

Xplornet Tech Tool 1206

Updating Firmware on WiMAX & LTE

Any WiMAX or LTE CPE deployed on the Xplornet network requires the latest firmware. This Tech Tool provides instructions for updating WiMAX software. Complete the following steps:

- 1. Obtain the current firmware
- 2. Confirm the firmware version on a CPE
- 3. Update the firmware to the latest version
- 4. Restore the CPE to factory defaults.

Note: Restoring factory defaults is a required step whenever applying updated firmware to a WiMAX or LTE CPE.

Description

Obtain the Current Firmware

Before you can update a CPE, you can obtain from the correct firmware from the Xplornet University Library. From the Xplornet University landing page:

- 1. Click Quick Links in the upper left portion of the screen
- 2. Hover over Library and select LTE or Wimax depending on the platform you are installing. A new window or new tab will open
- 3. In the Job Aids section at the bottom of the page, the files are linked as:
 - LTE Firmware Upgrade File XCI V135
 - LTE Firmware Upgrade File XCI V122
 - LTE Only Firmware for 3500.4 CPE
 - WiMAX Firmware Upgrade File XCI V122
 - WiMAX Only Firmware for 3500.4 CPE
- 4. Save these files to your computer and note their locations.



Confirm the Installation of the Firmware on a CPE

To confirm the current firmware version, you must log into the CPE. The following instructions for CPE7000, FWD3500.4, 3500.6 and 2500.6 units, with differences noted. For the purposes of this document, any CPE7000 with firmware version .106 or greater will be treated as an FWD3500.4, as they are functionally identical, including interface and passwords, beginning with that version.

1. Connect to the CPE directly from your PC. Browse to 192.168.209.1. The following screen appears:

XPLORNET	
USERNAME :	admin
PASSWORD :	•••••
	This connection is not secure. Logins entered here could be compromised. Learn More

- 2. Log in using the below credentials:
 - Username: operator
 - Password: **g4ketmeg** (for FWD3500.4, 3500.6 and 2500.6) or **g4darlet** (for CPE7000s with firmware below .106)

The following landing screen appears, with the current firmware version visible on the About tile: FWD3500.4, 3500.6 and 2500.6:

Operator : 000000 Signal:	LAN Subnet Mask : 255,255,255,0 WAN IP Address : N/A WAN Subnet Mask : N/A
Status : P Firewall	Device Name : XCI_877748 Management
Device Up Time : 17 Minutes Uplink Data Rate : 0.000 kbps Downlink Data Rate : 0.000 kbps Monitoring	Service Provider : Xplornet Firmware Version : 01.01.02.11(

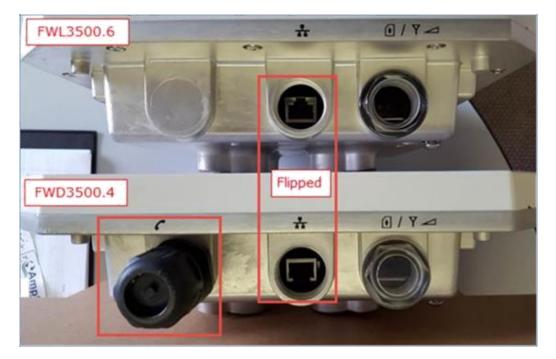


CPE7000:



Determining CPE type

Before updating the firmware it is important to verify which CPE you are working on. Visual inspection of the CPE will be the easiest method as the FWL2500.6 & FWL3500.6 CPE's do not have a Phone Connector (RJ11). Also the RJ45 jack on the CPE board has been flipped to allow for easier removal and to alleviate pressure on the board.



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You can also identify the CPE type from the Product Name section of the About Tile in the GUI.

Service Provider : Firmware Version : Model ID :	XCI 01.01.02.135 WLTMS-110	(i)	Service Provider : Firmware Version
About Product Name :	FWL3500.6	About	Model ID : Product Name :

Update the Firmware on a CPE

To update to the current firmware version, from the landing screen shown in Step 2, *Confirm the Installation of the Firmware on a CPE*.

 Click Management (if you are already in a different portion of the CPE Interface, the management menu is found by clicking the crossed "wrench and screwdriver" icon at the bottom of the screen). The following screen appears: FWD3500.4:

ccount	Privilege	Username	Current Password	New Password	Confirm New Password	Enable
	Superuser Enduser	operator admin				

3500.4

XPLORNET						
CPE7000:						
	XPLORNET WI	Account	t Management Username	Password	Login as Su Confirm Password	peruser 🕐 🖅 Enable
	Language Device Setting Restore Default Software RM Settings	Superuser Enduser	admin			
			Can	cel Apply		

2. Click Software on the left-hand menu. The following screen appears: FWD3500.4:

Management	Software → Software Upgrade
Account	Install IPKG Browse Upgrade
Language	Device Software Version 01.01.02.116
Device Setting	Confirmation has been
Restore Default	Configuration backup Configuration Browse Restore Save
Software	Configuration Browse Restore Save
RM Settings	



CPE7000:

Management	Software	
Account	 Software Upgrade 	
Language	Install IPKG	Browse Upgrade
Device Setting	Device Software Version 01.01.02.027	
Restore Default	Configuration backup	Current firmware version also displayed here
Software		
RM Settings	Configuration	Browse Restore Save

3. In the "Install IPKG" section at the top of the page, click Browse and select the applicable firmware.

Use the ipk file for each of the corresponding CPE types:

- a. FWD2500.4 devices (serial numbers start with GMB) will be upgraded to V122
 i. File name is FW-XCI_01.01.02.122.ipk
- b. FWD3500.4 devices are a two-step process
 - i. For LTE choose **DefaultLteOnly_01.01.02.086.ipk**, For WiMAX choose **DefaultWiMAXOnly_01.01.02.086.ipk**
 - ii. then choose FW-XCI_01.01.02.122.ipk
- c. FWL3500.6 and FWL2500.6 devices will be upgraded to V135
 - i. File name is FW-XCI_01.01.02.135.ipk



4. Click Upgrade. You will see a screen that indicates the upgrade is being applied. Wait for the upgrade to finish (will take ~2 minutes) and then the CPE automatically reboots.

Software Upgrade Install IPKG C Visikensith/FW-XCL 01 01 02 122 Browse Upgrade
9
Upgrading
Configuration Browse Restore Save

Upgrade screen on FWD3500.4:

And on a CPE7000:

Management	Software Software Upgrade
Account	
Language	Ins Justice grade
Device Setting	Upgrading
	Configuration backup
	S. could account account.
RM Settings	Configuration Browse Restore Save

5. You will see a countdown timer as the CPE automatically reboots; once this timer reaches zero you should be redirected to the login screen again. Log in to the CPE. Depending on the starting firmware version, you may have to use a different password of the two given earlier in this document, but it will always be one of the passwords noted above. Confirm that the About tile shows the new version #. If the new version # is not displayed, attempt the upgrade once more; consult DSG if this fails again. If the new firmware version is showing, then you have completed the first step in upgrading the CPE firmware. The CPE must now be set to factory defaults for the upgrade to be finalized. You must factory reset a CPE any time you update the firmware. These steps are outlined in the below section.



Set the CPE to Factory Defaults

1. After logging back in to the CPE, browse to the Management menu again. This time, click the option called Restore Default on the left-hand menu. The following screen appears:

FWD3500.4:

and the second second second second	
Management	Restore Default
	> Restore Default
Account	Restore Default Settings Restore
	> Last Good Configuration
Language	Last Good Configuration : Not Exist
Device Setting	Save Last Good Remove Last Good Reset to Last Good
Restore Default	> Integrity Check
	Image One Version: 01.01.02.122
Software	Image One Checksum: 250190DF
RM Settings	Image Two Version: 01.01.02.116
raw cotango	Image Two Checksum: 9A4888F2
	Rollback Settings

CPE7000:

Management	Restore Default
	> Restore Default
Account	Restore Default Settings Restore
Language	▹ Last Good Configuration
Device Setting	Last Good Configuration : Not Exist Save Last Good Remove Last Good Reset to Last Good
Restore Default	> Integrity Check
Software	✓ Image One Version: 01.01.02.049 Frevious and current
RM Settings	Image One Checksum: DD4B59B3 Image Two Version: 01.01.02.027 Image Two Checksum: E1FD4CFC



2. Click Restore. A dialog appears confirming you wish to restore to factory defaults. Click Yes. A status message will appear indicating the device is being restored.



3. The CPE will then automatically reboot, displaying a timer just as it did after the firmware upgrade.



4. When the timer reaches zero you will be redirected to the login screen once more. The second and final part of the firmware upgrade is now complete. Log in to the CPE, confirm the correct firmware version is still showing in the About tile, and proceed with activation via existing process.

Contact us

If you have questions about this bulletin, contact Xplornet Dealer Support at 1-866-841-6004 or <u>dealer.support@corp.xplornet.com</u>.