

<b>ITEM</b>	<b>Handheld Computers with Mobile Printers</b>
-------------	--

<b>DESCRIPTION</b>	Handheld Computers
<b>MAKE</b>	Motorola
<b>MODEL</b>	<b>MC75A8</b>
<b>QUANTITY</b>	15
<b>DESCRIPTION</b>	Attached is the closest description of item found online. For more detailed information, please reference make and model number provided.

<b>DESCRIPTION</b>	Mobile Receipt Printers
<b>MAKE</b>	Zebra
<b>MODEL</b>	<b>RW220</b>
<b>QUANTITY</b>	15
<b>DESCRIPTION</b>	Attached is the closest description of item found online. For more detailed information, please reference make and model number provided.

<b>SERIAL ID#S</b>	11221522500364
	11221522500425
	11221522500426**
	11221522500437
	11221522500438
	11221522500444
	11221522500445
	11221522500449
	11221522500451**
	11221522500457
	11221522500463**
	11221522500467**
	11221522500468
	11221522500472
	11221522500476*

<b>SERIAL ID#S</b>	XXRDJ112500001
	XXRDJ112500002
	XXRDJ112500003
	XXRDJ112500004
	XXRDJ112500005
	XXRDJ112500006
	XXRDJ112500007**
	XXRDJ112500008
	XXRDJ112500009*
	XXRDJ112500010
	XXRDJ112500013
	XXRDJ112500017*
	XXRDJ112500026*
	XXRDJ112500042**
	XXRDJ112500089*

<b>ITEM NOTES</b>	*Currently experiencing software failure (QTY: 1)
	**Currently experiencing hardware failure (QTY: 4)
	Includes 15 individual matching Ethernet data and charging stations with the correct charging cables, spare batteries that can be charged simultaneously with the units.

<b>ITEM NOTES</b>	*Currently experiencing software failure (QTY: 4)
	**Currently experiencing hardware failure (QTY: 2)



# MC75A SERIES

**PREMIUM 3.5G WORLDWIDE ENTERPRISE DIGITAL ASSISTANT (EDA)**

## **THE NEXT EVOLUTION IN EDA POWER**

Motorola's MC75A Series takes its place as one of the world's premier EDAs, offering more enterprise-class features and functionality than any other device in its class. Turbocharged with many Motorola Mobility Architecture eXtension (MAX) features, the MC75A addresses top business mobility needs, offering maximum processing power, rugged design, flexibility in extending solution reach, data capture capabilities, connectivity options, security and manageability. Three models meet the needs of every worker: a WLAN-only model for workers inside the four walls; a WLAN model designed to meet the special needs in healthcare environments; and a 3.5G WWAN/WLAN model for your field workforce. Add a field proven ergonomic design that is easy-to-hold, easy-to-carry and easy-to-use, and you have maximum value in a minimum footprint — all at the right price.

## MAXIMUM POWER

The MC75A offers the most robust processing platform in the EDA class today, from operating system to memory architecture, including Microsoft Windows Mobile 6.5; a PXA320 processor with 806 MHz of blazing speed; and 256 MB RAM/1GB Flash with a user accessible microSD slot to accommodate up to 32GB of additional storage. As a result, the MC75A delivers consistent desktop-like performance, regardless of whether your applications incorporate high resolution video, documents and images or you need thick client applications.

## MOTOROLA'S MOST RUGGED EDA

With Motorola MAX *Rugged*, you can count on reliable operation inside and outside the enterprise — the MC75A meets or exceeds MIL-STD 810G requirements for stress (drop) testing as well as IEC specifications for tumble and sealing. The MC75A is built to survive drops to concrete from as high as 5 ft./1.52 m. Motorola's tumble drum test proves that the device can endure 1,000 consecutive 1.6 ft./0.5 m tumbles (2,000 hits) — and still deliver dependable performance. And the IP54 sealing rating enables use in dusty environments and exposure to rain or spills. The result is a dramatic reduction in repair requirements and downtime, providing a strong return on asset (ROA).

In addition, the disinfectant-ready MC75A Series helps prevent the spread of germs to patients and caregivers in a hospital as well as shift workers in other industries who share devices. All models can be sanitized with many common cleansers, without harming the plastics or the sensitive scanning components.

## MAXIMUM FLEXIBILITY

The MC75A offers a level of flexibility that puts it in a class of its own, with a feature set that includes many Motorola-unique capabilities.

**The only EDA to offer five keypads.** Numeric, QWERTY, DSD, AZERTY and QWERTZ keypads enable maximum data entry simplicity for virtually any application anywhere in the world. Enterprises can standardize on a single device for many different workgroups with different application needs, simplifying the mobility architecture as well as reducing training and support costs.

**Motorola Integrated Voice Solutions: unparalleled integrated voice interoperability.** Inside the four walls, different workgroups often require different types of devices that run on different networks — from mobile computers and VoWLAN devices to two-way radios. The result is 'islands of voice' — the inability for cross-communications between device families. The MC75A eliminates this issue. The integrated TEAM Express voice client enables push-to-talk instant communications with other TEAM Express-enabled Motorola mobile computers, TEAM smartphones and two-way radios (Radio Link Server required). With powerful and highly cost-effective one-to-one and one-to-many voice communications between all workers inside the four walls, the enterprise enjoys lightning fast

response times, improved productivity and decision-making — as well as increased customer service, satisfaction and retention.

**Motorola MAX Locate for more robust location-based applications.** Integrated aGPS/GPS technology opens up a world of possible location-based applications — including real-time navigation, better fleet management, the ability to geostamp a photo for proof of condition or capture coordinates for proof of delivery in transportation and logistics or proof of service for inspections and maintenance. The best-in-class implementation includes the SiRFstarIII GSC3f/LP GPS chipset for robust coverage even in challenging urban canyons and areas of dense foliage, providing more users with location-based services in more areas. And the low-power chipset delivers top-notch accuracy with minimal power requirements, conserving battery power.

**Enterprise-class motion sensing with Motorola MAX Sensor.** MAX Sensor enables business-class implementation of one of the most popular consumer-style cellular phone technologies in the MC75A — the accelerometer. In addition to the typical ability to automatically switch between portrait and landscape display based on the orientation of the device, many additional features can be enabled in seconds, right out of the box. Power management features help ensure full shift battery power. For example, the device can automatically revert to sleep mode if movement is not detected in a specified period of time, or if the display is face down. The ability to detect and log drops helps increase worker accountability for device condition. And the open architecture allows enterprises to integrate the accelerometer data into customized applications that can help improve the safety of field service technicians working in remote areas and prevent device theft.

**MAX Data Capture for maximum business functionality.** The MC75A captures virtually any type of data and performs almost any business function, streamlining and reducing errors in your business processes. As the inventor of bar code scanning, Motorola offers unparalleled 1D and 2D scanning technology. The SE950 scan engine provides best-in-class 1D bar code scanning performance, while the SE4500, Motorola's revolutionary imager engine, delivers equally stunning performance on 1D and 2D bar codes. Two options provide the flexibility to address your unique bar code requirements. For 1D or 2D intensive applications and maximum reading distance, choose the SR4500-SR. For 1D and 2D intensive applications with smaller and high density bar codes, including those found on some driver's licenses, choose the SR4500-DL. In addition, the SE4500 offers omni-directional scanning, eliminating the need to align bar code and scanner, and providing the intelligence to capture even damaged and poor quality bar codes. The integrated 3.2 megapixel autofocus color flash-enabled camera enables the easy capture of high-resolution photographs, video footage and documents — complete with legible fine print.

# THE MC75A SERIES IN ACTION INSIDE THE FOUR WALLS



## Retail

The MC75A enables the complete mobile associate, providing the power to answer customer questions, manage inventory, line bust, process purchases and more, right on the spot.



## Manufacturing

The MC75A offers the rugged design required to survive life in a manufacturing plant, enabling remote system monitoring, inventory counts, replenishment, ID verification and more.



## Healthcare

Able to withstand wipe downs and sanitization, the MC75A enables many mobile point of care (POC) applications, from medication administration and specimen collection to nurse call, charge capture and inventory management.

## COMPREHENSIVE ACCESSORY FAMILY EXPANDS SOLUTION REACH

The Magnetic Stripe Reader (MSR) and Mobile Payment Module (MPM) enable workers to process purchases virtually anywhere in the world — from the retail sales floor to the customer's doorstep. Third party peripherals, such as an RFID reader, enable users to leverage RFID data to streamline and error-proof inventory and other workflows. Motorola's Bluetooth®-enabled RS507 Imager, worn on two fingers, provides hands-free scanning convenience. And a trigger handle allows workers to switch between handheld and industrial-style gun form factors in seconds, providing comfort for the most scan intensive tasks.

## MAXIMUM CONNECTIVITY OPTIONS

With the MC75A, your workers hold the universe of wireless connectivity options in their hands. WWAN functionality provides a connection to the fastest available cellular networks. Support for 3.5G HSDPA or CDMA EVDO Rev A provides workers anywhere in the world with high-performance broadband speeds. Comprehensive 802.11a/b/g support provides a seamless cost-effective WLAN connection inside the four walls and in hot spots — and support for 802.11a allows the granular segmentation of voice traffic, ensuring quality of service for VoWLAN communications. Bluetooth provides a wireless connection to a wide range of Bluetooth-enabled peripherals, such as headsets and printers. Support for the latest Bluetooth technology — v2.1 with EDR — provides simple one-step easy pairing, improved security and reduced power consumption. And support for IrDA enables wireless communications with a wide range of existing business equipment — from medical equipment to fax machines.

## GOVERNMENT-GRADE SECURITY WITH MOTOROLA MAX SECURE

The Motorola MAX *Secure* feature set keeps your data safe and secure, regardless of whether the MC75A is connected to the WWAN or the WLAN. Native FIPS 140-2 Level 1 certification and support for the most advanced encryption and authentication algorithms as well as Virtual Private Networks (VPNs) provides the compliance required for government level applications as well as stringent industry regulations — including PCI in retail and HIPAA in healthcare. And Motorola's deep knowledge of wireless infrastructure enables the integration of FIPS and other security requirements without the typical impact on WLAN performance.

## MAXIMUM EASE OF APPLICATION DEVELOPMENT AND DEVICE MANAGEABILITY

In addition to the right set of features for your users and applications, the MC75A also offers the functionality required to reduce IT time and cost, including:

### Rapid and cost-efficient application development.

Motorola MAX *MPA* (Motorola Platform Architecture) provides an industry standard platform that enables easy integration into your existing technology environment. Since all Motorola mobile computers share this common platform, existing applications developed for other Motorola mobile computers can be ported effortlessly and seamlessly to the MC75A, enabling exceptionally rapid deployment and improving the return on investment for existing applications. Additionally, Motorola's



# THE MC75A IN ACTION IN THE FIELD



## Field Service/Sales

The MC75A supports robust automation out in the field, enabling real-time dynamic work order assignment, proof of service, sales order management, asset management and the ability to process COD transactions.



## Transportation & Logistics

With a rugged design that can survive life in a truck, the MC75A enables real-time pick-up and delivery, inventory management, proof of location and condition and more.



## Government

Its rugged design and FIPS 140-2 certification enable state, local and federal governments to leverage the MC75A to improve operational efficiency and better protect revenues — and constituents.

robust award winning partner channel provides access to a world of well-tested best-in-class line of business applications, further reducing application development time and costs.

Another Motorola tool, PocketBrowser, is built on Pocket Internet Explorer and Internet Explorer, providing a familiar and easy-to-use environment that enables the simple and rapid development of applications that incorporate the wide range of advanced data capture capabilities integrated into the MC75A — from bar code scanning to signature capture.

**Comprehensive centralized tools for cost-effective day-to-day management.** Compatibility with the Motorola Mobility Suite enables extraordinary centralized control of your MC75A devices. Motorola Mobility Services Platform (MSP) allows IT to remotely stage, provision, monitor and troubleshoot tens of thousands of devices inside and outside the four walls virtually anywhere in the world, all from a central location, radically reducing one of the largest costs associated with mobility — day-to-day management. Device-level intrusion protection and Mobile Virtual Private Network (VPN) solutions allow the addition of extra layers of security to protect data that

is resident on the device and in transit to and from the MC75A and your network. And AppCenter allows enterprises to easily define which features and software applications users can access, preventing unauthorized device usage that could reduce productivity.

## THE MOTOROLA ADVANTAGE: WORLD CLASS PARTNERS AND WORLD CLASS SUPPORT

Motorola's award-winning partner ecosystem offers a best-in-class, broad set of ready-to-go and custom applications for a wide variety of industries, minimizing deployment time and cost. And since even rugged devices require a support plan, Motorola offers Service from the Start with Comprehensive Coverage to help keep your MC75A up and running at peak performance. This unique all-inclusive service significantly reduces your unforeseen repair expenses by covering normal wear and tear as well as internal and external components damaged through accidental breakage — all at no additional charge. And options such as Commissioning Service and Express Shipping help to further minimize downtime in the unlikely event your device requires repair.

**FOR MORE INFORMATION ON HOW YOU CAN LEVERAGE THE BENEFITS OF THE MC75A IN YOUR ENTERPRISE, PLEASE VISIT US ON THE WEB AT [WWW.MOTOROLA.COM/MC75A](http://WWW.MOTOROLA.COM/MC75A), [WWW.MOTOROLA.COM/MC75A0HC](http://WWW.MOTOROLA.COM/MC75A0HC) (HEALTHCARE MODEL) OR ACCESS OUR GLOBAL CONTACT DIRECTORY AT [WWW.MOTOROLA.COM/ENTERPRISE/CONTACTUS](http://WWW.MOTOROLA.COM/ENTERPRISE/CONTACTUS)**

# MOTOROLA'S MC75A SERIES:

## MAXIMUM FEATURES...MAXIMUM FUNCTIONALITY...MAXIMUM VALUE.

### Maximum power

**Powerful microprocessor designed for mobility: PXA320 @ 806 MHz**  
Desktop-like multimedia performance optimized for longer shift life

**Microsoft's latest operating system: Windows® Mobile® 6.5**  
Increased interoperability with existing enterprise infrastructure; enhanced security features; more flexible development platform; improved mobile messaging collaboration

**256MB RAM/1GB Flash**  
Provides memory space required to enable robust performance for database applications

**User accessible microSD card slot**  
Provides additional memory and expandable functionality up to 32GB

### Maximum rugged design

**Motorola MAX Rugged: Industry-leading drop, tumble and sealing specifications with a disinfectant-ready housing**  
Lightweight yet rugged; built for year-round use in nearly any environment; can be sanitized with many common cleansers to prevent the spread of germs as well as enable cleaning if the device is exposed to dust, dirt, grease, spills and more

**3.5G WWAN: GSM HSDPA or CDMA-EVDO Rev A broadband connectivity over the cellular network**  
High performance wireless broadband voice and data anywhere in the world: connection to most carriers in the world with one platform; best in class cellular broadband throughput; integrated voice and data services: allows workers to conduct a phone call while maintaining a data connection (where supported by carrier); internal WWAN diversity antenna provides better signal reception and a more dependable connection

### Maximum connectivity options — and wireless performance

**WLAN: 802.11a/b/g tri-mode radio; comprehensive VoIP support**  
Cost-effective voice and data connectivity in the office and hot spots; 802.11a enables segmentation of voice traffic to protect voice quality

**WPAN: Bluetooth® v2.1 with EDR2**  
Wireless connectivity to modems, printers, headsets and more; additional profiles for expanded connectivity to more device types with either Microsoft or Stonestreet stacks; v2.1 simplifies pairing, improves security and reduces power consumption

**IrDA**  
Wireless connectivity to legacy printers and other business equipment

**Motorola MAX MPA: Mobility Platform Architecture 2.0**  
Provides the latest best-in-class technology architecture; preserves existing application investments by enabling easy and cost-effective porting of applications from other Motorola mobile computers

### Maximum manageability

**Comprehensive centralized device management**  
Compatibility with Motorola Mobility Services Platform (MSP) and Motorola Mobility Suite provides superior centralized and remote management of all devices anywhere in the world — from a single console

### Maximum security

**Motorola MAX Secure**  
FIPS 140-2 certification and support for the most advanced encryption and authentication algorithms as well as Virtual Private Networks (VPNs) enables compliance with the most stringent industry security regulations, including sensitive government applications

**Motorola MAX Data Capture: multi-mode data capture via a bar code scanner plus a color camera**  
Ability to capture high quality pictures, documents and signatures as well as 1D and 2D bar codes in a single device improves workforce automation, increases productivity and reduces data errors

**Motorola MAX Sensor**  
Enterprise-class Interactive Sensor Technology (IST) enables leading edge motion-based applications, including dynamic screen orientation, power management and free-fall event logging

**Motorola MAX Locate: SiRFstarIII GSC3ef/LP GPS chipset**  
Integrated, autonomous and assisted GPS support for robust location-based applications; high performance, power-efficient processor capable of acquiring and maintaining a signal lock in areas where signals are typically weak, expanding the coverage area for GPS applications; faster time to first fix (TTFF); operates in either standalone or assisted GPS (aGPS) mode (carrier dependent) for faster and more accurate positioning

### Maximum flexibility

**Multiple keyboard options: Numeric, QWERTY, DSD, QWERTZ and AZERTY**  
Flexibility to meet diverse user and application needs

**Multiple voice modes: handset, headset and speakerphone**  
Flexibility to use the right mode at the right time; high quality speaker, microphone and receiver provide superior voice quality and performance

**3.5 inch color high definition VGA display (640 x 480) with the latest in LCD technology**  
Easy to view in any lighting; supports display of high resolution images including video and maps

**Backwards compatible with MC70 and MC75 accessories**  
Provides investment protection for existing investments

**Comprehensive accessory suite**  
Add-on functionality expands solution reach, protects investment and maximizes TCO — rich accessory ecosystem offers the ability to read debit and credit cards around the world, hands-free scanning, RFID and more

# MC75A SERIES SPECIFICATIONS CHART

## PHYSICAL CHARACTERISTICS

Dimensions:	6 in. L* x 3.3 in. W x 1.7 in D 15.24 cm L* x 8.4 cm W x 4.4 cm D
Weight (including standard battery):	WWAN standard 1.5X battery: 14.9 oz./423 g WLAN standard 1.5X battery: 14 oz./398 g
Display:	Transflective color 3.5" full VGA with backlight, 640 x 480
Touch Panel:	Glass analog resistive touch
Backlight:	LED backlight
Main Battery:	Rechargeable Lithium Ion 3.7V, 3600 mAh Smart Battery
Ext. Cap. Battery:	Optional 3.7V, 4800 mAh Smart Battery
Backup Battery:	Ni-MH battery (rechargeable) 15mAh 2.4V (not user-accessible)
Expansion Slot:	microSD slot with SDHC Support (up to 32GB)
Network Connections:	Ethernet (via cradle); full-speed USB, host or client
Notification:	Vibrator and LED
Keypad Options:	Numeric; QWERTY; DSD; AZERTY; QWERTZ
Audio:	VoWWAN; VoWLAN; TEAM Express compliant; support for wired and wireless (Bluetooth) headsets; headset, handset and speaker phone modes

## PERFORMANCE CHARACTERISTICS

CPU:	PXA320 @ 806 MHz processor
Operating System:	Microsoft® Windows Mobile® 6.5 Classic and Professional
Memory:	256MB RAM; 1GB Flash
Interface:	RS-232, USB 1.1

### User Environment

Operating Temperature:	14° F to 122° F/-10° C to 50° C
Storage Temperature:	-40° F to 158° F/-40° C to 70° C (w/o battery)
Humidity:	95% non-condensing
Drop Specification:	Multiple 5 ft. drops to concrete at room temperature; Multiple 4 ft. drops to concrete across the operating temperature range; meets and exceeds applicable MIL-STD 810G specifications
Tumble Specification:	1,000 1.6 ft./1.5 m tumbles (2,000 drops); per applicable IEC tumble specifications
Sealing:	IP54 per applicable IEC sealing specifications
InDA:	Infra-red port for connection to printers and other devices
Clock:	Integrated real time clock
Light Immunity:	Readability: Incandescent — 450 ft. candles; Sunlight — 8000 ft. candles; Fluorescent: 450 ft. candles
Electrostatic Discharge (ESD):	±15kV air discharge, ±8kV direct discharge

## BATTERY PERFORMANCE

Standby time:	150 hours
Talk time:	5 hours
User profiles:	Outdoor WAN+GPS, 15min/hour voice communication, 10kB transmission every 10 min, and GPS on all time, 8 hours of operation. Outdoor Voice, 15 min/hour voice communication, 8 hours of operation, and 75 hours standby time.

Note: Performance metrics above were measured with Battery reserve option set the highest (72 hours)

## WIRELESS WAN DATA AND VOICE COMMUNICATIONS

WWAN Radio:	GSM: HSDPA; CDMA: EVDO Rev A
GPS:	Integrated, Autonomous and Assisted-GPS (A-GPS) through SUPL; SiRFstarIII GSC3f/LP chipset

## WIRELESS LAN DATA AND VOICE COMMUNICATIONS

WLAN Radio:	Tri-mode IEEE® 802.11a/b/g
Data Rates Supported:	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps
Operating Channels:	Chan 8-165 (5040 – 5825 MHz) Chan 1-13 (2412-2472 MHz) Chan 14 (2484 MHz) Japan only Actual operating channels/frequencies depend on regulatory rules and certification agency
Security:	WPA2, WEP (40 or 128 bit), TKIP, TLS, TTLS (MS-CHAP), TTLS (MS-CHAP v2), TTLS (CHAP), TTLS-MD5, TTLS-PAP, PEAP-TLS, PEAP (MS-CHAP v2), AES, LEAP, CCXv4 certified; FIPS 140-2 certified
Spreading Technique:	Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency Division Multiplexing (OFDM)
Antenna:	Internal for LAN, External for WAN
Voice Communication:	Integrated Voice-over-IP ready (P2P, PBX, PTT), Wi-Fi™-certified, IEEE 802.11a/b/g direct sequence wireless LAN

## WIRELESS PAN DATA AND VOICE COMMUNICATIONS

Bluetooth:	Class II, v2.1 with Enhanced Data Rate (EDR) integrated antenna
------------	---

## DATA CAPTURE OPTIONS

Five Configuration Options:	Standard model available in four configurations: 1D laser scanner; 2D imager; 1D laser scanner and camera; 2D imager and camera Healthcare model (MC75A0-HC) configured with 2D imager, 3.2 MP camera, QWERTY keypad and WLAN/WPAN (no WWAN)
-----------------------------	---

## COLOR CAMERA

Resolution:	3.2 megapixel
Illumination:	User controllable flash
Lens:	Auto focus

## 1D LASER SCANNER: SE950

Range on 100% UPCA:	24 in./60 cm
Resolution:	4 Mil minimum element width
Roll:	±35° from vertical
Pitch Angle:	± 65° from normal
Skew Tolerance:	± 50° from normal
Ambient Light Immunity:	10,000 ft. candles/107,640 lux
Scan Rate:	104 (+/- 12) scans/sec (bi-directional)
Scan Angle:	47° ± 3° default; 35° ± 3° reduced

## 2D IMAGER ENGINE: SE4500-SR

Focal Distance:	From center of exit window: SR – 7.5 in./19 cm
Sensor Resolution:	752 x 480 pixels
Field of View:	Horizontal: 40°; Vertical: 25°

\* For WAN configurations, add 1 in./2.54 cm to the length (L) for the antenna

Skew Tolerance:	±60°
Pitch Tolerance:	±60°
Roll Tolerance:	360°
Ambient Light Immunity:	9,000 ft. candles/96,900 lux
Aiming LED (VLD):	655 ± 10 nm Laser
Illumination Element (LED):	625 ± 5 nm LEDs (2x)

## 2D IMAGER ENGINE: SE4500-DL

Focal Distance:	From center of exit window: SR – 5 in./13 cm
Sensor Resolution:	752 x 480 pixels
Field of View:	Horizontal: 33°; Vertical: 25°
Skew Tolerance:	±60°
Pitch Tolerance:	±60°
Roll Tolerance:	360°
Ambient Light Immunity:	9,000 ft. candles/96,900 lux
Aiming LED (VLD):	655 ± 10 nm Laser
Illumination Element (LED):	625 ± 5 nm LEDs (2x)

## MOTOROLA INTERACTIVE SENSOR TECHNOLOGY

Motion-sensor: 3-axis accelerometer that enables motion-sensing applications for dynamic screen orientation, power management and free-fall detect

## PERIPHERALS AND ACCESSORIES

Communication and Charging Cables:	Serial and USB v1.1 charging cables, printer cables, vehicle charging cable, power/charging cable
Battery Chargers:	4-slot battery charger (1X, 1.5X and 2.5X), universal battery charger (requires adapters for 1X, 1.5X and 2.5X capacity batteries)
Vertical-specific attachments:	Snap-on Magnetic Stripe Reader (MSR); Payment Snap-on (Debit and Credit); Mobile Payment Module; Mobile Payment Module with Chip and PIN
Electrical Safety:	Certified to UL / cUL 60950-1, IEC / EN60950-1
EMI/RFI:	USA: FCC Part 15; Canada: ICES 003 Class B; Europe: EN55022 Class B, EN 55024, EN60601-1-2; Australia: AS/NZS CISPR A 22

For countries outside USA, Canada, European Economic Area, Japan or Australia consult your local Motorola representative; for a complete list of MC75A Peripherals and Accessories, please visit [www.motorola.com/mc75a](http://www.motorola.com/mc75a) or [www.motorola.com/mc75a0hc](http://www.motorola.com/mc75a0hc)

## REGULATORY

Electrical Safety:	Certified to UL / cUL 60950-1, IEC / EN60950-1
Environmental:	RoHS-compliant
WLAN and Bluetooth:	<b>USA:</b> FCC Part 15.247, 15.407 <b>Canada:</b> RSS-210 <b>EU:</b> EN 300 328, EN 301 893 <b>Japan:</b> ARIB STD-T33, ARIB STD-T66, ARIB STD-T71 <b>Australia:</b> AS/NZS 4268
Quad Band GSM/EDGE, plus Tri-band HSDPA:	<b>Global:</b> 3GPP TS 51.010, 3GPP TS 34.121, 3GPP TS 34.123 GCF approved module <b>USA:</b> FCC Part 22, Part 24 <b>Canada:</b> RSS-132, RSS-133 <b>EU:</b> EN301 511, EN301 908 <b>Australia:</b> AS/ACIF S042.1&3

CDMA-EVDO Rev. A:	Verizon and Sprint (For the latest information, contact your local Motorola representative)
RF Exposure:	<b>USA:</b> FCC Part 2, FCC OET Bulletin 65 Supplement C <b>Canada:</b> RSS-102 <b>EU:</b> EN 50360 <b>Australia:</b> Radiocommunications Standard 2003
EMI/RFI:	<b>North America:</b> FCC Part 15, Class B <b>Canada:</b> ICES 003 Class B <b>EU:</b> EN55022 Class B, EN 301 489-1, EN 301 489-3, EN 301 489-7, EN 301 489-17, EN 301 489-24, EN 60601-1-2 <b>Australia:</b> AS/NZS CISPR A-22
Laser Safety:	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1

For countries outside USA, Canada, European Economic Area, Japan or Australia consult your local Motorola representative

## HAZARDOUS LOCATION CERTIFICATIONS

UL Class I, II, III Division 2, Groups A, B, C, D, F, G (Select Configurations Only)

## WARRANTY

The MC75A Series is warranted against defects in workmanship and materials for a period of 12 months from date of shipment, provided that the product remains unmodified and is operated under normal and proper conditions.

The MC75A Series is a true global product that is supported in all industrial countries. Please visit [www.motorola.com](http://www.motorola.com) for a complete list of supported countries.

Cleaning Instructions	
Approved Cleanser Active Ingredients:	100% of the active ingredients in any cleanser must consist of one or some combination of the following: isopropyl alcohol; bleach/sodium hypochlorite; hydrogen peroxide; mild dish soap
Harmful Ingredients:	The following chemicals are known to damage the plastics on the MC75A Series and should not come in contact with the device: ammonia solutions, compounds of amines or ammonia; acetone; ketones; ethers; aromatic and chlorinated hydrocarbons; aqueous or alcoholic alkaline solutions; ethanolamine; toluene; trichloroethylene; benzene; carbolic acid; TB-lysoform
Cleaning Instructions:	Do not apply liquid directly to the MC75A Series. Dampen a soft cloth or use pre-moistened wipes. Do not wrap the device in the cloth or wipe, but gently wipe the unit. Be careful not to let liquid pool around the display window or other places. Allow the unit to air dry before use.
Special Cleaning Notes:	Many vinyl gloves contain phthalate additives which are often not recommended for medical use and are known to be harmful to the housing of the MC75A Series. The MC75A Series should not be handled while wearing vinyl gloves containing phthalates, or before hands are washed to remove contaminant residue after gloves are removed.  If products containing any of the harmful ingredients listed above are used prior to handling the MC75A Series, such as hand sanitizers that contain ethanolamine, hands must be completely dry before handling the MC75A Series to prevent damage to the plastics.



**PRODUCT SPEC SHEET**  
MC75A SERIES



**MAX**  
*Rugged*



**MAX**  
*Secure*



**MAX**  
*Sensor*



**MAX**  
*Data Capture*



**MAX**  
*Locate*



**MAX**  
*MPA*



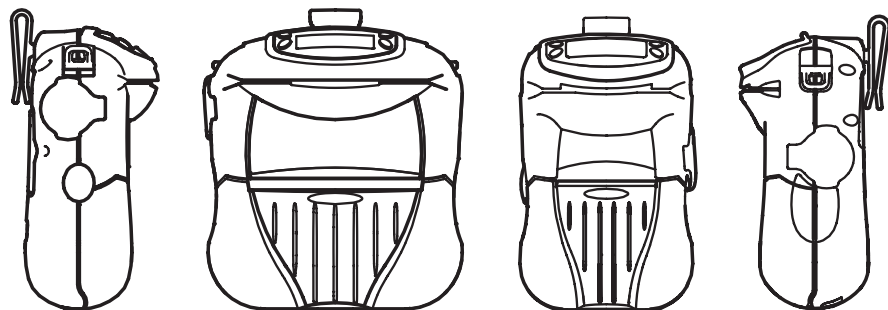
Part number: SS-MC75A. Printed in USA 07/11. MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. ©2010 Motorola Solutions, Inc. All rights reserved.





## Introduction


Thank you for choosing one of our Zebra RW Series™ Mobile Printers. These rugged printers will become productive and efficient additions to your workplace thanks to their innovative design. Because they are made by Zebra Technologies you can be assured of world-class support for all of your bar code printers, software, and supplies.



RW 420	RW 220
Media width: 2 in. [51 mm] to 4.12 in. [105 mm]	Media width: 1 in. [25.4 mm] to 2.37 in [60 mm].
L: 7.4 in. [188 mm]* W: 6.3 in. [160 mm] H: 3.7in. [94 mm] max.* *w/ belt clip & card reader option	L: 6.8 in. [173.6 mm]* W: 4.4 in.[111.8 mm] H: 3.7 in. [94.1 mm]* *w/ belt clip & card reader option

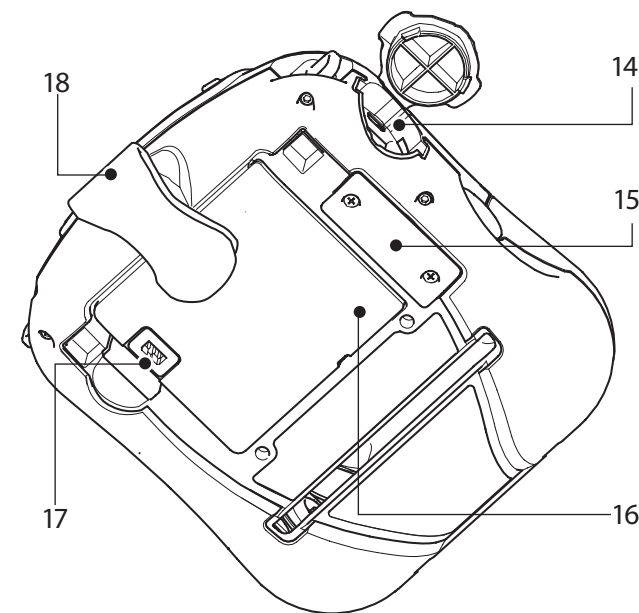
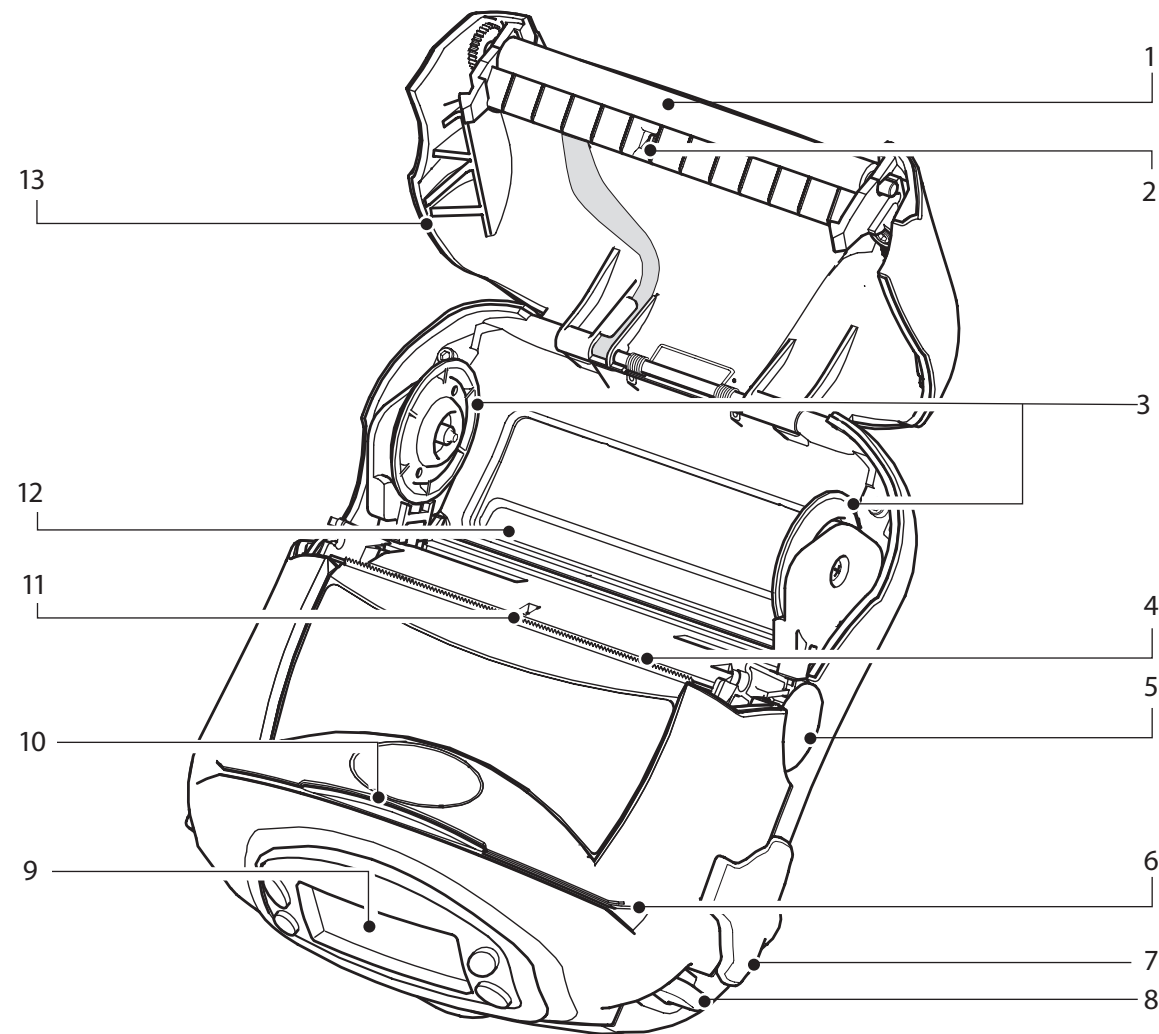
This document provides an easy reference for operating and maintaining the RW Series of Mobile Printers.

Complete and current documentation for each model printer is provided by the RW Series User Guide available on the Internet at: [www.zebra.com/manuals](http://www.zebra.com/manuals).

 Always refer to the Important Safety Information data sheet shipped with each printer and the Technical Bulletin shipped with each battery pack. These documents detail procedures to ensure maximum reliability and safety while using this printer.

## RW Series Overview

(RW 420 Illustrated)



1. Platen Roller
2. Bar Sensor
3. Media Support Disks
4. Printhead
5. Latch Release Button
6. Magnetic Stripe Reader (MSR) Slot
7. Communications Port Door
8. "D" Rings
9. Control Panel
10. Smart Card Slot
11. Gap Sensor
12. Bottom Media Feed Slot
13. Media Cover
14. Communications Port
15. Docking Connector Cover
16. Battery
17. Battery Charging Receptacle
18. Belt Clip

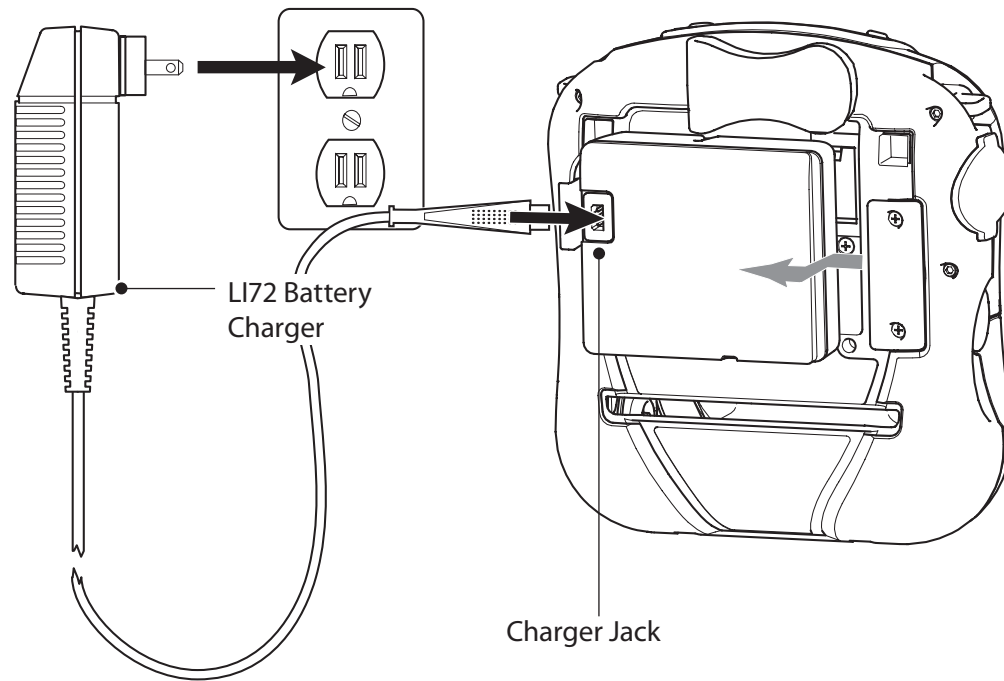
## Charge the Battery



Batteries are shipped uncharged. Remove protective shrink-wrap and labels from new battery packs and allow them to charge completely prior to initial use.



Do not charge the battery while using the printer!  
Charge the battery pack when removed from the Printer for best results.

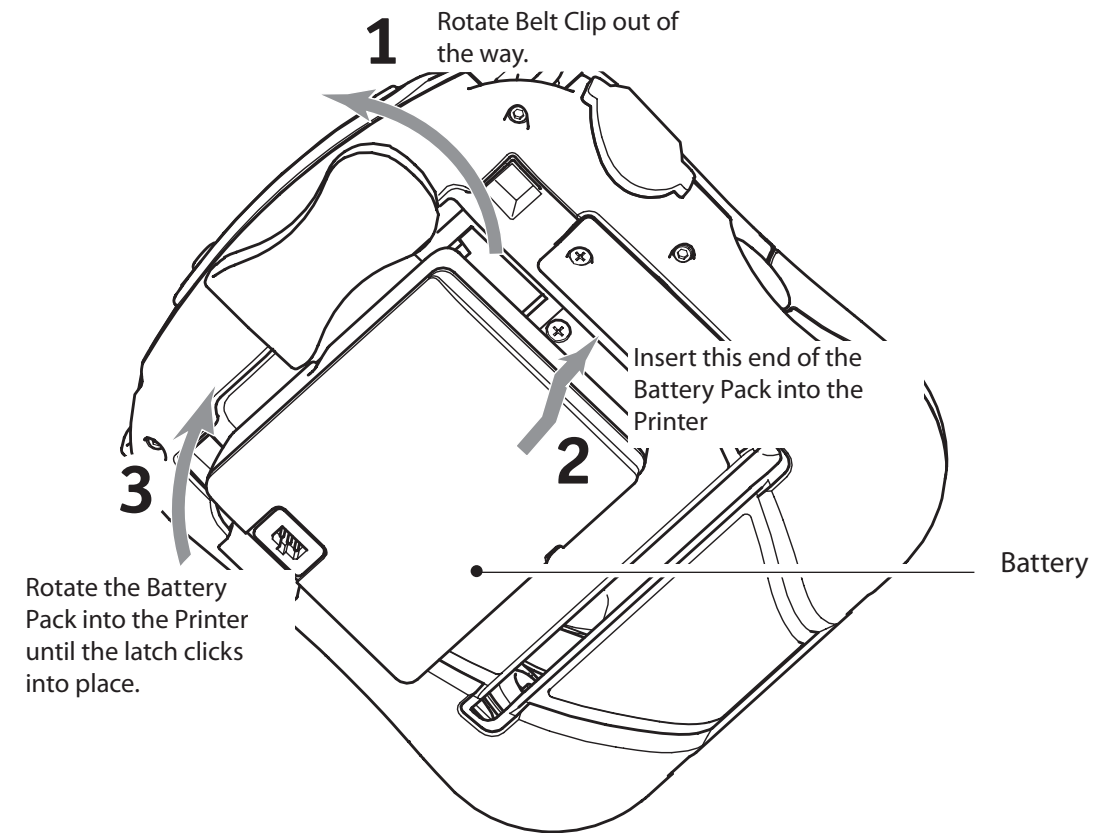


### Using the LI72 Single Charger

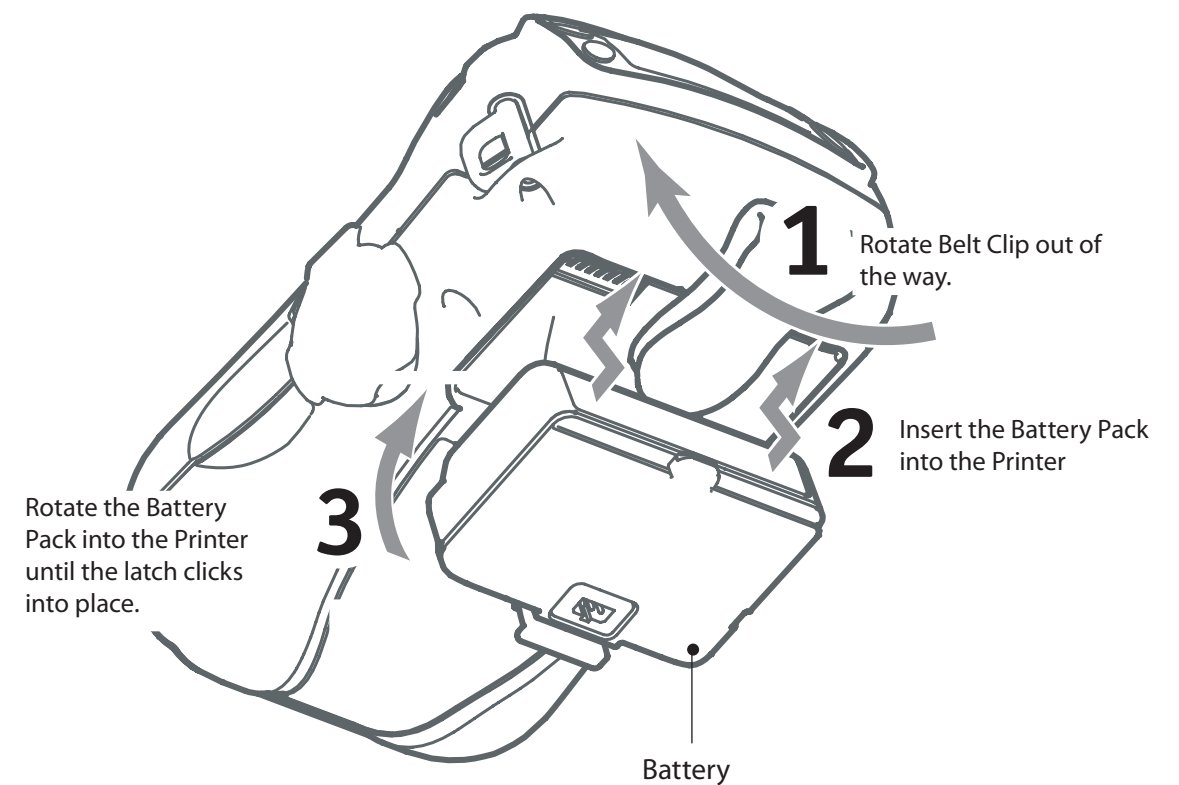
Insert the plug from the charger cable into the battery pack's charger jack. Plug the charger into the A.C. outlet. The light on the front of the charger will indicate the battery pack's charge status.

Consult the RW series User's Guide available at [www.zebra.com/manuals](http://www.zebra.com/manuals) for complete information on using the various versions of the Model LI72 Single Charger.

## Installing the Battery



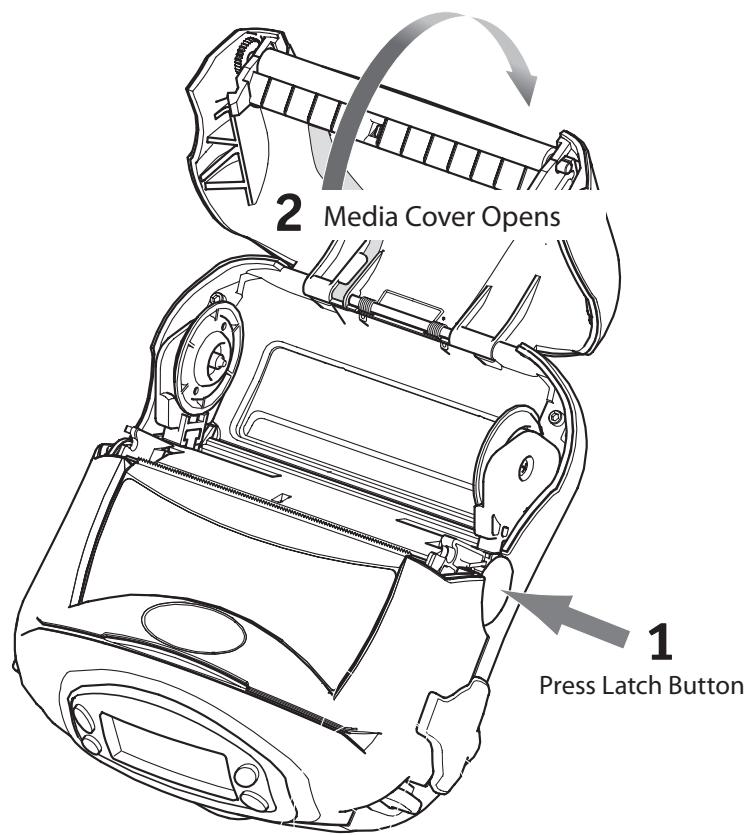
RW 420 Battery Installation



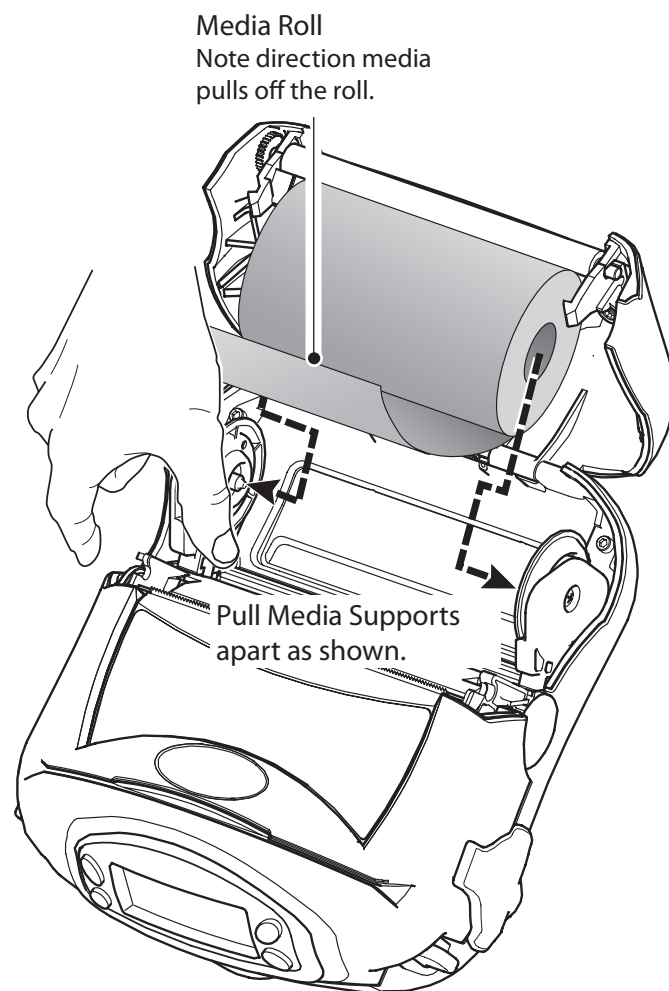
RW 220 Battery Installation

Section Continues

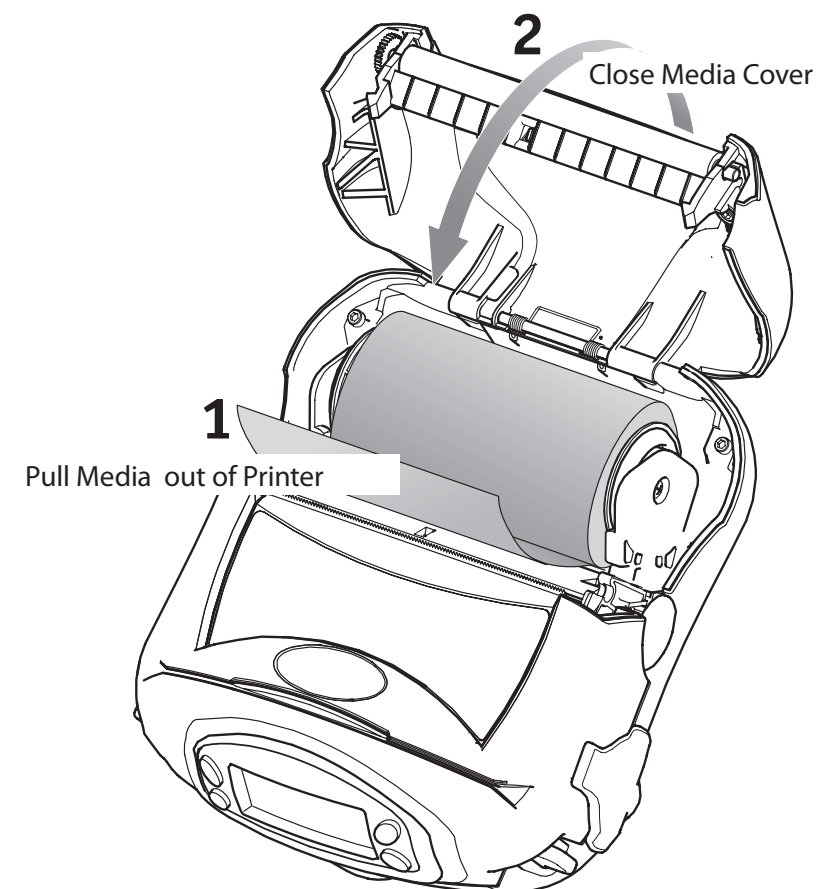
## Loading Media



Open the Media Cover



Load the Media Roll



Close the Media Cover

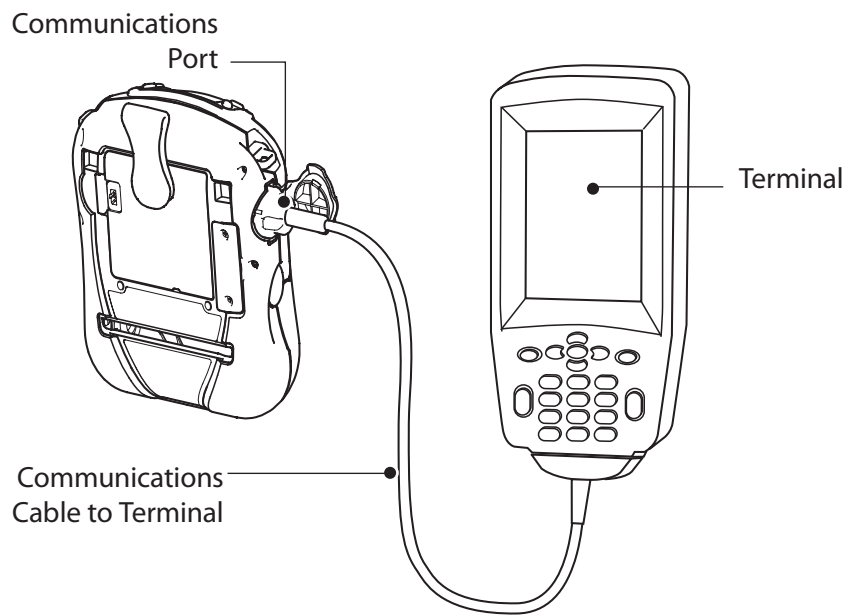
Section Continues ▶



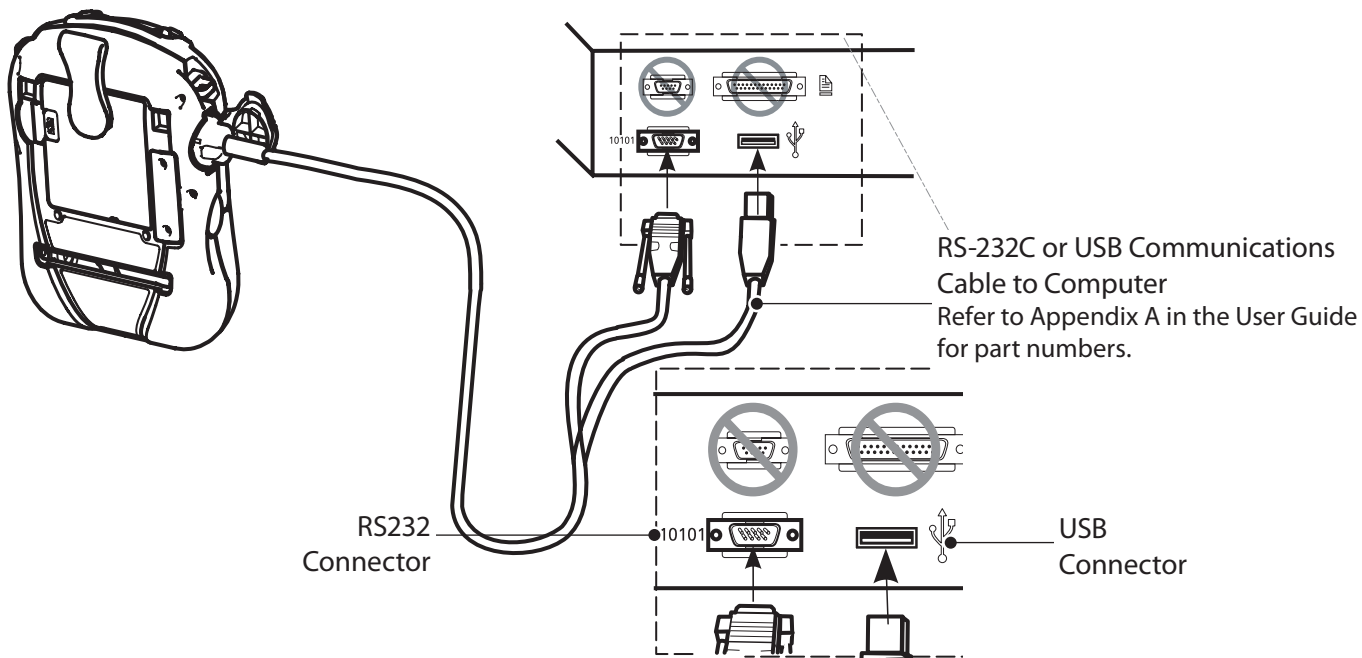
## Connect the Printer

### Connect The Printer With a Cable

You can connect your printer to a terminal or a PC using either RS232C or USB protocols. Refer to the Label Vista™ application available on the RW product CD or at [www.zebra.com/software](http://www.zebra.com/software) for help on setting up communications with your printer.



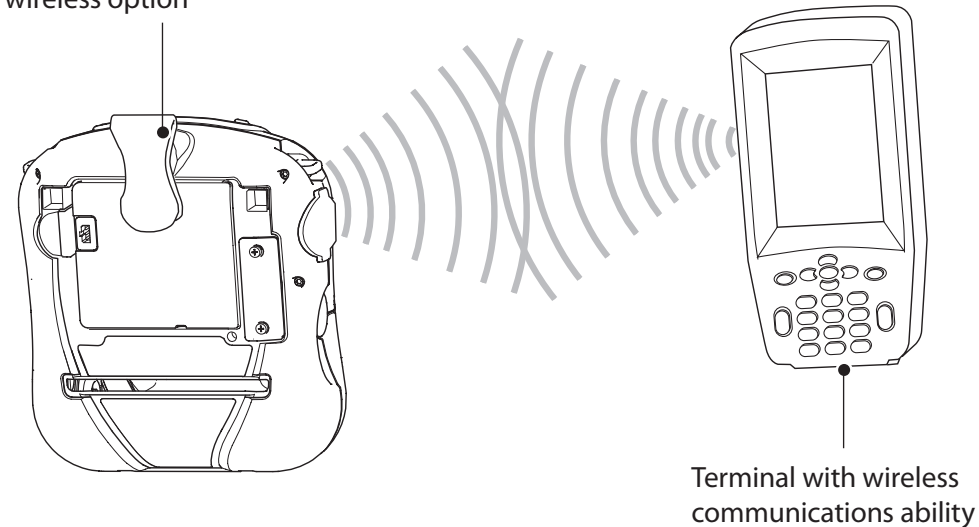
### Cable Communications with a Terminal.



### Cable Communications with a P.C.

If you are using a USB cable to connect to a PC you may need to install the Zebra Universal Driver available at: [www.zebra.com/drivers](http://www.zebra.com/drivers).

RW Series Printer with wireless option



### Connect the Printer by Infrared (IR) or Radio

If your RW series printer has the optional IR module, you can make wireless line-of-sight connections to other IR equipped devices using the standard IrDA protocol.

If your RW series printer has a radio option, you can connect wirelessly to either a terminal or a wireless network (WLAN.) Refer to the Mobile Printer Wireless Configuration Guide available on the product CD or at [www.zebra.com/utilities](http://www.zebra.com/utilities) for help on setting up wireless communications with your printer.



## Printer Controls

### LCD Keypad

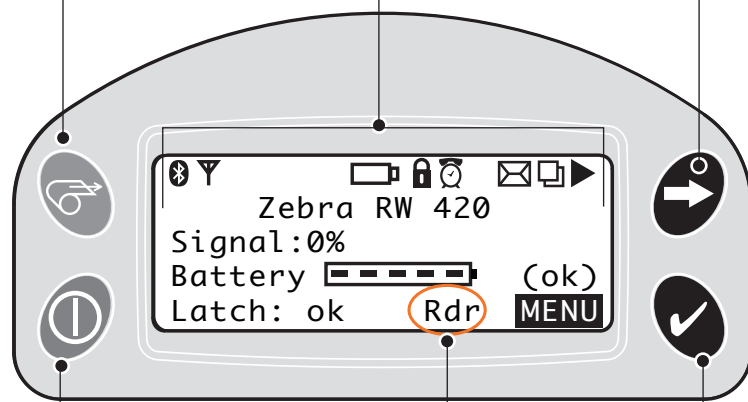
#### FEED BUTTON

Press to advance the media one blank label or a software determined length of journal media.

#### SCROLL BUTTON

Press to scroll through the menu choices on the LCD.

**PRINTER STATUS ICONS**  
Indicates the status of several Printer functions.



#### POWER BUTTON

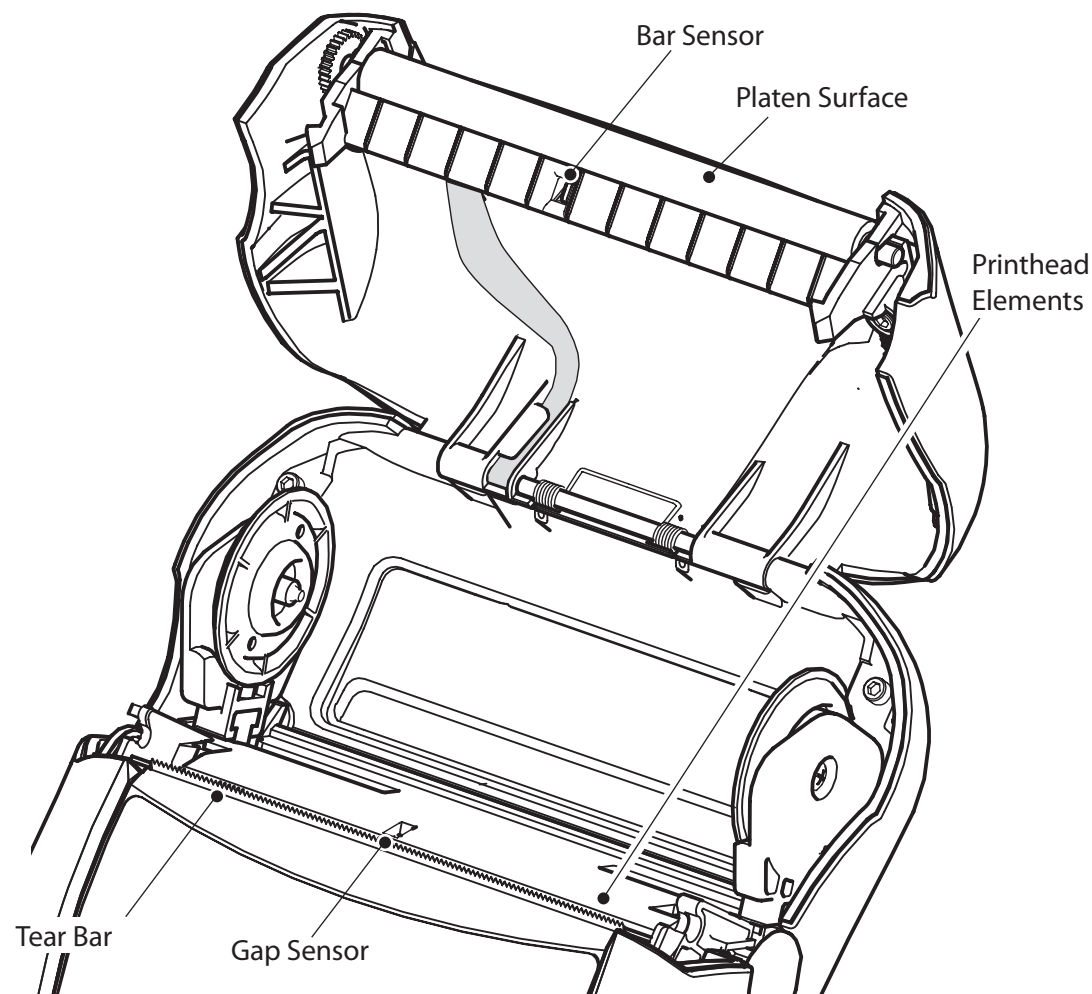
Press to turn unit on. Press again to turn unit off.

#### SELECT BUTTON

Press to select a menu choice on the LCD.

**MAG/SMART CARD READER INDICATOR**  
When "RDR" is displayed the Mag Stripe/ Smart Card reader is enabled.

## Cleaning the Printer




**Caution** • To avoid possible personal injury or damage to the Printer, never insert any pointed or sharp objects into the Printer.

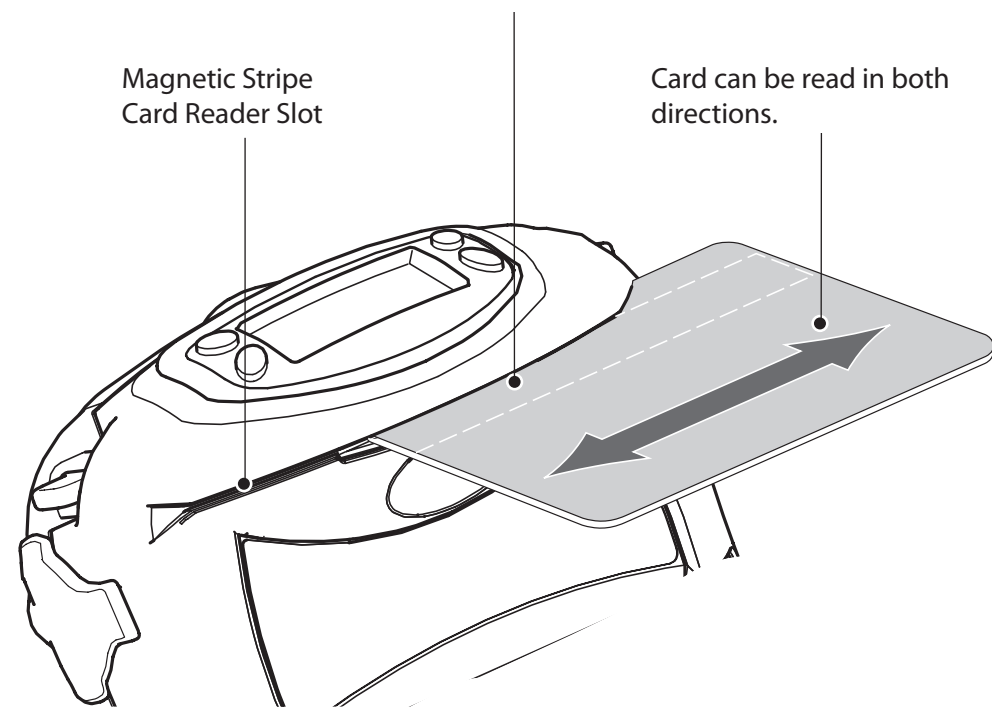
Area	Method	Interval
Printhead	Use a Zebra cleaning pen or 70% isopropyl alcohol on a cotton swab to clean the print elements from end to end (the print elements are located in the thin gray line on the printhead).	After every five rolls of media (or more often, if needed)
Platen	Rotate the platen roller and clean it thoroughly with the cleaning pen or 70% isopropyl alcohol and a cotton swab.	
Tear bar	Clean thoroughly with the cleaning pen or 70% isopropyl alcohol and a cotton swab.	As needed
Exterior	Water dampened cloth	
Interior	Brush/air blow. Ensure the Bar Sensor and Gap Sensor windows are free of dust.	

Section Continues

## Using the Magnetic Stripe Reader

 The Magnetic Stripe and Smart Card Readers are an optional feature of the RW series. Your printer may be configured without them.

Place the Magnetic Stripe Card in the reader slot with the magnetic stripe facing the bottom of the printer as shown.



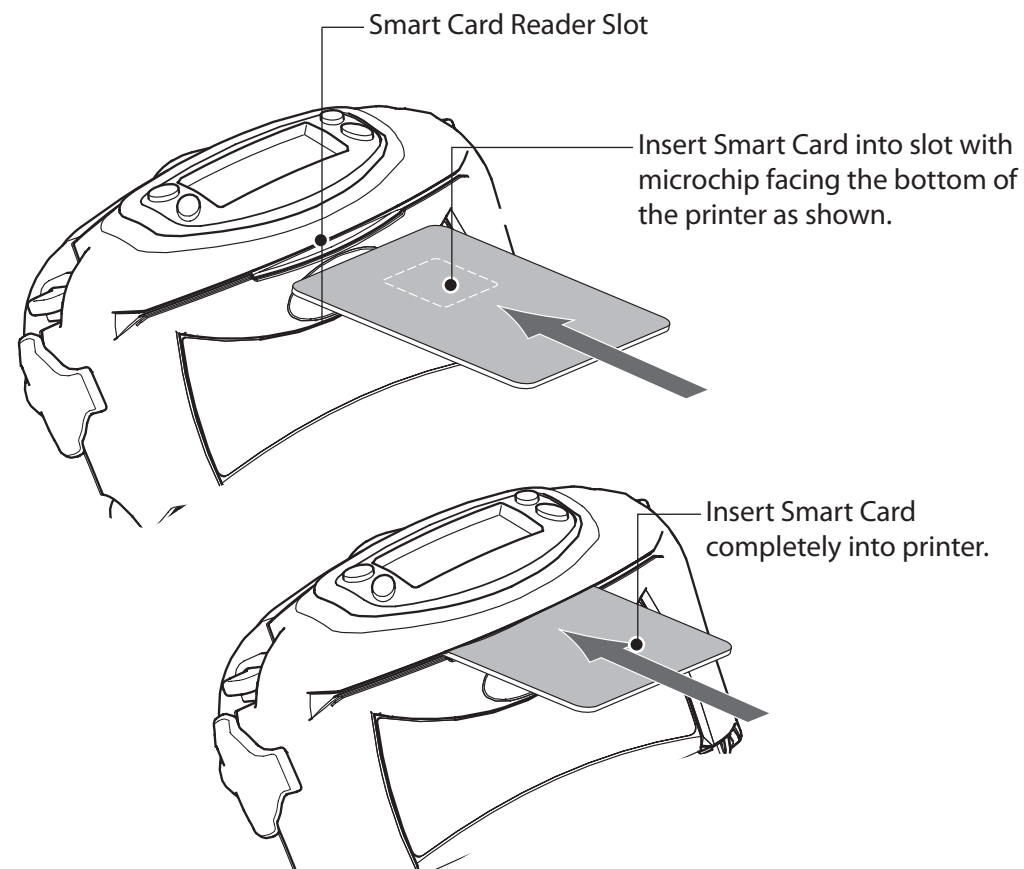
The status of the Magnetic Stripe Reader (MSR) is indicated in three possible ways:

- Reader status is displayed on the Main Menu LCD
- The LCD backlight flashes to indicate status (3 flashes = enabled, 2 flashes = disabled).
- Chimes indicates the reader status (3 chimes = enabled, 2 chimes = disabled).

The MSR is used as follows:

1. When the reader is enabled, place the card into the reader slot as shown above. The magnetic stripe must face the bottom of the printer, and be inserted into the card reader slot as shown above.
2. Slide the card through the slot in either direction. Depending on the application software, the printer will sound one chime when a scan is successful .
3. If the card did not read, slide it back through the slot in the opposite direction.

## Using the Smart Card Reader



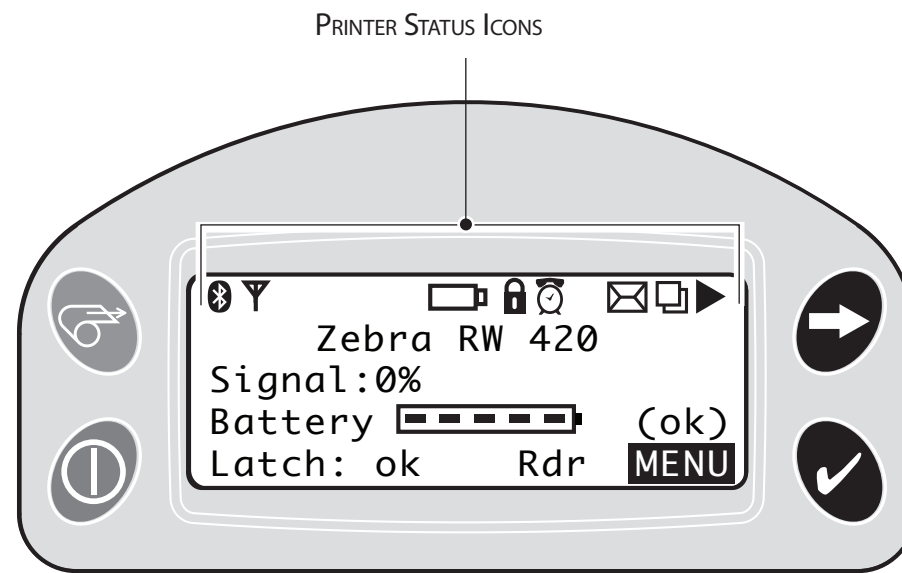
The optional Smart Card reader is used as follows:

1. The LCD will display "RDR" to indicate the Smart Card Reader is active. (Some reader applications may flash the display backlight and/or chime three times to indicate the reader status is "ready.") The printer is now acting only as a Smart Card reader connected to the host terminal; all other printer functions are suspended.
2. Insert the card into the reader slot as shown above. The microchip imbedded in the card must be oriented facing the bottom of the printer and must be completely inserted into the reader slot to scan successfully .
3. Depending on the application software, the printer will sound a chime after a successful transaction.
4. After the card has been successfully read the printer can resume normal printing operations and the Smart Card can be removed

## Troubleshooting

### LCD Control Panel

The top of the display shows icons indicating various printer functions. Check the icon's status and refer to the referenced Troubleshooting topic on the following pages.



Icon	Status	Indication	Ref. to Topic # on next page
	On	Bluetooth Link established	n/a
	Off	No Bluetooth Link	5
	On	Bluetooth link established	n/a
	Off	No Bluetooth link	5
	Flashing	Transmitting/Receiving data	n/a
	On	802.11x RF Link established	n/a
	Off	No 802.11x RF Link	5
	Flashing	Low Battery	3, 5, 6,
	Flashing	Head latch not closed	8, 10, 11
	Flashing	Indicates Printing activity	n/a
	Steady	Data processing in process	7
	Flashing	Out of Media	9,11
	Blank Screen	n/a	No application

RW series printers may be built with one of two LCD types. LCDs using the Bluetooth icon (highlighted by a gray background in the table above) will gradually replace LCDs with the “light bulb” icon indicating Bluetooth activity. Printers with either type of display will function identically.

Section Continues

## Troubleshooting Topics

### 1. No power:

- Check that battery is installed properly.
- Recharge or replace battery as necessary.

### 2. Media does not feed:

- Be sure printhead is closed and latched.
- Check spindle holding media for any binding.
- Ensure label sensor is not blocked.

### 3. Poor or faded print or icon flashing:

- Clean printhead.
- Check battery for possible damage. Recharge or replace as necessary.



Always dispose of batteries properly. Refer to Appendix E of the RW series User Guide for more information.

- Check quality of media.

### 4. Partial or missing print:

- Check media alignment.
- Clean printhead.
- Ensure printhead is properly closed and latched.

### 5. No print:

- Replace battery.
- Check cable to terminal.
- (Wireless units only) Restore wireless connection.

### 6. Reduced battery life:

- Check battery date code — if battery is one to two years old, short life may be due to normal aging.
- Replace battery.

### 7. Flashing icon:

- No application or application corrupted; program must be re-loaded.
- (Wireless units only): flashing error light indicates data transmission.

### 8. Flashing or icons:

- Check that media is loaded and that printhead is closed and securely latched.

### 9. Skips labels:

- Ensure correct media is being used.
- Ensure bar/ or gap sensor is not blocked.

### 10. Communication Error:

- Check media is loaded, head is closed and error light is off.
- Replace cable to terminal.



## 11. Label Jam:

- Open media cover.
- Generously apply alcohol to Printer in area of jammed label.

## 12. Blank LCD Screen:

- No application loaded or application corrupted: program must be re-loaded.

## 13. Magnetic Strip Card or Smart Card Won't Read

- Ensure the "RDR" text is displayed, indicating card reader is enabled.
- Ensure card is inserted with the magnetic stripe or microchip facing in the correct direction.
- Check card for excessive wear or damage to either the magnetic strip or the microchip.

## 14. Battery Pack Is Hard to Insert

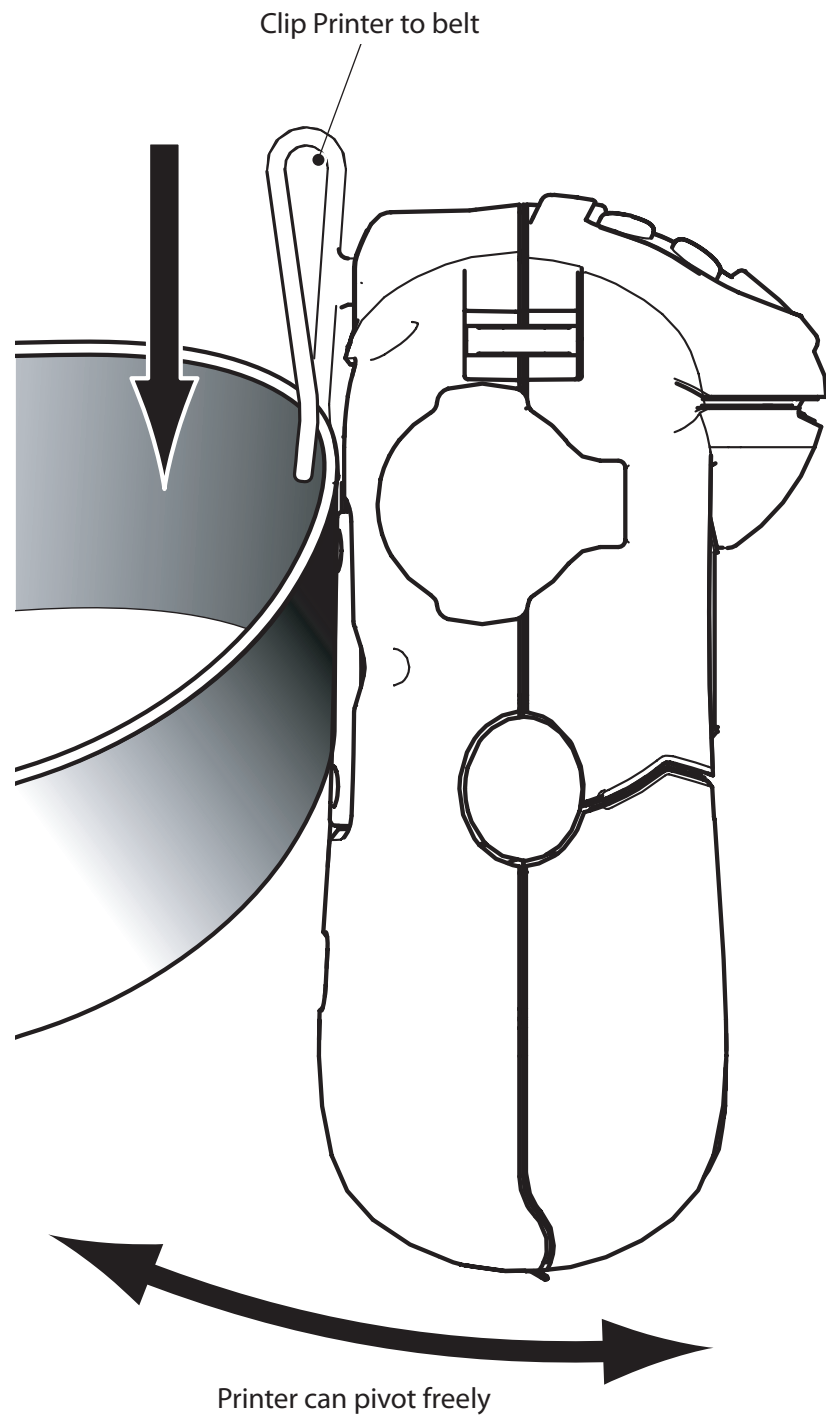
- Do not force the battery. Verify you have removed the protective shrink-wrap which protects the battery during shipping.
- The battery packs for the RW and QL series model printers are similar in size and shape, but not identical. Verify you are using the correct battery pack:  
The RW 420 battery pack replacement part number is AK17463-005. The RW 220 battery pack replacement part number is AK18026-002.



## Using the Accessories

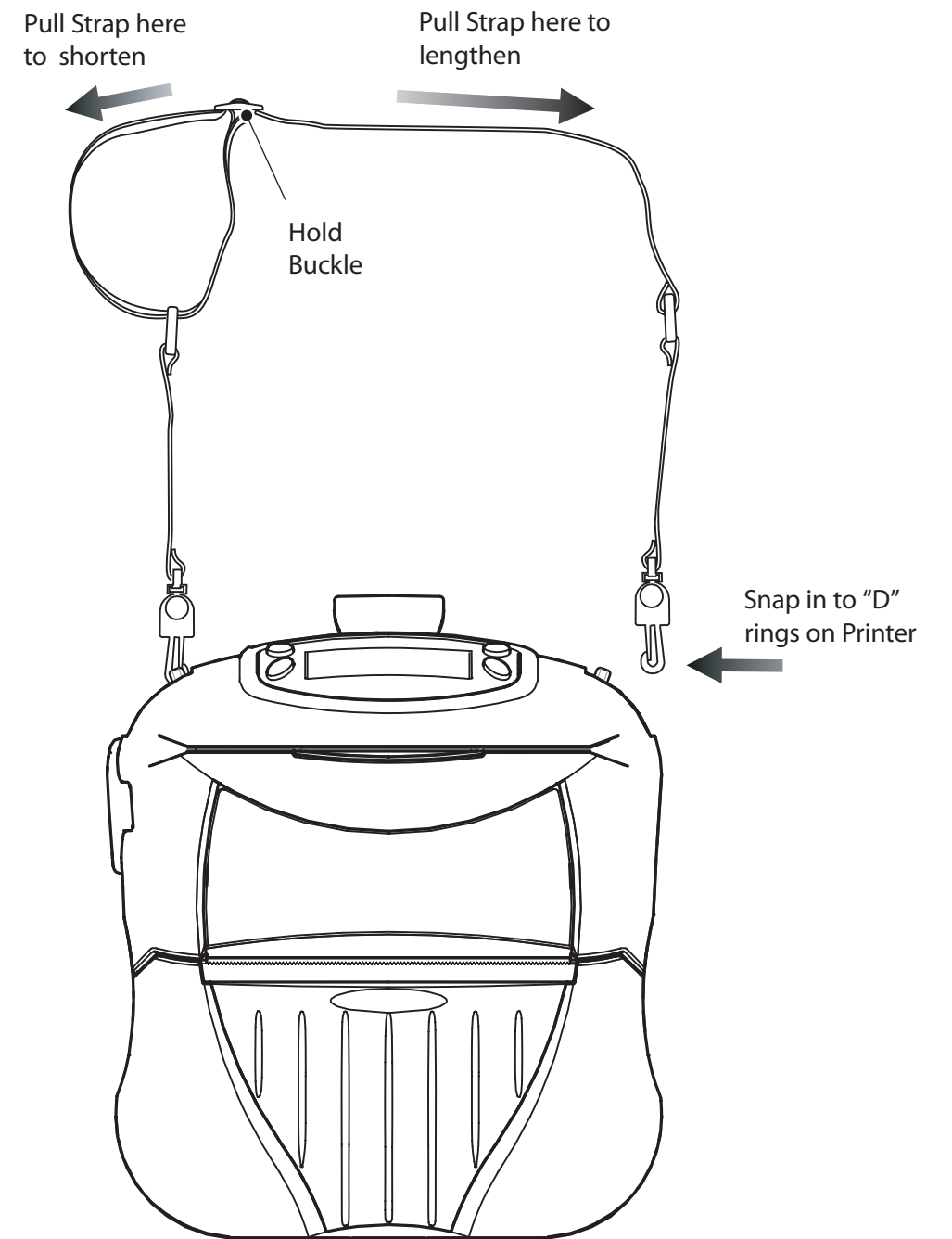
### Belt Clip (standard on all printers)

To use: hook the clip over your belt and ensure that the clip is securely attached to the belt. The belt clip will pivot to allow you to move freely while wearing the printer.



### Adjustable Shoulder Strap (optional)

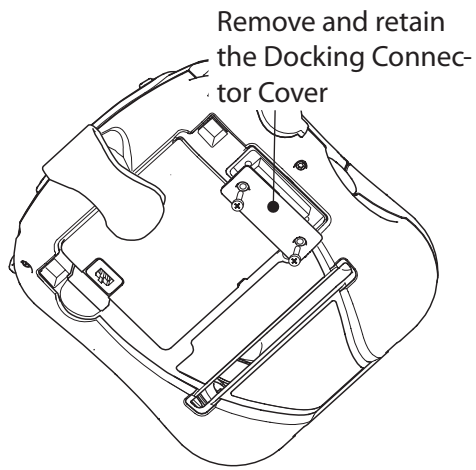
Refer to figure below. Snap each end of the shoulder strap into the "D" rings in the top of the printer. Hold the buckle and slide the strap as shown below until you achieve the desired length.



## Using the Accessories

### RW 420 Vehicle Cradle

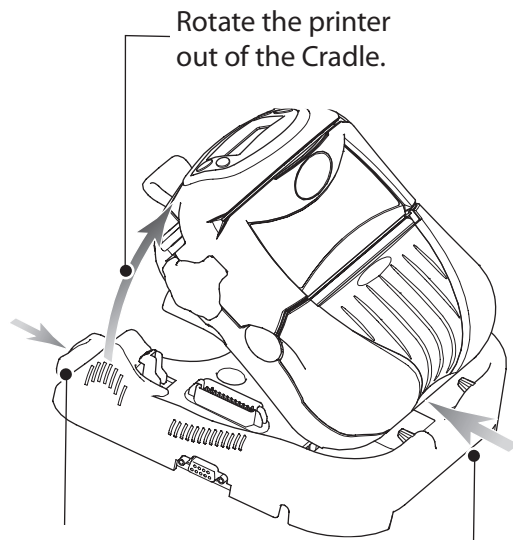
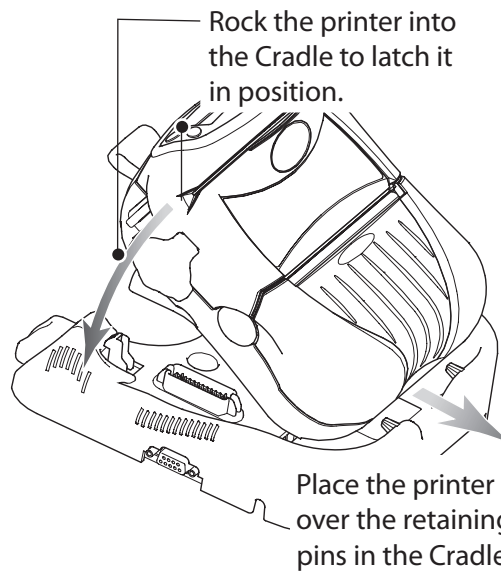
When the RW 420 Printer is “docked” in the Vehicle Cradle it can print, receive and transmit data and the cradle can charge the printer’s batteries. Refer to the documentation either in the Users Guide or supplied with the Cradle for more information.



#### Installing the Printer

- As a safety precaution, remove the shoulder strap prior to docking the printer.
- Remove the Docking Connector Cover from the bottom of the printer, and retain it for future use.

- Place the bottom of the printer over the two pins in the Cradle.
- Rock the top of the printer into the Cradle and press firmly until it latches in place.
- When the power indicator on the Cradle is lit turn the printer on.



Press the Latch button to release the printer.

Lift the printer free of the locating pins.

#### Removing the Printer

- Turn the printer off.
- Push on the latch on the Cradle and rock the top of the printer away from the Cradle.
- Lift the printer out from the Cradle.

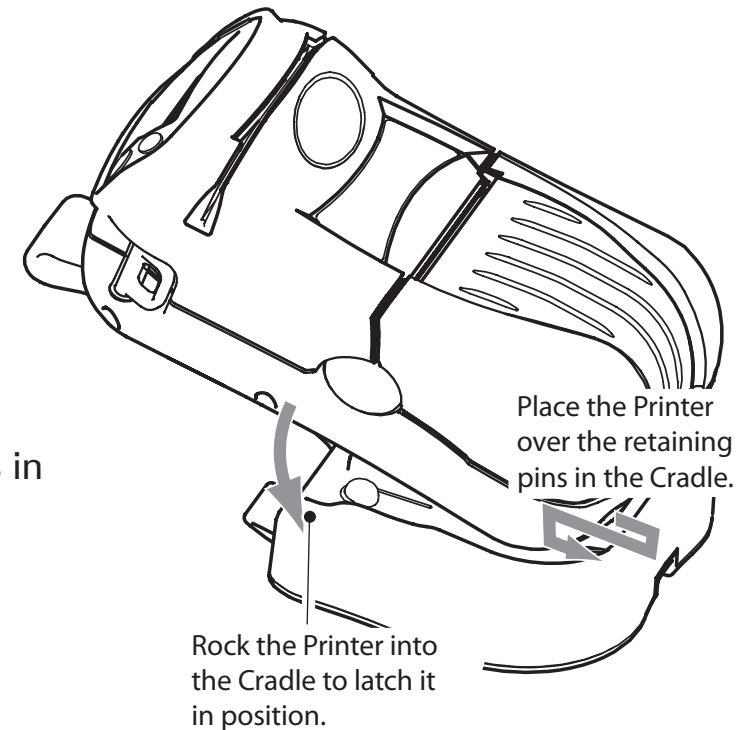
Replace the Docking Connector Cover if you will be using the printer for an extended period of time away from the Cradle.

### RW 220 Vehicle Cradle

The RW 220 can be used in conjunction with a docking Cradle. When the Printer is “docked” it can be powered by either its own battery or one of the RCLI series of external chargers. Refer to the documentation supplied with the Cradle for more information.

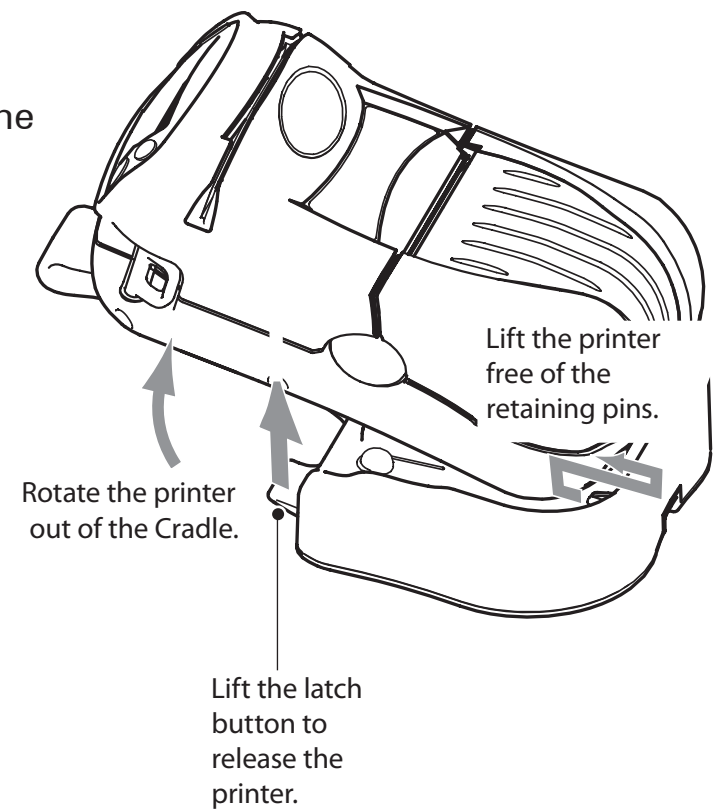
#### Installing the Printer

- Place the bottom of the printer over the two pins in the Cradle.
- Rock the top of the printer into the Cradle and press firmly until it latches in place.



#### Removing the Printer

- Turn the Printer off.
- Push on the latch on the Cradle and rotate the Printer away from the Cradle.
- Lift the Printer free of the cradle locating pins and out from the Cradle.



## Product Support

For product support, and the latest versions of all customer documentation, contact Zebra Technologies at: [www.zebra.com](http://www.zebra.com)

Refer to Appendix D in the RW Series User Guide for more detailed contact information

### IN THE AMERICAS CONTACT:

#### Zebra Technologies Corporation

475 Half Day Road, Suite 500  
Lincolnshire, Illinois 60069 USA  
Phone: +1.847.634.6700 or +1.800.423.0422  
Fax: +1.847.913.8766

### IN EUROPE, AFRICA, THE MIDDLE EAST, AND INDIA CONTACT:

#### Zebra Technologies Europe Limited

Dukes Meadow  
Millboard Road  
Bourne End  
Buckinghamshire SL8 5XF, UK  
T: +44 (0)1628 556000  
F: +44 (0)1628 556001

### IN THE ASIA PACIFIC REGION CONTACT:

#### Zebra Technologies Asia Pacific, LLC

71 Robinson Road #05-02/03  
Singapore 068895  
T: +65-6858 0722  
F: +65-6885 0838



## Zebra Technologies Corporation

475 Half Day Road, Suite 500

Lincolnshire, IL 60069 USA

T: +1 847.634.6700 or +1 800.423.0442