

RCLI-AC Charger Installation Guide

INSTALLATION INSTRUCTIONS



READ THIS MANUAL CAREFULLY! FAILURE TO INSTALL THIS EQUIPMENT PER THESE INSTRUCTIONS WILL VOID THE WARRANTY.



Zebra Technologies International, LLC
333 Corporate Woods Parkway
Vernon Hills, Illinois 60061.3109 USA

SPECIAL NOTICES

The following notices emphasize certain information in the guide. Each serves a special purpose and is displayed in the format shown:

Note: Note is used to emphasize any significant information.

Caution: Indicates information that, if not followed, can result in damage to software, hardware, or data.



Caution: This symbol indicates a potentially hazardous situation which, if not avoided, can result in personal injury.



Caution: This warning symbol indicates a potentially hazardous situation which, if not avoided, may be a shock hazard.



Warning: This warning symbol indicates an imminently hazardous situation which, if not avoided will result in death or serious injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents.

GENERAL WARNINGS AND CAUTIONS



Caution: Only trained and qualified personnel should be allowed to service this equipment.



Caution: Read the installation instructions before you connect the system to its power source.

Note: Zebra Technologies Corporation is not liable for personal injury or damage to any equipment caused by the improper installation of this equipment to any power source.

ELECTRICAL INFORMATION

100 - 240 VAC, 50-60 Hz

CAUTIONS

Installation

To ensure that the Charger has proper cooling, do not place any padding or cushioning material under the unit or next to the back of the unit.

Use of Shielded Data Cable

Printers comply with international regulations governing radiated emissions when using fully shielded data cables. Data cables must be fully shielded and fitted with metal or metallized connector shells. Shielded data cables and connectors are required to prevent radiation and reception of electrical noise. Use of unshielded data cables may increase radiated emissions above the regulated limits.

AC Power Considerations

Many areas of the world have specific power requirements. The power supply of the AC charger has interchangeable primary (mains) adapters. Use the mains plug specific to the country or origin of use.

Use the table below as a reference:

Area of use	Mains Adapter p/n
U.S./Japan*	AT15309-1
U.K.	AT15309-2
Euro	AT15309-3
Australia	AT15309-4

*supplied as standard

RCLI-AC Charger Installation Guide

INTRODUCTION

NOTE: Zebra Technologies Corporation is not liable for personal injury or damage to any equipment caused by the improper installation of this equipment to any power source.

The Zebra RCLI-AC Charger system is designed to allow Zebra Technology QL or RW series Mobile Printers to run off an A.C. power source. It does this by providing intelligent charging capabilities for the printer's battery allowing it to run for prolonged periods of time off A.C. power .

Follow these installation instructions closely to ensure safe, reliable performance of your QL series printer.

The printer is powered with its own battery which is charged by the RCLI-AC Series Charger System which in turn runs off your facility's A.C. power Your facility's A.C. power delivery system must be properly installed and maintained to minimize power spikes and electrical "noise" .

Faulty electrical components within your facility's A.C. wiring system can create electrical noise severe enough to defeat the electrical filtering that is built into the printer. When this

happens, printers and any data device communicating to them can behave unpredictably.

The RCLI-AC Charger is supplied with an output cable with a special plug for the printer's charging port, and an input power module which plugs into an A.C. power source. Refer to the installation section of this manual for more information.



NOTE: Failure to install this equipment per these instructions will void the warranty.

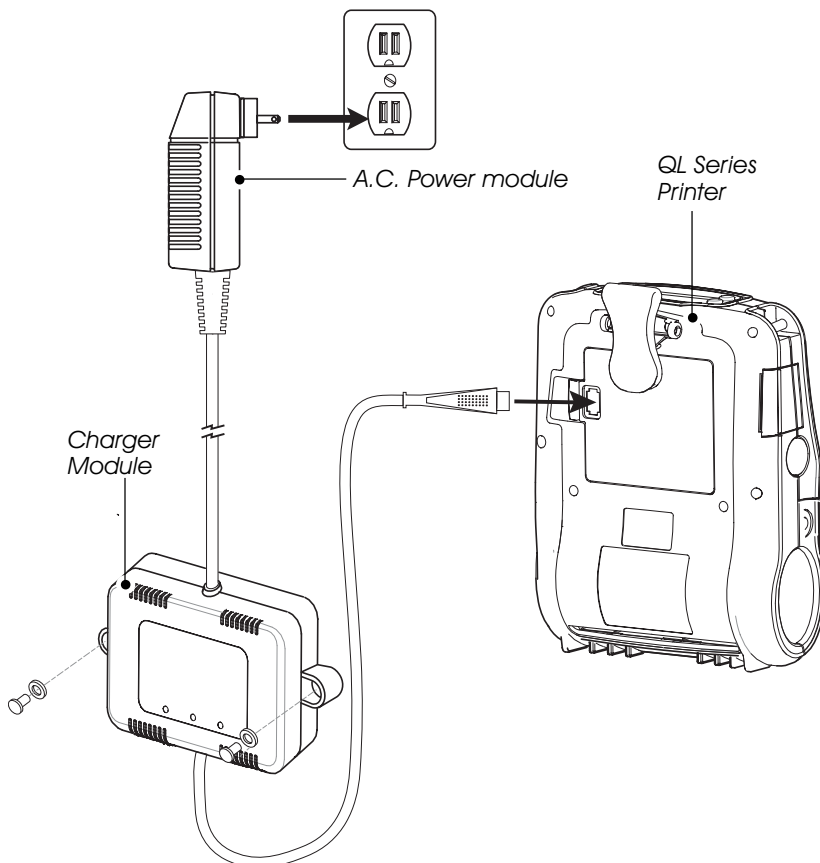


Figure 1
RCLI-AC Charging System

REGULATORY INFORMATION

Regulatory Markings

Type-approval labels indicate compliance with country regulations. This product carries country-specific labels to indicate compliance.

Radio Frequency Interference Regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Notification of Canadian Requirements

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicable aux appareils numériques de classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

Product Safety Regulatory Marking

Regulatory labels indicate compliance with safety standards. This product carries one of the following labels: UL, CE

INSTALLATION

Tools Required

- An electrical drill
- 5/32”(4 mm) drill bits (for clearance holes)
- Taps- #6-32 (M3) (optional)
- Common hand tools

References

- QL 420 User's Guide
- RW 420 User's Guide

Contents of the Package

- The RCLI-AC Charger Assembly including integrated input power module and output cable.
- This Guide

INTRODUCTION TO INSTALLATION

Since each situation or equipment type may pose unique requirements, mounting hardware selection and mechanical installation shall be the responsibility of the installer. Zebra recommends using self-locking (ESN) nuts, bolts, and/or lock washers for installing the mount. The mount is pre- drilled for #6 (M3) hardware.



NOTE: Hardware recommended to secure the Charger is not supplied in the kit. Recommended fasteners are #6-32 (3 mm) hex head or socket head bolts with flat washers, lock washers, nuts and/or locking nuts. You may optionally elect to drill and tap for a #6-32 or M3 screw.

Your tasks are to:

- Route and install the input power cable to the A.C. power source
- Install the RCLI-AC Charger.
- Decide where you will mount the printer, then proceed with the following instructions.
- Connect the output cable from the Charger to the Printer's battery charging connector.

POWER CABLE ROUTING

When Installing a Terminal

You most likely will be installing a terminal at the same time. Follow the terminal manufacturer's instructions for installing his unit. The printer and terminal usually are linked together with a data cable which typically is no longer than six feet (6 ft.).

Some installations may require the terminal and printer to communicate via radio frequency (RF) rather than cables.

Plan your installation with these considerations in mind, and locate the printer so that the operator can easily load printing media and operate the printer's controls.

CHARGER INSTALLATION

The RCLI-AC Series Charger can be located on any convenient surface within 12” [30.5 cm] of the printer. Do not locate near operator's feet or where it could hinder operation of the system.



NOTE: Locate the Charger and route the cables out of the way of normal use.

Refer to Figure 2 for Charger mounting dimensions. Recommended fasteners for the Charger are #6 [M3] bolts, flat washers and lock washers

The Charger is pre-wired with a power module which plugs into the AC power source, and is connected by a 24" [61 cm] long cable to the charger unit. Splicing onto the input power cable is not recommended due to voltage drops encountered across splices and other discontinuities.

CHARGER USE

Once the charger is installed there is no user input needed for proper operation. The Charger has three indicators to allow the user to monitor the charging process and provide diagnostic information in case of a malfunction.

Charger Indicators

The three LED indicators on the Charger are interpreted Per Table 1:

TABLE 1

CONDITION	INDICATORS			DETAILS
	POWER	CHARGE	ERROR	
Normal	Green	Amber	Off	Battery is charging
Normal	Green	Green	Off	Battery is charged
Error	Green	Green	Red	Battery is damaged: replace
Error	Off	Off	Off	No power to charger: check fuse and/or power connections

INSTALLATION GUIDELINES

CAUTION: Insure that the charger power module you are using for this installation is correctly configured for use with your facility's A.C. Voltage. The charger's power module has interchangeable A.C. Plugs to match most international standards, and will work within an input voltage range between 100 and 240 V.A.C..

CAUTION: Do not attempt to 'hard wire' the power module into the A.C. Power system, as it could result in improper printer operation or severe damage to either the printer and/or the charger. This will void the warranty.

NOTE: It is the installer's responsibility to insure correct installation. The manufacturer is not liable for damage to any equipment caused by improper installation or wiring of the charger, or damage resulting from use of the wrong charger for the intended application.

NOTE: Do not lengthen the converter's power cables or remove the cables' ferrites. Extending the cable and/or removing the ferrite will affect the converter's reliability and radio frequency interference (RFI). Do not attach any ground wires to the converter's housing.

NOTE: Use care when attaching the converter's power module to the power source.

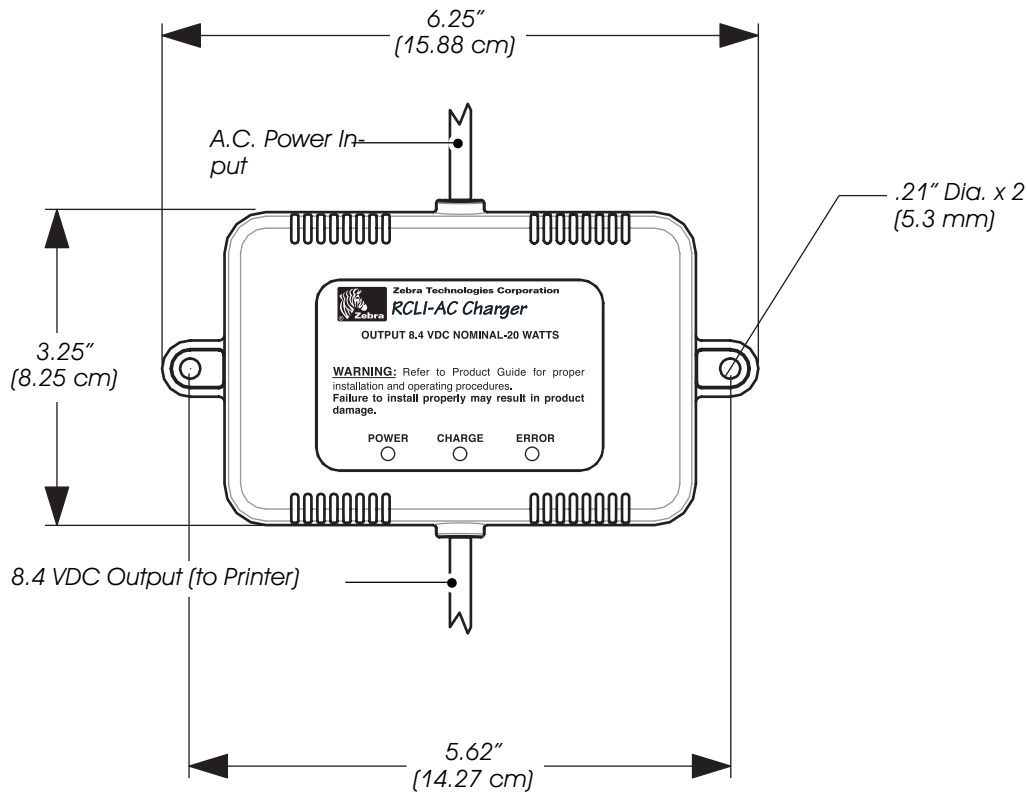


Figure 2
Charger Installation Dimensions

General Guidelines

- Route the Input Power from the general area where the unit(s) will be mounted.
- Protect the cables with a snap-in bushing if they must be routed through a wall or sheet-metal enclosures.
- Make sure that cable routing does not interfere with other equipment.
- Make sure that cable routing does not invite damage to the cable.
- Secure the input power cable at least every 12 inches [30 cm] throughout the cable run.

FINISH THE INSTALLATION

Charger Location

Locate the Charger in a location convenient to the printer. Follow these guidelines:

- Select a location that will avoid contact with the operator in case of an accident.
- If you are using the Charger in conjunction with an MMQ4 Mobile Mount, place the Charger so that you can easily unplug the charger's output cable from the Printer's battery connection.
- Route the charger's output cable to prevent undue strain being placed on the connection to the printer's battery.
- Make sure that cable routing does not invite damage to the cable.
- Secure the Charger with #6 (3mm) hardware using the mounting flanges molded into the Charger cover. Ensure that the mounting hardware will not become loose due to vibration by using locking hardware or prevailing torque fasteners.

Connect the Printer

- Plug the output cable from the Charger to the battery connection on the printer. (Refer to the QL Series Users Guide or the or RW 420 Users Guide for more information.) If you are using a MMQ4 Mobile mount in conjunction with a QL 420 Printer, it may be easier to plug in the charger connector before mounting the Printer to the Mobile Mount bracket.
- Plug the power module into an A.C. power source for the charger on, and verify that the indicator lights on the Charger's front panel are lit and the Charger is functioning properly. Refer to Table 1 for indicator display information.



NOTE: Zebra Technologies Corporation is not liable for personal injury or damage to equipment caused by improper installation to any power source.

TECHNICAL SUPPORT

U.S. ONLY

Zebra maintains a help line for questions involving installation of the RCLI-AC Chargers. Please have as much information as possible regarding your particular application ready when you call to enable the technical support personnel to help you. The number in the U.S. is (800)-423-0442. and is open Monday through Friday from 8:00 am to 4:30 P.M . E.S.T. Ask for Charger Technical Support.

ALL OTHERS

For Technical Support please contact your local Zebra sales representative.



Zebra Technologies International, LLC

333 Corporate Woods Parkway
Vernon Hills, Illinois 60061.3109 USA
Phone: +1.847.634.6700
Toll-Free: +1.800.423.0422
Fax: +1.847.913.8766