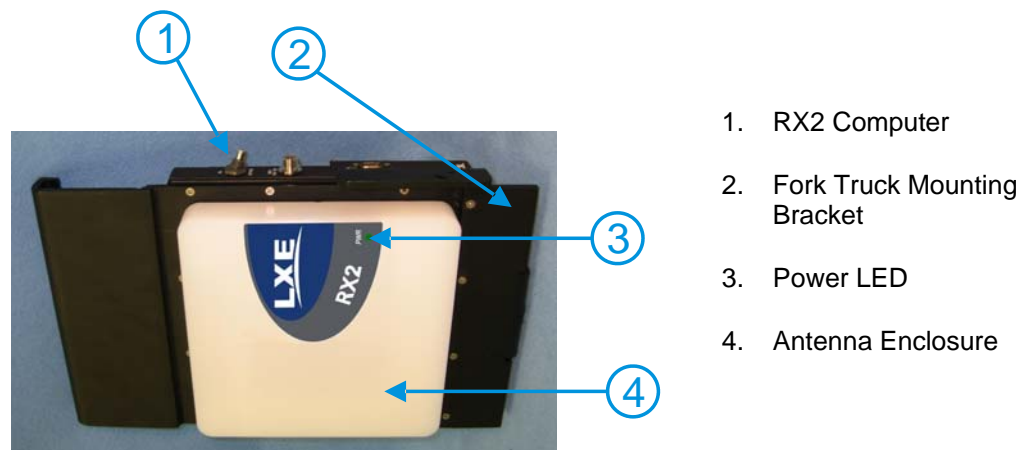
Figure 2 RX2 Components

Quick Start

Note: *The RX2 is assembled with an optional internal battery pack (if ordered) and radio card installed before shipment.*

This section's instructions are based on the assumption that your new system is pre-configured and requires only a power source.

In general, the sequence of events is:

1. Provide a power source for the RX2:
   - Connect an external power source to the unit (if required).
     -or-
   - Use the optional internal battery pack (the internal battery pack, if ordered, must be fully charged before use).

2. Flip the power switch to On (Battery powered units only).

Note: *Do **not** connect a tethered scanner cable to a USB-C labeled port. This port cannot power a tethered scanner.*

RFID Introduction

Radio frequency identification, or RFID, is a generic term for technologies that use radio waves to automatically identify individual items. The individual items identified/read by a RFID reader contain a tag (also known as an electronic label or transponder). Unlike barcodes that must be read by a beam passing over the barcode, RFID tags do not have to be in the line of sight of the reader before the reader can collect the data from the tag but they do need to be within the established reading range of the RFID-module.

See the "RX2 Reference Guide" for further information and configuration.

RFID Reader Scan Range

Type of Tag	Scan Range
Class 0 Tag	9.8 feet / 3.0 meters
Class 1 Tag	9.8 feet / 3.0 meters
Gen2 Tag	9.8 feet / 3.0 meters

Figure 3 RFID Tag Reading Ranges

Unlike barcode scanners that require line-of-sight before successfully reading a barcode, the RFID reader does not require line-of-sight when searching for and reading tags.

The range of the RFID reader is dependent on many outside influences including the tag construction and orientation.

RFID Tag Data Collection

Generally, when the RX2 is on, the RFID reader is ready for use.

- While the RX2 is booting, the Power LED is lit solid. The RFID reader is not available until the Power LED beings flashing and all drivers have finished loading.

- Please consult your system administrator for application details. Although the reader is ready for use, the application may not yet have enabled the reader.

- If the battery charger is connected to the RX2, the RX2 remains Off, even if the power switch is in the On position.

The reader supports Class 0 (read only) and Class 1 (read and write) tags as well as Class 1 Gen2 (read and write) tags.

The RFID information is relayed to the network via the 802.11 radio in the RX2. Data transmission is application specific. Please refer to your system administrator for details.

Getting Help

All LXE user guides 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 www.lxe.com.

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

Manuals

RX2 Reference Guide

Accessories

Data Cables

Cable, USB Host D9F to USB, 6'	MX3XA069CBL09USBCLNT
Cable, Serial D9 to D9	9000A054CBL6D9D9

DC Power Accessories

DC Adapter Cable, 12V	RX2A052CBLDCPWR
DC to DC Power Supply, 24-60VDC to 12V	9000A316PS24V72BARE

Battery Chargers and Battery

Battery Charger US, with Connector Cables	RX2A381CHGRUS

Installation

Introduction

The general installation procedure consists of

1. Mounting the RX2 and any accessories to the forklift truck.

2. Providing a power source to the RX2:

   - Use the optional internal battery after it is charged with the RX2 Battery Charger

   - Use a direct connection to 12V DC vehicles

   - Use a DC to DC converter for 24 – 60 VDC vehicles

Please read Appendix A, "Regulatory Notices and Safety Information" before installation.

Mounting the RX2

1. Set Screws (4 each)

2. Lock Nuts (4 each)

3. Set Screw Holes (4)

4. Hook
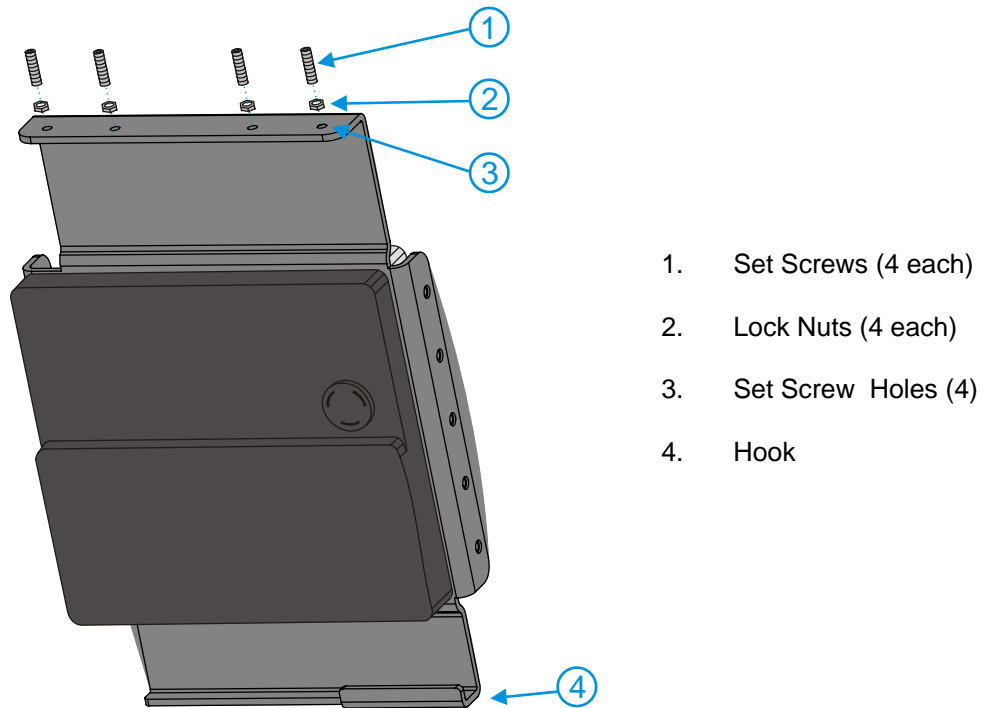
Figure 4 Mounting Provisions

To install the RX2:

1. Install the bracket by placing the hook (at the bottom of the bracket) over the lip of a Cascade® E or F series side shifter.

2. Slide the RX2 over to the desired position.

3. Secure with (4) 1/4-20 set screws in the threaded holes on the top surface of the bracket. Thread a lock nut onto each set screw. Using an Allen wrench, tighten all four set screws to an equal depth, but do not tighten the locking nuts yet.

4. After all set screws have been tightened, recheck and retighten all screws. Tighten the locking nut while holding the set screw tight with an Allen wrench.

Connect Cables

USB Client Cable

A USB Client port is available via an adapter cable. The USB connection is used to establish an ActiveSync connection with a PC.

Figure 5 Connect USB Cable

Insert the D9 end of the USB adapter cable into the RX2 USB connector. Seat the connector firmly over the pins and turn the thumbscrews in a clockwise direction. Do not over tighten.

Serial Cable

An RS-232 port is available via an adapter cable. The serial connection can be used to establish an FTP connection to another device.
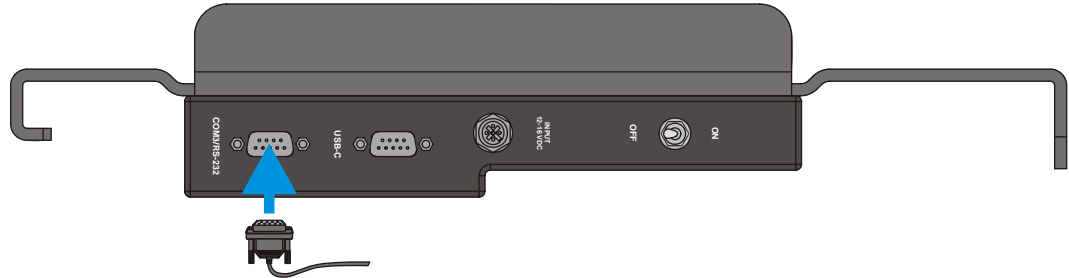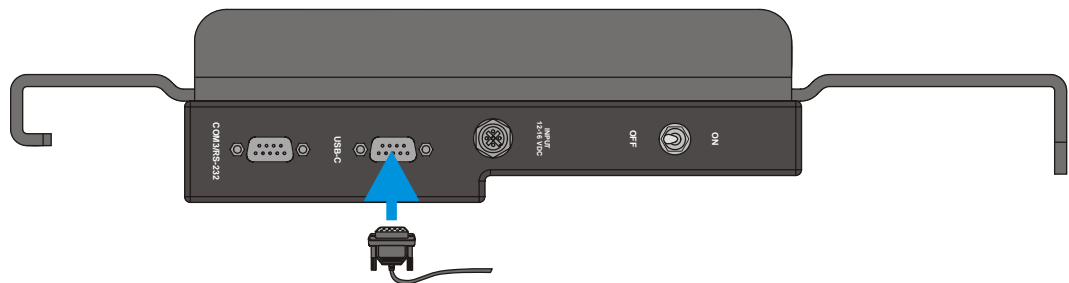
Figure 6 Connect Serial Cable

Insert the D9 end of the serial into the RX2 COM3/RS-232 connector. Seat the connector firmly over the pins and turn the thumbscrews in a clockwise direction. Do not over tighten.

Determine Power Source

A DC power source must be connected to the RX2 before it can be used

> *– or –*

The optional internal battery must be fully charged before the RX2 can be used.

Please refer to the following sections to determine the desired method to power the RX2.

Note: The RX2 power connector and the plugs on all cables that attach to the RX2 power connector are keyed and care must be used when connecting the cables. Align the connector pins to the power connector, push down on the watertight connector and twist it to fasten securely.
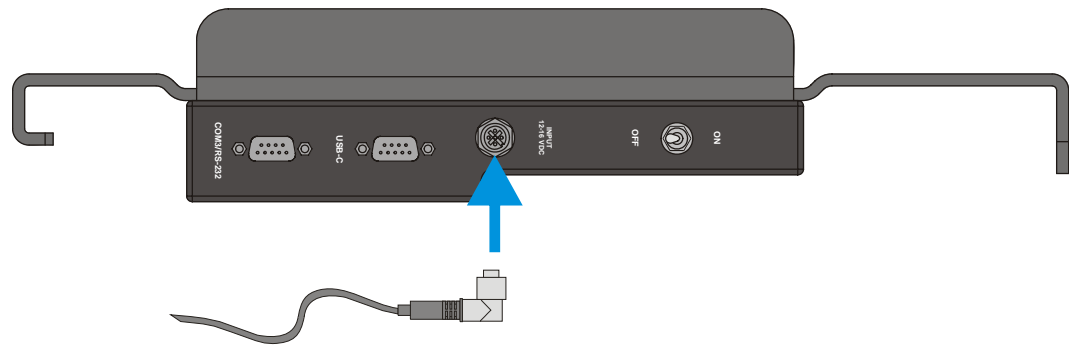

Figure 7 Connect Power Source or Battery Charger

Internal Battery Pack (Optional)

The RX2 is available with an optional internal battery pack.

Use the battery charger to charge the RX2's internal battery. The RX2 battery charger charges the RX2 battery pack in less than 6 hours. It is recommended the internal battery pack be fully charged before installing the RX2.

The battery charger uses an adapter cable. One end of the cable has a "break away" quick disconnect connection to reduce the chance of damage if the forklift is moved before the battery charger is disconnected. The other end of the cable attaches to the RX2.

Once fully charged, the internal RX2 battery pack powers the RX2 for nine hours under normal conditions including an RFID reader scan every two seconds.

The RX2 provides a low battery warning as follows:

- The power LED flashes red (or is solid red while the RX2 is booting)
- The low battery buzzer sounds
- A low battery signal can be sent via the radio card to the network host (please refer to your system administrator for details).

When the low battery warning is displayed, there is approximately 30 minutes of power left in the battery. If the battery is not recharged before it is depleted, the RX2 automatically shuts down. The RFID reader remains functional until the battery can no longer power the RX2.
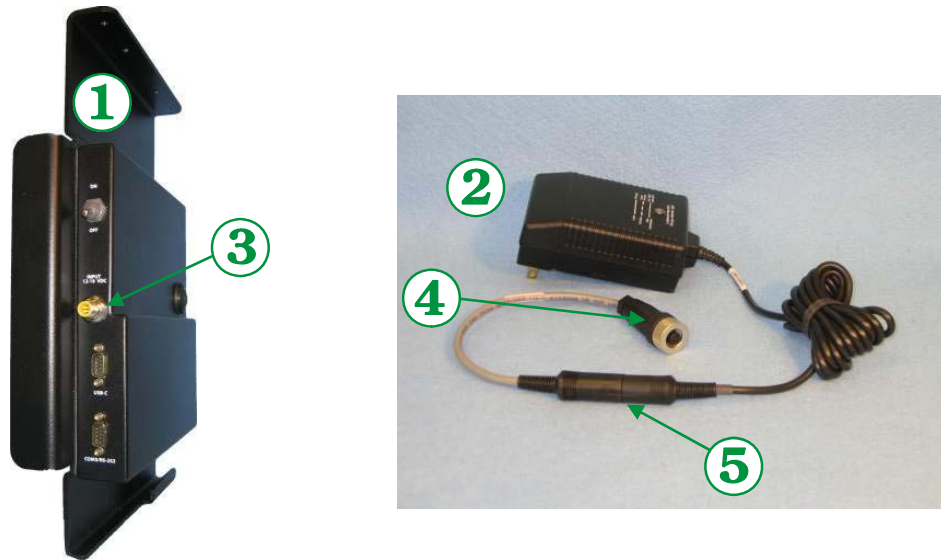
1   RX2 (Battery Powered)

2   RX2 Battery Charger, RX2A381CHGRUS

3   RX2 Power Connector

4   To RX2 Power Connector

5   Break Away Connector

Figure 8 Battery Charger and Cables

Caution: ⚠	To prevent damage to the RX2, the cables or the battery charger, make sure the charger is disconnected before moving the forklift truck.

Prepare Charger Connection

1. Locate the RX2 to Charger Coupler cable. This cable has an RX2 power connection on one end. The other end has a quick disconnect connector to attach to the RX2 Battery Charger.

2. Attach the couple cable to the RX2 and the RX2 Battery Charger.

3. Plug the Battery Charger into an AC outlet.

4. When the Charger is attached the RX2 is Off regardless of the power switch position. If the power switch is in the On position, the RX2 boots up when the charger is removed.

Vehicle 12VDC Direct Power 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 2 Amp maximum time delay (slow blow) high interrupting rating 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.*
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 ventilated area. Avoid creating arcs and sparks at battery terminals.*

1. To Terminal Block or Vehicle Battery
2. To RX2
3. Gray (GND)
4. Brown (DC+)
5. Black (DC-)
6. 12 VDC
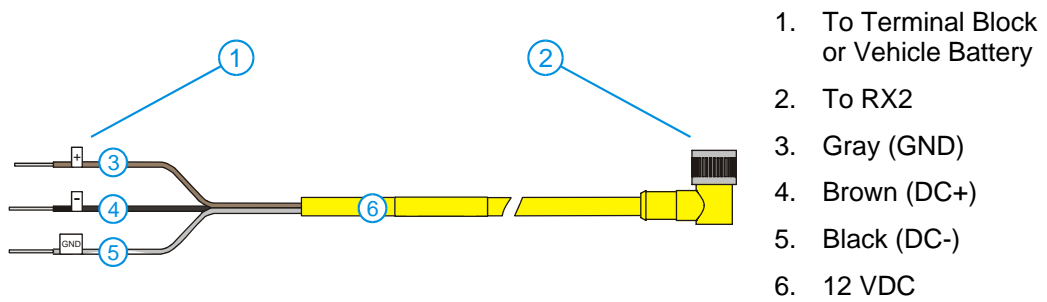
Figure 9 Vehicle Power Connection Cable (Fuse Not Shown)

1. Vehicle Electrical System
2. 2 Amp Slow Blow Fuse
3. DC +
4. DC -
5. Vehicle Chassis
6. Brown
7. Black
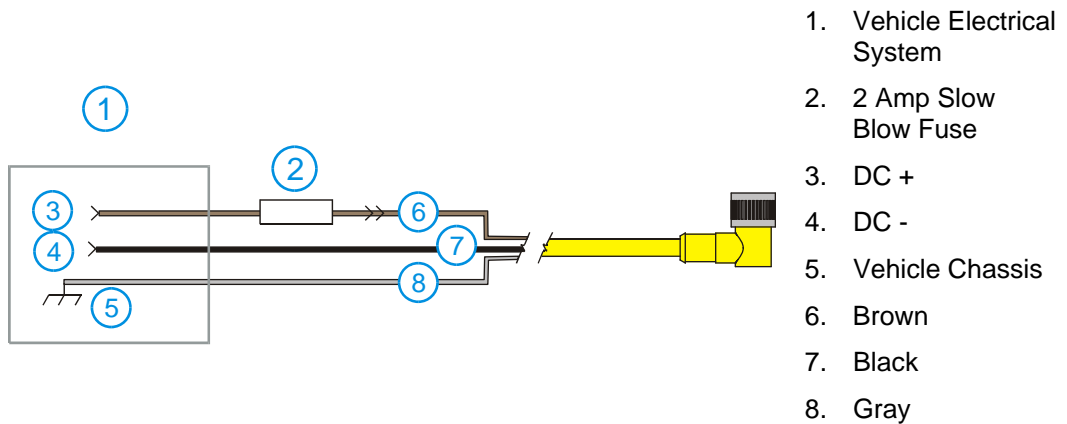8. Gray

Figure 10 Connecting the Power Cable to the Vehicle

Note: Correct electrical polarity is required for safe and proper installation. Connecting the cable to the RX2 with the polarity reversed will cause the power cable's fuse to be blown. See the following figure titled "Vehicle Connection Wiring Color Codes" for additional wire color-coding specifics.

How To: Connect Vehicle 12VDC Connection

1. The RX2 must be turned off and the power cable must be UNPLUGGED from the RX2.

2. While observing the fuse requirements specified above, connect the power cable to the terminal block or as close as possible to the actual battery terminals of the vehicle. When available, always connect to unswitched terminals in vehicle fuse panel, after providing proper fusing.

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

    Note: If it is necessary to shorten the power cable, please note that there are five wires inside the cable. The two extra wires are not used for the RX2 and can be removed.

3. 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.

    Note: 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.

    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 (1mm^2) conductors.

    Wiring color codes for LXE supplied DC input power cabling:

Vehicle Supply		Wire Color
+12 VDC	(DC +)	Brown
Return	(DC -)	Black
Vehicle Chassis	GND	Gray

    Figure 11 Vehicle Connection Wiring Color Codes

4. 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.

5. If necessary, the power cable can be extended using customer supplied components such as terminal blocks and a festoon cable. Any cables must be 18 AWG or heavier gauge, 250" (635 cm) or less in length and provide not less than 11.2 VDC at the RX2.

DC to DC Power Supply

The DC to DC power supply accepts 24 to 72VDC input power and provides 12VDC output power for the RX2.
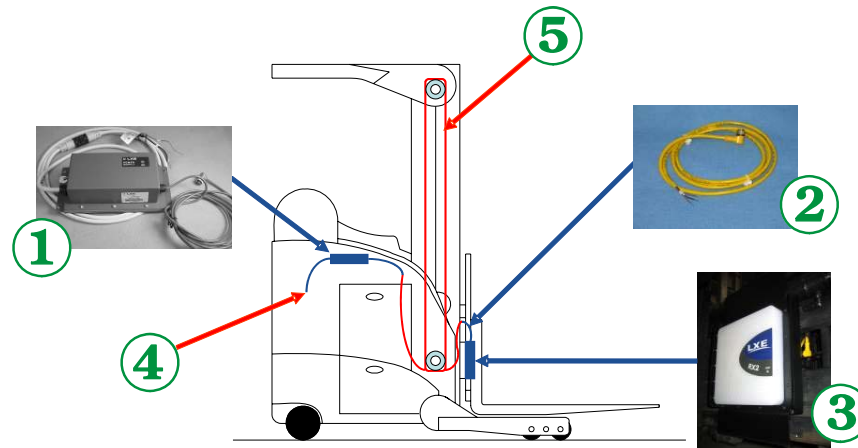
1   DC to DC Power Supply, 9000A316PS24V72BARE

2   RX2 Power Connection Cable, RX2A052CBLDCPWR

3   RX2 (DC powered)

4   Vehicle 24 to 72 VDC Power Source

5   DC Power Cabling, Not supplied by LXE (by lift manufacturer, for example)

Figure 12 DC to DC Power Supply Cabling

A power filter may be required when vehicles have unclean forklift power in which power spikes cause problems with the RX2.

Vehicle Cradle 24/72VDC 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.*

1. Power Switch
2. Power On Indicator
3. Output to RX2
4. Input from Vehicle Battery

Figure 13 Vehicle Power Supply, 24 - 72VDC (Fuse Not Shown)
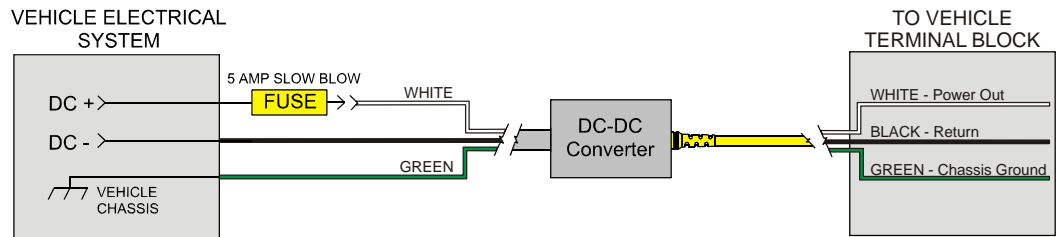

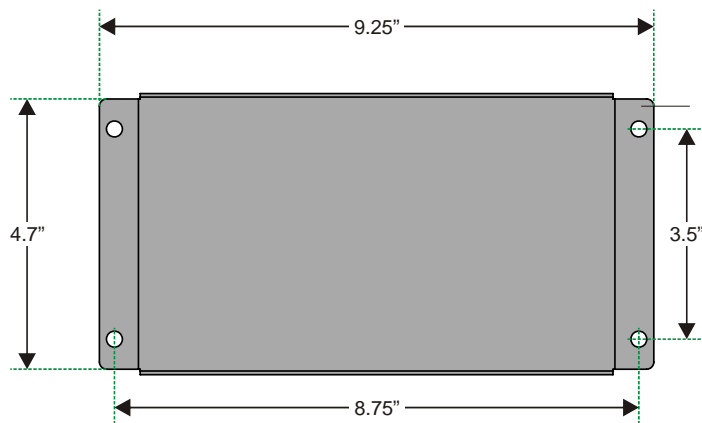**Figure 14 Connecting the Power Supply to the Vehicle**

Figure 15 Power Supply Mounting Template (Not to Scale)

1. Make sure the RX2 power switch is in the Off position.
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 unswitched 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 operator'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
+24-60VDC	(DC +)	White
Return	(DC -)	Black
Vehicle Chassis	(GND)	Green

    Figure 16 Vehicle Connection Wiring Color Codes

    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 a terminal block. Terminal blocks and any additional cabling (such as a festoon cable) between them must be supplied by the customer. The customer supplied cabling must be 18 AWG or heavier gauge, 250" (635 cm) or less in length and provide not less than 11.2 VDC at the RX2.

Wire Color	Function	
White	+12VDC	(DC +)
Black	Return	(DC -)
Green	Vehicle Chassis	(GND)

    Figure 17 Power Supply Output Color Codes

7. Locate a second terminal block near the RX2. Connect this terminal block to the customer supplied cable.

8. Use the Power Cable and the instructions in "Vehicle 12VDC Direct Power Connection", earlier in this section, to connect the RX2 to the terminal block.

9. Turn the Power Supply on. The ON LED on the Power Supply illuminates when it is receiving power from the vehicle.

10. Turn the RX2 On.

11. The status LED on the RX2 lights solid green while the RX2 is booting, then switches to flashing green after the RX2 has finished booting.

The RX2 Battery Charger

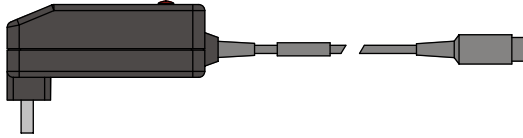The RX2 battery charger accepts AC power input.

Figure 18 RX2 Battery Charger

The charger can be used to internal RX2 battery pack in less than six hours. The battery changer can operate in environments from 32°F to 104°F (0°C to 40°C).

The charger has a **red** LED that indicates the status of the charger:

- Rapid flashing – The charger is in deep discharge mode.

- Solid – The charger is in Rapid Charge mode.

- Slowly flashing – The battery is charged and ready for use. The charger provides a trickle charge to keep the battery at full charge.

Before using the Charger, please follow the instructions in "Prepare Charger Connection", earlier in this section, to mount the cables necessary for the Charger connection.

Operation

Turning the RX2 On

RX2's with an optional internal battery have a Power Switch to turn the unit On or Off.

RX2's without the internal battery have no power switch. These units are On whenever DC power is applied.

Note: The DC to DC Power Supply contains an On/Off switch. When this switch is set to Off, power is not supplied to the RX2.

The Power Switch

The power switch is a toggle switch located on the connector panel side of the RX2.

Figure 19 Power Switch

When the switch is set to **On**:

- The CPU is on and the RX2 functions normally if power is present and the battery charger is not attached.

- The CPU remains Off if the battery charger is attached, even if the power switch is flipped to On. This allows the optional internal battery to charge.

- If the RX2 is On, the RX2 automatically powers down when the battery charger is attached. This allows the optional internal battery to charge. If the charger is disconnected and the switch remains in the On position, the RX2 boots up.

When the switch is set to **Off**:

- If the battery charger is connected, the battery recharges.

- If DC power is connected, the battery DOES NOT charge.

- If neither the battery charger nor DC power is connected, the RX2 is Off.

When the power switch is flipped to On and a power source is present:

- The LED lights solid green (or solid red if battery power is low) while booting

- When the RX2 has finished booting, the LED flashes green (or red if battery power is low). The RX2 is ready for use after a slight delay while drivers and applications load. Consult your system administrator for more information.

- If the battery charger is connected, the RX2 remains Off, even if the power switch is flipped to On.

The Power LED

The RX2 has a power status LED on the front of the antenna enclosure.

Figure 20 Power LED

The LED indicates the status of the RX2:

Off	Indicates the RX2 is switched off or no power is applied to the RX2. The LED is off when the battery charger is attached to the RX2.
Solid Green	Indicates the RX2 is booting and battery power is good (or DC power is attached).
Solid Red	Indicates the RX2 is booting and battery power is low.
Flashing Green	Indicates the RX2 has finished booting and is ready for use. Battery power is good (or DC power is attached).
Flashing Red	Indicates the RX2 has finished booting and is ready for use. Battery power is low.

When the power LED switches from green to red, this indicates approximately 30 minutes of battery power remains in the battery.

Before the 30 minutes expire, action should be taken:

- The RX2 battery charger can be used to charger the internal battery. The RX2 cannot be used while the battery is charging.

- DC power can be attached to the RX2.

Additional Low Power Warning

In addition to the LED turning red, other indications of a low battery may be present depending on your configuration:

- A low battery buzzer may sound.

- The network host may be configured to monitor for RX2 units with a low battery. Please consult your system administrator for details.

Tag Orientation and the RX2

The RX2 contains an RHCP (right hand circularly polarized) antenna.

Tags orientation by rotation on the "Z" axis does not decrease the range of the RX2's RFID reader.
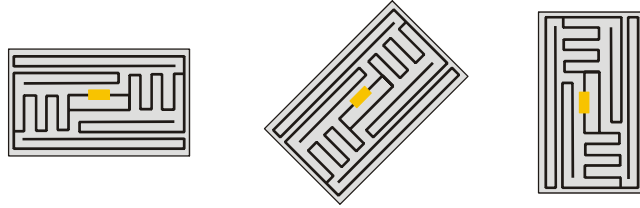

Figure 21 Tag Rotation, Example 1

However, changing tag orientation by rotating on the "X" axis or "Y" axis can reduce the range of the RX2's RFID reader.
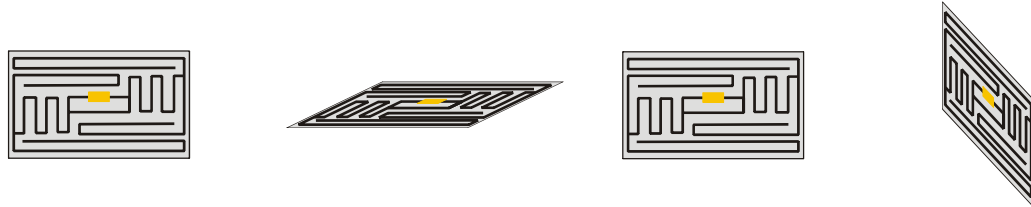

Figure 22 Tag Rotation, Example 2

If you have any questions about tag orientation and its effect on the RX2's range in your warehouse, please consult your system administrator.

Appendix A Regulatory Notices and Safety Information

FCC Information:

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, 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 guide, 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.

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

Caution	*This device is intended to transmit RF energy. For protection against excessive RF exposure to humans and in accordance with FCC and Industry Canada rules, this transmitter should be installed such that a minimum separation distance of at least 25cm (9.8 in.) is maintained between the antenna and the general population. This device is not to be co-located with other transmitters.*

Notice:

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

Antenna Description:

The antenna approved to operate with the RX2 Vehicle Mount Computer is a Right Hand, Circularly Polarized (RHCP) single-patch with 5dbi linear gain.

Approvals

Product	EMI / EMC Standards
RX2	FCC Part 15 Subpart B, Class A
	Industry Canada Class A

Transceiver:

Transceiver	RF Standards	Notes
6726 (LXE Model No.) [Cisco]	FCC Part 15, Subpart C FCC Part 2	Unlicensed Operation
	IC-RSS 210	Requires License for Outdoor Use
	IC-RSS 102	
4830 (LXE Model No.) LXE 2.4GHz CF with Type II PCMCIA Adapter Card	FCC Part 15, Subpart C IC-RSS 210 IC-RSS 102	Unlicensed Operation Requires License for Outdoor Use
RFID Reader (Sirit)	FCC Part 15, Subpart C IC-RSS 210 IC RSS 102	Unlicensed Operation Requires License for Outdoor Use

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.

⚠ Vehicle Power Supply Connection Safety Statement ⚠

Vehicle Power Supply Connection:

If the supply connection is made directly to the battery, a 2A slow-blow fuse should be installed in the positive lead within 5 inches (12.7 cm.) of the battery positive (+) terminal. (US)

Legend: English – US

Updated 02/10/2004

Revision History

Revision A, Initial Release: June 2006

Revision B: February 2007

Section	Explanation
Notices	Updated Trademarks.
Accessories	Revised list based on currently available items.
Internal Battery Pack (Optional)	Revised section.
Vehicle 12VDC Direct Power Connection	Revised section with new graphics.
DC to DC Power Supply	Revised section.
Appendix A – Regulatory Notices and Safety Information	Revised Transceiver table.

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