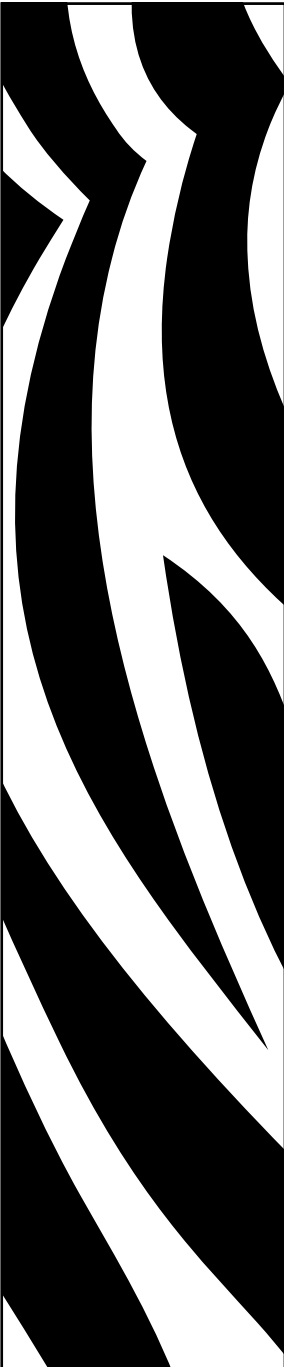


Rhein Tech Laboratories, Inc.
360 Herndon Parkway
Suite 1400
Herndon, VA 20170
<http://www.rheintech.com>

Client: Zebra Technologies Corp.
Model #: Cameo-ZBR3
Standards: FCC 15.247 & RSS-210
FCC ID: I28MD-BTC2TY5
Report #: 2006028

Appendix K: Manual

Please refer to the following pages.



Zebra® Cameo® Series Mobile Printers

User Guide

PRELIMINARY



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Product Improvements

Since continuous product improvement is a policy of Zebra Technologies Corporation, all specifications and signs are subject to change without notice.

FCC Compliance Statement

Class B digital device. Tested to comply with FCC standards for home or office use.

WARNING: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in this manual. Note that there are several radio options available with this printer. Additional regulatory information is contained in later sections devoted to each radio individually.

NOTE: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to insure compliance.

Changes or modifications to this unit not expressly approved by Zebra Technologies Corporation could void the user's authority to operate this equipment.

Canadian Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

"IC:" before the equipment certification number signifies that the Industry Canada technical specifications were met. It does not guarantee that the certified product will operate to the user's satisfaction.

Agency Approvals and Regulatory Information

- Design certified by CSA
- FCC part 15
- NOM/NYCE (Mexico)
- C-Tick (Australia)
- IP54 Certified
- Canadian STD RSS-210
- EN60950: 2000 Safety Standard
- EN55022:1998 Class B European Electromagnetic Radiation Standard

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Document Conventions

The following conventions are used throughout this document to convey certain information:

If you are viewing this guide online, click the underlined text to jump to a related Web site. Click on *italic text* (not underlined) to jump to that location in this manual..

Cautions, Important, and Note



Caution • Warns you of the potential for electrostatic discharge.



Caution • Warns you of a potential electric shock situation.



Caution • Warns you of a situation where excessive heat could cause a burn



Caution • Advises you that failure to take or avoid a specific action could result in physical harm to you.

Caution • Advises you that failure to take or avoid a specific action could result in physical harm to the hardware.

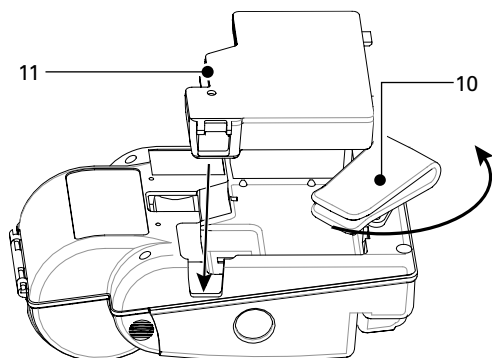
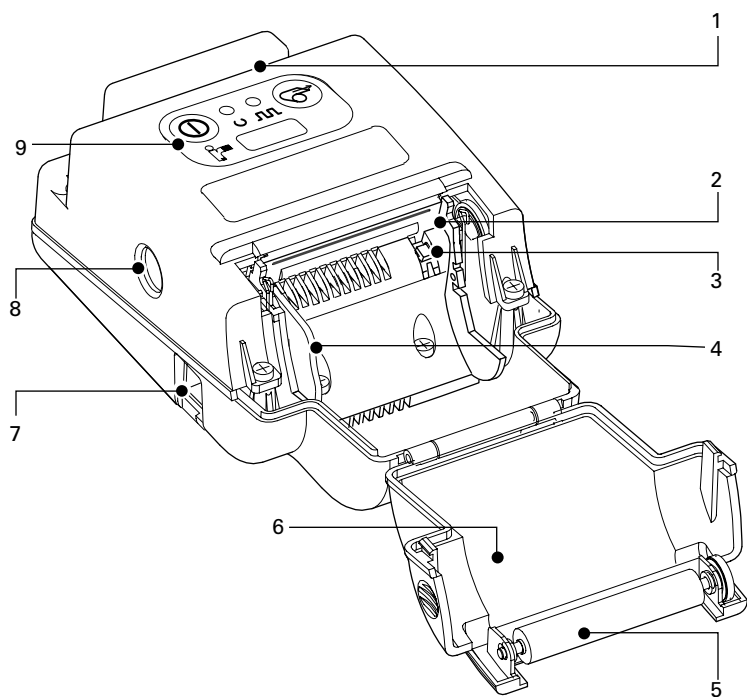


Important • Advises you of information that is essential to complete a task.



Note • Indicates neutral or positive information that emphasizes or supplements important points of the main text.

Cameo Series Overview



1. Magnetic Stripe Reader (MSR) Slot
2. Printhead
3. Gap Sensor
4. Media Edge Guide
5. Platen Roller

6. Media Cover
7. Battery Charging Receptacle
8. Communications Port
9. Control Panel
10. Belt Clip
11. Battery

Introduction

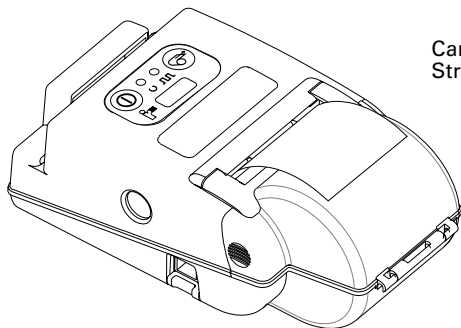
The Cameo® Series of Mobile Printers utilize the latest in direct thermal printing technology. These products are designed for mobile printing applications. Their compact size and rugged construction is ideally suited to print receipts and for many other situations where on-site printing is required.

The Cameo Series also offers Bluetooth® or infrared (IrDA) wireless communications options. Cameo 3 printers can be ordered with an optional 802.11b compliant WLAN radio.

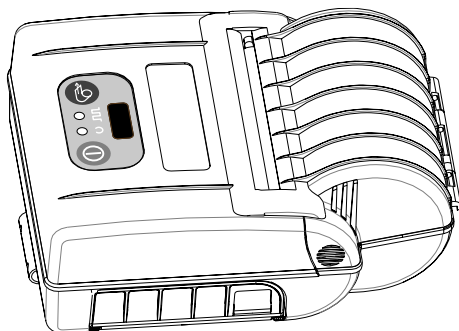
Cameo Series printers can also be ordered with an integrated magnetic stripe reader (MSR).

This manual should be read in its entirety before attempting operation of this product. Further information regarding this printer series' features and operation can be found in the Mobile Printing Systems CPCL Programming Manual, available on our Web site at: <http://www.zebra.com>.

Cameo Models Illustrated



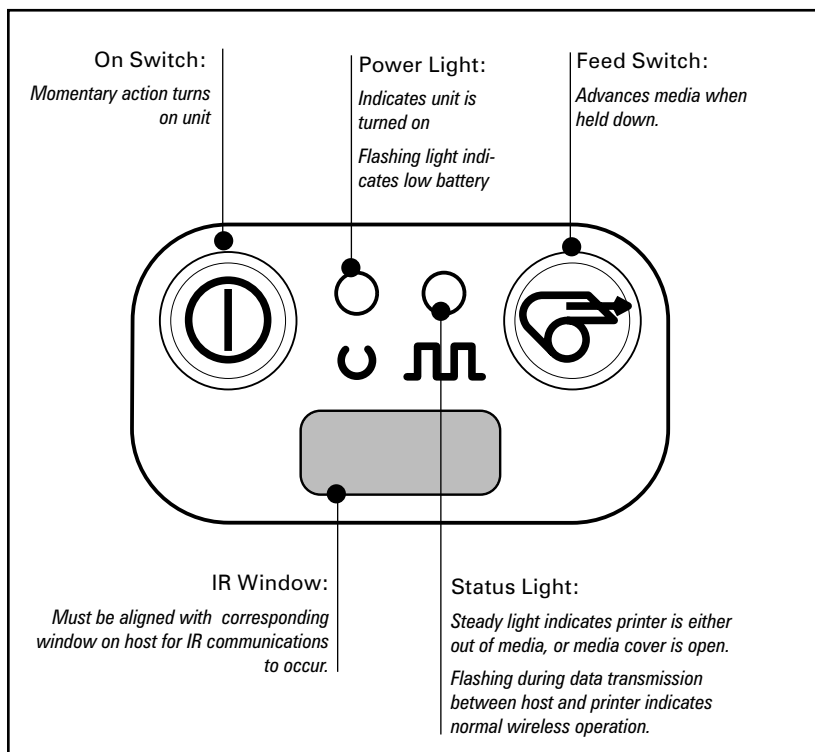
Cameo 2 with optional Mag Stripe Reader and IR interface.



Cameo 3

Controls

Keypad Functions



Self Test

Cameos can perform a self test which will print a line of interlocking "x" characters to insure all elements of the print-head are working, and then print out the version of software loaded in the printer. Refer to the Troubleshooting section for details on interpreting the self-test.

The self test is activated by the following key sequence:

1. Press the "FEED" key
2. While still holding down the "FEED" key, turn on the printer by pressing and releasing the "ON" key.
3. Continue pressing the "FEED" key until self test starts.

The Cameo will perform the self test and remain on. Refer to the Troubleshooting section for more information on using the Self Test function.

Batteries and Charging

Conditioning Battery Packs



Important • Cameo batteries must be cycled several times before maximum capacity is realized.



Note • A battery is "cycled" by fully charging it, then fully discharging it through normal use.

Chargers

Listed below are the specifications for the Cameo series chargers:

Model UCN72-4:

Model UCN72-4 is designed to charge up to four batteries simultaneously. Battery packs may be charged separately or while plugged into the printer. Typical charge time is 90 minutes. Input voltage is switch selectable between 110 and 220 V.A.C. The charger is supplied with line cords compatible with most international standards.

Caution • Do not attempt to charge batteries with the UC72-4 Charger while printing. Attempting to print while charging batteries can result in unreliable charging.

UCN72-4 part numbers vary depending on specific country of use. Consult the factory for appropriate part numbers.

Model UCN72:

Model UCN-72 is a wall mounted single charger with a universal 110 to 230, 50-60 Hz. VAC input. Multiple plug configurations comply with most international standards.

Caution • Do not attempt to charge batteries with the UCN72 Charger while printing. Attempting to print while charging batteries can result in unreliable charging.

UCN72 part numbers vary depending on specific country of use. Consult the factory for appropriate part numbers.

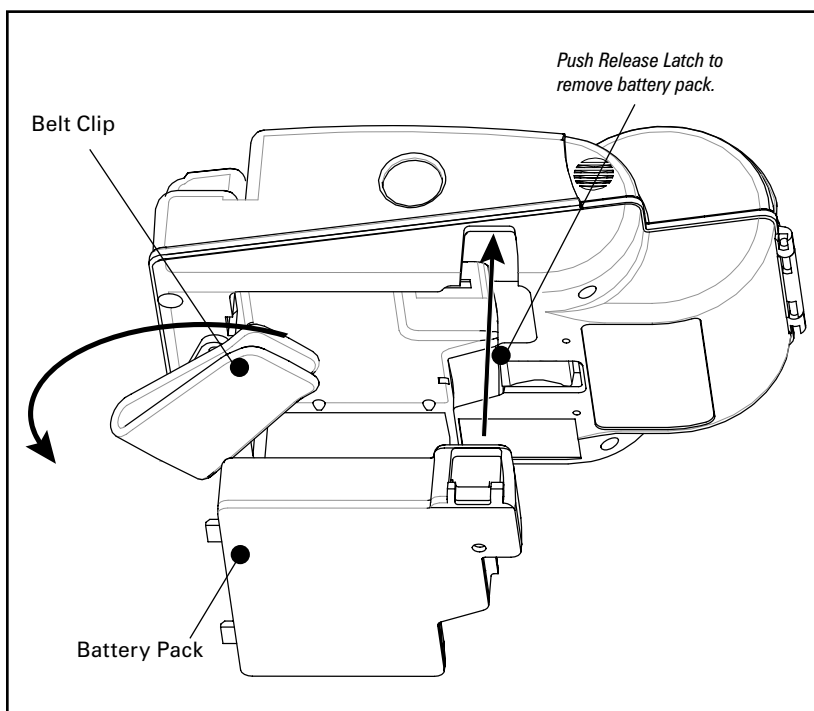
Removing and Replacing Cameo 2 Battery Packs

To remove the battery pack from the Cameo 2:

1. Push the battery release button on the bottom of the printer towards the media compartment.
2. Rotate the belt clip as shown while,
3. Allowing the battery pack to slide out.

Battery Packs are replaced by the following procedure:

1. Rotate the Belt Clip to clear the battery
2. Align the battery pack to the bottom of the printer. The side of the battery with the contacts will face into the well for the battery.
3. Slide the pack completely into the printer until it locks in place. The battery will engage with a distinct "click".
4. Rotate the Belt Clip back into position.



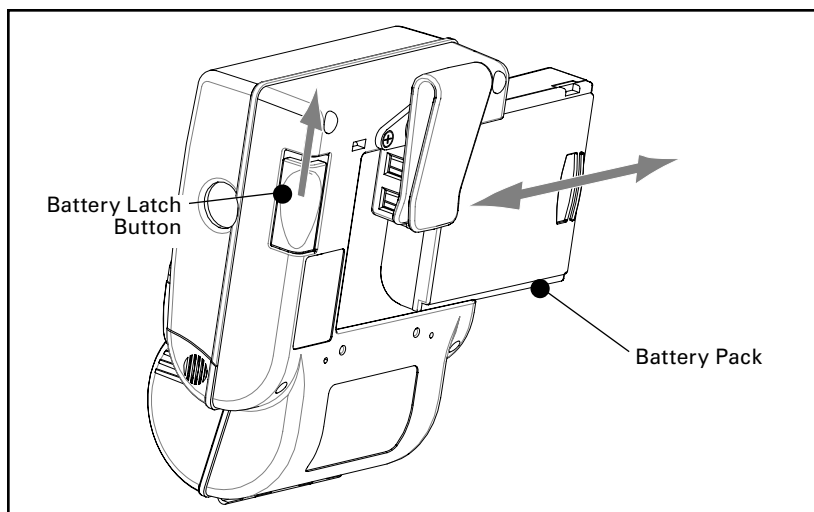
Removing and Replacing Cameo 2 Series Battery Packs

Removing and Replacing Cameo 3 Battery Packs

To remove the battery pack from the Cameo 3:

Slide the Battery Latch button in the direction shown in the top illustration below, and slide the battery out.

To replace the battery, insert the end with the contacts into the battery well and slide the battery into the printer until it clicks into place. Always dispose of battery packs properly. Refer to Appendix D for more information on battery pack disposal.



Removing and Replacing Cameo 3 Battery Packs

Low Battery Shutdown

As the battery charge level becomes depleted the Power LED will flash. At this time the printer should be shut off and the battery pack recharged or replaced. Cameos will automatically shut off if the batteries become severely discharged.

Safety Warnings



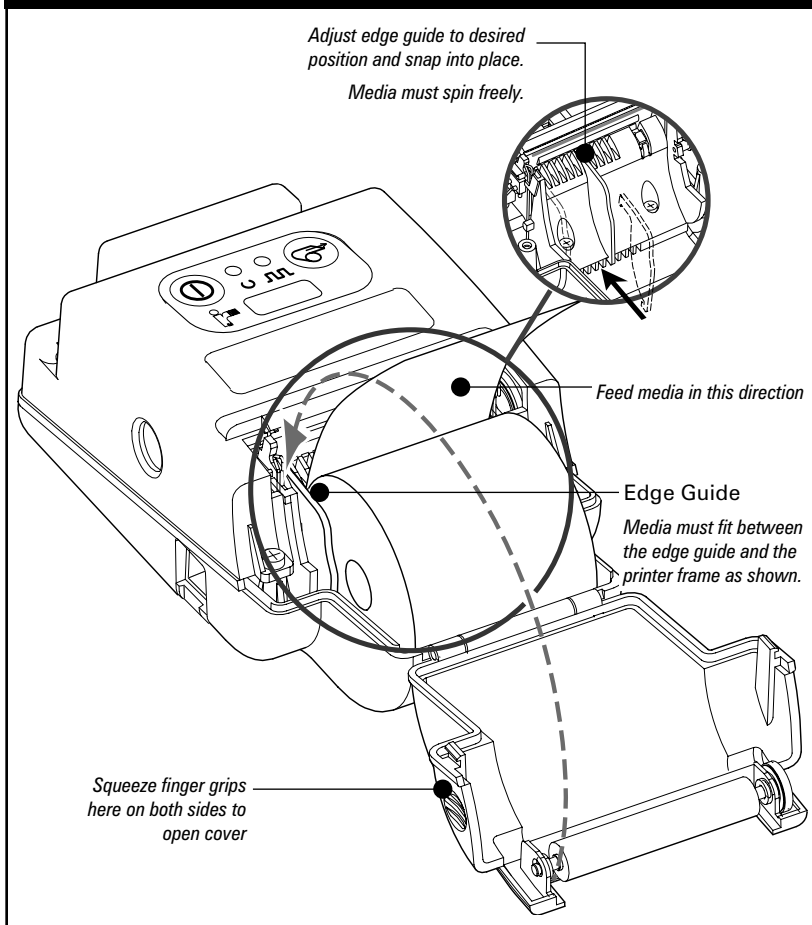
Caution • Battery terminals are recessed to prevent short circuiting of the battery. Allowing these terminals to contact conductive material will create a short circuit which could cause burns, other injuries or start a fire.

Important • Use of a charger not approved by Zebra for use with Cameo series NiMH batteries could damage the battery pack or the printer and will void the warranty.

Installation of Media

The following details media installation:

Cameo Media Installation



Cameo 2 is illustrated. Loading procedure is identical for all Cameo Series printers

1. Turn unit off.
2. Squeeze the two finger grips on either side of the media compartment cover. Rotate the top back to reveal the paper compartment.
3. If necessary, adjust the edge guide as shown for the media to be used.
The edge guide should be set into the nearest slot in the

continued

printer body that will allow the media roll to spin freely yet prevent it from wandering from side to side so much that print quality is affected.



Important • The media roll must sit between the right hand surface of the edge guide and the printer frame as shown in the illustration.

4. Drop a new roll of paper into the compartment. Media should feed from the top of the roll and the roll should fit between the edge guide and the right hand wall.
-



The inner core of the media roll should be Ø.75" [19 mm] or larger to prevent the media at the end of the roll from jamming in the printer mechanism.

5. Close the cover while holding the free end of the media roll.
 6. Ensure the cover is securely latched before beginning to print.
-

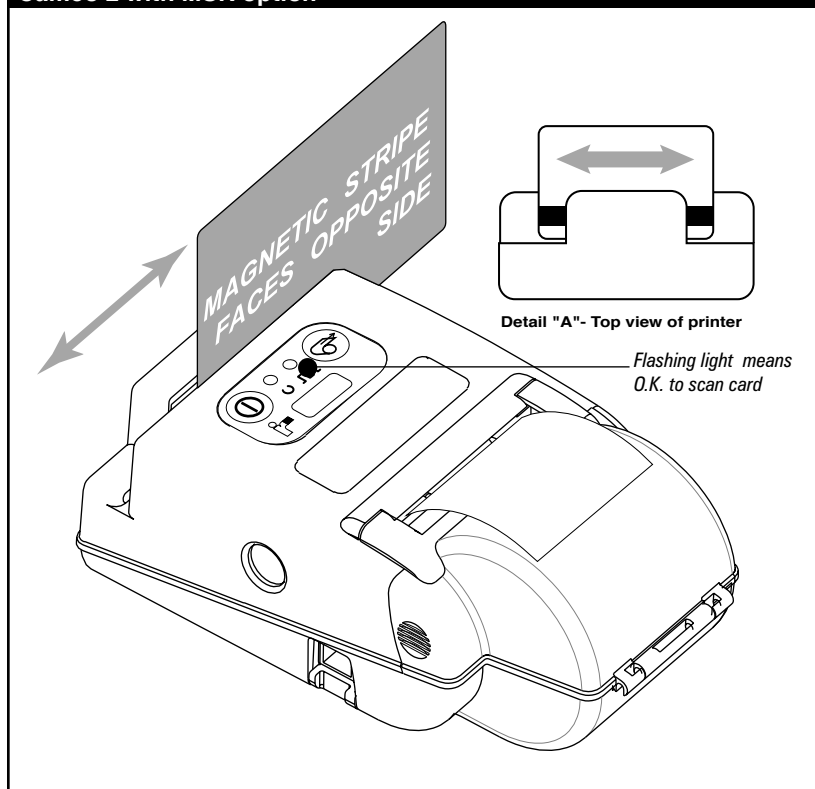
Caution •When printing, there must be a wait time of one second between labels to remain within the optimal performance specifications for this product.

Magnetic Stripe Reader

The optional magnetic stripe reader (MSR) is used as follows:

1. A flashing status light indicates the printer is available to scan. Place the card into the reader slot as shown. The magnetic stripe must face the top of the printer, and into the body of the printer as shown in Detail "A" below.
2. Slide the card through the slot. The card will be read if slid in either direction. Depending on the application software, the receiving terminal will sound a beep on a successful scan.
3. If the card did not read, slide it back through the slot in the opposite direction.

Cameo 2 with MSR option



Maintenance

Cameo printers will provide years of reliable service provided a few simple guidelines are followed. The printer should be cleaned approximately every two weeks, or more often depending on usage and the type of media being employed. Components of the printer that require periodic maintenance are the printhead, print roller (platen), and the media sensor. When cleaning, please use only isopropyl alcohol, the same type included in the Cleaning Kit. Always use Zebra label or ticket stock for maximum print quality and extended printer life.



Caution • Always turn the printer off prior to any cleaning operation.

Caution • Never use any sharp objects on the printer mechanism as it could damage the printhead and platen. Use only the supplied cleaning pen or a cotton swab saturated with alcohol for cleaning.

Cleaning the printhead

- Always turn the printer off prior to any cleaning operation.
- Open the printer by squeezing the finger grips on either side of the media compartment cover.
- Swing the media compartment cover open.
- Use the cleaning pen supplied with the printer and/or alcohol and cotton swabs to clean the surface of the printhead, the platen, and the sensor.

Cleaning the platen (print roller)



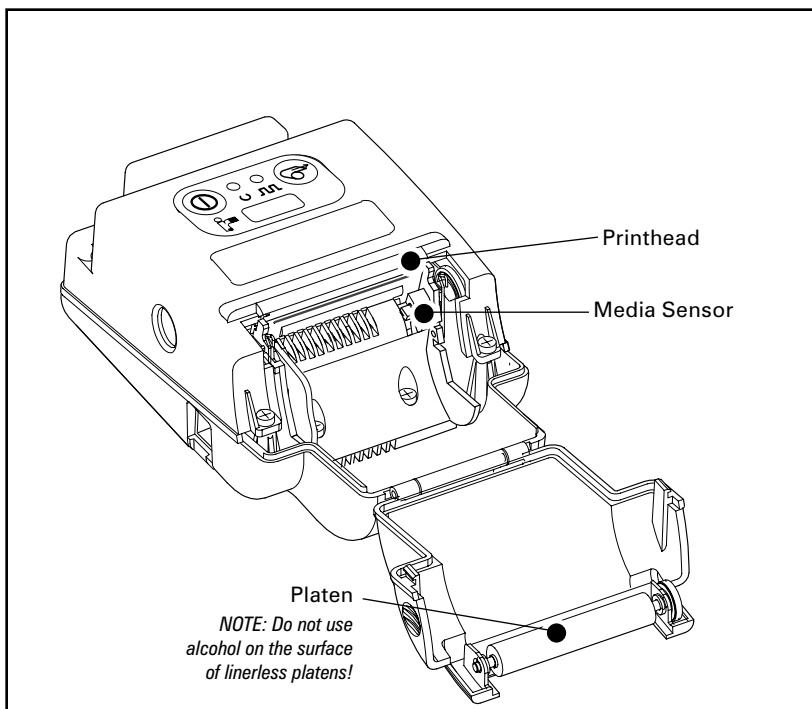
Note • Applies to printers configured for lined media only

- Open the printer by squeezing the finger grips on either side of the media compartment cover and swinging it open.
- Gently clean the platen with the cleaning pen supplied with the printer and/or alcohol and a cotton swab while rotating the platen.

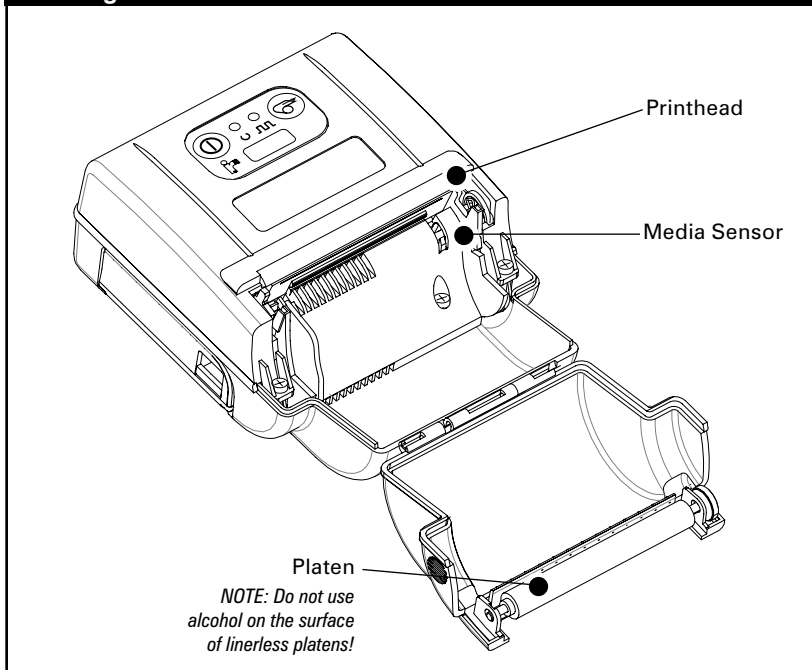
Cleaning the Media Sensor

The Media sensor is located inside the media compartment under the printhead. Blow out any dust deposits carefully, then finish cleaning with the cleaning pen supplied with the

continued on page 18



Cleaning the Cameo 2



Cleaning the Cameo 3

printer and/or alcohol and cotton swabs.

Linerless Media Printers

Printers using linerless media require more frequent cleaning. Linerless media deposits adhesive which must be removed for optimum performance. Linerless printers can be identified by a platen which is not black, or by reading the unit's fifteen digit Product Configuration Code (PCC) label on the back of the printer. PCC digit "8" will be "B", "D", "F", or "H" for linerless printers.



Note • It is not necessary to clean the platen on linerless units. The platen material is self cleaning and will not require constant maintenance.

Caution • Never use any sharp objects on the printer mechanism as it could damage the printhead. Use only isopropyl alcohol, the supplied cleaning pen and /or a cotton swab for cleaning the printer.

- Open the printer by squeezing the finger grips on either side of the media compartment cover.
- Surfaces inside the media compartment that come in contact with the linerless media adhesive should be cleaned, along with:
 - The print mechanism area around the Sensor
 - The printhead
 - The inside surface of the edge guide

Allow printer to dry before resuming printing.

Troubleshooting

Self Test:

Perform the self test as described in the Controls section. The unit should print a line of interlocking “x” characters to insure all elements of the printhead are working, print out the version of software loaded in the printer and then print two reports. The first report indicates model, ROM version, serial number, baud rate, etc. The second report contains application information. If no second report appears, there is no application loaded.

Troubleshooting Guide

No power

- Check battery, recharge or replace as necessary.

Media does not feed:

- Be sure media compartment cover is closed and latched.

Poor or faded print:

- Clean printhead.
- Check/replace battery. Refer to Appendix D for information on proper disposal of batteries.
- Check quality of media.

Partial/missing print:

- Check media alignment.
- Clean printhead.
- Verify media compartment cover is closed and latched.

Prints illegible characters:

- Check baud rate.

No print:

- Check baud rate.
- Replace battery. Refer to Appendix D for information on proper disposal of batteries.
- Check cable connection to terminal.
- Wireless units: verify communication link between printer and terminal.
- Wireless printers associated with a LAN: refer to the RF LAN Information section of the Self Test printout to verify the printer’s SSID and IP addresses are correct, and that the printer is “associated” with the wireless LAN.
- Invalid label format or command structure — use Hex Dump Mode for troubleshooting. Refer to the Programming Manual for more information.

Reduced battery charge life:

- Recondition (cycle) battery.
- Damaged battery-replace. Refer to Appendix D for information on proper disposal of batteries.
- Check battery date code: if one to two years old, short charge life may be due to normal aging.

Status light flashing and beeper chimes:

- No application: reload program.

Status light flashing

- If using SRRF communications: normal indication while data is being received.

Status light always on:

- Check media is loaded and media compartment cover is closed and latched.

Communication Error:

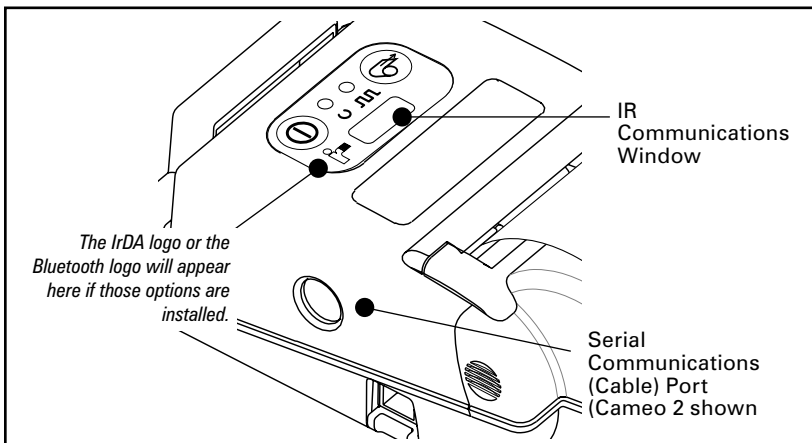
- Check media is loaded, media compartment cover is closed and latched, and error light is off.
- Check baud rate.
- Replace cable to terminal.

Caution • Never use any sharp objects on the printer mechanism as it could damage the printhead. Use only isopropyl alcohol, the supplied cleaning pen and /or a cotton swab for cleaning the printer.

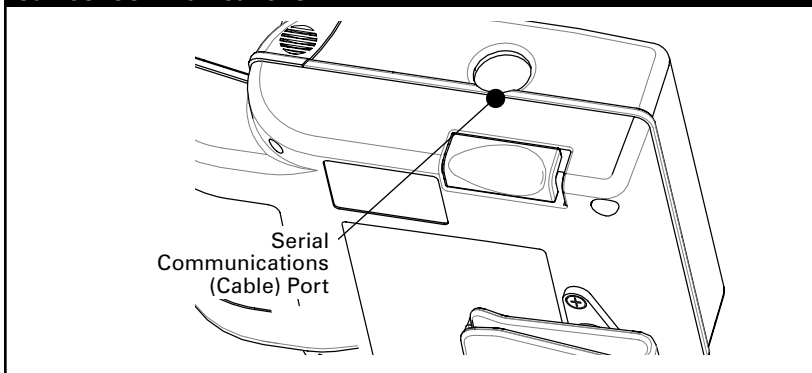
Communicating with the Printer

The printer must establish communications with a host terminal which sends the data to be printed. Communications occur in three basic ways:

- By a cable between the printer and its host terminal
- Infrared (usually by means of the industry standard IrDA protocol) Units with the IrDA option can be identified by the "IR" logo on the unit's keypad.



Cameo Communications



Cameo 3 Communications Port

- Using Bluetooth wireless communications. Cameos with the Bluetooth option will have a Bluetooth logo on the lower left corner of the keypad.
- By means of a wireless LAN (Local Area Network) Cameo printers with the WLAN option are identified by

the text “Wireless Network Printer” on the product identification label.

Cable Communications

All Cameo printers can communicate by cable; the specific cable supplied with your printer will vary with the host terminal. The 8-pin circular connector on your communications cable plugs into the serial communications port on the side of the Cameo printer. (Refer to the Specifications Section of this manual for communications port pin assignments.)

The connector is keyed to assure correct alignment; do not try to force it if it does not plug in. The other end of the cable must be plugged into the host terminal. Communications between the terminal and the printer is controlled by the applications running on the terminal and the printer.

IR Communications

Printers equipped for infrared (IR) communications are identified by a small “IR” logo on the unit’s keypad. IR allows wireless communications between the printer and the host terminal. IR units can also communicate with a cable as detailed above, however, IR functions are disabled when the cable is plugged in. Cameo units with the IR option can be configured to conform to the standard IrDA communications protocol

Linking a Printer to an IrDA Host

IrDA compliant terminals will automatically initiate communications to the printer. First insure that there is a direct line of sight between the printer and the terminal that will be sending data. The IR window on the front of the Cameo must face the corresponding window on the terminal to properly send and receive signals. An IrDA compliant terminal will seek out any linkable devices and establish communications between them, even turning the printer on if necessary.

Bluetooth Networking Overview

In order to exchange data, two Bluetooth enabled devices must establish a connection. Bluetooth software is always running in the background, ready to respond to connection requests. One device (known as the master or the client) must request a connection with another. The second device (the slave or the server) then accepts or rejects the connection. A Bluetooth enabled QL 320 will normally act as a slave, but in theory any Bluetooth device can be either a master or a slave. This miniature network is sometimes referred to as a "piconet" and can consist of several Bluetooth enabled devices.

Each Bluetooth enabled Cameo printer has a unique Bluetooth Device Address (BDA) loaded into its radio module when manufactured. For the most part, communications using the Bluetooth protocol are initiated and processed without any operator intervention, much like the IrDA system described previously.

WLAN Overview

Cameo printers, when equipped with the 802.11b WLAN radio option, allow wireless communication as a node within a local area network (LAN). This option allows communication from any point within the LAN's perimeter. Methods of establishing communications to the printer will vary with each LAN application.

More detailed information on establishing WLAN communications can be found in either the "CPCL Programmers Manual" or the "Quick Start Guide for Mobile Wireless Printers" both available on-line at www.zebra.com.

More information and LAN configuration utilities may also be found in Zebra's Label Vista™ program (version 2.8 and later). Label Vista may be downloaded from the Zebra Web site.

Radio Regulatory Information

Bluetooth Radio for Cameo 2 and Cameo 3

The following section only applies when the Bluetooth ZBR3 Module is installed in the Cameo 2 or Cameo 3 printers. Cameo 2 printers with the Bluetooth radio have an FCC ID: I28MD-BTC2TY2. Cameo 3 printers with the Bluetooth Radio have an FCC ID: I28MD-BTC2TY5. Note that only one of the radio options can be installed in the printer at one time.

“Bluetooth” is a worldwide standard for the exchange of data between two devices via radio frequencies. Bluetooth radios are relatively low powered to help prevent interference with other devices running at similar radio frequencies. This limits the range of a Bluetooth device to about 10 meters (about 32 feet).

Both the printer and the device it communicates with must follow the Bluetooth standard.



Caution • Exposure to Radio Frequency Radiation. *The radiated output power of this internal Bluetooth radio is far below the FCC radio frequency exposure limits. Nevertheless, this Bluetooth radio must be used in such a manner that the antenna is 2.5 cm or further from the human body. The radio and antenna are mounted internally in this printer such that when the printer is worn with the back of the printer against the body and the front of the printer (where paper exits) away from the body, then the 2.5 cm distance between the antenna and the users body will be met. Do not use the printer in an unauthorized manner. The internal Bluetooth radio operates within guidelines found in radio frequency safety standards and recommendations. The level of energy emitted is far less than the electromagnetic energy emitted by other wireless devices such as mobile phones.*

European Regulatory Information for the ZBR3 Bluetooth Radio

This device is intended for use in all EU and EFTA member states.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of compliance with the R&TTE Directive 1999/5/EC:

- EN 60950: 2000
Safety of Information Technology Equipment
- EN 300 328-2 V1.4.1 (2003-04)
Technical requirements for spread-spectrum radio equipment
- EN 301 489-1/-17 V1.4.1/1.2.1 (2002-08)
EMC requirements for spread-spectrum radio equipment.

This device is a 2.4 GHz wireless LAN transceiver, intended for indoor home and office use in all EU and EFTA member states.

CE 0336

Important Notice:

This device is a portable RF printer intended for commercial and industrial use in all EU and EFTA member states.

Zebra Value Radio, 802.11b for Cameo 3

The following section only applies when the Zebra Value Radio, 802.11b (with FCC ID: I28MD-ZLAN11B) is installed in a Cameo 3 printer. The FCC ID number is on the serial number label on the back of the printer and can be read with the module installed. Note that only one of the radio options can be installed in the printer at one time and the antenna used for these transmitters must not be co-located or must not operate in conjunction with any other antenna.



Caution • The radiated output power of this internal 802.11b radio is far below the FCC radio frequency exposure limits. Nevertheless, this radio must be used in such a manner that the antenna is 2.5 cm. or further from the human body. The radio and antenna are mounted internally in this printer such that when the printer is worn with the back of the printer against the body and the front of the printer (where paper exits) away from the body, then the 2.5 cm distance between the antenna and the users body will be met. Do not use the printer in an unauthorized manner.

European Regulatory Information for this Radio

AT	BE	CY	CZ	DK
EE	FI	FR	DE	GR
HU	IE	IT	LV	LT
LU	MT	NL	PL	PT
SK	SI	ES	SE	GB

Note: -Member states in the EU with restrictive use for this device are crossed out!

This device is also authorized for use in all EFTA member states (**CH, IS, LI, NO**)

CE 0336 !

Important Notice:

This device is a portable RF printer intended for commercial and industrial use in all EU and EFTA member states except in France where restrictive use applies.

continued

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of compliance with the R&TTE Directive 1999/5/EC:

- EN 60950: 2000

Safety of Information Technology Equipment

- EN 300 328-2 V1.2.1 (2001-12)

Technical requirements for spread-spectrum radio equipment

- EN 301 489-17 V1.2.1 (2002-08)

EMC requirements for spread-spectrum radio equipment.

This device is a 2.4 GHz wireless LAN transceiver, intended for indoor home and office use in all EU and EFTA member states, except in France where restrictive use applies.

The use of this frequency band in France is subject to restrictions. You may only use channels 10 and 11 (2457 and 2462 MHz) on French territory, except in those French departments as listed in the table below where channels 1-13 (2412-2472 MHz) may be used. For more information see <http://www.anfr.fr/> and/or <http://www.art-telecom.fr>

01	Ain	36	Indre	69	Rhone
02	Aisne	37	Indre et Loire	70	Haute Saone
03	Allier	39	Jura	71	Saone et Loire
05	Hautes Alpes	41	Loir et Cher	72	Sarthe
08	Ardennes	42	Loire	75	Paris
09	Ariege	45	Loiret	77	Seine et Marne
10	Aube	50	Manche	78	Yvelines
11	Aude	54	Meurthe et Moselle	79	Deux Sievres
12	Aveyron	55	Meuse	82	Tarn et Garonne
16	Charente	57	Moselle	84	Vaucluse
19	Correze	58	Nievre	86	Vienne
2A	Corse Sud	59	Nord	88	Vosges
2B	Haute Corse	60	Oise	89	Yonne
21	Cote d'Or	61	Orne	90	Territoire de Belfort
24	Dordogne	63	Puy de Dome	91	Essonne
25	Doubs	64	Pyrenees Atlantique	92	Hauts de Seine
26	Drome	65	Hautes Pyrenees	93	Seine St Denis
27	Eure	66	Pyrenees Orientales	94	Val de Marne
32	Gers	67	Bas Rhin		
35	Ille et Vilaine	68	Haute Rhin		

Printer Specifications

Physical

	Cameo 2	Cameo 3
Weight*	1.15 lbs. (.5 kg)	1.4 lbs. (.64 kg) (CM3)
		1.6 lbs (.73 kg) (CM3w/ MSR)

* Weight is with battery, no media loaded

Environmental

Operating temperature:	5° to 122°F (-15° to 50°C)
Storage temperature:	-13° to 158°F (-25° to 70°C)
Relative humidity:	10%-90% non-condensing

Cameo electronics automatically compensate for head temperature when printing. Protection circuitry prevents damage due to excessive printhead temperatures.

When printing, there must be a wait time of one second between labels to remain within the optimal performance specifications for this product.

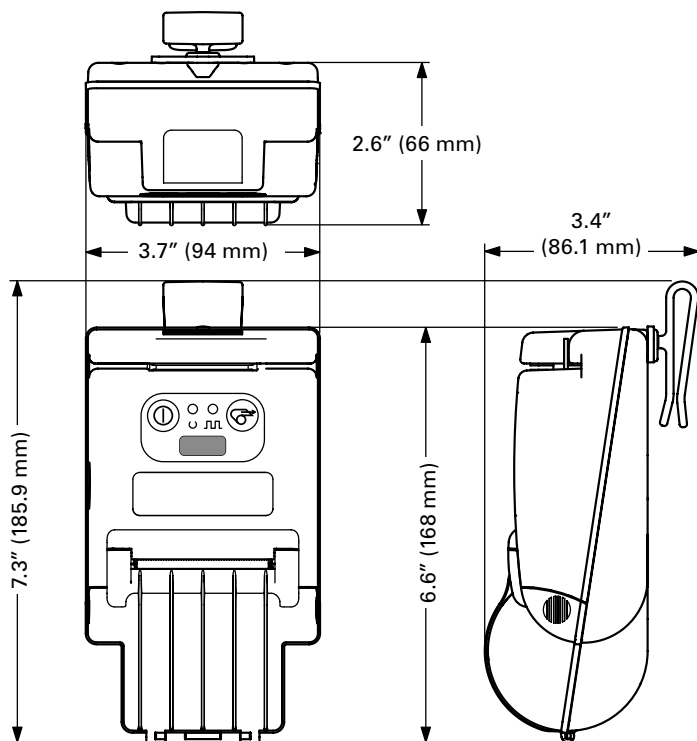
Printing Characteristics

	Cameo 2	Cameo 3
Printhead Width:	1.9" (48 mm)	2.83" (72 mm)
Number of Dots:	384	574
Printhead Life (Est.)	1,950,000" (50 Km nominal)	
Technology	Direct Thermal	
Print Speed	up to 3 IPS (76.2 mm/sec.)	
Printhead Density	203 DPI (8 dots/mm)	

Communications Specifications

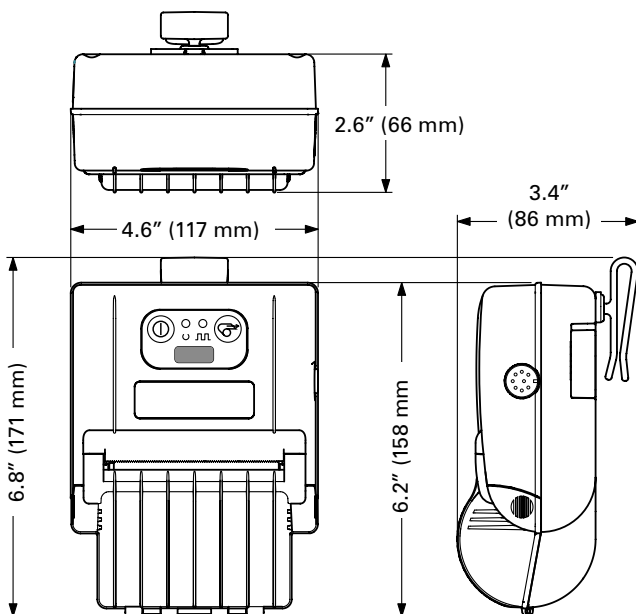
Standard Communications	Built-in RS-232 port for one or two-way cable communication to terminal or other host up to 38.4K BPS. Programmable RTS/CTS (hardware) and XON/XOFF protocols are supported. Default communications parameters are: Handshaking = RTS/CTS, Baud Rate = 19,200 Parity = None; Data Bits = 8; Stop Bits = 1
Optional Wireless Communications	Optional infrared communications via IrDA specifications. Optional Bluetooth radio Cameo 3 only: Optional wireless LAN via 802.11b protocol

Cameo 2 Physical Dimensions

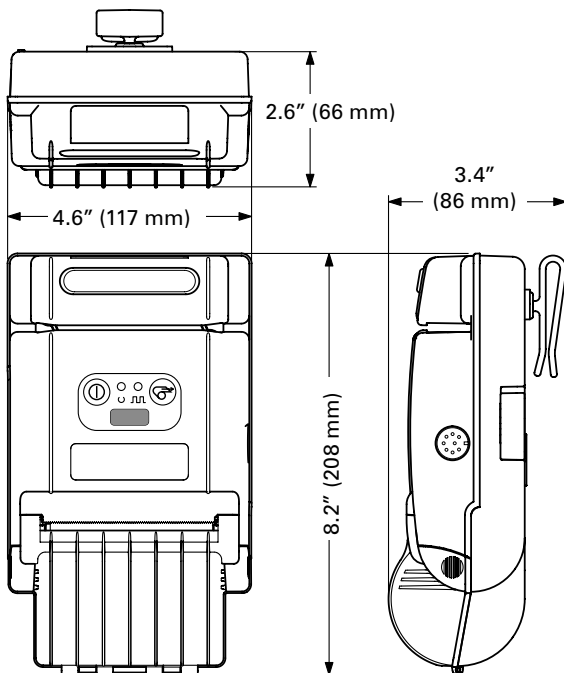


CAMEO 2

Cameo 3 Physical Dimensions



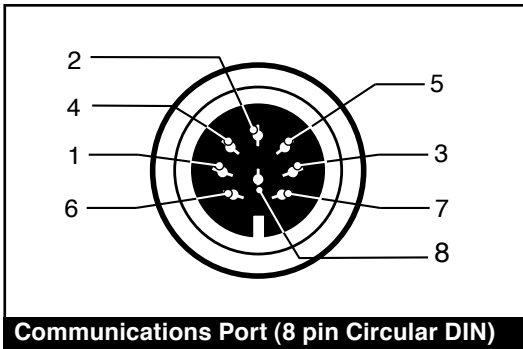
CAMEO 3



CAMEO 3 w/MSR

Communications Port

Pin Number	Pin Name	Signal Type	Signal Description
1	RXD	input	Receive Data
2	TXD	output	Transmit Data
3	CTS	input	Clear To Send from host
4	RTS	output	Request To Send set high when printer is ready to accept command/ data
5	GND		Ground
6	NC		No Connect
7	DSR	input	Data Set Ready: Low to high transition turns printer on, High to low transition turns printer off (if enabled)
8	DTR	output	Data Terminal Ready high when printer is on (set at battery voltage for "S" option)



Power

Cameos utilize removable NiMH battery packs. If not connected to a terminal with DTR present, the Cameo will automatically power off to conserve battery life. The time-out value can be programmed from the host terminal; the factory default time-out is two minutes.

Additional power features include:

- Low battery indicated by flashing LED and reported to terminal on demand
- Power On/Off controlled from terminal or keypad

Media Specifications

	Cameo 2	Cameo 3
Max. Print Width	1.9" (48.3 mm)	2.83" (71.9 mm)
Max. Roll O.D.	2.25" [57 mm]	
Core Diameter	.75" [19 mm] min.	

Media Width Settings

(all dimensions $\pm .05"$ [± 1.3 mm])

Cameo 2	Cameo 3
0.72 [18.2 mm]	1.47 [37.3 mm]
0.85 [21.6 mm]	1.60 [40.64 mm]
0.97 [24.6 mm]	1.72 [43.7 mm]
1.10 [27.9 mm]	1.85 [47.0 mm]
1.22 [31.0 mm]	1.97 [50.0 mm]
1.35 [34.3 mm]	2.10 [53.3 mm]
1.47 [37.3 mm]	2.22 [56.4 mm]
1.60 [40.64 mm]	2.35 [59.7 mm]
1.72 [43.7 mm]	2.47 [62.7 mm]
1.85 [47.0 mm]	2.60 [66.0 mm]
1.97 [50.0 mm]	2.72 [69.1 mm]
2.13 [54.1 mm] ¹	2.85 [72.4 mm]
	2.97 [75.4 mm]
	3.10 [78.7 mm] ¹

1. This width available only with edge guide removed.

Media Type

- Paper Journal
- Two-part thermal receipts
- Linerless labels (on linerless models only)

Resident Hardware/Memory Features

- 25 Resident fonts
- Optional international character fonts
- Flash memory for down-loadable programs, label formats, fonts and graphics
- Fully scalable fonts
- Built-in graphics support

Software Features

- Vertical or horizontal printing
- Left, right, or center justification
- Scale to fit
- Concatenation
- Line print mode- ideal for receipt printing
- Programmable label odometer with on-demand terminal reporting
- Serial number reporting to terminal on demand
- Automatic printhead temperature compensation

continued

-
- Programmable inactivity shut-off
 - Out of paper/open cover error LED indicator
 - Power On/Off from terminal or built-in keypad

Accessories and Options

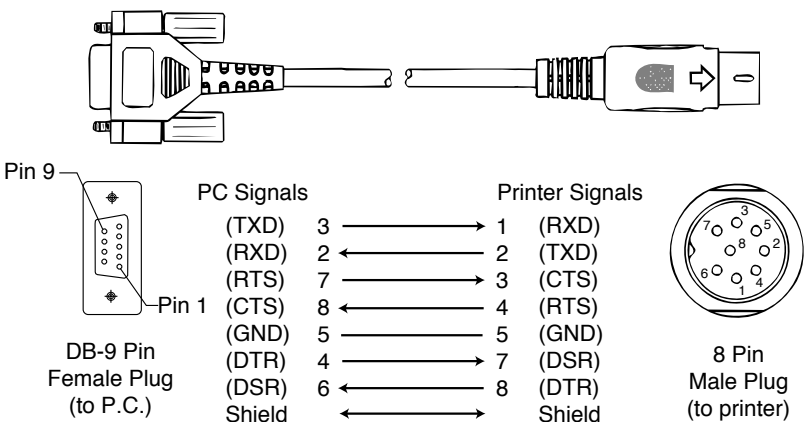
- Single battery pack fast charger/conditioner
- Four battery pack fast charger/conditioner
- Vehicle Charger
- Extra NiMH battery pack
- Variety of interface cables
- IrDA Option
- Bluetooth wireless interface option
- Integrated Magnetic Stripe Reader (MSR) option
- 802.11b WLAN option (Cameo 3 only)
- Soft carrying case
- Protective rubber boots for severe use

Appendix A

Interface Cables

Download Cables, for use with a personal computer:

- Part Number **BL11757-000**
8-Pin DIN to 9-Pin DB PC Cable
- Also available as a coiled cable as:
Part Number **BL15063-1**.



Appendix A

MORE INTERFACE CABLES

Terminal	Cable Part Number	Cord Lgth/Type	Terminal Connector	Printer Connector	Notes
COMPSEE Apex II	BL12093-3	8' / Coiled	RJ45	8 Pin DIN	
NORAND RT1100/1700 Series RT1100/1700 Series RT5900 Series RT1100/1700 Series RT1100/1700 Series RT1100/1700 Series	BL11537-1 BL11537-2 BL12803-1 BL12804-1 BL13298-1 BL13309-1	8' / Coiled 12' / Coiled 8' / Coiled 8' / Coiled 8' / Coiled 8' / Coiled	6 Pin MiniDIN 6 Pin MiniDIN 15 Pin D-Sub 6 Pin MiniDIN 6 Pin MiniDIN 6 Pin MiniDIN	8 Pin DIN Over-molded 8 Pin DIN Over-molded 8 Pin DIN 8 Pin DIN -Locking 8 Pin DIN Over-molded 8 Pin DIN	Auto ON/OFF Auto ON/OFF
SYMBOL PDT3300 Series PDT4100 Series RS232 12059-01 PDT3100/3500 for the PDT3100 Series SPT1700 Series SPT2700 Series LRT/LDT3800 Series LRT/LDT3800 Series (2 Way)	BL11391-000 BL11757-000 BL12093-1 /6100 Series BL12093-2 BL15483-1 BL15482-1 CC11371-3 CC11371-4	8' / Coiled 6' / Straight 8' / Coiled 8' / Coiled 9' / Coiled 9' / Coiled 6' / Coiled 6' / Coiled	DB25 male 9 Pin DB Fem. RJ45 RJ45 Cradle Cradle PIM Optical PIM Optical	8 Pin DIN 8 Pin DIN 8 Pin DIN 8 Pin DIN 8 Pin DIN 8 Pin DIN 8 Pin DIN 8 Pin DIN	Must be used with Symbol Adapter - Symbol PN#25- a. Power On/Off (+5V) b. Used Percon Falcon Power On/Off (DTR Line) No Power On/Off (DTR Line) Power On/Off (DTR Line) "S" Printers Only "S" Printers Only

Appendix A

MORE INTERFACE CABLES (continued)

Terminal	Cable Part Number	Cord Lgth/Type	Terminal Connector	Printer Connector	Notes
SYMBOL (CONT.) LRT/LDT3800 & 6800 Series	CC11371-5	6' / Coiled	PIM Optical	8 Pin DIN	"S" Printers Only
TEKLOGIC 7030 ILR 7025 ILR	BL13285-2	Coiled	36 Pin IDC Fem	8 Pin DIN	
	BL13285-1	Coiled	15 Pin DB male	8 Pin DIN	
TELXON 960 960SL Adapter for BL11122-1 960 (BL11122-1) & 960SL (CC13711-1) 960 860 & 912	BL11122-1	8' /Coiled	RJ45	8 Pin DIN	
	CC13711-1	n/a	n/a	n/a	
	CP74005	n/a	n/a	n/a	
	BL12996-1	8' /Coiled	RJ45	8 Pin DIN-Locking	
	CL11314-000	8' /Coiled	DB25	8 Pin DIN	

Appendix B

Media Supplies

To insure maximum printer life and consistent print quality and performance for your individual application, it is recommended that only media produced by Zebra be used. These advantages include:

- Consistent quality and reliability of media products.
- Large range of stocked and standard formats.
- In-house custom format design service.
- Large production capacity which services the needs of many large and small media consumers including major retail chains world wide.
- Media products that meet or exceed industry standards.

For more information call Zebra Technologies Corporation at +1.866.230.9495 (U.S., Canada and Mexico) and ask to speak to a Media Sales Representative.

Appendix C

Maintenance Supplies

In addition to using quality media provided by Zebra, it is recommended that the printhead be cleaned as prescribed in the maintenance section. The following items are available for this purpose:

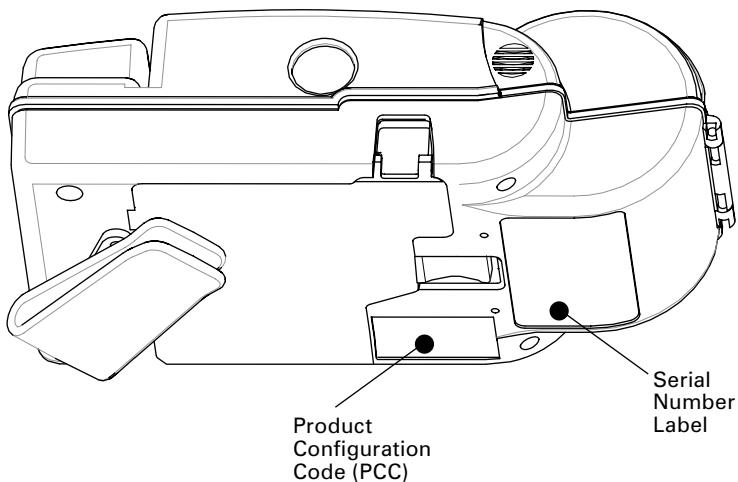
- Cleaning Pen (10 pack), Reorder No. AN11209-1
- Cleaning Kit with Cleaning Pen, and Cotton Swabs, Reorder No. AT702-1

Appendix D

Product Support

When calling with a specific problem regarding your printer, please have the following information on hand:

- Model number/type (e.g. Cameo 2)
- Unit serial number
- Product Configuration Code (PCC)



For product support, contact Zebra Technologies at:
www.zebra.com

Zebra Technologies International, LLC

333 Corporate Woods Parkway
Vernon Hills, Illinois 60061-3109 USA
Phone: +1.847.793.2600 or
+1.800.423. 0422
Fax: +1.847.913.8766

Zebra Technologies Europe Limited

Zebra House
The Valley Centre, Gordon Road
High Wycombe
Buckinghamshire HP13 6EQ, UK
Phone: +44.1494.472872
Fax: +44.1494.450103

Zebra Technologies

Latin American Sales Office
9800 NW 41ST Street
Suite 220
Doral, Florida 33178 USA
Phone: +1.305.558.8470
Fax: +1.305.558.8485

Zebra Technologies Asia Pacific, LLC

16 New Industrial Road
#05-03 Hudson TechnoCentre
Singapore 536204
Phone: +65-68580722
Fax: +65-68850838

Appendix E

Battery Disposal



The EPA certified RBRC® Battery Recycling Seal on the Nickel-Metal Hydride (Ni-MH) battery supplied with your printer indicates Zebra Technologies Corporation is voluntarily participating in an industry program to collect and recycle these batteries at the end of their useful life, when taken out of service in the United States or Canada. The RBRC® program provides a convenient alternative to placing used Ni-MH batteries into the trash or the municipal waste stream, which may be illegal in your area.

Please call 1-800-8-BATTERY for information on Ni-MH battery recycling and disposal bans/restrictions in your area.

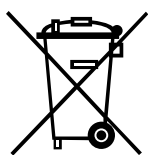


Important • When the battery is worn out, insulate the terminals with tape before disposal

Zebra Technologies Corporation's involvement in this program is part of our commitment to preserving our environment and conserving our natural resources.

Outside North America, please follow local battery recycling guidelines.

Product Disposal



Do not dispose of this product in unsorted municipal waste. This product is recyclable. Please recycle according to your local standards. For more information, please see our web site at: <http://www.zebra.com/recycle>



Patent Information

This product and/or its use may be covered by one or more of the following US patents and corresponding international patents worldwide

D275,286	5,047,617	5,372,439	5,570,123	6,068,415
D347,021	5,103,461	5,373,148	5,578,810	6,095,704
D389,178	5,113,445	5,378,882	5,589,680	6,109,801
D430,199	5,140,144	5,396,053	5,612,531	6,123,471
D433,702	5,132,709	5,396,055	5,642,666	6,147,767
3,964,673	5,142,550	5,399,846	5,657,066	6,151,037
4,019,676	5,149,950	5,408,081	5,768,991	6,201,255 B1
4,044,946	5,157,687	5,410,139	5,790,162	6,231,253 B1
4,360,798	5,168,148	5,410,140	5,791,796	6,261,009
4,369,361	5,168,149	5,412,198	5,806,993	6,261,013
4,387,297	5,180,904	5,415,482	5,813,343	6,267,521
4,460,120	5,229,591	5,418,812	5,816,718	6,270,072 B1
4,496,831	5,230,088	5,420,411	5,820,279	6,285,845 B1
4,593,186	5,235,167	5,436,440	5,848,848	6,292,595
4,607,156	5,243,655	5,444,231	5,860,753	6,296,032
4,673,805	5,247,162	5,449,891	5,872,585	6,364,550
4,736,095	5,250,791	5,449,893	5,874,980	6,379,058 B1
4,758,717	5,250,792	5,468,949	5,909,233	6,409,401 B1
4,816,660	5,262,627	5,479,000	5,976,720	6,411,397 B1
4,845,350	5,267,800	5,479,002	5,978,004	6,428,227 B2
4,896,026	5,280,163	5,479,441	5,995,128	6,530,705
4,897,532	5,280,164	5,486,057	5,997,193	6,540,122
4,923,281	5,280,498	5,503,483	6,004,053	6,607,316
4,933,538	5,304,786	5,504,322	6,010,257	6,609,844
4,992,717	5,304,788	5,528,621	6,020,906	6,874,958
5,015,833	5,321,246	5,532,469	6,034,708	6,899,477L
5,017,765	5,335,170	5,543,610	6,036,383	
5,021,641	5,364,133	5,545,889	6,057,870	
5,029,183	5,367,151	5,552,592	6,068,415	



www.zebra.com

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