

Thank you for purchasing the FreeWave ZumLink™ Z9-PE.

This **Quick Start Guide** provides procedures for the hardware connection and configuration of the ZumLink Z9-PE.

For detailed information about the ZumLink Z9-PE, download the **User Manual** (LUM0076AA) from http://support.freewave.com/.



Warning! The ZumLink Z9-PE is sold as a fully enclosed device, assembled at the FreeWave factory. Opening the ZumLink Z9-PE device voids the FreeWave warranty.

ZumLink Z9-PE Included Equipment

The ZumLink Z9-PE package contains these items:

Qty	Description
1	ZumLink Z9-PE wireless device
1	Power Cable w/ flying leads
	(FreeWave Part Number: ASC0003ZL)
1	ZumLink Z9-PE Quick Start Guide

User-supplied Equipment

- USB to micro-USB cable
- Ethernet cable
- FCC approved antenna for the ZumLink Z9-PE.

Powering the ZumLink Z9-PE

The ZumLink Z9-PE is approved to operate with an input voltage range of +6 to +30VDC.

FREEWAVE Recommends: A dedicated power supply line is preferred. The power supply used MUST provide more current than the amount of current drain listed in the specifications for the product and voltage.

Warning! Use electrostatic discharge (ESD) protectors to protect the radio from electric shock and provide filtered conditioned power with over-voltage protection.

Hardware Installation

ZumLink Z9-PE Connections



Figure 1: ZumLink Z9-PE Connections

ZumLink Z9-PE CLI Configuration

This procedure provides a Tera Term terminal connection to the ZumLink CLI. The basic steps are:

- A. Connect the ZumLink Z9-PE to the Computer (on page 1)
- B. Tera Term Activation & ZumLink Z9-PE Setup (on page 2)

Note: The images in this procedure are for Windows® 7 and/or Firefox®. The dialog boxes and windows appear differently on each computer.

Connect the ZumLink Z9-PE to the Computer

 Connect the ZumLink Z9-PE to all four connections as shown in Figure 1. The AutoPlay ZumLink, AutoPlay FreeWave Drivers, and ZumLink windows open.

🔊 AutoPlay	
ZumLink	
Always do this for this device:	
Device options	
Open device to view files using Windows Explorer	
View more AutoPlay options in Cont	rol Panel

Figure 2: AutoPlay ZumLink window

🕤 AutoPlay	- • ×
FreeWave Drivers (E:)
General options	
Open folder to view files using Windows Explorer	
Use this drive for backup using Windows Backup	

Figure 3: AutoPlay FreeWave Drivers window

Image: Second Action Image: Se					x 9
Organize • 🛛 💱 • 🗍				0	
Computer Cost CC: COS (CC) COST RW Drives (DC) FreeWave Drivers (E) CumLink 4026691628	E	4026691628			
1 item					

Figure 4: ZumLink window

Important!: The ZumLink driver installs automatically.



Figure 5: Installing Driver message



Figure 6: Driver ready to use message

2. Continue with Tera Term Activation & ZumLink Z9-PE Setup (on page 2).

Tera Term Activation & ZumLink Z9-PE Setup

Note: The images in this procedure are for Windows® 7 and/or Firefox®. The dialog boxes and windows appear differently on each computer.

- 1. On the computer connected to the ZumLink Z9-PE, open a terminal program (e.g., Tera Term http://ttssh2.osdn.jp/).
- 2. In Tera Term, on the File menu, select New Connection.

Tera Term - (disconnect) VT	
ile Edit Setup Contro	Window Help	
New connection	Alt+N	
Duplicate session	Alt+D	
Cygwin connection	Alt+G	
Log.,		
Comment to Lon		
Change C		
Replay Log		
TTY Record		
TTY Replay		
Drint	414 - 0	
FUILE	ACTE	
Disconnect	Alt+I	
Exit	Alt+Q	

Figure 7: File menu > New Connection

- The Tera Term New Connection dialog box opens.
- 3. Click the **Port** list box arrow and select the COM port the ZumLink device is connected to.

Tera Term: New con	nection	
© TCP <u>/</u> IP	Host: 192168111 History Service: Telnet @ SSH Other	TCP port#: 22 SSH version: SSH2 * Protocol: UNSPEC *
⊛ S <u>e</u> rial	Po <u>r</u> t: COMI: Com COMI: Com OK	munications Port (COM) • nunications Port (COM) wave Configuration Console (COM)

Figure 8: Select the ZumLink Z9-PE COM port

Important!: The Port assignment varies from computer to computer.

- Click OK to save the changes and close the dialog box. The Tera Term window shows the connected COM port and Baud rate in the title bar of the window.
- 5. In the Tera Term window, click the Setup menu and select Serial Port.

🚇 сом1:	:115200baud - Tera Term VT	Í
File Edit	Setup Control Window Help	
	Terninal * Window Ent III Font Keyboard Servi port	-
	Proy- SSL. SSH Authorpassword Additional settings.	
	Restore setup	

Figure 9: Serial menu > Setup Port

The **Tera Term: Serial Port Setup** dialog box opens with the default ZumLink settings.



Figure 10: Tera Term: Serial Port Setup dialog box with default settings

- Verify the COM port settings are: Baud Rate: 115200 Data: 8 bit Parity: none Stop: 1 bit
- 7. Click **OK** to save the changes and close the dialog box.
- 8. In the Tera Term window, press <Enter>. The ZumLink CLI Login returns.
- 9. Type admin to login and press < Enter>.
- 10. When prompted, type admin for the password and press < Enter>.

Note: The password does not appear when typing - it looks blank.

The FreeWave Shell returns.

📒 COM11:115200baud - Tera Term VT				
<u>File E</u> dit <u>S</u> etup C <u>o</u> ntrol <u>W</u> indow <u>H</u> elp				
freewave-ib login: Login timed out after 60 seconds.				
freewave-ib login: admin Password: FreeWave Shell >				

Figure 11: The FreeWave Shell returns.

- 11. At the > prompt, type ip_address=192.168.1.nnn and press <Enter>.
- 12. At the > prompt, type **nodeld=nnn** and press < Enter>.

Note: Where nnn = the same unique 3 digit number.

13. At the > prompt, type save and press < Enter >.

Learn More

For additional product information about the ZumLink Z9-PE, visit http://support.freewave.com/.

For additional assistance, contact a local reseller, or contact FreeWave Technologies, Inc. at 303.381.9200 or 1.866.923.6168, or by email at moreinfo@freewave.com.

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The ZumLink Z9-PE complies with FCC Part 15 rules. Operation is subject to the following two conditions: 1) This device may not cause harmful interference and 2) this device must accept any interference received, including interference that may cause undesired operation.

The ZumLink Z9-PE must be professionally installed and is only approved for use when installed in devices produced by FreeWave or third party OEMs with the express written approval of FreeWave Technologies, Inc. Changes or modifications should not be made to the device.

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