

Sample Configuration Label (continued)

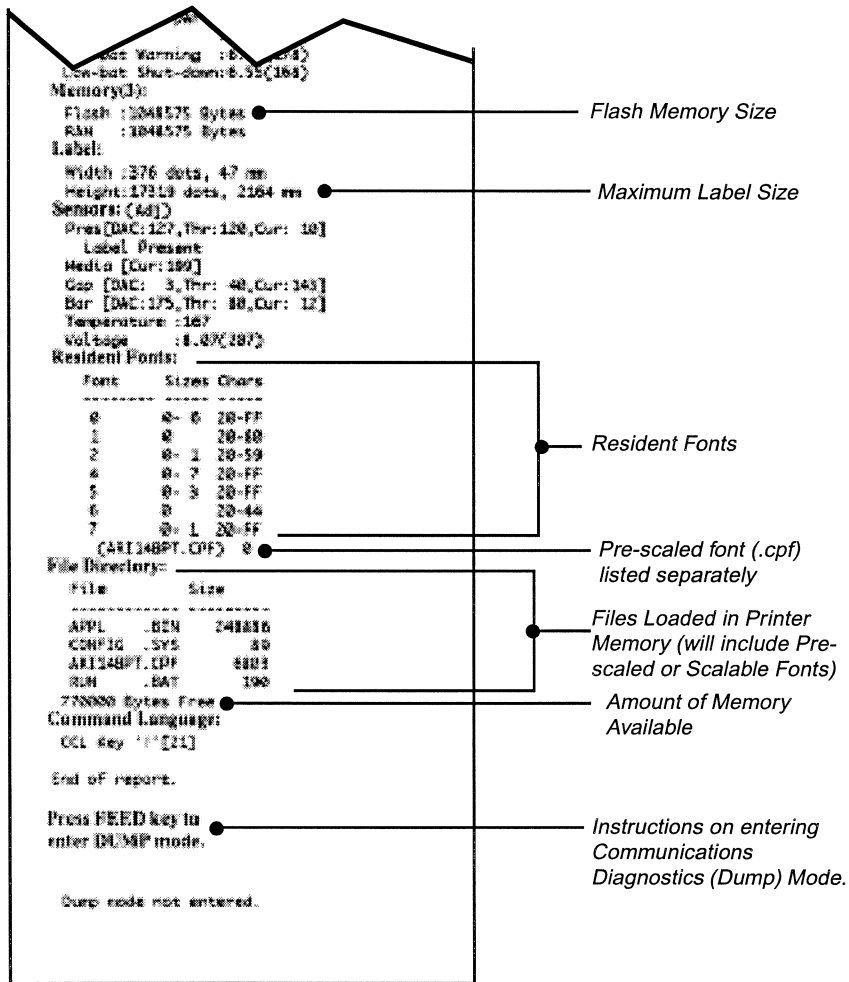


FIGURE 17A

Communications Diagnostics

If there's a problem transferring data between the computer and the printer, try putting the printer in the Communications Diagnostics Mode (also referred to as the "DUMP" mode). The printer will print the ASCII characters and their and their text representation (or the period '.', if not a printable character) for any data received from the host computer

To enter Communications Diagnostics Mode:

1. Print a configuration label as described on pg. 34.
5. At the end of 2nd diagnostics report, the printer will print: "Press FEED key to enter DUMP mode".
6. Press the FEED key. The printer will print: "Entering DUMP mode".

Note: If the FEED key is not pressed within 3 seconds, the printer will print "DUMP mode not entered" and will resume normal operation.

7. At this point, the printer is in DUMP mode and will print the ASCII hex codes of any data sent to it, and their text representation (or "." if not a printable character).

Additionally, a file with a ".dmp" extension containing the ASCII information will be created and stored in the printer's memory. It can be viewed, "cloned" or deleted using the Label Vista application. (Refer the Label Vista documentation for more information.)

To terminate the Communications Diagnostics Mode and return the printer to normal operations:

1. Turn the printer OFF.
2. Wait 5 seconds.
3. Turn the printer ON.

Calling the Help Desk

If the printer fails to print the configuration label, or you encounter problems not covered in the Troubleshooting Guide, contact the Help Desk. Help Desk addresses and phone numbers for your area can be found in Appendix D of this manual. The Help Desk will need the following information:

- Model number/type (e.g. QL 320)
- Unit serial number (Found on the large label on the back of the printer, also found in the configuration label printout))
- Product Configuration Code (PCC) (15 digit number found on the small label on the back of the unit)

Specifications



NOTE.- Printer specifications are subject to change without notice.

Printing Specifications

Print Density	203 dots/inch (8 dots/mm)
Print Width	Up to 2.9" (71.2 mm)
Print Speed	4" per second (101.6 mm per second)
Print Head Life, calculated	1,964,160" (50 Km) nominal
Distance from Print Element to Top of Form	.571" (14.5 mm) 116 dots

Memory/Communications Specifications

Flash Memory	1 MB flash (standard); 2MB flash (optional)
SRAM Memory	1MB SRAM (standard); 2 MB SRAM (optional)
Standard Communications	RS-232 serial port (8 Pin circular DIN connector) Configurable Baud rate (from 9600 to 57.6 Kbps), parity and data bits. Software (X-ON/X-OFF) or hardware (DTR/STR) communication handshake protocols.
Optional Wireless Communications	Infrared wireless link (meets IrDA 1.1 communications specifications) 2,400 to 115,200 Baud rate Bluetooth compatible 2.4 GHz SRRF link Optional SRRF frequencies of 916 MHz and 2.4 GHz per Zebra proprietary wireless protocol. Optional wireless LAN capabilities comply with 802.11 and 802.11b protocols

Label Specifications

Label/Tag Width	1.5" to 3.1" (38.1 mm to 78.4 mm)
Max. Label/Tag Length	16" (406.4 mm) with standard memory
Inter-label Gap.	.08" to .16" (.12" preferred) 2 mm to 4 mm (3 mm preferred)
Label/Tag Thickness	.0025" to .0065" (.064 mm to .165 mm)
Label Roll Size: Max. Diameter	2.625" (66.7 mm) O.D.
Inner Core Diameter	.75" (19 mm) std, 1.38" (35.05 mm) optional Use Zebra-brand direct thermal media that is outside wound. Media may be reflective (black mark) sensing or transmissive (gap) sensing, die-cut, continuous or linerless. For die-cut labels, use only full auto dies.
Media Requirements	The reflective media black marks should extend past the centerline of the roll. Minimum Black Mark Dimensions: Mark width: 0.5" (12.7mm) perpendicular to the edge of the media, centered within the width of the roll. Mark length: 0.094" (2.4 mm) parallel to the edge of the media.

Font/Bar Code Specifications

Fonts Available	Five resident scalable and rotatable fonts available from 12-48 pt. Downloadable pre-scaled fonts via Label Vista™ software Optional international character sets
1D Bar Codes Available	Codabar UCC/EAN 128 Code 39 Code 93 EAN 8/JAN 8, 2 and 5 digit extensions EAN 13/JAN 13, 2 and 5 digit extensions Interleaved 2 of 5 MSI/Plessey FIM/POSTNET UPC-A, 2 and 5 digit extensions UPC E, 2 and 5 digit extensions
2D Bar Codes Available	MaxiCode PDF 417
Rotation Angles	0°, 90°, 180°, and 270°

Physical/Environmental/Electrical Specifications

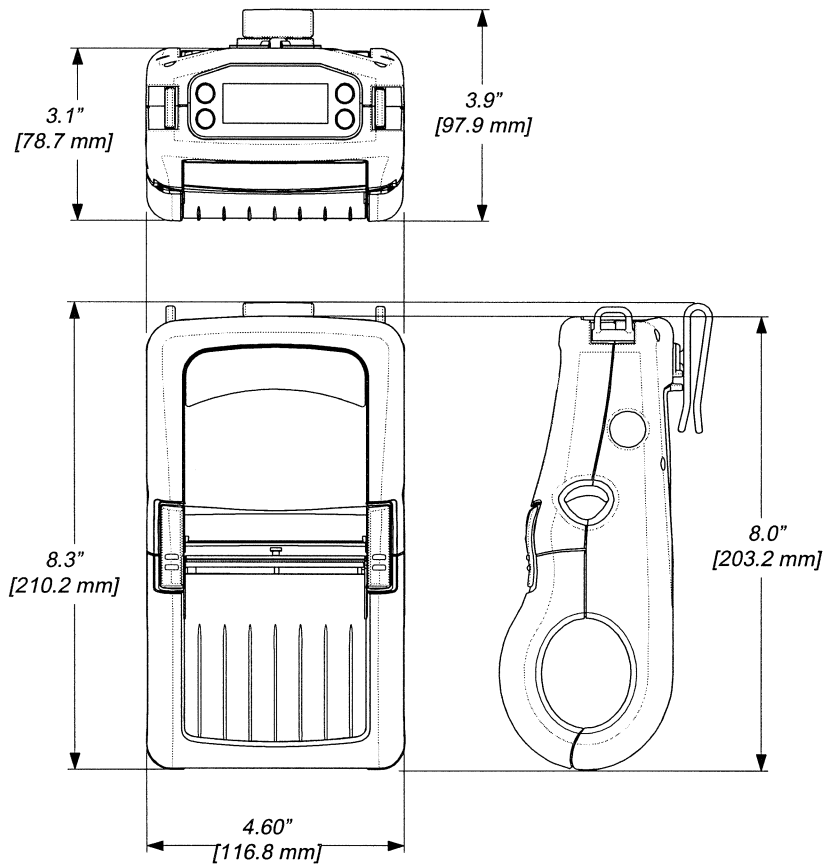


FIGURE 18 OVERALL DIMENSIONS

Weight w/ battery excluding media.	1.65 lbs. (.75 kg.)
Temperature Operating Storage	5° to 122° F (-15° to 50° C) -13° to 158° F (-25° to 70° C) Range
Relative Humidity Operation Storage	10% to 80% (non-condensing) 10% to 90% (non-condensing)
Electrical	Battery: 7.4V Lithium-Ion Charger: External battery charger, 120-230 VAC depending on model selected.

Communications Port

Pin#	Signal Name	Type	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 set high when printer is on (set to battery voltage for "S" versions)

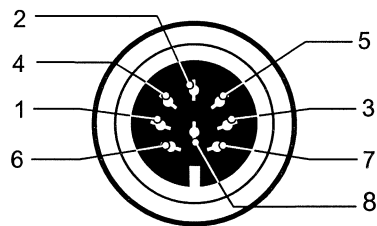


FIGURE 19 COMMUNICATIONS PORT
(8 pin Circular DIN)

Agency Approvals

- FCC Part 15 Subpart B Class A Electromagnetic Radiation Standard
- Built to UL, CUL and TUV standards
- EN50082-1 International Immunity Standard
- EN55022 Class B European Electromagnetic Radiation Standard

Accessories

- Adjustable shoulder strap
- Protective soft case
- Extra battery packs
- 120-230 VAC battery charger
- Desk Mount
- Data cables

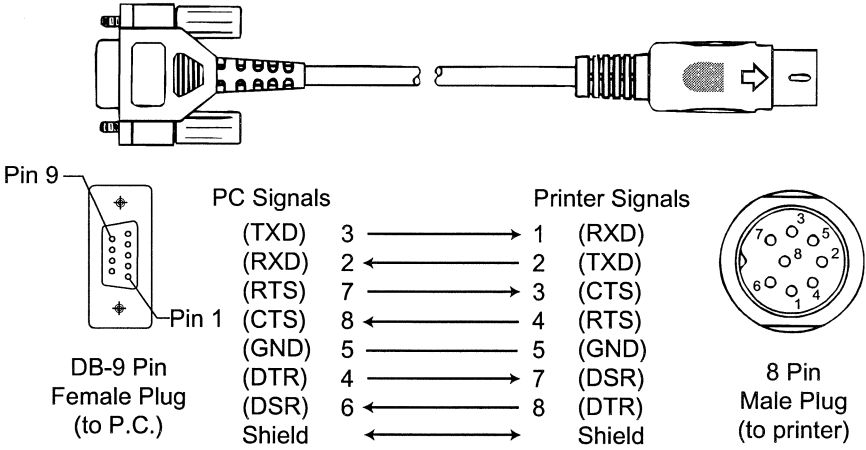
For details, call your authorized Zebra re-seller.

Appendix A

Interface Cables

Part Number 'BL11757-000; 8-Pin DIN to 9-Pin DB PC Cable
 This part is also available as a coiled cable under Part Number BL15063-1.

For Use With a Personal Computer



Appendix A

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	
LXE MX1, MX3 1380, 1390, 1590 2325	BL17757-000 BL17757-000 BL12093-1	6'/Straight 6'/Straight 8'/Coiled	9 Pin DB 9 Pin DB RJ45	8 Pin DIN 8 Pin DIN 8 Pin DIN	Power On/Off (+5V)
NORAND RT1100/1700 Series RT1100/1700 Series RT5900 Series RT1100/1700 Series RT1100/1700 Series RT1100/1700 Series RT1100/1700 Series 6400	BL11537-1 BL11537-2 BL12803-1 BL12804-1 BL13298-1 BL13309-1 BL11757-000	8'/Coiled 12'/Coiled 8'/Coiled 8'/Coiled 8'/Coiled 8'/Coiled 6'/Straight	6 Pin MiniDIN 6 Pin MiniDIN 15 Pin D-Sub 6 Pin MiniDIN 6 Pin MiniDIN 6 Pin MiniDIN 9 Pin DB	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 8 Pin DIN	Auto ON/OFF Auto ON/OFF
SYMBOL PDT3300 Series PDT4100 Series	BL11391-000 BL11757-000	8'/Coiled 6'/Straight	DB25 male 9 Pin DB Fem.	8 Pin DIN 8 Pin DIN	Must be used with Symbol RS232 Adapter - Symbol PN#25-12059-01
PDT3100/3500 /6100 Series PDT3100 Series	BL12093-1 BL12093-2	8'/Coiled 8'/Coiled	RJ45 RJ45	8 Pin DIN 8 Pin DIN	a. Power On/Off (+5V) b. Used for the Percon Falcon Power On/Off (DTR Line)

Appendix A

INTERFACE CABLES (continued)

Terminal	Cable Part Number	Cord Lgth/Type	Terminal Connector	Printer Connector	Notes
SYMBOL (CONT.)					
SPT1700 Series	BL15483-1	9' / Coiled	Cradle	8 Pin DIN	No Power On/Off (DTR Line)
SPT2700 Series	BL15482-1	9' / Coiled	Cradle	8 Pin DIN	Power On/Off (DTR Line)
LRT/LDT3800 Series	CC11371-3	6' / Coiled	PIM Optical	8 Pin DIN	"S" Printers Only
LRT/LDT3800 Series (2 Way)	CC11371-14	6' / Coiled	PIM Optical	8 Pin DIN	"S" Printers Only
LRT/LDT3800 & 6800 Series	CC11371-14	6' / Coiled	PIM Optical	8 Pin DIN	"S" Printers Only
LRT/LDT3800 & 6800 Series	CC11371-15	6' / Coiled	PIM Optical	8 Pin DIN	"S" Printers Only
TEKLOGIC					
7030 ILR	BL13285-2	Coiled	36 Pin IDC Fern	8 Pin DIN	
7025 ILR	BL13285-1	Coiled	15 Pin DB male	8 Pin DIN	
TELXON					
960	BL11122-1	8' / Coiled	RJ45	8 Pin DIN	
960SL Adapter for BL11122-1	CC13711-1	n/a	n/a	n/a	
960 (BL11122-1) & 960SL (CC13711-1)	CP74005	n/a	n/a	n/a	
960	BL12996-1	8' / Coiled	RJ45	8 Pin DIN-Locking	
860 & 912	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 +1.401.739.5800 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 printer 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. QL 320)
- Unit serial number (Found on the large label on the back of the printer)
- Product Configuration Code (PCC) (15 digit number found on the small label on the back of the unit)

Contact the Help Desk at:

Zebra Technologies Corporation
30 Plan Way
Warwick, Rhode Island 02886-1012 USA
Telephone: +1 401.739.5800
Fax: +1 401.732.7808
e-mail: risupport@zebra.com

In Europe:

Zebra Technologies Europe, Limited
Zebra House
The Valley Centre, Gordon Road
High Wycombe
Buckinghamshire HP13 6EQ, United Kingdom
Telephone: +44 1494 768298
Fax: +44 1494 768210
e-mail: tseurope@zebra.com
Ask for Customer Support

Index

A

- Accessories 42
- Agency Approvals 42

B

- Battery, charging 9
 - while printing 9
- Battery, installing 9
- Battery life, tips 29
- Belt clip 25, 28
- Bluetooth Device Address (BDA). *See* Communications: short range radio frequency (SRRF): Bluetooth™

C

- Charger, battery 9
- Cleaning
 - Exterior 31
 - Interior 31
 - Linerless platen roller 31
 - Peel bar 31
 - Platen roller 31
 - Printhead 31
 - Sensors 31
 - Tear bar 31

Communications

- Connector signals 41
 - infrared (IR) 20
 - SRRF 21
 - Bluetooth™ 23
 - Zebra proprietary protocol 21
 - with a cable 19
- Communications diagnostics 37
- Configuration label 34
 - sample printout 35, 36

D

- Damage, shipping 7

H

- Help Desk, contacting 37

L

- Label Vista 17, 26
 - use in troubleshooting 37
- LAN. *See* Wireless communication: Local Area Network

M

- Manual
 - CPL Programming 7, 26
 - ZPL II Programming 7, 26
- Media, loading 10
 - adjusting for core diameter 11

- peel-off mode 12
- tear-off mode 12

O

- Operator Controls 13
 - LCD Keypad 15
 - functions displayed 17
 - Standard Keypad 13
 - error indicator 14
 - power-on indicator 13

P

- piconet. *See* Communications: SRRF: Bluetooth™
- Platen
 - linerless 31
- Programming language
 - CPL 7
 - ZPL II 26
 - interpreter for 7

Q

- QuickLink™ module 13

S

- Shoulder Strap, adjusting 27
- Software 26
- Specifications
 - Font/bar Code 39
 - Label 39
 - Memory/communications 38
 - Physical 40
 - printing 38

T

- Troubleshooting
 - entering Communications
 - Diagnostics Mode 37
 - entering Communications
 - Diagnostics Mode Diagnosti 37
 - LCD Control Panel 32
 - Standard control panel indicators 32
- Troubleshooting tests 34
 - printing a configuration label 18
- Troubleshooting Topics 33

W

- Wireless communication
 - Local Area Network 13, 25

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	5,017,765	5,304,786	5,479,441	5,909,233
D347,021	5,021,641	5,304,788	5,486,057	5,976,720
D389,178	5,029,183	5,321,246	5,503,483	5,978,004
D430,199	5,047,617	5,335,170	5,504,322	5,995,128
D433,702	5,103,461	5,364,133	5,528,621	5,997,193
3,964,673	5,113,445	5,367,151	5,532,469	6,004,053
4,019,676	5,140,144	5,372,439	5,543,610	6,010,257
4,044,946	5,132,709	5,373,148	5,545,889	6,020,906
4,360,798	5,142,550	5,378,882	5,552,592	6,034,708
4,369,361	5,149,950	5,396,053	5,570,123	6,036,383
4,387,297	5,157,687	5,396,055	5,578,810	6,057,870
4,460,120	5,168,148	5,399,846	5,589,680	6,068,415
4,496,831	5,168,149	5,408,081	5,612,531	6,070,805
4,593,186	5,180,904	5,410,139	5,642,666	6,095,704
4,607,156	5,229,591	5,410,140	5,657,066	6,109,801
4,673,805	5,230,088	5,412,198	5,768,991	6,123,471
4,736,095	5,235,167	5,415,482	5,790,162	6,147,767
4,758,717	5,243,655	5,418,812	5,791,796	6,151,037
4,816,660	5,247,162	5,420,411	5,806,993	6,201,255B1
4,845,350	5,250,791	5,436,440	5,813,343	6,231,253B1
4,896,026	5,250,792	5,444,231	5,816,718	6,261,009
4,897,532	5,262,627	5,449,891	5,820,279	6,261,013
4,923,281	5,267,800	5,449,893	5,848,848	6,267,521
4,933,538	5,280,163	5,468,949	5,860,753	6,270,072B1
4,992,717	5,280,164	5,479,000	5,872,585	6,285,845B1
5,015,833	5,280,498	5,479,002	5,874,980	6,292,595
				6,296,032



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