

# Let's go

Getting started with your device.



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# Getting to Know Your Device

## **Packing list**

Upon receiving the product, please unpack the product package carefully. Each product is shipped with the following items:

Outdoor CPE Products	Quantity
ODU unit	1
Anchor ear	2
48V DC POE Power Adapter	1
Power cord	1
PC Ethernet Cable	1

If you find any of the items is missing, please contact our local distributor immediately.

## **Unpacking the Equipment**

All of the required material is provided in your Wireless access terminal Unit Installation Package. Please take the time to unpack the package and check the contents against the following list of material.



## **LED Indicators**

LED	Function	Description
SYS	System Run Indicator	Fast Blinking – Device is rebooting Slow Blinking – Device is in normal operation
ETH	LAN port status	Solid Green – LAN port is up Blinking Green – LAN data activity in progress
RF (4LEDs)	RF Signal Strength	Four Level Signal Strengths Indication. 1st Green LED: -123dBm <= RSRP < -118dBm 2nd Green LED: -118dBm <= RSRP < -114dBm 3rd Green LED: -114dBm <= RSRP < -105dBm 4th Green LED: -105dBm <= RSRP

# **Connection Scenario**

For outdoor CPE product, it is suggested that the CPE device be installed in a shaded area to avoid direct sun light exposure and prolong the device life.

To power on the device, the outdoor CPE use a 48V PoE integrated DC power supply adapter. The power adapter can operate in 90-250V AC range and therefore can be used in different countries. Once the device is powered up, the user should wait for about 2 minutes before the device becomes operational. For CPE with the SYS LED indicator, a slowly flashing light indicates the system has completed the startup procedure.

To connect your PC, LAN switch, or other type of IP device to the CPE device, the user should use standard CAT5 Ethernet cable and connect to the LAN port. Once connected, the CPE ETH LED indicator should come on.



To obtain the best radio signal level and connection quality, the CPE antenna should be directed towards the best serving cell. To search for the best serving cell direction, the user can rotate the CPE slowly and/or tilt the CPE slightly to find the best signal direction. The CPE radio signal strength level can be observed from the RF LEDs mounted on the lower panel as shown below. The more LEDs on, the better the signal strength.



Installing Outdoor Unit Mounting Bracket:



**Header Connection:** 



# **Connecting to Your Device**

WF824 is a user-friendly wireless access terminal, and very easy to configure and setup. Subscribers can just connect the device to their computer or home switch/router and the device is ready to provide Internet Services.

## WEB Login

It is a preferred to setup the CPE using a Web browser from a local PC connected to device LAN port. The user should ensure that the connected PC is able to acquired IP address via DHCP from the device. After IP connectivity is established between the PC and CPE device the user may launch a Web browser and specify <u>http://10.1.1.1</u> in the address bar. A window will pop up requesting to enter a password. Input the default user login password and then click the "Log in" button. After successful log on, the default home page of the WEB GUI interface will appear. Note that the default user password is "user123". The admin password is protected and only available to the network operator.

Log in to WF824	
Please enter your login password Password	
Log in	

#### **Device Status**

Once the user is logged in, the following window device status window will be prompted for viewing. It contains both the wireless link information, networking, and device information configured for the device. The wireless info provides detailed information about the radio connection and the user can use this information to determine the receiving signal strength and transmit power of the device. Click the "Advanced" button to get more configuration options.

Information			
Link Information			
Manufactur <mark>e</mark> r	ZTE	UL/DL Bandwidth	- / - KHz
Model Name	WF824	UL/DL Earfon	-1-
Serial Number	942861480004	UL/DL Throughput	0 / 0 Mbps
RSRP	0 / 0 dBm	Media State	DISCONNECTED
SINR	0 dB	Connection Time	0 sec
		IPv4/IPv6 Address	- / -
Networking			
Device MAC Address	6C:AD:EF:FF:D9:B8		
IP Address	192.168.0.1		
Subnet Mask	255.255.255.0		
Local DNS			

# LAN Configuration

AN Setup							Help
Device IP							Local IP Address:
Local IP Addre	SS	192	168.	0.	1		This is the address of the device.
Subnet Mask		255.	255	255	0		Subnet Mask:
Local DNS		0.	0.	0.	0		This is the subnet mask of the device
Notwork Add	race Corver Settinge (	DHCD					DHCP Server:
DHCP Server	ess server settings (	Enable	Disabl	e			Allows the device to manage your IF addresses.
Start IP Addres	S	192.168.0.	100				Start IP Address:
Maximum DHCP Users 100			The address you would like to start				
DHCP Static	eases Map						with.
		12					Maximum DHCP Users:
Ind	ex IP Address	Device M/	AC Address				You may limit the number of
1	192.168.0.	:	: :		:		addresses your device hands out.
2	192.168.0.	-	:	*	:		DHCP Static Leases Map:
3	192.168.0.		+	-	1		Configure the static IP lease for LAN device based on MAC address.
Deny IP Addre	ess						
Inde	x IP Ado	iress		Delete	9		
-				1			
		Add	Cancel				

The LAN setting allows user to specify the DHCP server setting for the LAN devices, including the pool address, IP and MAC binging, and whether DHCP server should be enabled.

User is advised to leave the default setting unchanged for quick configuration and smooth device operation.

#### **UPnP** Setting

Status Network LAN VF	PN Security Applications UPnP Maintenance	🏠 Back 🔱 user 🖪 Exit
Universal Plug and Play (UP)	nP)	Help
Forwards Description From (WAN)	) To (LAN) IP Address Protocol Delete - None -	Forwards: Configure Port forwarding for UPnP. Click the delete to delete individual entry.
UPnP Configuration UPnP Service UPnP Notification Interval	C Enable  ● Disable 60 (30~600s)	UPnP Service: Allows applications to automatically setup port forwardings.
	Save & Apply Cancel Changes	



#### Forwards:

Configure Port forwarding for UPnP. Click the trash sign to delete individual entry.

#### **UPnP Service:**

Allows applications to automatically identification port forwarding.

## Maintenance

Status Network LAN V	PN Security Applications UPnP Maintenance	🏤 Back 🔱 user 📴 Exi
Firmware Management		Help
Local Firmware Upgrade After flashing, reset to Please select a file to upgrade	No reset O Default settings     Browse	Local Firmware Upgrade: Click on the Browse button to selec the firmware file to be uploaded to the device.
Change Decouved	Upgrade	Click the Upgrade button to begin the upgrade process which must not be interrupted.
Change Password		Old Password:
Change Password Username Old Password New Password Re-enter to Confirm		The password currently in use. New Password: The new password length is 4 to 20 characters, the characters of 0~9 or a~Z Enter the new password a second time to confirm it.
Language Management		Firmware Update Checking:
Language	English V	This will disable or enable the firmware update check during user login. The user will be promoted option to perform device firmware
Update & Reset		upgrade if new version is available.
Update & Reset Firmware Update Checking System Reboot	Enable Reboot	Restore Factory Defaults: This will restore the device to original factory setting. User will need to reconfigure the authentication setting

#### Firmware Upgrade over HTTP:

Click on the Browser button to select the firmware file to be uploaded to the device.

Click the Upgrade button to begin the upgrade process. Upgrade must not be interrupted.

#### **Load Factory Defaults:**

Once the upgraded is complete, the factory setting will be restored to the CPE device. User may need to reconfigure the device in order to get the device operational.

#### **Device Reset**

In case the user forgets the login password, user can also contact the operator.

# Warning and Notice

## To the Owner

- Some electronic devices are susceptible to electromagnetic interference sent by your device if inadequately shielded, such as the electronic system of vehicles. Please consult the manufacturer of your device before using if necessary.
- Operating your device may interfere with medical devices like hearing aids and pacemakers. Please always keep them more than 20 centimeters away from such medical devices when they are turned on. Turn your device off if necessary. Consult a physician or the manufacturer of the medical device before using your device.
- Be aware of the usage limitation when using your device at places such as oil warehouses or chemical factories, where there are explosive gases or explosive products being processed. Turn off your device if required.
- The use of electronic transmitting devices is forbidden in aircrafts, at petrol stations and in hospitals. Please observe and obey all warning signs and switch off your device in these conditions.
- Do not touch the inner antenna area if not necessary. Otherwise it will affect your device's performance.
- Store your device out of the reach of little children. Your device may cause injury if used as a toy.
- Do not touch the metallic parts of your device so as to avoid a burn, when your device is working.

# **Using Your Device**

- Please use original accessories or accessories that are authorized. Using any unauthorized accessories may affect your device's performance, and violate related national regulations about telecom terminals.
- Avoid using your device near or inside metallic structures or establishments that can emit electromagnetic waves. Otherwise it may influence signal reception.
- Your device is not waterproof. Please keep it dry and store in a shady and cool place.
- Do not use your device immediately after a sudden temperature change. In such case, it will produce dew inside and outside your device, so don't use it until it becomes dry.
- Handle your device carefully. Do not drop, bend or strike it. Otherwise your device will be damaged.
- No dismantling by non-professionals and only qualified technicians can undertake repair work.
- Operating temperature range of  $-40 \sim +60$  and humidity range of 5%  $\sim 95\%$  are recommended.



# **Limited Warranty**

- This warranty does not apply to defects or errors in the Product caused by:
  - i. Reasonable abrasion.
  - ii. End User's failure to follow ZTE's installation, operation or maintenance instructions or procedures.
  - iii. End User's mishandling, misuse, negligence, or improper installation, disassembly, storage, servicing or operation of the Product.
  - iv. Modifications or repairs not made by ZTE or a ZTE-certified individual.
  - v. Power failures, surges, fire, flood, accidents, actions of third parties or other events outside ZTE's reasonable control.
  - vi. Usage of third-party device, or usage in conjunction with third-party products provided that such defects are due to the combined usage.
  - vii. Any other cause beyond the range of normal usage intended for the Product.

End User shall have no right to reject or return the Product, or receive a refund for the Product from ZTE under the above-mentioned situations.

• This warranty is End User's sole remedy and ZTE's sole liability for defective or nonconforming items, and is in lieu of all other warranties, expressed, implied or statutory, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, unless otherwise required under the mandatory provisions of the law.

# **Limitation of Liability**

• ZTE shall not be liable for any loss of profits or indirect, special, incidental or consequential damages resulting from or arising out of or in connection with using of this product, whether or not ZTE had been advised, knew or should have known of the possibility of such damages, including, but not limited to lost profits, interruption of business, cost of capital, cost of substitute facilities or product, or any downtime cost.

Problem	Suggested Solution
My PC cannot connect to the CPE.	• Re-plug the PC Ethernet cable and check if the PC LAN connection is up or showing activity.
	• Check if the PoE power adapter LED is on. If it is not, check the power cord and make sure it is connected properly. Also verify that the AC power supply is available.
	• If the PC LAN shows no activity and PoE adapter LED is off but the power cord and ETH cable are connected properly and there is AC supply, then it is likely the PoE adapter is damaged. Please

#### FAQ and Troubleshooting

#### WF824 Getting Started

		contact distributor to obtain replacement part.
My PC cannot acquire IP from the CPE.		First check if the Network card is up and working properly. Then check the PC Network card configuration and make sure the DHCP is enabled.
	•	To release and renew the correct IP address, please unplug the Ethernet cable from PC and wait for about 5 seconds, then connect it again.
	•	If the problem persists, please contact the operator or distributor for further diagnosis.
My CPE networking is not working properly.	CPE networking is not • You may want to check if the wireless running properly. You can do this by 1 check the Interface Info page.	
	•	You may want to perform a factory reset and see if the problem is being corrected. You can do this by log into the WEB GUI using "user" password and perform restore the unit to default factory setting.
	•	If the problem cannot be corrected by factory reset, please contact the operator or distributor.
I forgot the login password and like to reset the unit to factory default.	•	User can also contact the operator.

# **Federal Communication Commission Interference Statement**

This device complies with Part 15 of the FCC 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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

•Reorient or relocate the receiving antenna.

•Increase the separation between the equipment and receiver.

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- •Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- •Consult the dealer or an experienced radio/TV technician for help.

# FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# **Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

For more assistance, please:

- Send E-mail to mobile@zte.com.cn
- Visit <u>http://www.ztedevice.com</u>
- Call Service Hotline: +86–755–26779999 (May generate long distance call charges)
- US Customer Support: +1-877-387-6771