



CLEAR Hub Express USER GUIDE

Version 3.0



WHAT'S IN THE BOX?	3
INFORMATIVE LED INDICATORS	3
USE WITH CARE	3
PLACE THE DEVICE ON A FLAT AND STABLE SURFACE	4
PLUG IN THE POWER CORD	4
CONNECT TO CLEAR 4G NETWORK	5
CONNECT TO THE WI-FI NETWORK	6
ALTERNATIVE TO WI-FI	6
CONNECT TO THE INTERNET	6
SHARE YOUR CLEAR HUB EXPRESS	7

MANAGE YOUR CLEAR HUB EXPRESS **8**

CLEAR HUB EXPRESS HOME PAGE OVERVIEW	8
CLEAR HUB EXPRESS HOME PAGE / SUMMARY	9
CLEAR HUB EXPRESS HOME PAGE / DEVICE SETUP / SETUP WIZARD	10
CLEAR HUB EXPRESS HOME PAGE / DEVICE SETUP / PASSWORD	12
CLEAR HUB EXPRESS HOME PAGE / DEVICE SETUP / DEVICE TIME	12
CLEAR HUB EXPRESS HOME PAGE / DEVICE SETUP / RESET MODEM	13
CLEAR HUB EXPRESS HOME PAGE / DEVICE UPDATE	14
CLEAR HUB EXPRESS HOME PAGE / WI-FI SETTINGS / BASIC	15
CLEAR HUB EXPRESS HOME PAGE / WI-FI SETTINGS / ADVANCED	16
CLEAR HUB EXPRESS HOME PAGE / WI-FI SETTINGS / WPS	17
CLEAR HUB EXPRESS HOME PAGE / ADVANCED SETTINGS / FIREWALL	18
CLEAR HUB EXPRESS HOME PAGE / ADVANCED SETTINGS / ROUTER	19
CLEAR HUB EXPRESS HOME PAGE / ADVANCED SETTINGS / ROUTER (CONTINUED)	20
CLEAR HUB EXPRESS HOME PAGE / ADVANCED SETTINGS / ROUTER (CONTINUED)	21
CLEAR HUB EXPRESS HOME PAGE / ADVANCED SETTINGS / SYSTEM	22
CLEAR HUB EXPRESS HOME PAGE / ADVANCED SETTINGS / SYSTEM LOG	23
CLEAR HUB EXPRESS HOME PAGE / HELP / ABOUT	24
CLEAR HUB EXPRESS HOME PAGE / REGULATORY	25
CLEAR HUB EXPRESS HOME PAGE / GLOSSARY	25
CLEAR HUB EXPRESS HOME PAGE / ONLINE SUPPORT	26
CLEAR HUB EXPRESS HOME PAGE / HELP	26
ADDITIONAL INFORMATION – EXTERNAL ANTENNA PORT	27

QUICK TIPS **27**

MAXIMIZE SECURITY OF THE CLEAR HUB EXPRESS	27
CHANGE THE DEFAULT TIME ZONE FROM CENTRAL TIME	28
ENSURE YOUR DEVICES RECOGNIZE YOUR CLEAR HUB EXPRESS	28
FACILITATING YOUR ABILITY TO BROWSE THE INTERNET	28

IMPORTANT MESSAGE FROM CLEAR	28
ENSURE YOU CAN SHARE YOUR CLEAR HUB EXPRESS	28
RESETTING YOUR DEVICE	29
<u>OTHER INFORMATION</u>	<u>30</u>
<i>TECHNICAL SPECIFICATIONS</i>	30
<u>STILL NEED HELP?</u>	<u>30</u>
FAQS AND LIVE CHAT SUPPORT	30
TELEPHONE SUPPORT	30
IMPORTANT INFORMATION DOCUMENT	30
WARRANTY INFORMATION	30
LEGAL DISCLOSURES	30

Set It Up

What's in the Box?



CLEAR Hub Express



Device Foot



Power Cord



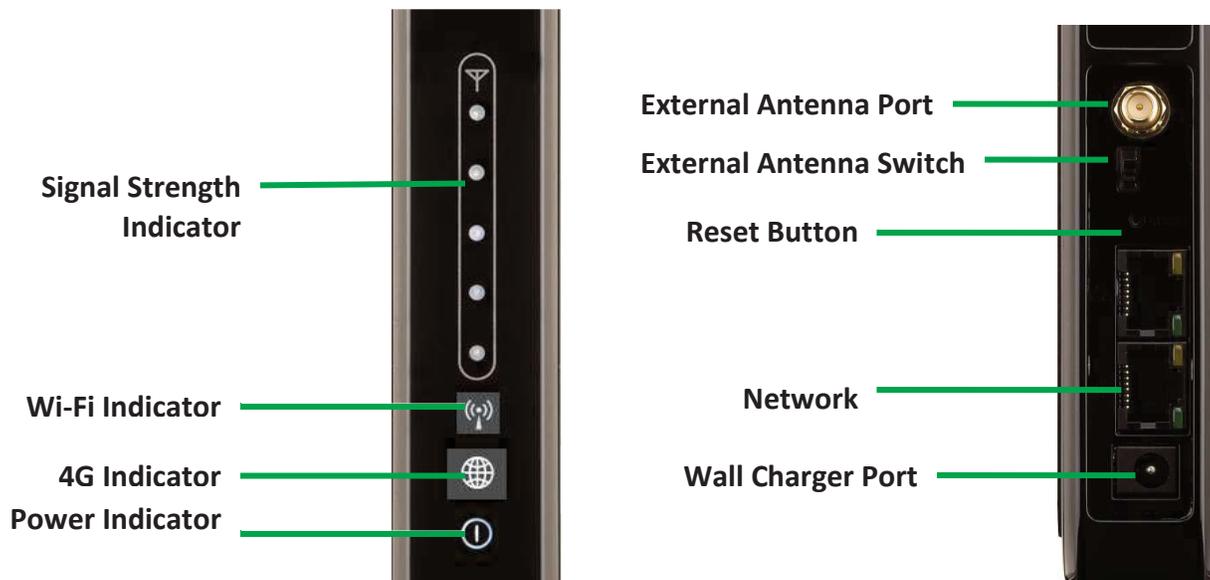
Ethernet Cable



Quick Start Guide

Informative LED Indicators

The LED indicators are located on the front and back of the CLEAR Hub Express.



- The **Signal Strength Indicators** indicate the strength of the CLEAR 4G signal (five LEDs lit indicates an excellent signal).
- The **Wi-Fi Indicator** flashes when Wi-Fi is available, and remains lit when connected.
- The **Power Indicator** indicates the Device is turned on.
- The **4G Indicator** indicates the Device is connected to the CLEAR 4G.

Use with Care

- Do not throw, drop, or dismantle the device
- Keep the device out of direct sunlight
- Keep pets and children from playing with the device
- Do not immerse the device in water or other liquid
- Make sure your hands are dry before handling the device

Set up the Device

Place the device on a flat and stable surface

Align the slots at the bottom of the device with the slots on the Device Foot. Push gently on the Device to snap the Foot onto the device.



To remove the Foot, press both tabs outward at the same time and the Foot will release from the slots.



Do not place the device on its side or block the top air vents. The preferred location is near a window and away from obstructions.

Plug in the Power Cord

Follow the diagram below to plug in the Power Cord.



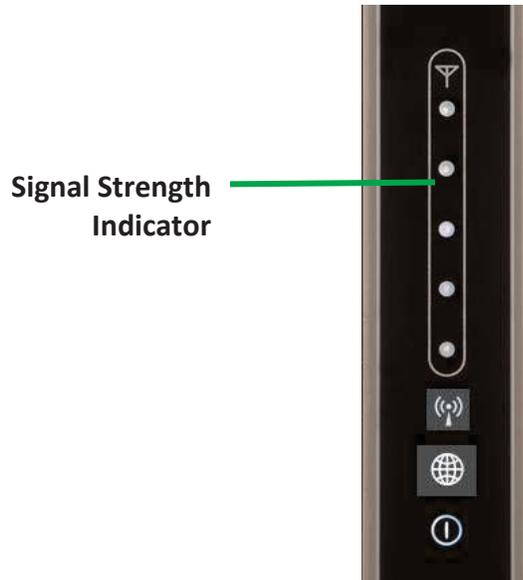
Plug one end of the Power Cord into the AC adapter port on the device and plug the other end into a power outlet.

After you've plugged the device into a power outlet, the device will automatically search for a CLEAR 4G signal.

Set up the Device (continued)

Connect to CLEAR 4G Network

As the device is searching for the CLEAR 4G network, five LED lights, located on the front of the device, will blink sequentially and then in unison. When the device is connected to the CLEAR 4G network, the LED lights will stop blinking and remain lit.



Note: The number of LED lights indicates the CLEAR 4G signal strength – the more lights, the stronger the signal. For optimal signal strength, you should try different locations for the device to ensure a minimum of two LED lights are lit. If at least two LED lights are not lit, try moving the device to another room.

Move just the device (not your computer) to another room, and wait 15—20 seconds after the LED lights are solid white, in order to obtain the most accurate reading of the CLEAR 4G network.

To optimize the signal strength in the device's current location, try turning the Device by small 1/4" increments.

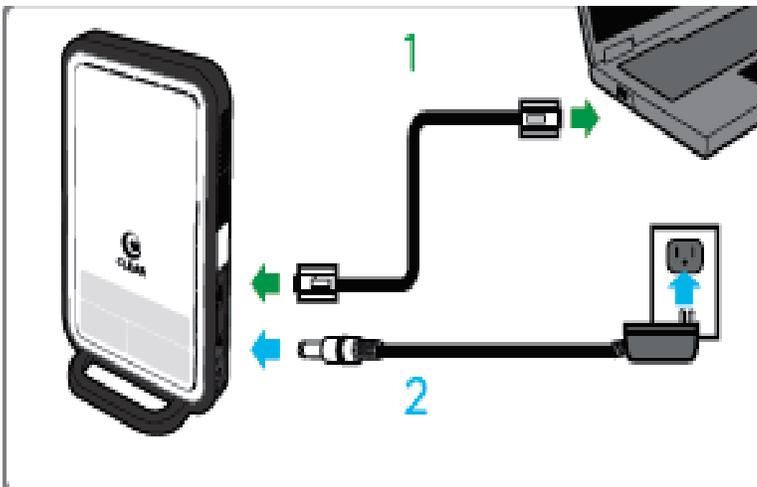
Set up the Device (continued)

Connect to the Wi-Fi Network

- From a computer, select to connect to the SSID (network name). The device's SSID will be visible in the wireless network connection list.
- Connect to the device's Wi-Fi network. The default Wi-Fi network name is "WiFiRSU-xxxxx", where "xxxxx" are the last five digits of the MAC ID, which can be found on the label on the back of the device. The MAC ID also might be referred to as WAN MAC ID.
- Enter the default Wi-Fi password. The default Wi-Fi password is comprised of the last eight digits of the MAC ID, which can be found on the label on the back of the device.
- Your computer should display a message indicating it has connected to your device's wireless network.

Alternative to Wi-Fi

As an alternative to Wi-Fi, you also can use the included Ethernet Cable to connect to the device.



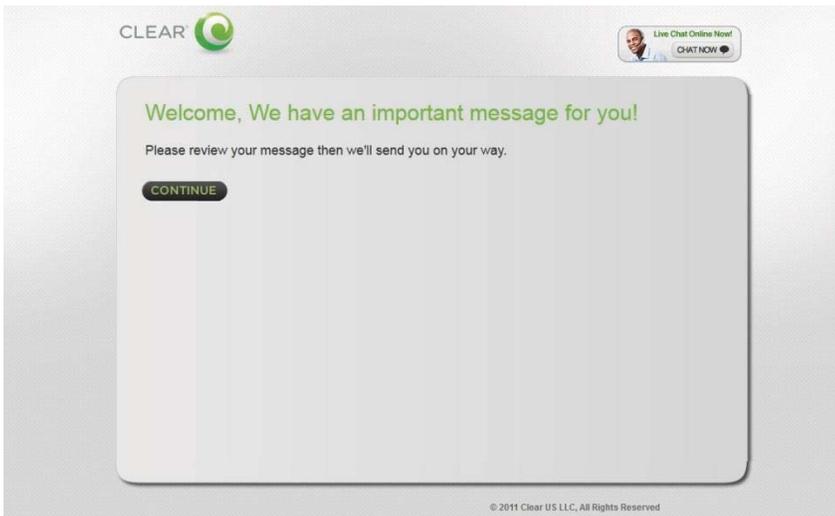
Plug one end of the Ethernet Cable into the ethernet port on the computer and plug the other end into the ethernet port on the Device.

Set up the Device (continued)

Connect to the Internet

Every CLEAR customer gets an online account, so you easily can manage your account and view / pay your bill.

The first time you connect to the internet with your device, you'll be directed to a page to review your rate plan information, complete your CLEAR online account, and read / accept the CLEAR Terms of Service.



Set up the Device (continued)

Share your CLEAR Hub Express

It's easy to share your CLEAR Hub Express with other Wi-Fi-enabled devices at the same time.

Give your colleagues and friends your CLEAR Hub Express Wi-Fi network name and password.



Make sure the devices with which you want to share are within range of your CLEAR Hub Express – usually within 100 - 150 feet.

If you are sharing the CLEAR Hub Express Wi-Fi network with other devices and you turn the CLEAR Hub Express off, the other devices won't be able to access the Internet.

If you changed the CLEAR Hub Express Wi-Fi network name and password, you easily can reset them.

- Use the reset button on the CLEAR Hub Express.

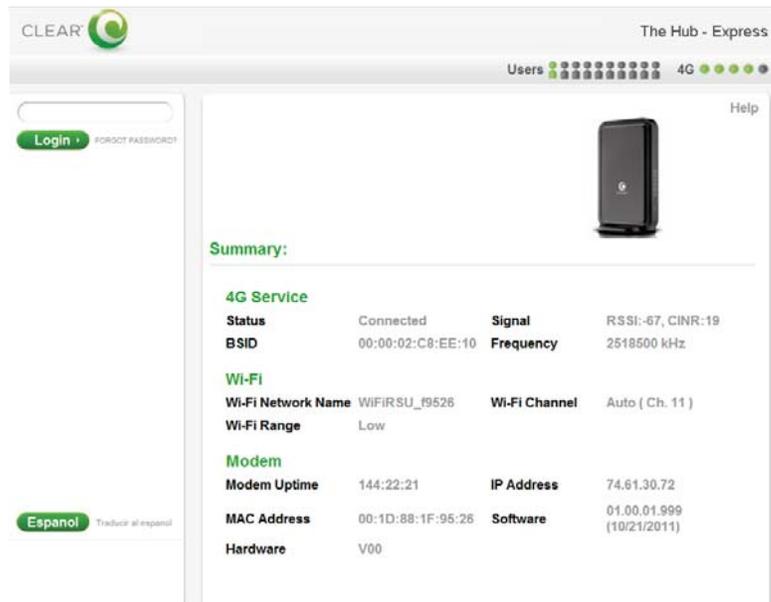
- Instructions are in the “Quick Tips / Resetting your Admin Password” section of the Online User Guide. Click [here](#) to jump to the Quick Tips section for more information and instructions.
- Use the “Device Setup / Reset Device” Tab of the CLEAR Hub Express Home Page.
 - Instructions are in the “Manage Your CLEAR Hub Express / Device Setup / Reset Device” section of the Online User Guide. Click [here](#) to jump to the Manage Your CLEAR Hub Express section for more information and instructions.

Manage your CLEAR Hub Express

CLEAR Hub Express Home Page Overview

It’s easy to manage your CLEAR Hub Express. With the CLEAR Hub Express Home Page, you can:

- Select your preferred language (English or Spanish only).
- Use the Setup Wizard to set up your CLEAR Hub Express.
- Change the CLEAR Hub Express Wi-Fi network name and password.
- Change settings, such as network signal range, security setting.
- View signal strength and battery charge level.
- View connection time and the amount transmitted.
- And more!



When using your CLEAR Hub Express, enter <http://clearmodem> in your web browser to open the CLEAR Hub Express Home Page.

To login to the CLEAR Hub Express Home Page, you’ll need to enter a password. The default password is “admin”.

On the top right of each page, you can view the number of connected users (i.e., devices)

 and the CLEAR Hub Express signal strength **4G** .

Just below the connected users, signal strength and battery icons, you’ll see a **Help** link. If you need help, click **Help** and a window with helpful tips relevant to the page you’re viewing will open. You can also find the same feature to the side navigation bar on the left-hand side under Help.

The Navigation Bar appears on the left side of every page of the CLEAR Hub Express Home Page. You can click:

- **LOGOUT:** To log out of the CLEAR Hub Express Home Page.
- **Summary:** To view the Summary tab. This tab will display the current device settings.

- **Modem Setup:** To view the Device Setup tab. This tab will display and give you access to launch the Device Wizard, display and change Password, Device Time, Device Name, select your preferred language (English or Spanish only) and perform a Device Reset.
- **Modem Update:** To view the Device Update tab where you can see if there are any software updates.
- **Wi-Fi Settings:** To view the Wi-Fi Settings tab. This tab will display and give access to your Basic/Advanced Wi-Fi settings and Wi-Fi Protected Setup.
- **Advanced Settings:** To view the Advanced Settings tab. This tab will display and give access to 4G stats, Firewall, Router, System, Device Log and a Reboot button to reboot the device.
- **Help:** To view the Help tab. This tab will display and give access to Device summary, Regulatory disclosure, Glossary and direct access to the CLEAR support page.

On the bottom right of every CLEAR Hub Express Home, you can click [CLEAR Support](#). This link opens a new window (<http://www.clear.com/support>) where you can access a variety of resources such as: Forum Discussions, Frequently Asked Questions, Live Chat Support, and Downloads available for your CLEAR Hub Express and login to your CLEAR online account.

We recommend bookmarking the CLEAR Hub Express Home Page for easy reference.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Summary

The Summary Tab displays helpful information about your CLEAR Hub Express.

Current Device Settings:

- **4G Status:** Shows the current status of the 4G connection. The status may be one of the following: Connected, Searching, Connecting, and Not Connected.
- **Signal:** Shows the CLEAR Hub Express signal strength at your current location. Signal Strength is composed of:
 - **RSSI (Received Signal Strength Indicator):** Displays power present in the radio signal (RSSI) of the active connection.
 - **CINR (Carrier-to-Interference Noise Ratio):** Displays a measurement of signal effectiveness for the active connection.
- **Tower:** Shows the tower to which the CLEAR Hub Express is connected.
- **Frequency:** Shows the center frequency of the 4G channel being used by the CLEAR Hub Express.

Summary:			
4G Service			
Status	Connected	Signal	RSSI:-67, CINR:20
BSID	00:00:02:C8:EE:10	Frequency	2618500 kHz
Wi-Fi			
Wi-Fi Network Name	WIFIRSU_f9626	Wi-Fi Channel	Auto (Ch. 11)
Wi-Fi Range	Low		
Modem			
Modem Uptime	144:28:05	IP Address	74.61.30.72
MAC Address	00:1D:88:1F:95:26	Software	01.00.01.999 (10/21/2011)
Hardware	V00		

If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Express Home Page.

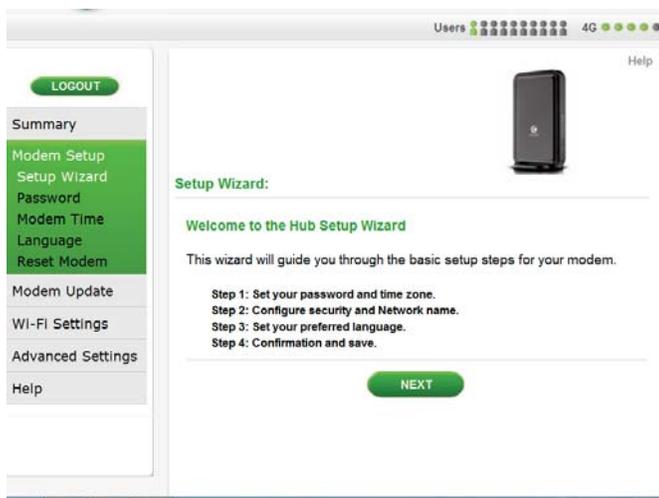
- **Network Name (SSID):** Shows the CLEAR Hub Express's Wi-Fi network name, which is broadcast by the CLEAR Hub Express, to allow Wi-Fi-enabled devices to identify and connect to it. The Wi-Fi network name appears on the LCD screen. The CLEAR Hub Express Wi-Fi network name can be changed using the CLEAR Hub Express Home Page Setup Wizard. The CLEAR Hub Express Wi-Fi network name also can be changed on the Wi-Fi Settings / Basic Tab.
- **Wi-Fi Channel:** Shows the channel number being used by the CLEAR Hub Express.
- **Wi-Fi Range:** Shows the current Wi-Fi network range setting and allows you to set the CLEAR Hub Express for best battery life (Short), best Wi-Fi range (Long), or a balance of each (Medium).
- **MAC Address:** Shows the MAC (Media Access Control) Address (ID) of the CLEAR Hub Express. A MAC Address (ID) is a unique serial number burned into network adaptors that identifies them on a network. The CLEAR Hub Express has the ability to specify what MAC Addresses are allowed to connect to its Wi-Fi network.
- **IP Address:** View the Internet Protocol (IP) Address used to locate and access your Clear Hub Express network.
- **Device Uptime:** Shows the length of time (for the current period) the CLEAR Hub Express has been connected to the CLEAR 4G network.
- **Software Version:** Shows the software version of the CLEAR Hub Express. The software version cannot be changed.
- **Hardware Version:** Shows the hardware version of the CLEAR Hub Express.

The Navigation Bar (with links to the different tabs and links to logout, to reconnect, to reboot), the number of connected users, signal strength, battery meter, the contextual Help link and the link to Clearwire Support appear on every page of the CLEAR Hub Express Home Page.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Device Setup / Setup Wizard

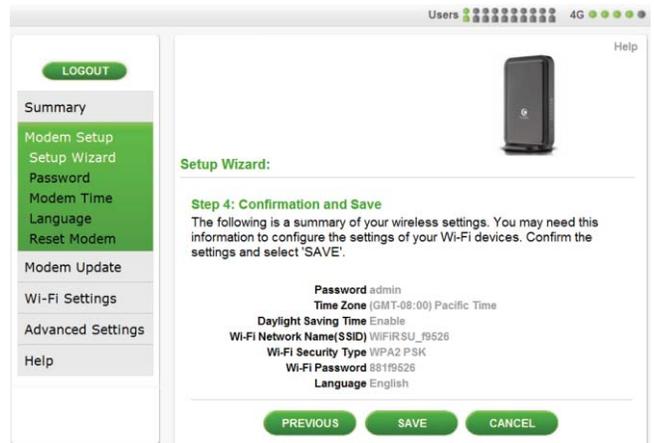
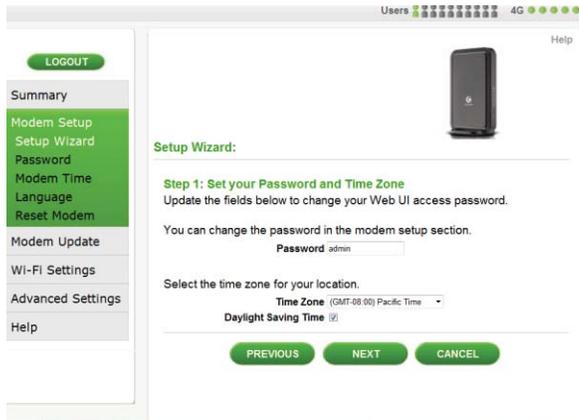
The Setup Wizard guides you through the basic CLEAR Hub Express set up steps. Change the admin password, select the time zone, choose the CLEAR Hub Express Wi-Fi network name, choose the security type and more.



Step 1: Includes changing the admin password, which is defaulted to “admin”. **Note:** You also can change the password on the Device Setup > Password tab at any time. Step 1 also includes setting the time zone for your preferred location and enabling or disabling Daylight Savings Time.

Step 2: Is where you can personalize the CLEAR Hub Express Wi-Fi network name (SSID) and choose the security setting.

Step 3: Is where you can select your preferred language.



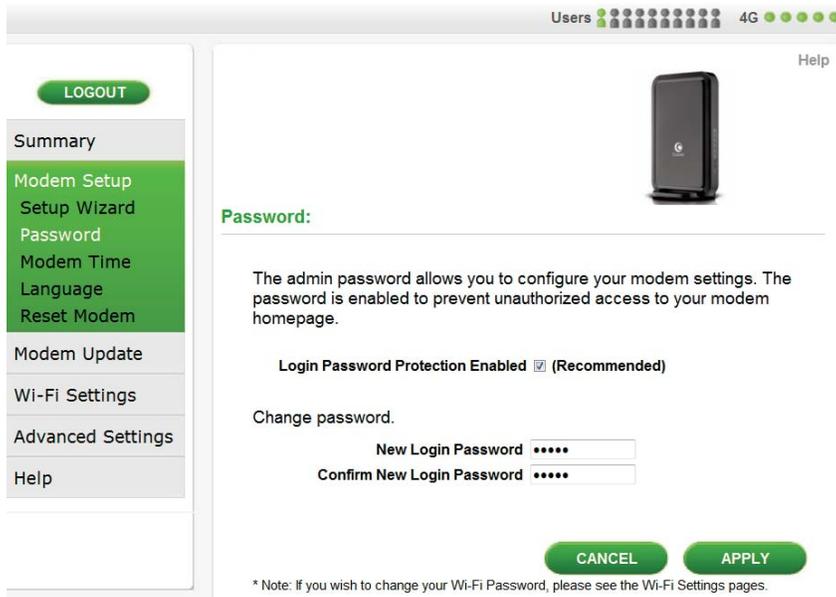
Once you've gone through the Setup Wizard, click "Next" and you'll see a screen where you can preview the new settings before saving the settings. If you need to make any changes, click "PREVIOUS". If the information is correct, click "SAVE" to save the new settings. If you don't want to make any changes, click "CANCEL".

You will be prompted to authenticate your device by turning your CLEAR Hub Express off and then on again in order for new settings to apply.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Device Setup / Password

Using a password may help prevent unauthorized access to your CLEAR Hub Express. CLEAR recommends enabling password protection.



The screenshot shows the CLEAR Hub Express web interface. At the top, there is a status bar with 'Users' (represented by 10 small icons) and '4G' signal strength (represented by 5 green dots). On the left, there is a navigation menu with a 'LOGOUT' button at the top. The menu items are: Summary, Modem Setup (highlighted in green), Setup Wizard, Password (highlighted in green), Modem Time, Language, Reset Modem, Modem Update, Wi-Fi Settings, Advanced Settings, and Help. The main content area is titled 'Password:' and features a small image of the CLEAR Hub Express device. Below the image, there is a paragraph explaining the admin password: 'The admin password allows you to configure your modem settings. The password is enabled to prevent unauthorized access to your modem homepage.' A checkbox labeled 'Login Password Protection Enabled' is checked and followed by '(Recommended)'. Below this, it says 'Change password.' and there are two input fields: 'New Login Password' and 'Confirm New Login Password', both with masked characters (dots). At the bottom of the form are two buttons: 'CANCEL' and 'APPLY'. A small note at the bottom reads: '* Note: If you wish to change your Wi-Fi Password, please see the Wi-Fi Settings pages.'

If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

The default admin password to login is “admin”. It is advisable that you should change the admin password required to log in and manage your CLEAR Hub Express.

Click “APPLY” when you're ready to change the admin password.

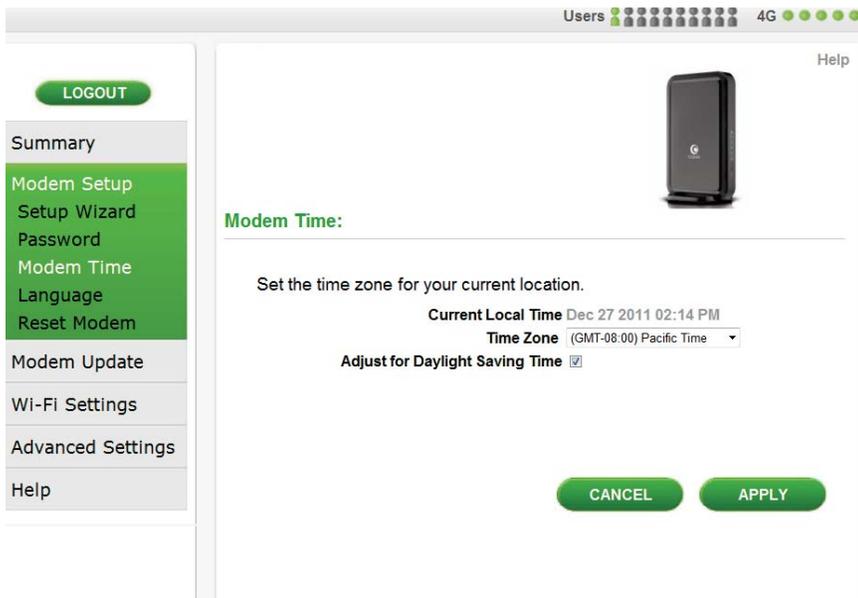
If you don't want to make any changes to the admin password, click “CANCEL”.

The left Navigation Bar, top icon bar, contextual Help link and the link to CLEAR Support appear on every page of the CLEAR Hub Express Home Page for easy access.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Device Setup / Device Time

Set the time zone for your current or preferred location and enable or disable Adjust for Daylight Savings. The default time zone for your CLEAR Hub Express is Central Time.



If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

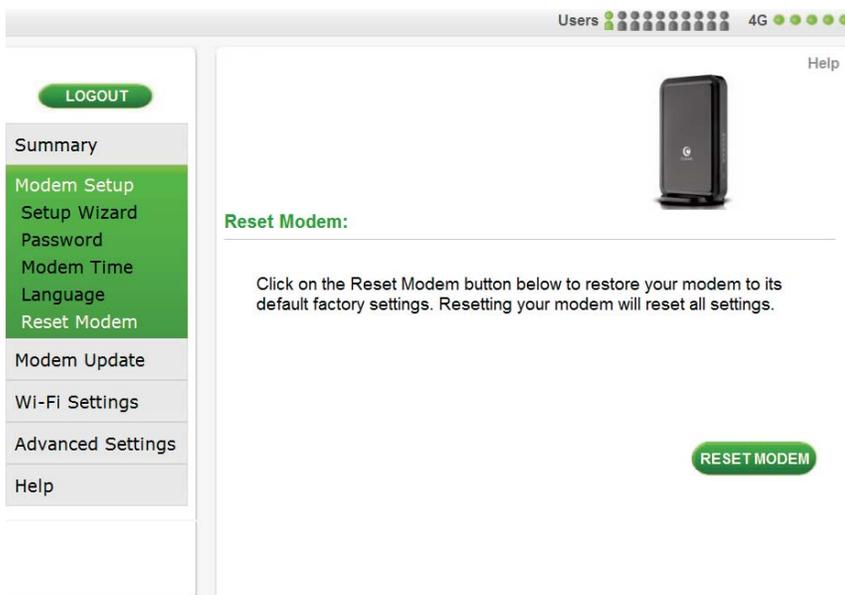
Click "APPLY" when you're ready to change the time zone settings for your CLEAR Hub Express. If you don't want to make any changes to the time zone settings, click "CANCEL".

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Device Setup / Reset Modem

Use this tab to reset the CLEAR Hub Express to the default factory settings.

Warning: It is important to note that many device settings will be reset to the factory default settings. For example, the admin password required to login and manage your CLEAR Hub Express will be reset to "admin", the factory default setting. We recommend writing down any settings you've changed before you reset your CLEAR Hub Express to the factory settings.



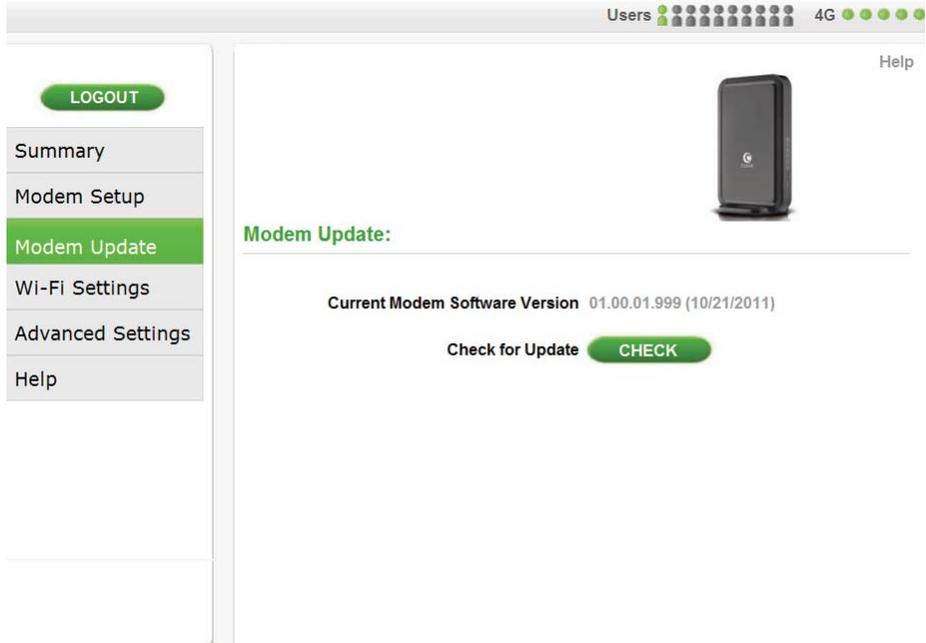
If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

Click "RESET MODEM" when you're ready to restore the CLEAR Hub Express to the factory settings.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Device Update

Use this tab to view the software version of your CLEAR Hub Express. In addition, this is also where you can check for any available software updates of your CLEAR Hub Express. Click on the “CHECK” button. You will receive a message confirming that no updates have been found or an update has been found and your device will automatically receive the update. Software updates are pushed to the device automatically and does not require any additional tasks from you.



The screenshot displays the management interface for a CLEAR Hub Express. At the top, there is a status bar with 'Users' (represented by 10 icons) and '4G' (represented by 4 green dots). Below this is a 'Help' link. On the left side, there is a navigation menu with a 'LOGOUT' button at the top, followed by 'Summary', 'Modem Setup', 'Modem Update' (highlighted in green), 'Wi-Fi Settings', 'Advanced Settings', and 'Help'. The main content area features a 'Modem Update:' section with a small image of the CLEAR Hub Express device. Below the image, it shows the 'Current Modem Software Version' as '01.00.01.999 (10/21/2011)'. At the bottom of this section, there is a 'Check for Update' label and a green 'CHECK' button.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Wi-Fi Settings / Basic

Use this tab to view and change the basic Wi-Fi settings of your CLEAR Hub Express.

Users 4G Help

LOGOUT

Summary

Modem Setup

Modem Update

Wi-Fi Settings

Basic

Advanced

WPS

Advanced Settings

Help

Basic Wi-Fi Settings:

Enable Wi-Fi

Network Name (SSID) WIFIRSU_f9526

Authentication WPA2 PSK

Encryption AES

Wi-Fi Password Type ASCII

Wi-Fi Password 8819526

CANCEL APPLY

If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

- **Enable Wi-Fi:** This setting is defaulted to “enable.” You may disable this setting if you only wish to use the CLEAR Hub Express tethered to your computer. You will not be able to access the internet via Wi-Fi with this setting disabled.
- **Network Name (SSID):** Shows the CLEAR Hub Express Wi-Fi network name (SSID), which is broadcast by the CLEAR Hub Express, to allow Wi-Fi-enabled devices to identify and connect to it.
- **Authentication:** Select the Wi-Fi security type that is used by the CLEAR Hub Express. Use the Wi-Fi security settings to password-protect access to your CLEAR Hub Express Wi-Fi network. WPA provides the most robust level of Wi-Fi security, but older devices may not support it. WEP is supported by virtually all Wi-Fi devices. Check your device's user manual to find out which types of security are supported.
- **Encryption:** Select the type of encryption that is used by the CLEAR Hub Express.
- **Password Type:** Select the type of password that is used by the CLEAR Hub Express.
- **Password:** View and change the password needed to access the CLEAR Hub Express's Wi-Fi network.

Click “APPLY” when you're ready to change the basic Wi-Fi settings.

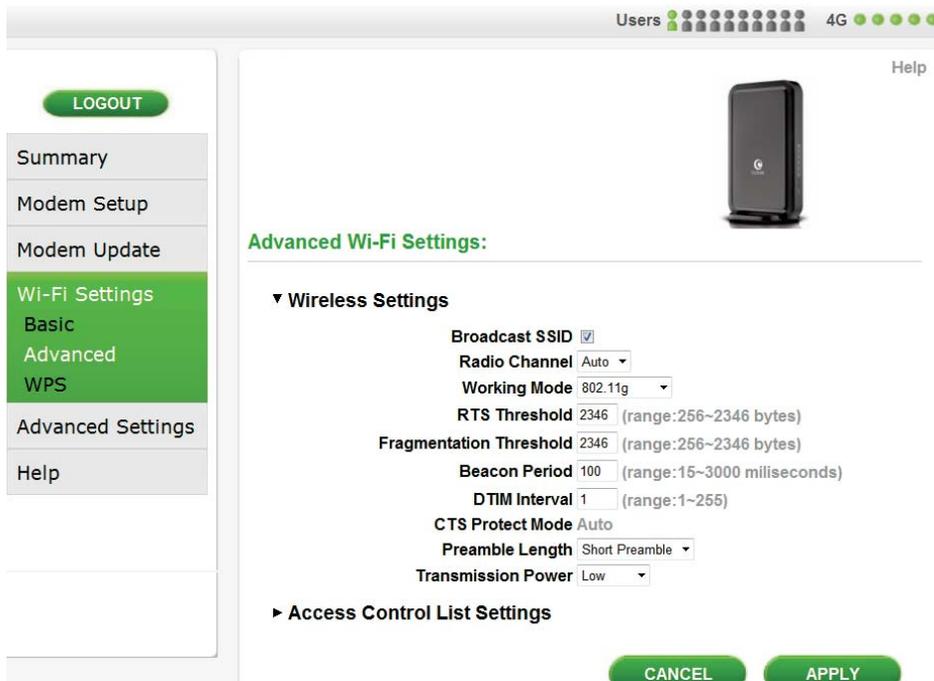
If you don't want to make any changes to the basic Wi-Fi settings, click “CANCEL”.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Wi-Fi Settings / Advanced

Warning: This tab includes settings that could negatively impact the performance of the CLEAR Hub Express, if set incorrectly. These settings should be modified only by advanced users or if directed by CLEAR Customer Care.

The Wi-Fi Settings / Advanced Tab displays advanced Wi-Fi settings of the CLEAR Hub Express.



If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

Wireless Settings:

- **Broadcast SSID:** This setting is defaulted to “enable.” You may disable this setting if you do not wish other devices to see your CLEAR Hub Express Wi-Fi network in their list of available wireless networks. Others still can connect to your CLEAR Hub Express Wi-Fi network, if you give them the name of the CLEAR Hub Express Wi-Fi network and Wi-Fi password.
- **Radio Channel:** Shows the channel number being used by the CLEAR Hub Express. Select “Auto” for the CLEAR Hub Express automatically to choose the best available channel; or select a specific channel (from the drop-down box).
- **Working Mode:** View and change the type (802.11b only, 802.11g only, 802.11n only, or all) of Wi-Fi-enabled devices that can connect to the CLEAR Hub Express Wi-Fi network. Select 802.11g only for the highest performance. To determine which Wi-Fi standard your device uses, refer to the device’s user manual.
- **RTS Threshold:** A Request to Send (RTS) threshold whose feature can control the traffic flow, especially when there are many devices connected. Set the packet size (256 to 2432 bytes) threshold.
- **Fragmentation Threshold:** Set the packet length (256 to 2432 bytes) for Fragmentation Threshold. When the transmission of the packet length exceeds the range, the packet will be segmented.
- **Beacon Period:** Adjust the beacon interval (15 to 3000 milliseconds). The beacon interval tells receiving devices on the CLEAR Hub Express Wi-Fi network how long they can wait in low-power mode before waking up to handle the beacon.

- **DTIM Interval:** Set the number of AP Beacons between each DTIM (Delivery Traffic Indication Message).
- **CTS Protect Mode:** This protects transmission from interference. This is preset to Auto Mode.
- **Preamble Length:** Set the Preamble Length, if any.
- **Transmission Power:** Change the transmission power, if any.
- **Access Control List Settings:** Allows you to change what type of System Default, if any.

Click “APPLY” when you’re ready to change the advanced Wi-Fi settings.

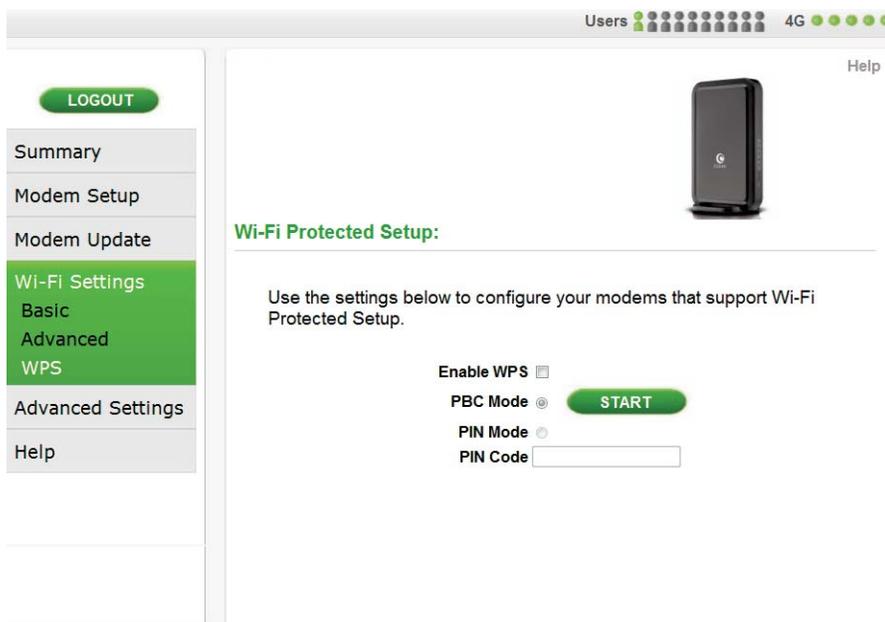
If you don’t want to make any changes, click “CANCEL”.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Wi-Fi Settings / WPS

Warning: This tab includes settings that could negatively impact the performance of the CLEAR Hub Express, if set incorrectly. These settings should be modified only by advanced users or if directed by CLEAR Customer Care.

The Wi-Fi Settings / WPS Tab allow you to configure your devices that support Wi-Fi Protected Setup.



If you’re using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

Wi-Fi Protected Setup:

- **Enable WPS:** Wi-Fi Protected Setup (WPS) could allow users to fetch an AP wireless configuration, which includes SSID, Security Method and Key).
- **PBC Mode:** Process WPS by Pushing Button method.
- **PIN Mode:** Process WPS by PIN code method (AP and station share the PIN code).
- **PIN Code:** Input PIN is generated from the station if PIN Mode is selected.

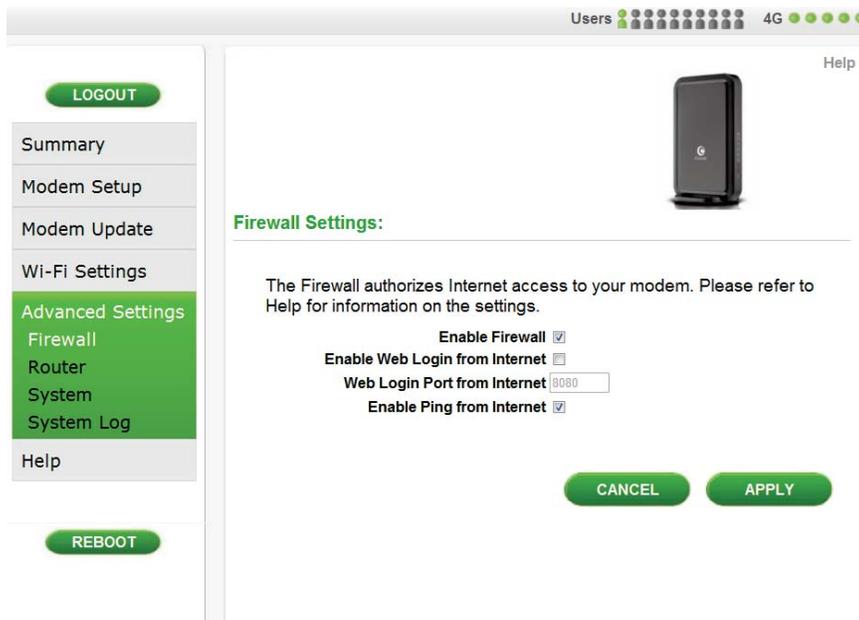
Click the checkout next to “Enable WPS” to enable and apply this feature. Uncheck the box if you want to disable the feature.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Advanced Settings / Firewall

Warning: This tab includes settings that could negatively impact the performance of the CLEAR Hub Express, if set incorrectly. These settings should be modified only by advanced users or if directed by CLEAR Customer Care.

A firewall can be used to help protect your CLEAR Hub Express Wi-Fi network from unauthorized access. A firewall also helps manage authorized access from the Internet to your CLEAR Hub Express.



The screenshot shows the CLEAR Hub Express web interface. At the top, there are status indicators for 'Users' (a row of 10 icons) and '4G' (four green dots). On the left side, there is a navigation menu with options: LOGOUT, Summary, Modem Setup, Modem Update, Wi-Fi Settings, Advanced Settings (highlighted), Firewall (highlighted), Router, System, System Log, and Help. At the bottom left, there is a REBOOT button. The main content area is titled 'Firewall Settings:' and contains the following text: 'The Firewall authorizes Internet access to your modem. Please refer to Help for information on the settings.' Below this text are four settings: 'Enable Firewall' (checked), 'Enable Web Login from Internet' (unchecked), 'Web Login Port from Internet' (input field with '8080'), and 'Enable Ping from Internet' (checked). At the bottom of the settings area are two buttons: CANCEL and APPLY.

If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

- **Enable Firewall:** Allows user to enable and disable Web Login from Internet, if necessary. Uncheck the box to disable the firewall setting for your CLEAR Hub Express. By default, this feature is selected.
- **Enable Web Login from Internet:** Allows user to enable Web Login from Internet (only works with https), if necessary.
- **Web Login Port from Internet:** Allows user to set the Web Login Port from Internet. Choose a port number with which to connect when logging in from a network other than your own. The default is 8080.
- **Enable ping from Internet:** Check the box to enable your CLEAR Hub Express to respond to a ping from the Internet. This option should be enabled to allow testing only. It should not be left enabled.

Click "APPLY" when you're ready to change the firewall settings.

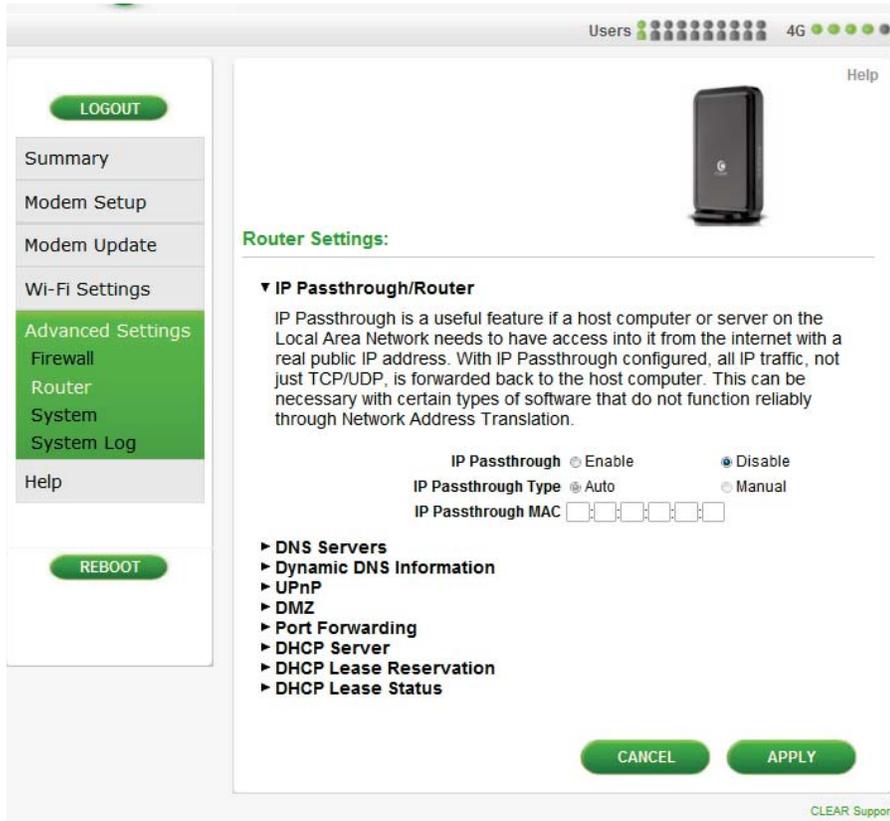
If you don't want to make any changes to the firewall settings, click "CANCEL".

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Advanced Settings / Router

Warning: This tab includes settings that could negatively impact the performance of the CLEAR Hub Express, if set incorrectly. These settings should be modified only by advanced users or if directed by CLEAR Customer Care.

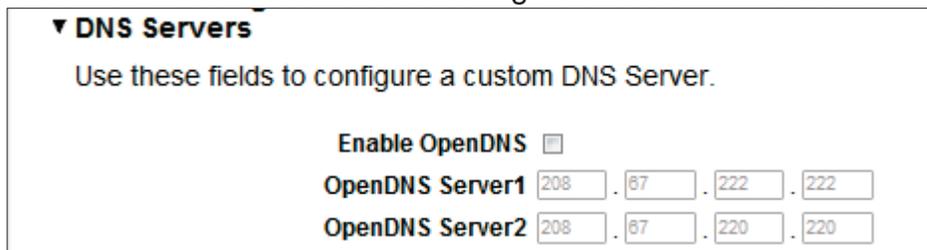
On the Advanced Settings / Router Tab, you can view and change router settings of the CLEAR Hub Express.



If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

Click on the setting options (**Dynamic DNS, Universal PnP, DMZ Host, Port Forwarding, DHCP Server, DHCP Lease Reservation, or DHCP Lease Status**) to expand the screen and see the available fields.

- **DNS Servers:** Use these fields to configure a custom DNS Server.



- **Enable OpenDNS:** Enable the OpenDNS Servers for DNS queries. Please refer to www.opendns.com for more information.
- **OpenDNS Server 1:** Set the primary OpenDNS Server of the present connection.
- **OpenDNS Server 2:** Set the secondary OpenDNS Server of the active connection.

- **Dynamic DNS Information (Domain Name Service):** This is a mechanism used for translating host names for network nodes into IP Addresses in real time. Use these fields to configure a Dynamic DNS service.

▼ Dynamic DNS Information

Use these fields to configure a Dynamic DNS Service.

Enable DDNS

DDNS Service Provider

- **Enable DDNS:** Allows you to enable Dynamic DNS.
- **DDNS Service Provider:** Select the type of service provider that is used.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Advanced Settings / Router (continued)

- **Universal PnP:** Universal Plug and Play (UPnP) Internet Gateway Device (IGD) is a protocol that simplifies device connection and network implementation. When this option is enabled, certain Windows applications would setup the Port Forwarding rule dynamically.

Enable UPnP to allow Windows applications to dynamically configure Port Forwarding rules on the modem.

Enable UPnP IGD

- **Enable UPnP IGD:** Allows you to enable UPnP IGD, if any.

- **DMZ Host:** Put a device connected to the CLEAR Hub Express in the DMZ (Demilitarized Zone) so that the device can be accessed by external hosts.

▼ DMZ

DMZ IP Address

- Configuring this option requires entering the IP Address of the host.

- **Port Forwarding:** This allows you to forward specific external ports to host devices connected to the CLEAR Hub Express.

▼ Port Forwarding

Use these fields to forward inbound connections to a specific client connected to the modem.

Select	Protocol	WAN Port		LAN IP	Enabled
		Begin	End		
+					-

- **Add:** Enter the host IP Addresses and the port to be forwarded in order to set up the route.
- **Delete:** Select items to delete in order to cancel the route.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Advanced Settings / Router (continued)

- **DHCP Server:** Dynamic Host Configuration Protocol (DHCP) is used to automatically assign IP addresses and configuration information to Wi-Fi clients, thereby greatly simplifying network set up. Use these fields to configure your CLEAR Hub Express's DHCP Server.

▼ DHCP Server

Use these fields to configure your ClearSpot's DHCP Server

Enable DHCP Server

DHCP Server IP Address 192 . 168 . 15 . 1

DHCP Starting IP Address 192 . 168 . 15 . 2

DHCP Ending IP Address 192 . 168 . 15 . 254

DHCP Lease Time 1 hours 0 minutes 0 seconds

- **Enable DHCP Server:** Click the box to enable the service.
 - **DHCP Server IP Address:** Set the Internet Protocol (IP) address (in decimal format) used to locate and access the CLEAR Hub Express on the local Wi-Fi network the CLEAR Hub Express creates.
 - **DHCP Starting IP Address:** Set the first IP address (in decimal format) assigned by the DHCP server, in dotted decimal format. It must be greater than the IP address value of the gateway.
 - **DHCP Ending IP Address:** Set the final IP address (in decimal format) assigned by the DHCP server. If the DHCP server runs out of DHCP addresses, users cannot access network resources. If this happens, increase the Ending IP or decrease the Lease Time.
 - **DHCP Lease Time:** Set the time that a network computer remains connected to the gateway using its currently assigned IP address. At the end of this time, the DHCP server renews the lease or assigns the computer a new IP address.
- **DHCP Lease Reservation:** Use these fields to reserve a specific IP address for a device.

▼ DHCP Lease Reservation

Use these fields to reserve a specific IP address for a device.

Select	Host Name	MAC Address	IP Address	Enabled
--------	-----------	-------------	------------	---------

ADD DELETE

- **Add:** Enter the Host Name, MAC Address and IP Address to reserve a specific IP address for the CLEAR Hub Express.
- **Delete:** Select items to delete.

- **DHCP Lease Status:**

Shows the devices currently connected to your modem.

Host Name	MAC Address	IP Address	Remaining Lease Duration
WST40018887	00:18:EB:18:EC:BC	192.168.15.174	2287 seconds

- **Refresh:** Refreshes the DHCP Lease Status periodically.
- **Auto-Refresh:** Auto-refreshes the DHCP Lease Status periodically.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Advanced Settings / System

Use this tab to view and change system settings of the CLEAR Hub Express.

If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

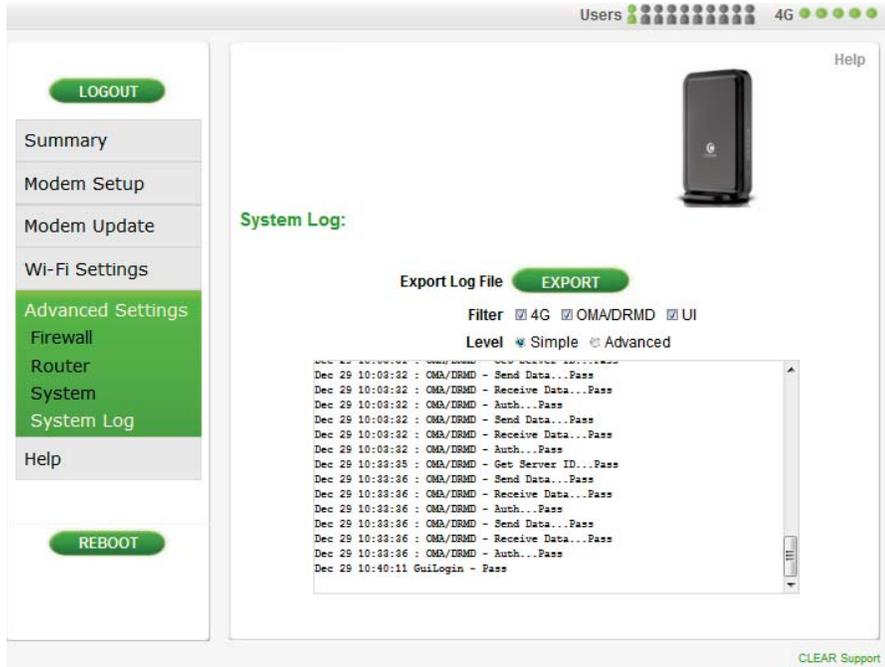
Click on the setting option **User Interface** to expand the screen and see the available fields.

- **User Interface:** Change the refresh interval.
 - **Web UI Refresh Interval:** Change the Web UI (CLEAR Hub Express Home Page Refresh Interval). The default setting is 3 seconds.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Advanced Settings / System Log

The Device Setup/System Log Tab shows the history of actions by the CLEAR Hub Express and connected devices such as connections and disconnections. Logs are a great way to find out what your CLEAR Hub Express is doing and its activities.

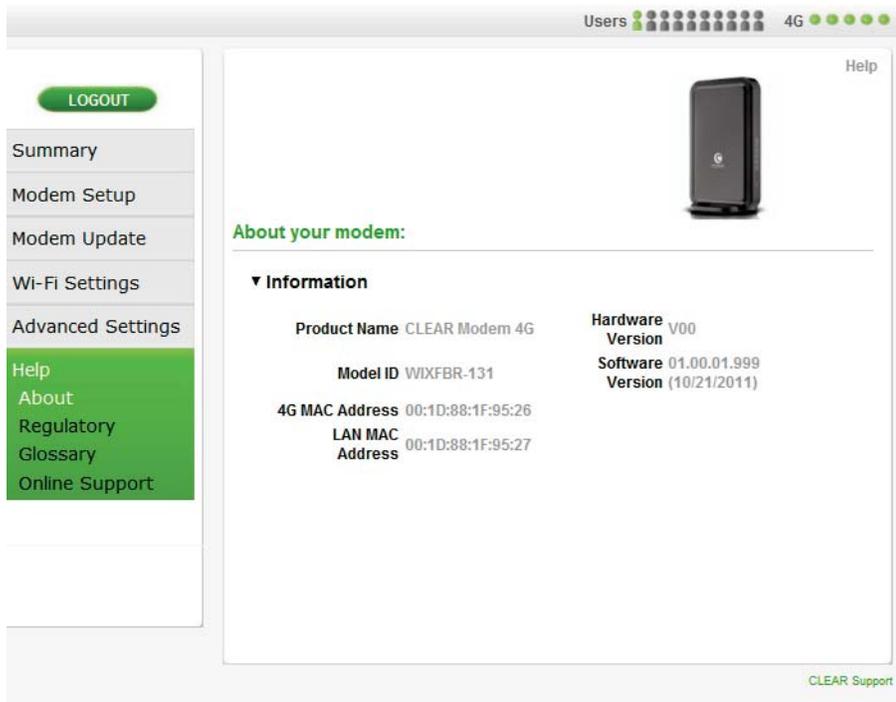


If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

- Export Log File:** Allows user to export the log files to text files.
- Filter:** Allows user to select the type of system log filter to use.
- Level:** Allows user to change the level of system log.

CLEAR Hub Express Home Page / Help / About

Use this tab to view system settings of the CLEAR Hub Express.



The screenshot shows the CLEAR Hub Express web interface. At the top, there are indicators for 'Users' (a row of 10 icons) and '4G' (four green dots). On the left, a sidebar contains a 'LOGOUT' button and a list of navigation options: Summary, Modem Setup, Modem Update, Wi-Fi Settings, Advanced Settings, Help (highlighted), About, Regulatory, Glossary, and Online Support. The main content area is titled 'About your modem:' and features an image of the CLEAR Hub Express device. Below the image, there is a section titled 'Information' with the following details:

Product Name	CLEAR Modem 4G	Hardware Version	V00
Model ID	WIXFBR-131	Software Version	01.00.01.999 (10/21/2011)
4G MAC Address	00:1D:88:1F:95:26		
LAN MAC Address	00:1D:88:1F:95:27		

At the bottom right of the page, there is a 'CLEAR Support' link.

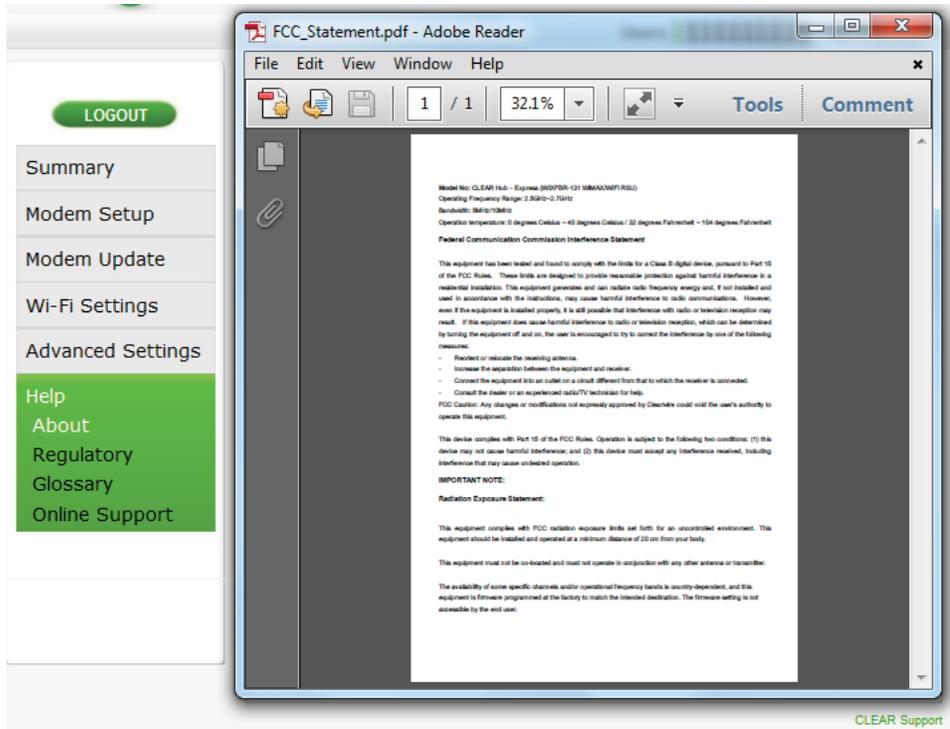
If you're using your CLEAR Hub Express click [here](#) to open the CLEAR Hub Home Page.

- **Product Name:** Displays the product name of the CLEAR Hub Express.
- **Model ID:** Displays the Model ID of the CLEAR Hub Express.
- **4G MAC Address:** Displays the 4G MAC address of the CLEAR Hub Express.
- **LAN MAC Address:** Displays the LAN MAC address of the CLEAR Hub Express.
- **Hardware Version:** Displays the hardware version of the CLEAR Hub Express.
- **Software Version:** Displays the software version of the CLEAR Hub Express.

Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Regulatory

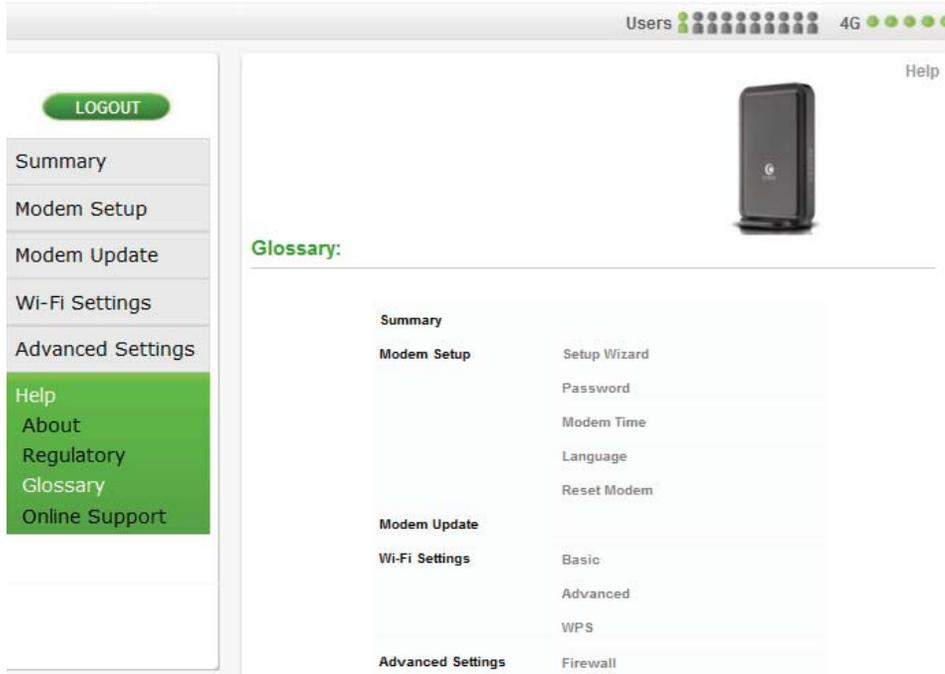
Use this tab to view the Federal Communication Commission Interference Statement for the CLEAR Hub Express.



CLEAR Support

CLEAR Hub Express Home Page / Glossary

Use this tab to view the definitions used in the CLEAR Hub Express.



Manage your CLEAR Hub Express (continued)

CLEAR Hub Express Home Page / Online Support

Use this tab to view the definitions used in the CLEAR Hub Express.

The screenshot shows the CLEAR Hub Express website's 'Answers' section. At the top, there's a navigation bar with tabs: 'What Is CLEAR?', 'Service Plans', 'Devices', 'Packages', 'Coverage Map', and 'Answers'. The 'Answers' tab is selected. Below the navigation bar, there's a search bar and a 'Support 888-888-3113' link. The main content area is titled 'ANSWERS' and includes several sections: 'Your Connection' (Optimize it for speed), 'Billing Tips' (How does billing work?), and 'View Coverage Map'. There's also a 'Search FAQs' box. Below these are four columns of frequently asked questions: 'Billing & Payments', 'Installation, Activation & Setup', 'Troubleshooting Connection & Speed Issues', and 'CLEAR Voice & Home Phone'. Each column has a list of questions and a 'View all' link.

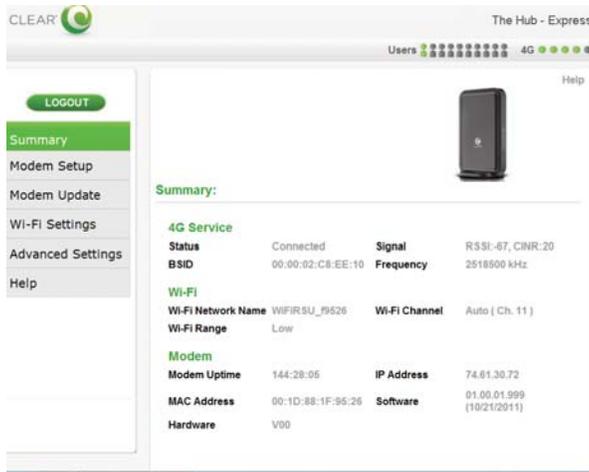
CLEAR Hub Express Home Page / Help

The **Help** Link (on the top right of the CLEAR Hub Express Home Page) is context-sensitive and displays helpful tips that are relevant to the tab you are viewing.

If you need help, click **Help** and a window with helpful tips relevant to the page you're viewing will open. Similar Help windows are available for all the Tabs within the CLEAR Hub Express Home Page.

For example, if you're viewing the Summary page and click "Help," you'll see helpful explanations about items relating to the Summary page.

Device Summary



The Hub - Express

Users [Progress Bar] 4G [Signal Strength]

LOGOUT

Summary

Modem Setup

Modem Update

Wi-Fi Settings

Advanced Settings

Help

Summary:

4G Service

Status	Connected	Signal Frequency	RSSI: -67, CINR: 20 2518500 kHz
--------	-----------	------------------	------------------------------------

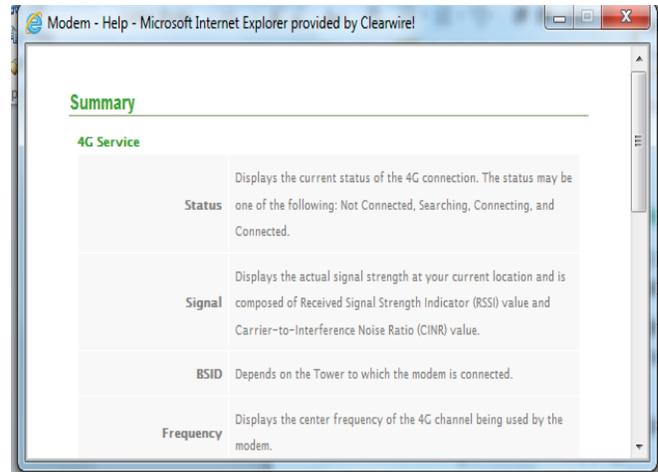
Wi-Fi

Wi-Fi Network Name	WIFIRSU_#9526	Wi-Fi Channel	Auto (Ch. 11)
Wi-Fi Range	Low		

Modem

Modem Uptime	144:28:05	IP Address	74.61.30.72
MAC Address	00:1D:88:1F:95:26	Software	01.00.01.999 (10/21/2011)
Hardware	V00		

Help for Device Summary



Modem - Help - Microsoft Internet Explorer provided by Clearwire!

Summary

4G Service

Status	Displays the current status of the 4G connection. The status may be one of the following: Not Connected, Searching, Connecting, and Connected.
Signal	Displays the actual signal strength at your current location and is composed of Received Signal Strength Indicator (RSSI) value and Carrier-to-Interference Noise Ratio (CINR) value.
BSID	Depends on the Tower to which the modem is connected.
Frequency	Displays the center frequency of the 4G channel being used by the modem.

Additional Information – External Antenna Port

If you have a CLEAR Hub Express and are experiencing sub-optimal service in your area, it may be possible to enhance your 4G signal and performance speed by using an auxiliary antenna. To do so, attach the antenna via the SMA connector located on the back of the Hub Express. Once you have connected to an external antenna, flip the switch (on the back of the Hub Express) to “Enable”. To revert to the internal antenna, flip the switch to “Disable”. If you are not using an external antenna, please confirm that the switch is set to “Disable”.

Please understand that using an auxiliary antenna will not improve your signal in all cases. We recommend that you explore this alternative only if your 4G signal strength registers a CINR score of 8 dB or lower. To locate the 4G signal strength on your CLEAR Hub Express, log into the admin area and note the CINR value on the Summary Page. (For steps to log into the admin area, go [here](#).)

Auxiliary antennas can be purchased “over-the-counter” at most consumer electronics retailers. We have not tested or certified any auxiliary antennas. Hence, we are not able to endorse any particular type or brand of auxiliary antenna.

Quick Tips

Maximize security of the CLEAR Hub Express

- Use the CLEAR Hub Express Home Page Setup Wizard to change the admin password required to log in and manage your CLEAR Hub Express.
- Use the CLEAR Hub Express Wi-Fi network name and password. You can access your CLEAR Hub Express Home Page without being connected to the Internet. Click [here](#) to open the CLEAR Hub Express Home Page.
- Use the highest level of Wi-Fi security with your Wi-Fi-enabled devices. Go to the Help feature in your CLEAR Hub Express Home page for instructions.

Change the Default Time Zone from Central Time

- Use the CLEAR Hub Express Home Page / Modem Setup / Modem Time to change the default time zone to the desired time zone.

Ensure your devices recognize your CLEAR Hub Express

- Make sure you are using the correct device Wi-Fi network name and password. The default Wi-Fi network name is “WiFIRSU-xxxxx”, where “xxxxx” are the last five digits of the MAC ID, which can be found on the label on the back of the device. The MAC ID also might be referred to as WAN MAC ID.
- Make sure the Wi-Fi-enabled devices with which you are trying to share are within range of your device – usually within 150 feet.

If you are sharing the device Wi-Fi network with other devices and you turn the Modem off, the other devices won't be able to access the internet.

Facilitating your ability to browse the Internet

- First, verify that your CLEAR Hub Express is receiving the CLEAR 4G signal.
- The CLEAR Hub Express LED indicates the CLEAR 4G signal strength.
- When indoors, the best locations to try are near a window and away from other electronic devices.

Important Message from CLEAR

- If your browser is stuck on a message from CLEAR, follow the on-screen instructions to view the message and provide any requested information.
- You also can call Customer Care at 877-956-4056.

Quick Tips (continued)

Ensure you can share your CLEAR Hub Express

It's easy to share your CLEAR Hub Express with other Wi-Fi enabled devices at the same time. Make sure you are using the correct CLEAR Hub Express Wi-Fi network name and password. They can be found on the sticker on the back of the CLEAR Hub Express.

- Give your friends and colleagues your CLEAR Hub Express Wi-Fi network name and password.
- Make sure the devices with which you are trying to share are within range of your CLEAR Hub Express – usually within 100-150 feet.
- Make sure you have not “disabled” the SSID Broadcast setting. If you set “SSID Broadcast” to disable, other users will not see your CLEAR Hub Express in the list of available wireless networks. To make sure SSID Broadcast is on, go into the Wi-Fi Settings / Advanced tab of the CLEAR Hub Express Home Page.
- Make sure the devices they are trying to connect to your CLEAR Hub Express are not blocked.
- If you are sharing the CLEAR Hub Express Wi-Fi network with other devices and you turn your CLEAR Hub Express off, other devices connected to your CLEAR Hub Express won't be able to access the Internet.

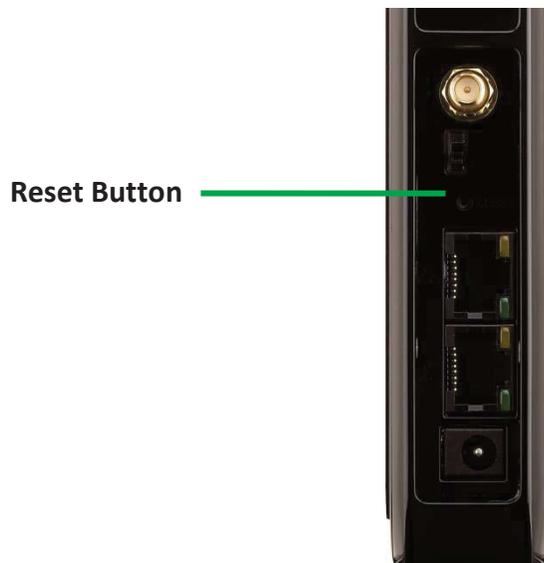
Resetting Your Device

If you changed your Admin Password and can't remember it, you can reset your CLEAR Hub Express to the factory settings.

Warning: Resetting your CLEAR Hub Express will reset ALL of the settings, including your Wi-Fi network name and password.

1. Turn on the device
2. Once device is powered on, carefully insert a sturdy thin object into the hole above to the Ethernet connector on the back side of the device and press firmly for two seconds. Remove the thin object out of the hole
3. All LEDs will turn off except for the power LED on the front. The device will reboot with factory default settings.

Note: The Admin default password is: “admin”



Other Information

Technical Specifications

- **Dimensions:** 9.17 in (H) x 6.1 in (W) x 1.18 in (D)
- **Weight:** 1.0 lb
- **Hardware:** WiMAX chipset – Broadcom BCS5350
- **Bands Supported:** WiMAX 2500 MHz
- **Compatibility:** Works with any Wi-Fi enabled device
- **Antenna:** Internal Omni-Directional 5dB average gain
- **LEDs:**
 - **Signal Strength:** Five
 - **Wi-Fi:** One
 - **4G Network:** One
 - **Power:** One

Still need help?

FAQs and Live Chat Support

- If you have questions about your CLEAR Hub Express, please access the FAQs and live chat support at www.clear.com/support.

Telephone Support

- If you still have questions, please call us at 877-956-4056. We provide automated telephone support 24/7 and live telephone support between 9am and 10pm, local time, seven days a week.

Important Information Document

- Please read “Regulatory” section under the Help tab in your CLEAR Hub Express Home Page for regulatory information, safety information and other important disclosures.

Warranty Information

- See Section 6(d) of our Terms of Service (at www.clear.com/legal/terms) for warranty details.

Legal Disclosures

- CLEAR coverage areas are limited. Actual CLEAR network performance may vary and is not guaranteed. See Device, Support and other pages at www.clear.com for additional information. CLEAR, the CLEAR logo and CLEAR Hub Express are trademarks or registered trademarks of Clearwire Communications LLC. Other company, product and brand names and trademarks are the property of their respective owners. © 2012 Clear Wireless LLC. All rights reserved.