

Troubleshooting

Front Control Panel

If the printer is not functioning properly, refer to the table below to determine the state of the LED indicator ring located around the Power button.



Green	Yellow	Red	Indication
Solid	Off	Off	Charged Battery Battery Eliminator in Use
Off	Solid	Off	Battery Charging
Blinking	Off	Off	Sleep Mode
Off	Off	Solid	Battery Fault

Printer Status Indicators

The printer's control panel displays multiple icons which indicate the status of various printer functions. Check the indicator status and then refer to the Troubleshooting topic referenced on the following pages to resolve the problem.

Icon	Status	Indication
	On	Bluetooth link established
	Grayed Out	Inactive
	Blinking	Receiving printer data
	Not Present	No WLAN radio detected
	Antenna Blinking	Looking for AP
	Antenna Blinking/1 Parenthesis Solid	WLAN Associated/Attempting Authentication
	Antenna and 2 Parentheses Solid	WLAN Associated and Authenticated
	Antenna and 2 Parentheses Blinking	Receiving Data
	4 Bars	802.11 Signal Strength >75%
	3 Bars	802.11 Signal Strength </= 75%
	2 Bars	802.11 Signal Strength </= 50% but >25%
	1 Bar	802.11 Signal Strength </= 25%
	0 Bars	No signal strength
	Not Present	No error condition
	Blinking	Error condition (excluding Latch Open or Media Out)

Icon	Status	Indication
	Blinking	Data processing in progress
	Steady	No data being received
	Blinking	Out of media
	Steady	Media present
	Blinking	Media cover open
	4 Bars	>80% charged
	3 Bars	60%-80% charged
	2 Bars	40%-60% charged
	1 Bar	20%-40% charged
	0 Bars	Low Battery
	On	Battery Eliminator present (Replaces Battery icons)
	On (Media Out icon Off)	Printer in Segmentation Mode
	On (Media Out icon Off)	Printer in Draft Mode

Troubleshooting Topics

1. No power:

- Check that battery is installed properly.
- Recharge or replace battery as necessary.
- If using battery eliminator, ensure that it is connected properly to power source



Always dispose of batteries properly. Refer to Appendix F for more information on proper battery disposal.

2. Media does not feed:

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

3. Poor or faded print:

- Clean print head.
- Check quality of media.

4. Partial or missing print:

- Check media alignment.
- Clean print head.
- Ensure media cover is properly closed and latched.

5. Garbled print:

- Check baud rate.

6. No print:

- Check baud rate.
- Replace battery.
- Establish RF Link and/or restore LAN associativity.
- Invalid label format or command structure. Place printer in Communications Diagnostic (Hex Dump) Mode to diagnose problem.

7. Reduced battery charge life:

- If battery is older than 1 year old, short charge life may be due to normal aging.
- Check battery health.
- Replace battery.

8. flashing:

- Flashing Data icon is normal while data is being received.

9. or flashing:

- Check that media is loaded and that the media cover is closed and securely latched.

10. Communication error:

- Check baud rate.
- Replace cable to terminal.

11. Paper jam:

- Open head release latch and media cover.
- Remove and reinstall media.

12. Blank LCD screen:

- Make sure printer is turned on.
- No application loaded or application corrupted: reload program.
- Check LED ring around Power button to see if it's blinking yellow, indicating the printer is in sleep mode. Press Power or Select buttons to "wake up" the printer.

13. Magnetic Strip Card Won't Read

- Ensure card is inserted with the magnetic stripe facing in the correct direction.
- Check card for excessive wear or damage to the magnetic strip.

14. No NFC Connectivity

- Ensure smartphone is positioned 3 inches (7.62 cm) or closer to the Print Touch icon on the side of the printer.

Troubleshooting Tests

Printing a Configuration Label

To print out a listing of the printer's current configuration follow these steps:

1. Turn the printer off. Load the media compartment with journal media (media with no black bars printed on the back).
2. Press and hold the Feed Button.
3. Press and release the Power button and keep the Feed button pressed. When printing starts, release the Feed button.

Communications Diagnostics

If there is 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 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 above.
2. At the end of the diagnostics report, the printer will print: "Press FEED key to enter DUMP mode".
3. 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.

4. 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 Net Bridge application. (Refer to the Net Bridge 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.

Contacting Technical Support

If the printer fails to print the configuration label, or you encounter problems not covered in the Troubleshooting Guide, contact Zebra Technical Support. Technical Support addresses and phone numbers for your area can be found in Appendix H of this manual. You will need to supply the following information:

- Model number and type (e.g. ZQ510)
- 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 label on the back of the unit)

Figure 21a: ZQ500 Series Configuration Label (ZQ510 Shown)

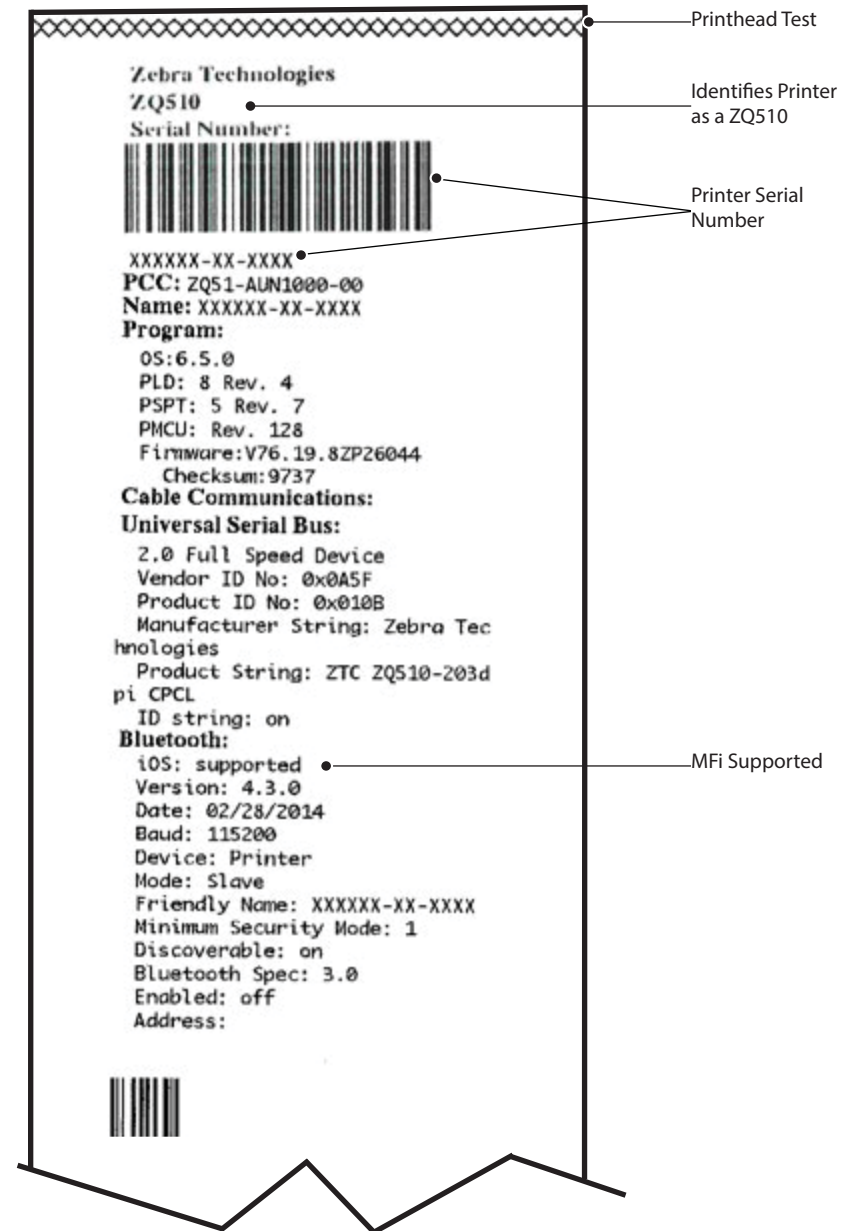



Figure 21b: ZQ500 Series Configuration Label (cont.)

```

Wireless:
Radio: 802.11 a/b/g/n
Region: usa/canada
Country: usa/canada
Enabled: on
MAC Address: 00:22:58:62:3a:0e
IP Address: 0.0.0.0
Netmask: 255.255.255.0
Gateway: 0.0.0.0
Operating Mode: infrastructure
International Mode: off
Preamble Length: long
Security: none
Stored ESSID: TestLanOpen
Associated: no
DHCP: on
DHCP CID type: 1
DHCP CID: 002258623a0e
Power Save: on

Active Network Information:
Active Network: Unknown
IP Address: 0.0.0.0
Netmask: 255.255.255.0
Gateway: 0.0.0.0
TCP Port: 6101
Alternate TCP Port: 9100
TCP JSON Config Port: 9200
UDP Port: 6101
Remote Server:
Remote Server Port: 10013
TCP: on
UDP: on
LPD: on
DHCP: on
BOOTP: off
FTP: on
HTTP: on
SMTP: on
POP3: off
SNMP: on
TELNET: on
MIRROR: off
UDP Discovery: on
Weblink:
DHCP CID type: 1
DHCP CID: 002258623a0e

Product support website:
http://zebra.com/zq500-info



Peripherals:
MCR: Not installed
LCD: Installed
    
```

802.11 radio option /n installed. This section details the radio's network settings

Network Information

Scan QR code to go to ZQ500 Series product support website

Peripherals Installed

Figure 21c: ZQ500 Series Configuration Label (cont.)

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Power Management:
In-activity Timeout:0 Secs
Low-battery Timeout:60 Secs
Remote(DTR) pwr-off:Disabled
Voltage :8.12
Low-bat Warning :
Low-bat Shut-down:
Power On Cycles :156
Battery Health :good
Battery Cycle Count:1

Memory:
Flash :67108864 Bytes
RAM :8384608 Bytes
Label:
Width :576 dots, 72 mm
Height:65535 dots, 8191 mm
Sensors: (Adj)
Pres[DAC:,Thr:60,Cur:0]
Label Removed
Media [48 (384 dots)]
Gap [DAC:161,Thr:75,Cur:132]
Bar [DAC:128,Thr:128,Cur:79]
Temperature :31C (56)
Voltage :7.8V (208)

Resident Fonts:

| Font | Sizes | Chars |
|------|-------|-------|
| 0    | 0- 6  | 20-FF |
| 1    | 0     | 20-80 |
| 2    | 0- 1  | 20-59 |
| 4    | 0- 7  | 20-FF |
| 5    | 0- 3  | 20-FF |
| 6    | 0     | 20-44 |
| 7    | 0- 1  | 20-FF |

File Directory:

| File              | Size   |
|-------------------|--------|
| E:NCU_08_DEV0.BIN | 7168   |
| E:MEMREAD         | 19344  |
| E:MEMWRITE        | 19653  |
| E:TT0003M_.TTF    | 169188 |
| E:TWIREAD         | 23079  |
| E:TWINWRITE       | 16446  |


66852352 Bytes Free
Command Language:
CCL Key '!'[21]
ZPL Configuration Information:
Rewind.....Print Mode
Gap/Notch.....Media Type
10.0.....Darkness
+00.....Tear OFF Adjust
2030.....Label Length
48mm.....Print Width
7Eh.....Control Prefix
5Eh.....Format Prefix
2Ch.....Delimiter
00.....Top Position
No Motion...Media Power Up
Feed.....Media Head Closed
00.....Left Margin
384.....Dots per row
End ZPL Configuration

End of report.

Press FEED key to enter DUMP mode.

Dump mode not entered.
    
```

Flash and RAM Memory Installed

Maximum Label Size

Resident Human Readable Fonts Installed

Files loaded in printer memory (includes pre-scaled or scalable fonts)