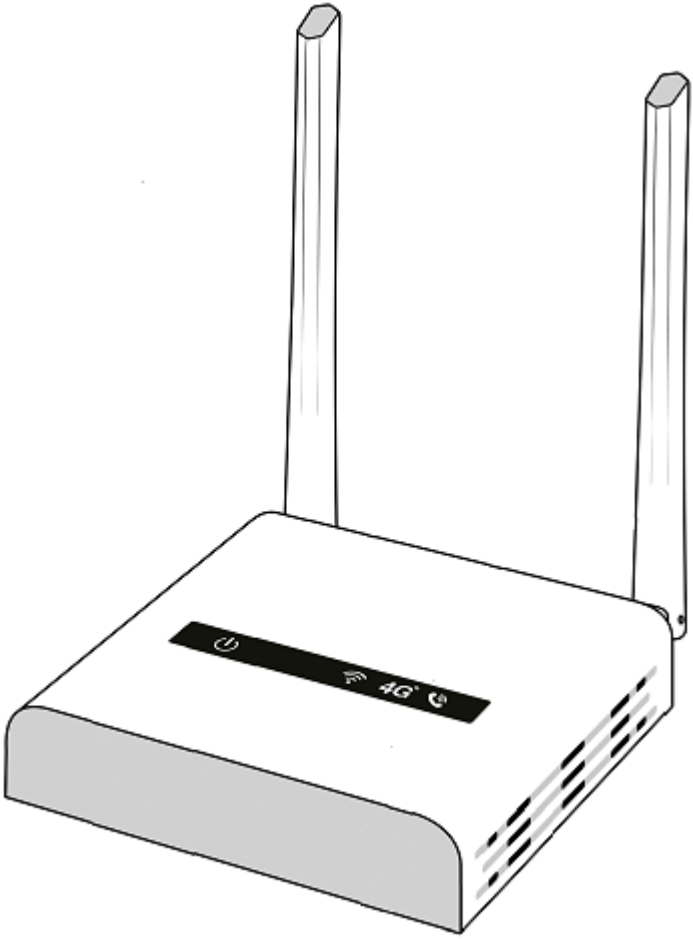
CL2000

4G WIRELESS ADAPTOR MANUAL

INSTRUCTIONS



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1.OVERVIEW

▪ This 4G CPE (Customer Premises Equipment) router provides high-speed internet access via a 4G cellular network. It can be used in homes, offices and other locations where a reliable 4G network is available. It allows you to connect a phone to the RJ11 connector anywhere in an area covered by 4G.

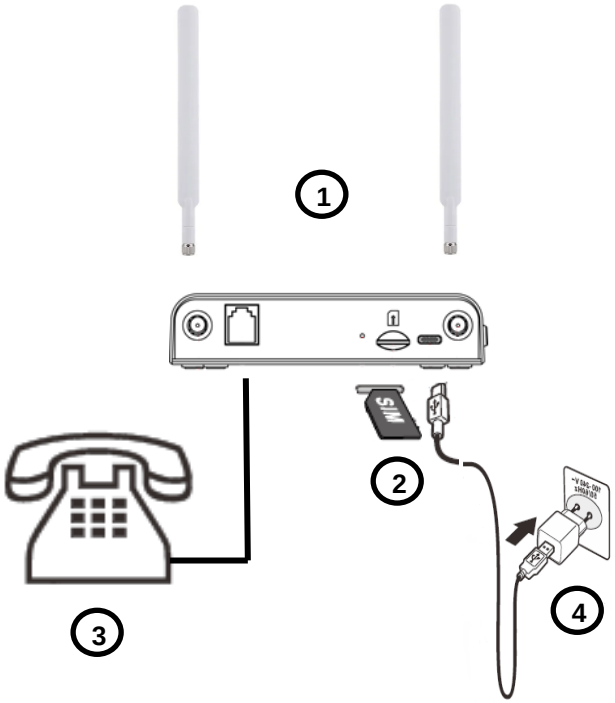
Telephone adaptor Information:

- The telephone adaptor is equipped with a 4G ASR communications module and provides 2.4GHz Wi-Fi for voice and data transfer.
  LTE-FDD: B1/3/5/7/8/20/28
  LTE-TDD: B38
  WCDMA: B1/5/8"
- The telephone adaptor provides a Wi-Fi access point (WAP function).
  WAP is a hardware networking device that allows other Wi-Fi devices to connect to a wireless network.
  The default Wi-Fi Service Set Identifier (SSID) name is **GEEMARC CL2000 XXXX** (xxxx is the last four digits of the Wi-Fi MAC address (media access control address)).
  An SSID (service set identifier) is a sequence of characters that uniquely names a Wi-Fi network.
  A MAC address (short for medium access control address or media access control address) is a unique identifier assigned to a network interface controller
  The default Wi-Fi password is **GEEMARC**. It is important to change this password for a strong password of your own. Refer to the WebUI management system for details.
- The default IP address of the router is **192.168.1.1.**
- You can log in to the WebUI at **http://192.168.1.1 WEB UI** to set up and change various parameters including the router Wi-Fi password and Network Name (SSID). The initial login password for the WebUI is **admin**.

Note:

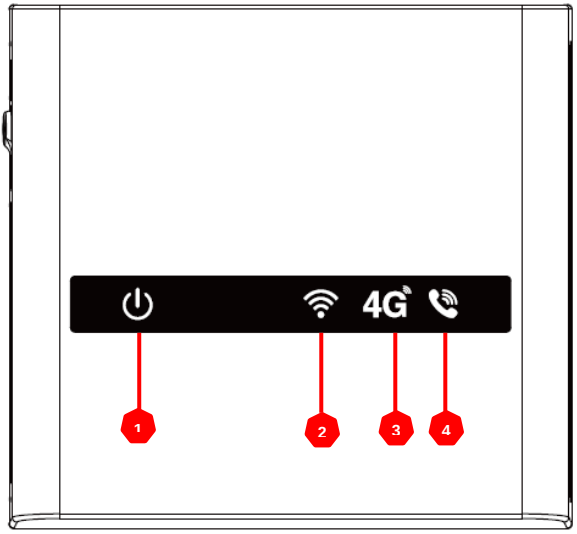
1. The router is powered by a USB type C cable connected to a computer or by an external power adapter (5V/1A).
2. On/OFF button.
3. Use the pinhole reset button to restore the router to factory settings.
4. Clear your browser history before you use the WebUI management system.
5. The telephone adaptor is equipped with a RJ11 telephone / voice port.

Installation of your telephone adaptor



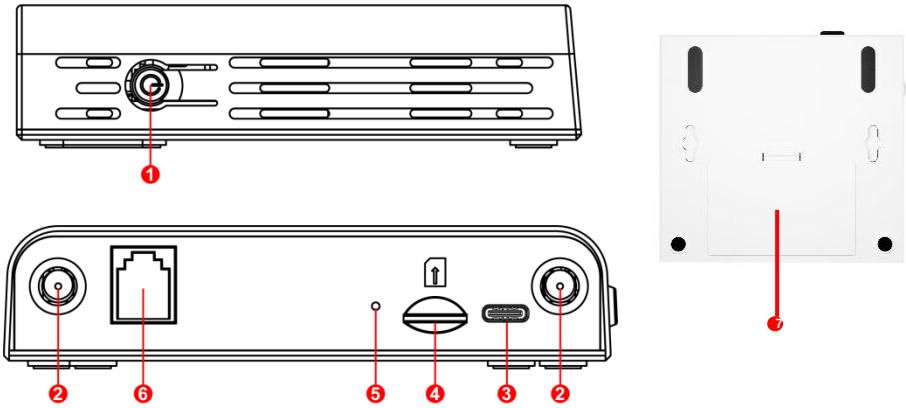
1) Connect the 2 external 4G antennas
2) Insert the Nano Sim card
3) Connect your landline (PSTN) phone with RJ11/RJ11 cable
4) Connect the USB cable with your power adaptor (not supplied). The Adapter is powered by USB (5V /1A / 5W)

2.1 LED “ON” - Status Identification



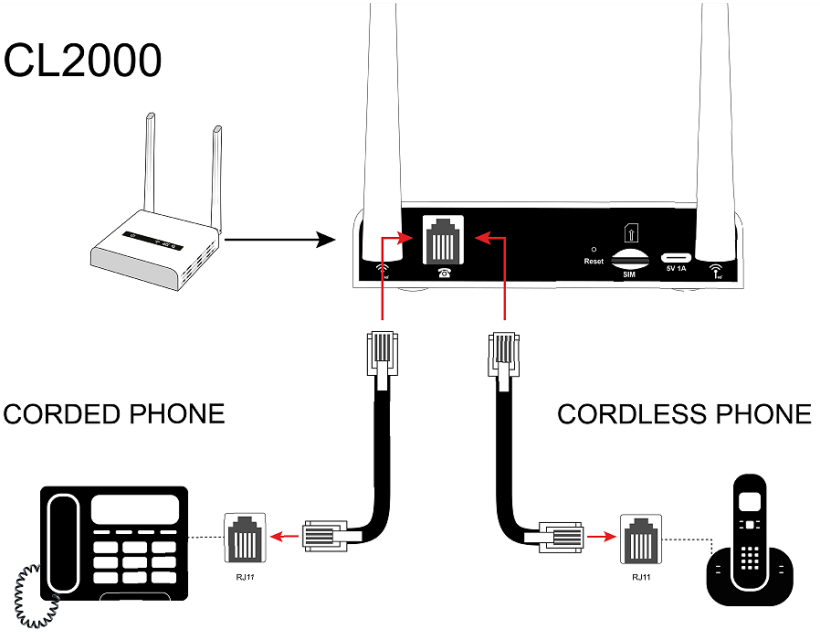
	LED	Working Status	LED Status
1	Power	Power ON (telephone adaptor connected to power supply)	ON
2	Wi-Fi	telephone adaptor connected to Wi-Fi device	ON
3	4G Signal	telephone adaptor connected to a 4G mobile network (SIM inserted)	ON
4	RJ11	Voice call in progress (telephone connected to RJ11)	ON

2.2 Port & Button Identification



	Port/Button	Feature
1	POWER	telephone adaptor power ON/OFF
2	Antenna Port	Connects to external 4G antennas for better coverage
3	Type-C	Connect the USB type C with a power Adaptor (not supplied)
4	SIM card Slot	Supports Nano SIM Card only
5	Reset	Recessed pin button to restore Adapter to factory settings
6	RJ11	To connect PSTN phone to the telephone adaptor with the RJ11/RJ11 provided
7	Battery door	Battery compartment

Insert a 4G Nano SIM card, with the PIN code deactivated (you will need to use a mobile phone to disabled the PIN code if this is not the case), with Mobile network provider enabled, into the SIM card slot (4). The CL2000 is compatible with all network operators.
Connect your landline phone to the CL2000 with the RJ11 telephone cable.
Use your phone to make and receive calls as normal. The Telephone LED is on when a call is in progress. When your phone rings, answer it as normal.



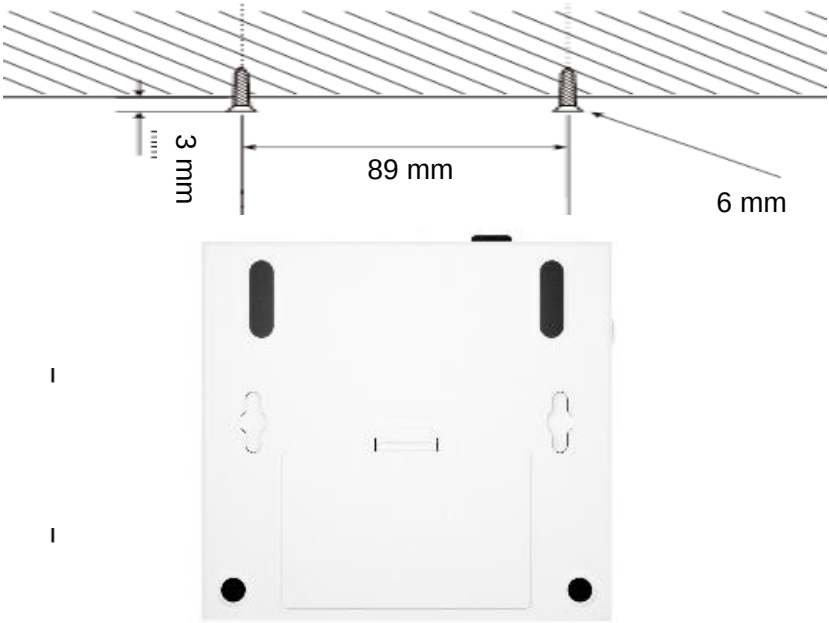
Pairing your device by Wi-Fi

Your CL2000 allows you to access your network from any location covered by the Wi-Fi network.
However, the strength and range of the wireless signal will vary depending on the actual environment in which your adopter is located.
Many obstacles can limit the range of the wireless signal, such as concrete or metal structures.

For your safety and optimal Wi-Fi performance, please:
- Do not place the CL2000 where it will be exposed to moisture or excessive heat.
- Locate the adapter away from sources of strong electromagnetic radiation.
- Place the adapter in a location where it can be easily connected to your telephone and an electrical outlet.
- Place the adapter where there is a strong mobile Internet signal.
- Make sure that the cables and power cord are placed safely, out of the reach of children, to avoid tripping or other hazards.

Generally, the adapter is placed flat, such as on a shelf or desk and must be easily accessible.
It can also be mounted on the wall, as shown in the following illustration.

Drill 2 holes in the wall (89 mm apart).
Insert the wall plugs and the screws leaving about 2.5 mm of the screws projecting from the wall. Slide the telephone downwards to secure.



Quick settings

Your CL2000 allows you to connect a tablet, mobile phone, computer or other device to the internet with Wi-Fi.

1) On your device Wi-Fi settings, search, then select **GEEMARC-CL2000.**
2) Enter the Wi-Fi password, which is printed underneath the adapter.
   Your device is now connected to the internet (via the Adapter's Wi-Fi).

IMPORTANT: We strongly recommend that you change the default password for added online security – see the main user guide for details.

WiFi Data rates maximum 286.8Mbps@TX and 229.4Mbps@RX.
Wi-Fi6 2.4GHz, 802.11b/g/n/ax



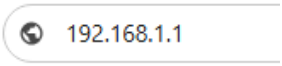
The Web User Interface (WebUI) management system allows you to view and configure the status of the router. The WebUI management webpages work with most mainstream browsers such as Internet Explorer 11 and later, Firefox, Chrome, and Safari.

3.1 Basic Functions

1. The computer, mobile phone or tablet is connected to the Wi-Fi hotspot of the CL2000 via Wi-Fi.



The login page is displayed after the user enters **192.168.1.1** in the browser

Write: 

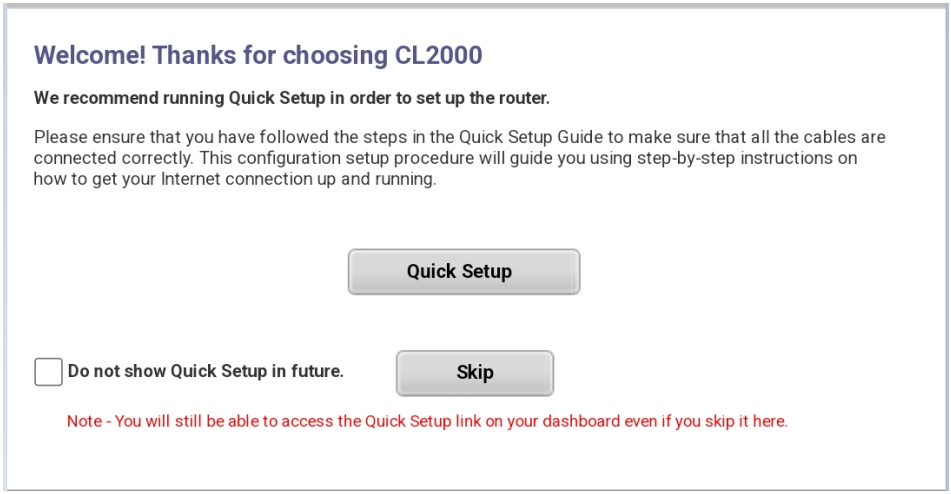
You can see this display below

2. Select your language desired then enter the Username and password is **admin** by default,

You will find this information on the bottom of your CL2000.



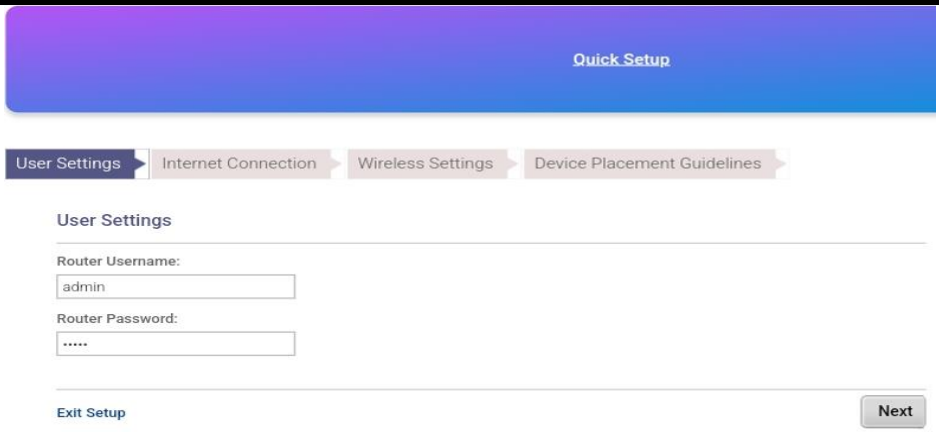
3. 2 settings



If you wish to modify the settings, press on **Quick setup** else press on **Skip** to keep the setting by default.
The MIFI CL2000 **Quick Setup** tab is designed to assist you in connecting your new MIFI CL2000 to the Internet. This Quick Setup procedure guides you through step-by-step instructions on how to get an Internet connection up and running.
You can press on the square to remove the question at each connection.

3.2.1 User Settings

If you select Quick setup, you can see this first screen
This display, allow you to custom your CL2000 username and Password if you want, press **Next** to valid.
By default, the User name & Password are **"admin"**
We invite you to change the Password for more security.



3.2.2 Internet connection

This display, allow you to configure your internet connection type, if you want, press **Next** to valid or **Back** to modify a previous setting.

A) 2 types of connections are available:

Disable - No Internet connection. Only the wireless Home Network is active.
Cellular - This is the default mode of connectivity. You can insert your SIM into the router and the wireless clients associated can make use of it for internet connectivity! Also, note that in this mode, the Ethernet port can be used for connecting any LAN side clients. For 3G USB Modem, there is a bunch of ISP's that we support - you can select one of them from a dropdown list. In addition, you can update the CL2000's ISP database by uploading your local ISP settings file.

B) Network mode

You have the possibility to configure the type of network, different possibilities:
4G/3G/2G multimode - All the network mode is enabled
4G only - Only 4G is enabled
4G/3G only - Only 4G and 3G is enabled
3G/2G only - Only 3G and 2G is enabled
Disable NW settings - All the network is disabled

C) Preferred Network Mode –

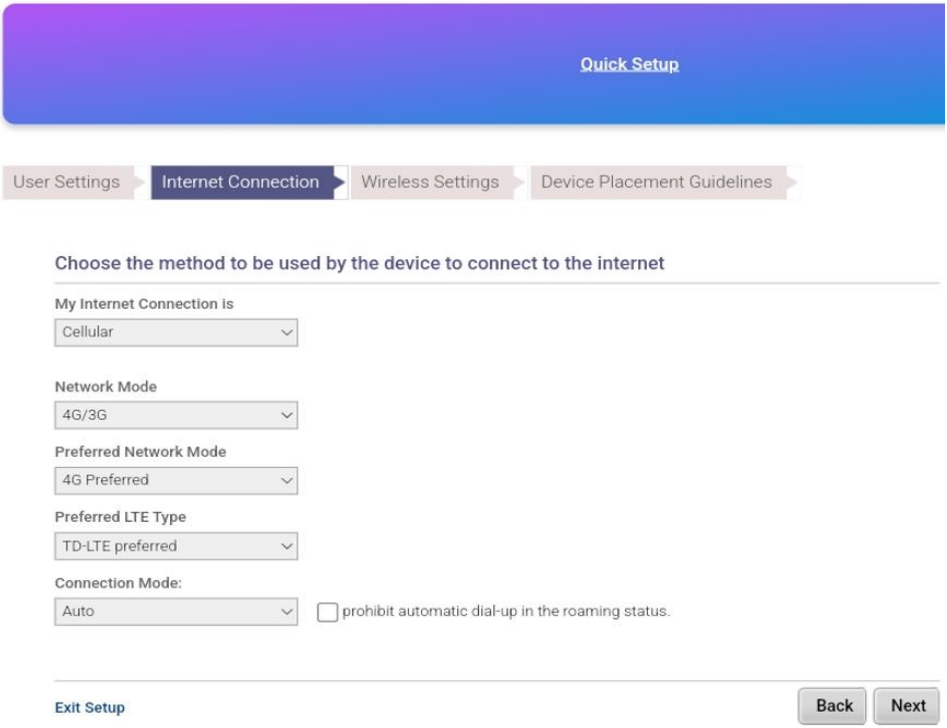
You allow to configure the type of network that we like to use.

D) Preferred LTE Type

2 possibilities:
TD LTE: TDD technique allows for higher throughput in the DL direction compared to the UL direction. This setting is preferable for making and receiving telephone calls.
LTE FDD: The FDD technique theoretically allows for lower latency

E) Connection mode

2 possibilities to set the connection mode preferred (Auto or manual)



3.2.3. Wireless settings

This display, allow you to custom your Wifi connection, if you want, press **Next** to valid or **Back** to modify a previous setting.

A) Network name (SSID)

You allow to change the name of your CL2000 on the Wi-Fi network.

B) Network Visibility status

4.possibilities are available:
Disabled, WPA2-PSK, WPA-WPA2 mixed and WAPI-PSK
Disabled -- No wireless security. All traffic may be read by others
WPA2-PSK -- The Highest Level of Security. Passwords should be at least 8 characters and contain characters besides letters and numbers such as, #, @, % & etc. Only devices that support WPA2-PSK may associate. WPA2 Cipher is AES.
WPA-WPA2 Mixed -- WPA2-PSK or WPA-PSK Security method depending on the device that needed to connect. Passwords should be at least 8 characters and contain characters besides letters and numbers such as, #, @, % & etc. WPA2 Cipher is AES. WPA Cipher is TKIP/ AES.
WEP -- The WEP Security is used if the devices that use the home router do not support WPA or WPA2. WEP security is based on a fixed size password. Older devices only support 5 characters (40 bit) newer devices support 13 characters (104 bit). The 13 characters' security are better than 5 characters.

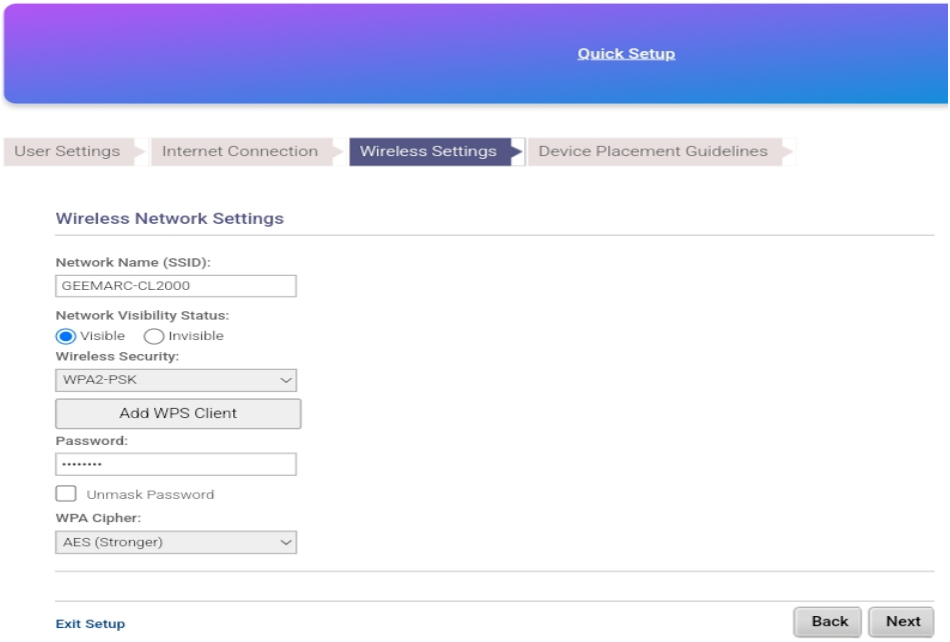
C) Password

The password by default is XXXXXXXX, you can find this password under the CL2000. We invite you to change the Password for more security.



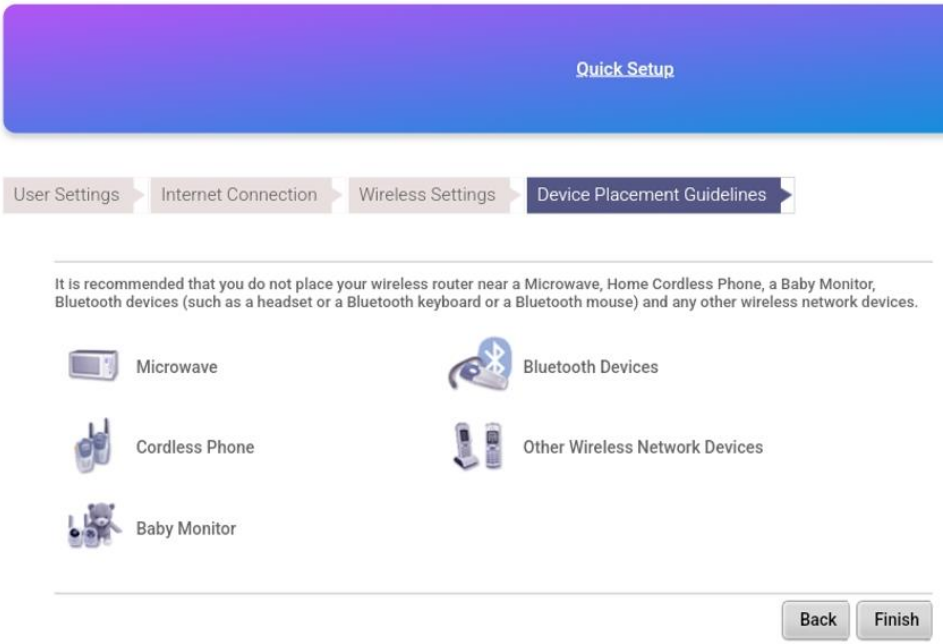
D) WPA Cipher

WPA Cipher -- An encryption algorithm used to secure the data communication. Temporal Key Integrity Protocol (TKIP) provides per-packet key generation and is based on WEP. The Advanced Encryption Standard (AES) is another very secure encryption option. With the "TKIP and AES" option, the telephone adaptor negotiates the cipher type with the client, and uses AES when available.



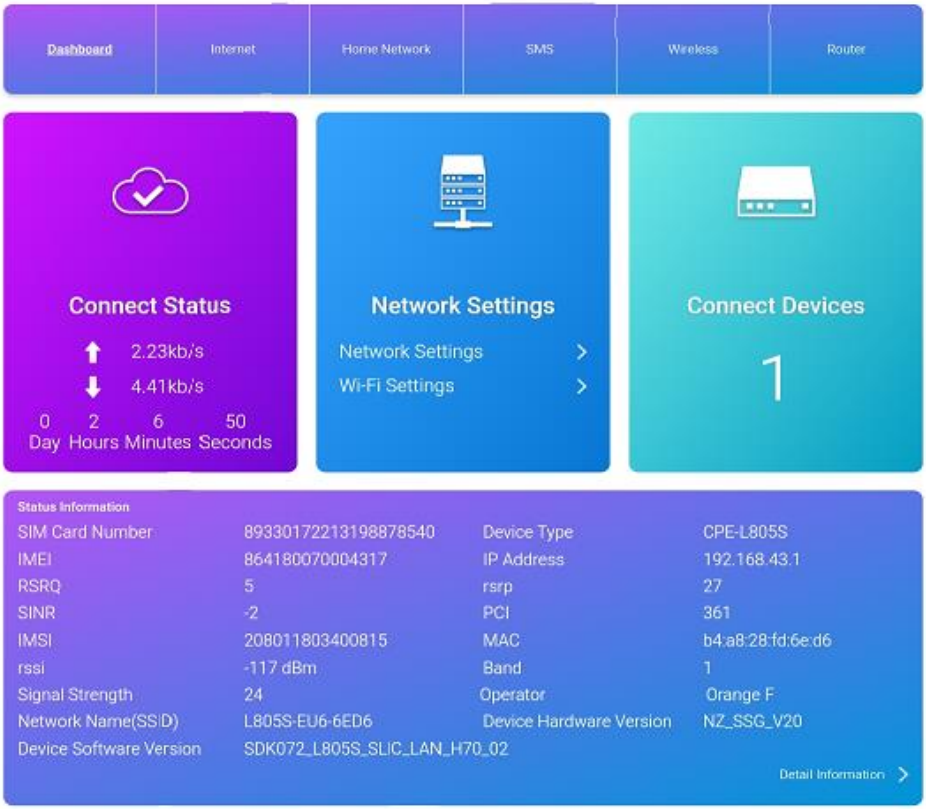
Device Placement Guidelines

This display, inform you on the position to place your CL2000 at your home, if you want, press **Next** to valid or **Back** to modify a previous setting.



3.2.4 Dashboard

The **Dashboard** page allows you to view basic information including status of the internet connection, router, home network and the number of Connect Devices.

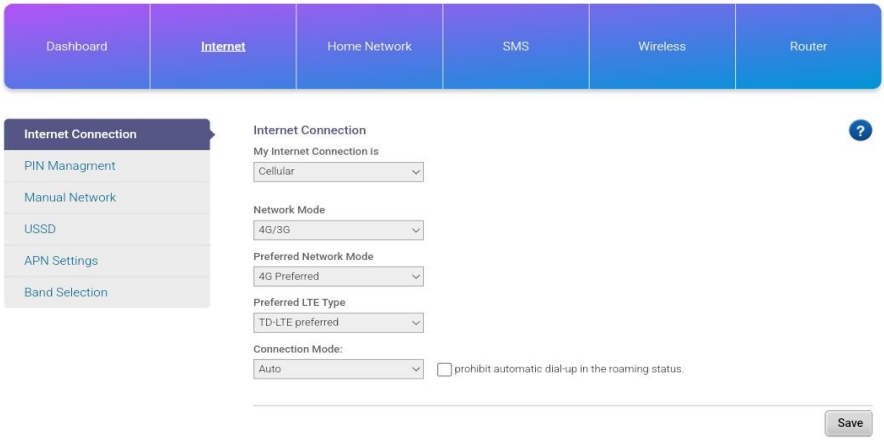


3.3 Internet

The **Internet** page allows you to set the internet connection, PIN management, manual network, USSD, APN Settings then Brand selection.

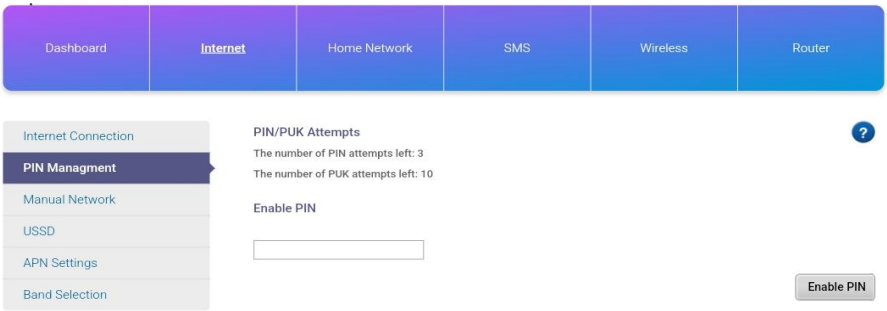
3.3.1 Internet connection

See chapter 3.2.2 for more information.

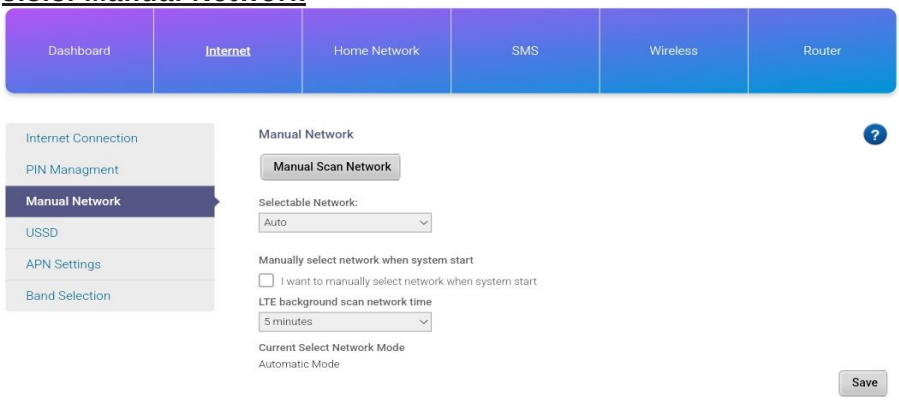


3.3.2 Pin management

This menu allow you to set the PIN/ PUK attemps of your SIM card.

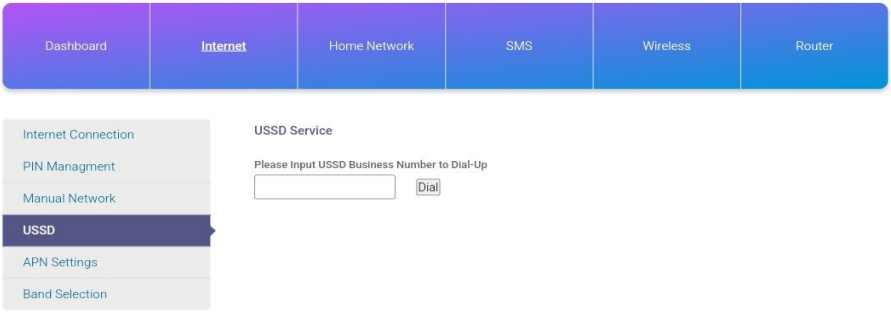


3.3.3. Manual Network



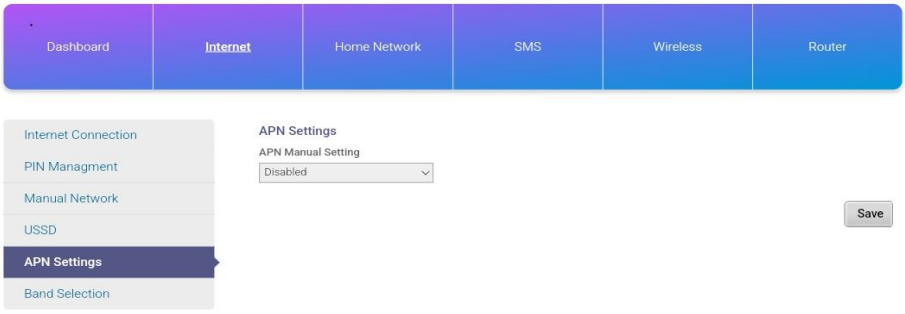
3.3.4 USSD

USSD (Unstructured Supplementary Service Data) is a Global System for Mobile Communications (GSM) protocol that is used to send text messages. USSD is similar to Short Message Service (SMS).



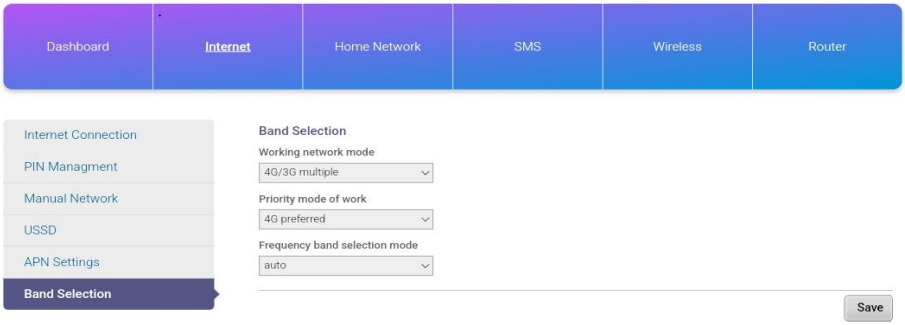
3.3.5 APN Settings

This menu allow you to set the Access point Name information.
APN provides all the details that your device needs to connect to mobile data. If you are setting up a new device or putting your SIM card into a device for the first time, your network operator should send you their APN details in a configuration message.



3.3.6 Band Selection

This menu allow you to set the band selection



3.4 Home Network

The **Home Network** page allows you to configure the gateway address and IP address of the router.

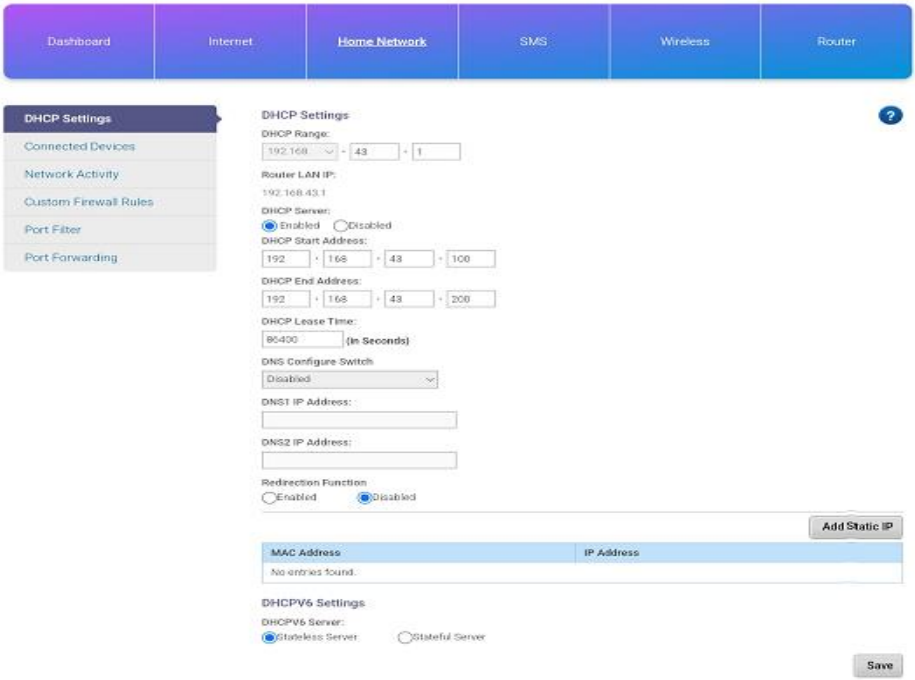
NOTE: The number of Wi-Fi devices connected to the CL2000 can limit the speed and capacity of the Wi-Fi connection.

3.4.1 DHCP Settings

Dynamic Host Configuration Protocol (DHCP) is used to dynamically assign Internet Protocol (IP) addresses to each host on your organization's network. In this DHCP meaning, a host can refer to any device that enables access to a network.

DHCP Range -- Selects the basic IP address range, in which the start and the end DHCP IP addresses range are assigned.

Start DHCP Address and End DHCP Address -- Defines a range of addresses that the DHCP Server uses when assigning addresses to computers and devices on your Local Area Network. Any addresses that are outside this range are not managed by the DHCP Server; these could, therefore, be used for manually configured devices or devices that cannot use DHCP to obtain network address details automatically.



3.4.2 Connected devices

The Connected Devices screen displays a list of devices that are connected to the network. The Connected Devices screen also allows the user to block access to the Internet to a specific device.



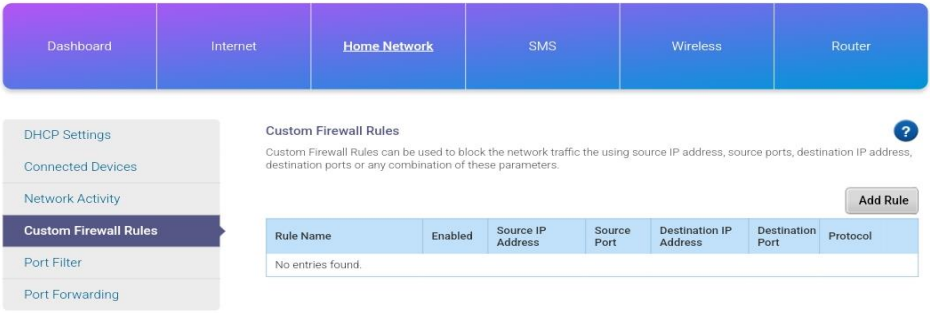
3.4.3 Network activity

The Network Activity screen displays a list of dialer logs and WIFI client connect and disconnect log.

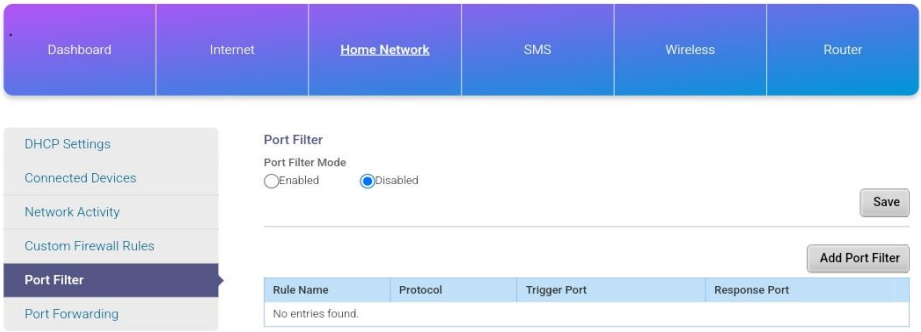


3.4.4 Custom firewall Rules

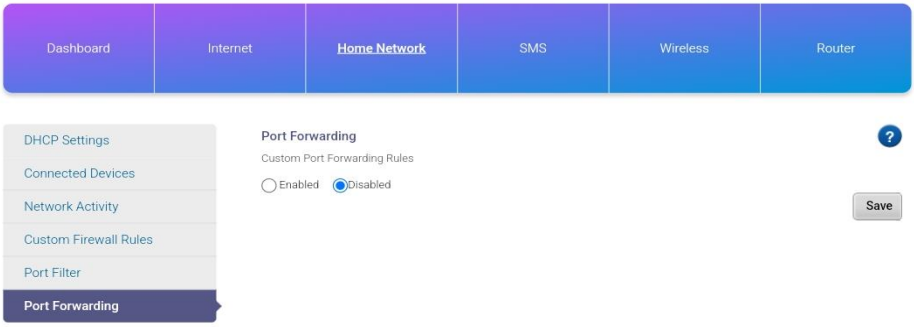
Custom Firewall Rules can be used to block the network traffic the using source IP address, source ports, destination IP address, destination ports or any combination of these parameters.



3.4.5 Port filter

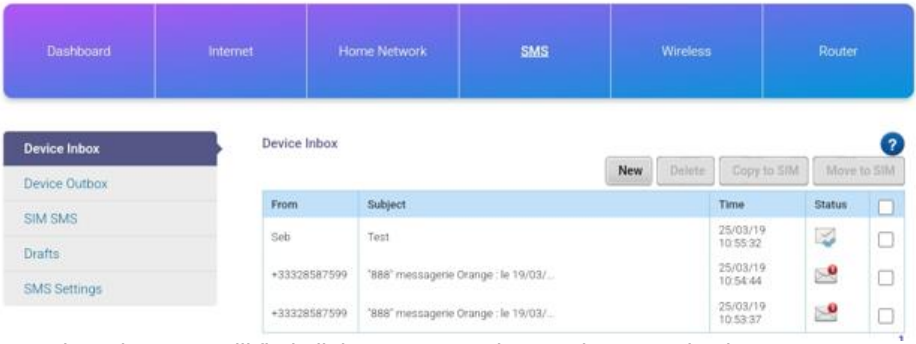


3.4.6 Port forwarding



3.5 SMS

3.5.1) Display the message received



In Device Inbox, you will find all the messages that you have received.

This icon  means that the message has not been read.

This icon  means that the message has not been read
Tap on status of your mail to view the message, you have the possibility to reply to your message then select **Send** to send your message.
Select **Save** to save your message in Drafts
Select **Cancel** to delete the message

3.5.2) Display the message sent

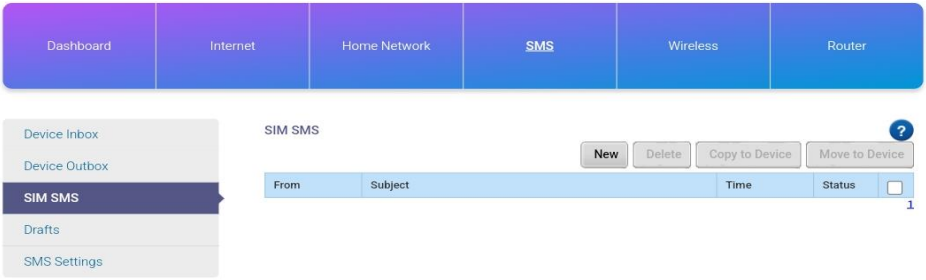


In Device Outbox, you will find all the messages that you have sent.

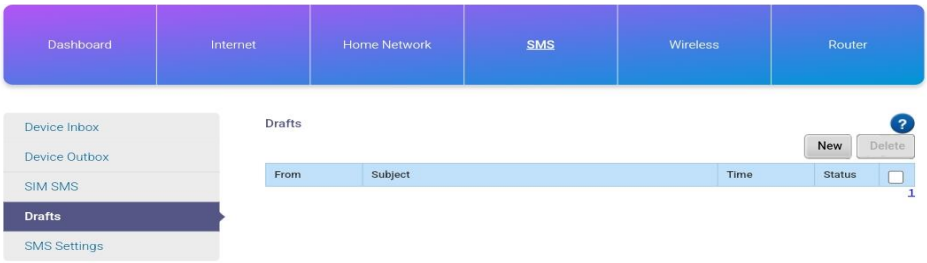
This icon  means that the message has been sent.
Tap on status of your mail to view the message, you have the possibility to reply to your message then select **Send** to send your message.
Select **Save** to save your message in Drafts
Select **Cancel** to delete the message

3.5.3) Create a new message

Press **New** then enter your contact phone number of your contact then write your message.
Select **Send** to send your message.



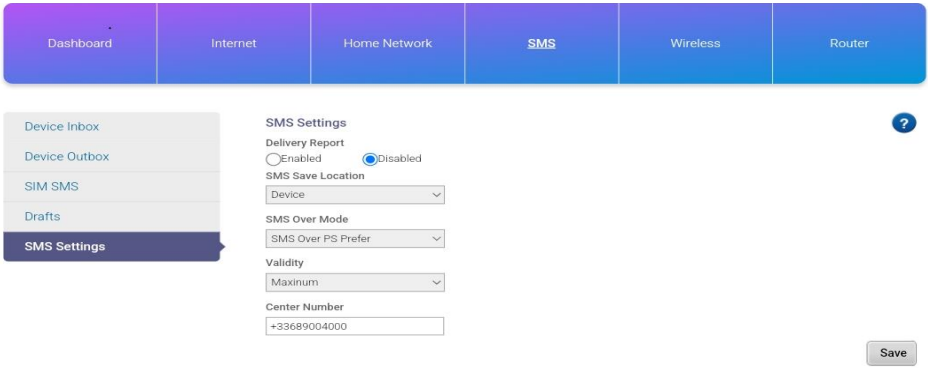
3.5.4) Display the Draft message



Under Drafts, you will find all the messages that you have in Draft status.

This icon  means that the message has not yet been sent.
Tap on status of your message to view the message, you have the possibility to reply or continue your message then select **send** to send your message.
Select **Save** to save your message in Drafts
Select **Cancel** to delete the message

3.5.5) Settings of the SMS



The SMS settings allow you to configure the message center. When the message center is activated, you can change the number of the message center via which messages will be sent. It is not recommended that you change this, as the wrong message center number will affect the CL2000's SMS function.

3.6 Wi-Fi Settings

The **Wireless** page allows you to set the Wi-Fi name and password, hidden Wi-Fi, encryption type, MAC filter modes and firewall.

3.6.1 Wireless setting

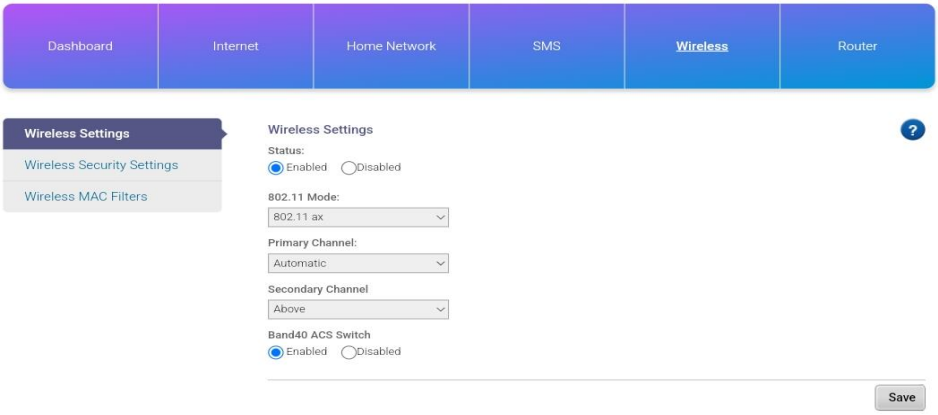
The wireless setting section allows user to define the status of the Wi-Fi, to select the 802.11 mode (type de Wi-Fi to use follow the places)

Primary channel allows you to set the channel of your Wi-Fi

Primary channels are the main 20 MHz frequency bands used for wireless communication, while secondary channels are additional 20 MHz bands paired with primary channels to expand bandwidth to 40 MHz. This expansion increases data throughput and network efficiency.

Band 40 is an LTE operating frequency Band. LTE is designed to work across a number of frequency bands – E-UTRA operating bands- currently ranging from 450 MHz up to 3.8GHz. The available bandwidths are also flexible starting with 1.4 MHz up to 20 MHz with Carrier Aggregation allowing use of wider multiples.

Note: Does not forget to press on save to validate your modification.

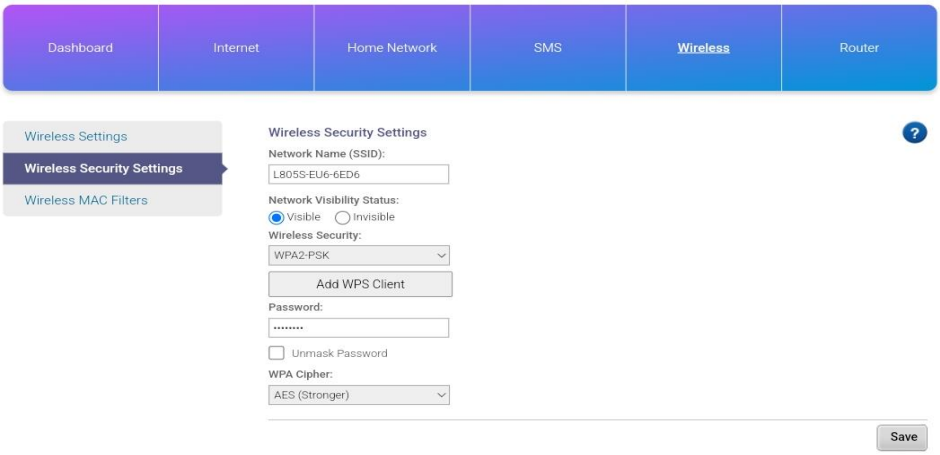


3.6.2 Wireless Security Settings

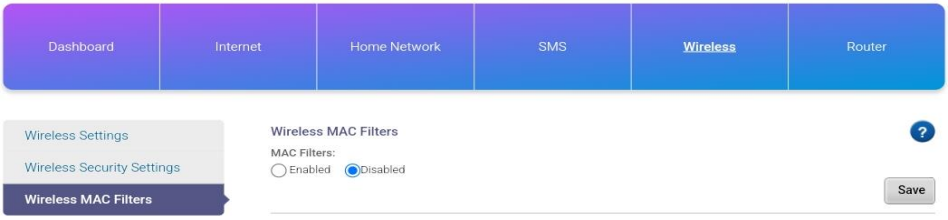
The Wireless Security section allows users to define the network as well as the security parameters for the wireless home network as required. The factory default setting for security is WPA-WPA2 Mixed mode that allows only the WPA/WPA2 devices to associate with the home router.

You can choose whether or not to make the Wifi visible.

Note: Does not forget to press on save to validate your modification.



3.6.3 Wireless MAC Filter



The MAC address (located under the CL2000) is used to uniquely identify a network device. MAC addresses are used in most network systems, whether wireless (Bluetooth, Wi-Fi, etc.) or wired (Ethernet, ATM, etc.).

The wireless MAC filters screen allows you to enable/disable MAC filters.

Also you can delete multiple MAC filters selectively from 'Allow' or from 'Deny' list.

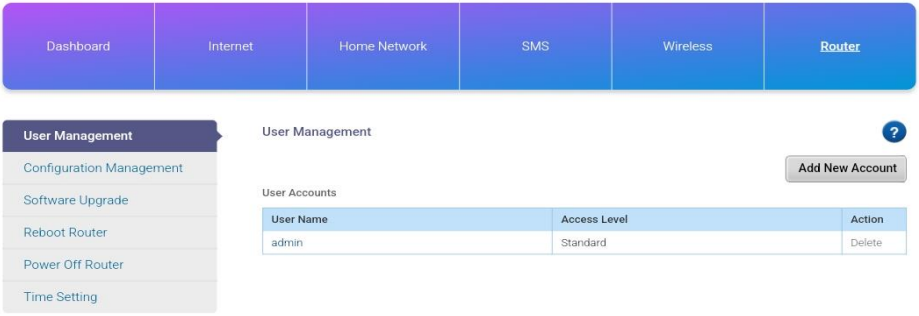
Note: doesn't forget to press on save to validate your modification.



3.7 Router Management

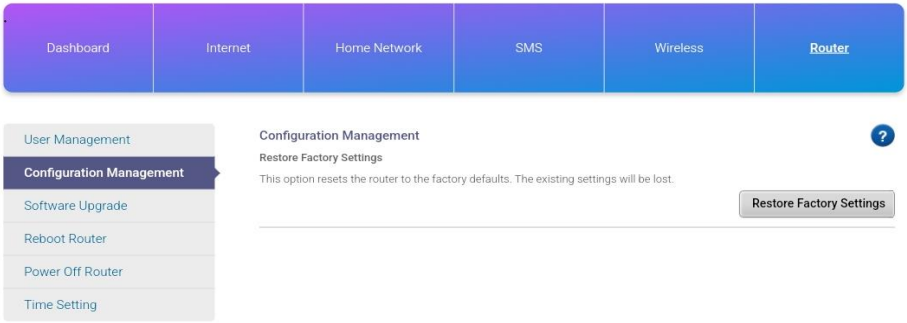
The **Router** page allows you to view account information, restore factory settings, and restart the device.

3.7.1 User Management



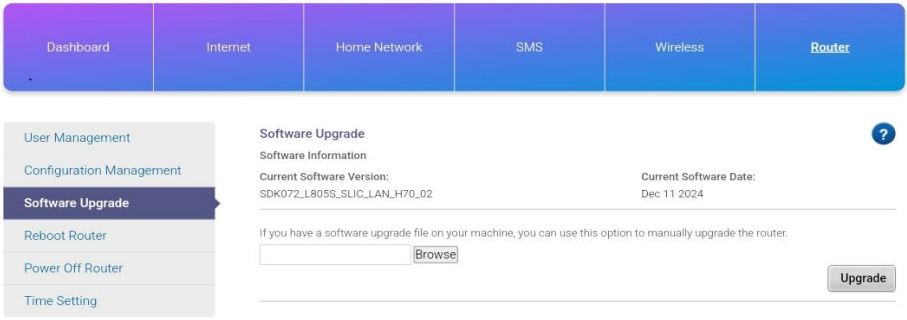
3.7.2 Configuration Management

In pressing **Restore factory settings**, you come back with the factory settings.



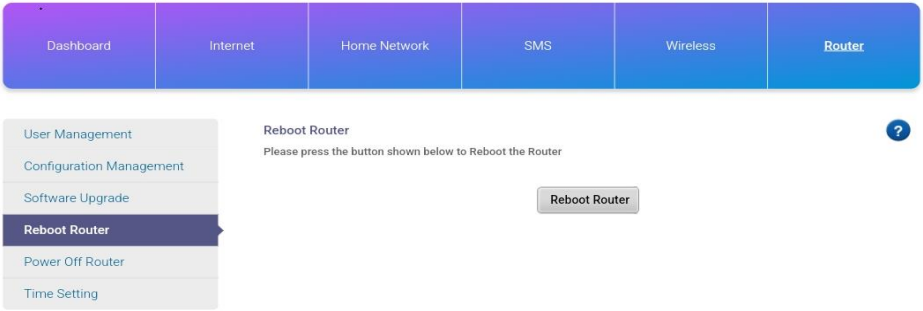
3.7.3 Software Mangement

In pressing **Update**, you can uploaded your CL2000 at the last version.



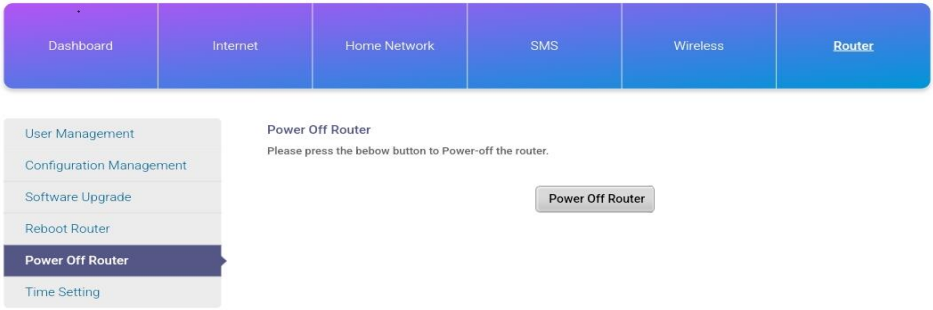
3.7.4 Reboot Router

In pressing the function **Reboot Router**, your CL2000 will restart



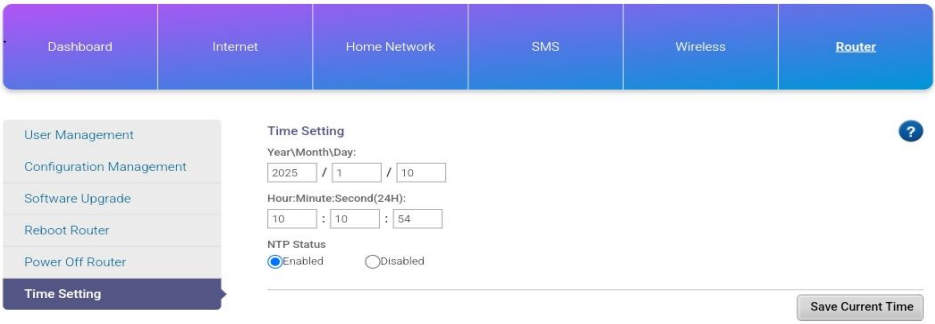
3.7.5 Power off Router

In pressing **Power off Router**, you can turns off your CL2000



3.7.6 Time Setting

Allows you to set the date & hour of your CL2000



3.8 Troubleshooting

Problem	
POWER light is OFF (Adapter not working).	• Adapter is not connected to a USB power supply. USB power supply switched off / not working.
Doesn't arrive to make or receive an call	Double check the SIM card and the quality of the network
Device (laptop, smartphone etc.) cannot connect to the Adapter via Wi-Fi.	• Verify that your SIM card is properly inserted Verify that your SIM card has sufficient credit Verify that you have selected the Adapter and that Wi-Fi is enabled on your device. Check the mains power adapter and cable are properly connected to the USB Type C port. • Verify that the Wi-Fi password is correct (underneath the Adapter).
How do I restore the Adapter to factory setting?	Push the button in the reset hole with a pin and hold for 3 seconds to restore to factory setting.
What do you do if you forget your Wi-Fi password?	Use the default password underneath the Adapter (if you have not changed the password). If you have changed the password refer to the main user guide.
If the problem persists	Download the full user guide from the Geemarc website, or contact your retailer after sales service.
Nothing works	Double check that you have deactivated the PIN code

NOTE: For the best use of this product, we strongly recommend you download the full user guide from our website at: https://geemarc.com/uk/user-guides then search CL2000/

GUARANTEE

From the moment your Geemarc CL2000 product is purchased, Geemarc guarantee it for the period of two years. During this time, all repairs or replacements (at our discretion) are free of charge. Should you experience a problem then contact our Helpline or visit our website at **www.geemarc.com**. The guarantee does not cover accidents, negligence or breakage to any parts. The product must not be tampered with or taken apart by anyone who is not an authorised Geemarc representative.

The Geemarc guarantee in no way limits your legal rights.

Important: YOUR RECEIPT IS PART OF YOUR GUARANTEE AND MUST BE RETAINED AND PRODUCED IN THE EVENT OF A WARRANTY CLAIM.

UKCA & CE DECLARATION

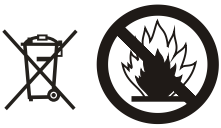
Geemarc Telecom SA hereby declares that this CL2000 is in compliance with the essential requirements and other relevant provisions of the Radio Equipment Directive 2014/53/UE.

The CE and UKCA declarations of conformity may be consulted at www.geemarc.com

SAR Test:
Head : 0.01 W/kg
Body : 1.647 W/kg
LIMBS : 2.977 W/kg

Technical specifications

BATTERY WARNINGS



- **DO NOT** attempt to dismantle.
- **DO NOT** dispose of in fire.
- **DO NOT** swallow.
- Keep away from children.
- **DO NOT** short-circuit the Battery Contact terminals.
- ***Caution:*** Risk of explosion if battery is replaced incorrectly or if the wrong type of battery is used. Dispose of used batteries according to the instructions.

WEEE (Waste Electrical and Electronic Equipment) directive ensures that electrical products at the end of their useful life are disposed and recycled in an appropriate way that protects the environment.



When this product is finished with, please do not put it in your domestic waste bin.

Please use one of the following disposal options:

- Deposit the product in an appropriate WEEE skip (contact your local authority to find out where these are).
- Or, hand the old product to the retailer. If you purchase a new one, they should accept it.

If you respect these instructions, you ensure human health and environmental protection.

TECHNICAL SPECIFICATIONS

Operating voltage	5V/ 1A/ 5W
Battery capacity	3.7V, 4000mAh Lithium Polymer Battery
Battery operating time	: Up to 10 hours or 40 hours in Stand by

For product support and help visit our website at **www.geemarc.com**

Parc de l'étoile, 2 rue Galilée, 59760 Grande-Synthe,
France
E-mail : **help@geemarc.com**
Telephone : **01707 387602**
lines are open from **10:00-12:00** then **13:00-14:30** Mon. to Fri.

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