

NF18MESH

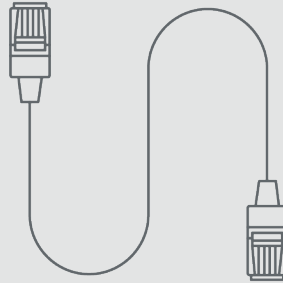
QUICK START GUIDE



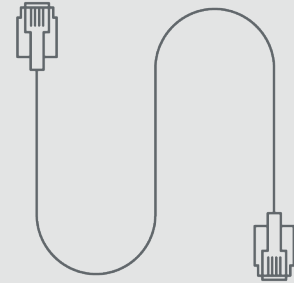
WHAT'S IN THE BOX



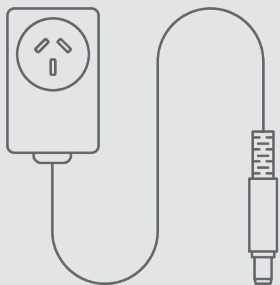
1 x NF18MESH
CloudMesh Gateway



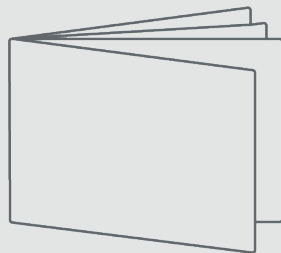
1 x RJ45
Ethernet Cable



1 x RJ11
Telephone Cable



1 x Power Supply
(12V/2A)



1 x Quick Start Guide



1 x Warranty Card
1 x End User Licence Agreement



SAFETY INFORMATION

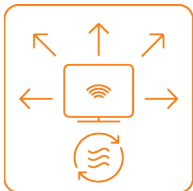
PLEASE READ BEFORE USE



LOCATION

The gateway is designed for indoor use only.

Place the gateway in a central location for the best WiFi performance.



AIRFLOW

Do not restrict airflow around the gateway.

The gateway is air cooled and may overheat where airflow has been restricted.

Always allow minimum clearance of 5cm around all sides and the top of the gateway.

The gateway may become warm during normal use. Do not cover, do not put in an enclosed space, do not put under or behind large items of furniture.



ENVIRONMENT

Do not place the gateway in direct sunlight or any hot areas.

Safe operating temperature of the gateway is between 0° and 40°C

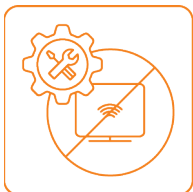
Do not allow the gateway to come in contact with any liquid or moisture.

Do not place the gateway in any wet or humid areas such as kitchen, bathroom or laundry rooms.



POWER SUPPLY

Always use only the power supply unit that came with the gateway.
You should immediately stop using the power supply unit if the cable or power supply unit is damaged.



SERVICE

There are no user-serviceable components in the gateway.
Do not attempt to disassemble, repair, or modify the gateway.



SMALL CHILDREN

Do not leave the gateway and its accessories within the reach of small children or allow them to play with it. The gateway contains small parts with sharp edges that may cause an injury or which could become detached and create a choking hazard.



RF EXPOSURE

The gateway contains a transmitter and a receiver. When it is on, it receives and transmits RF energy. The gateway conforms with the radio frequency (RF) exposure limits adopted by the Australian Communications and Media Authority Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2014, when used at a distance of not less than 20 cm from the body.



PRODUCT HANDLING

- Always treat the gateway and its accessories with care and keep it in a clean and dust-free place.
- Do not expose the gateway or its accessories to open flames.
- Do not drop, throw or try to bend the gateway or its accessories.
- Do not use harsh chemicals, cleaning solvents, or aerosols to clean the gateway or its accessories.
- Do not paint the gateway or its accessories.
- Please check local regulations for disposal of electronic products.
- Arrange power and Ethernet cables in a manner such that they are not likely to be stepped on or have items placed on them.

GETTING STARTED

PRE-CONFIGURED?

If you received the gateway from your service provider (ISP/RSP) please follow the instructions they have provided with the gateway.



BEFORE YOU BEGIN

Ensure that you have the following information from your service provider:

- How your **INTERNET SERVICE** will physically connect to the gateway, see below.
- The **Settings** specific to your type of service.

There are two ways to connect the gateway to the internet service:

Ethernet WAN

This is the most common access type in Australia and New Zealand and covers fixed line technologies such as **nbn™ FTTB, HFC, FTTC** as well as **nbn™ Fixed Wireless** and **Sky Master satellite** services.

This type of internet service uses the **blue WAN** port on the back of the gateway to connect to the dedicated connection box installed by your access network provider.

Refer to page 10

ADSL or VDSL

These access types are provided by **nbn™ FTTB, FTTN** or **ADSL/VDSL** over a traditional telephone line.

This connection uses the **grey DSL** port on the back of the gateway.

Refer to page 12

1

Connect the **Ethernet cable** supplied by your network carrier to the **blue WAN port** on the back of the **gateway** and then connect the other end to your network carrier's **upstream device**, for example an FTTP gateway or HFC cable modem.

2

Connect the included **power adapter** to the **power jack** of the **gateway** and then plug it into an available **wall socket**.

Press the **ON/OFF** button to power the gateway on. The **POWER** light initially will turn **red**.

When the **gateway** has finished starting up, the **POWER** light will turn **green**.

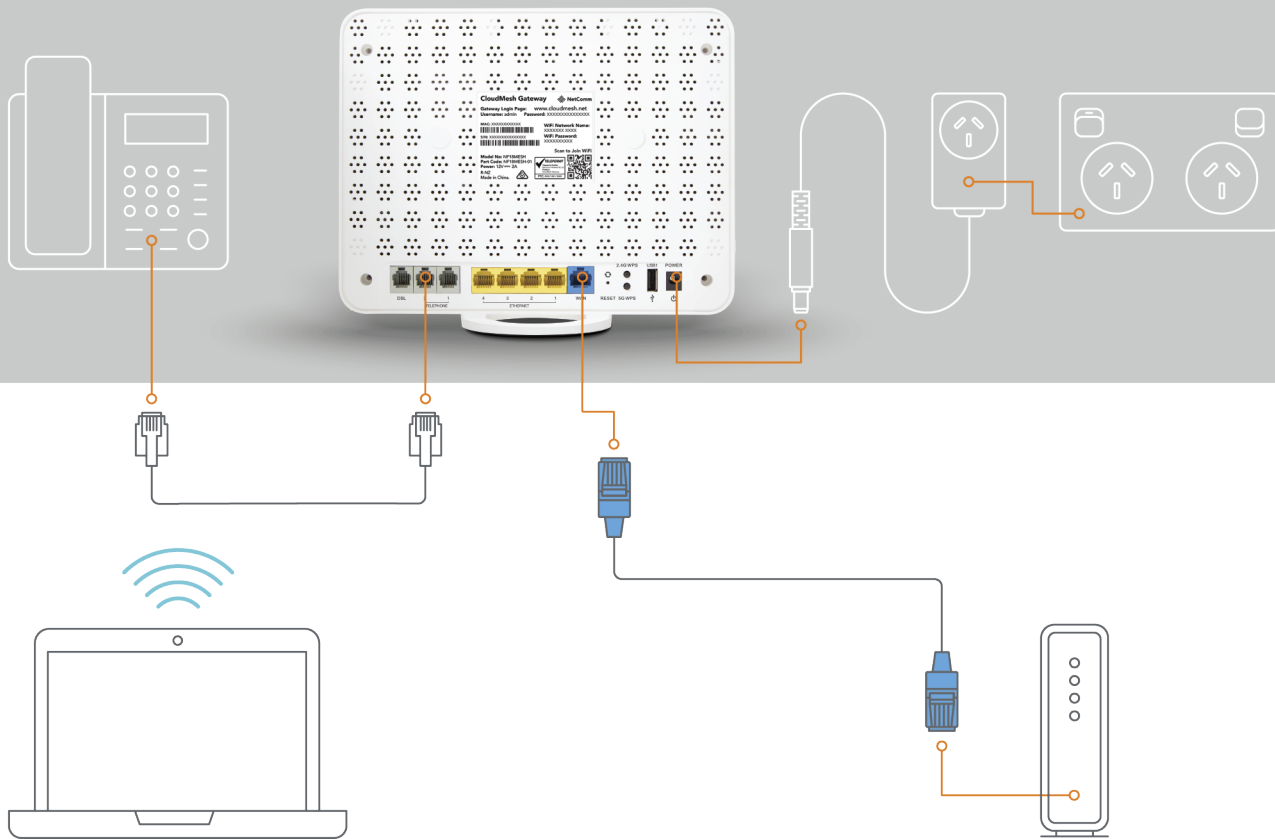
3

To connect using WiFi, use your computer to scan for wireless networks and select the **WiFi Network Name** and use the **WiFi Password** (both are printed on the back of the **gateway**) to log on.

Alternatively, connect the supplied **yellow RJ45 Ethernet cable** from your **computer** to one of the yellow **Ethernet ports (1-4)** on the back of the **gateway**.

Once the connection is established, go to the **LOG IN TO THE WEB INTERFACE** section of this guide on page 14.

INSTALLING THE GATEWAY VIA **ETHERNET** CONNECTIONS



[Go to page 14](#)

1

Connect the supplied **grey RJ11 cable** from the **grey DSL port** of the **gateway** to the **wall telephone socket**.

If you have a **VoIP service**, connect your **telephone handset** to one of the **grey TELEPHONE ports** on the back of the **gateway**.

2

Connect the included **power supply** to the **POWER** jack of the **gateway** and then plug it into an available wall socket.

Press the **ON/OFF** button to power the gateway on. The **POWER** light initially will turn **red**.

When the **gateway** has finished starting up, the **POWER** light will turn **green**.

3

To connect using WiFi, use your computer to scan for wireless networks, select the **WiFi Network Name** and use the **WiFi Password** (both are printed on the back of the **gateway**) to log on.

Alternatively, connect the supplied **yellow RJ45 Ethernet cable** from your **computer** to one of the **yellow ETHERNET** ports (**1-4**) on the back of the **gateway**.

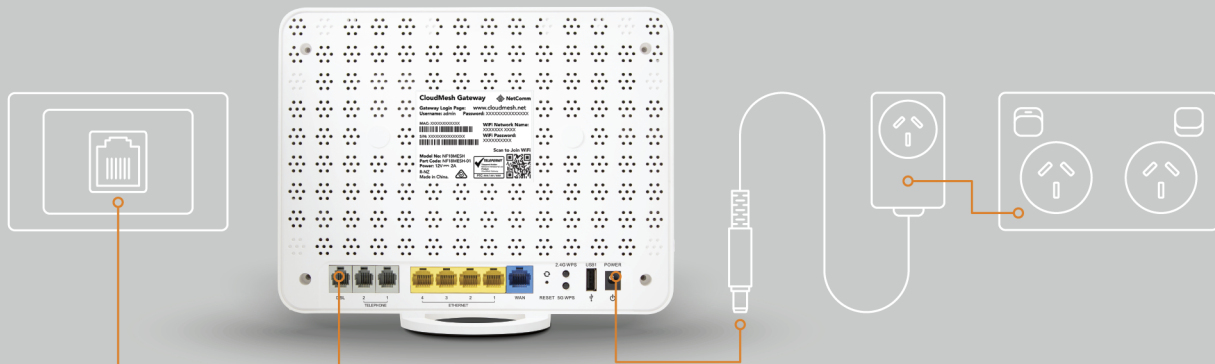
Once the connection is established, go to the **LOG IN TO THE WEB INTERFACE** section of this guide on page 14.

INSTALLING THE GATEWAY VIA **DSL** CONNECTIONS

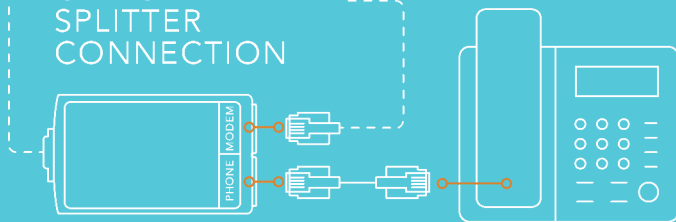
OPTIONAL CONNECTION WITH SPLITTER

If your telephone line delivers both your internet as well as traditional telephone service, you will require an **In-line DSL Splitter/Filter**.

In this case, your installation will follow the dotted lines on the diagram on the next page.



OPTIONAL SPLITTER CONNECTION



Go to page 14

LOGGING IN TO THE WEB INTERFACE



LOGIN TO YOUR DEVICE

Username

Password

Login >

1

Open a web browser (such as Mozilla Firefox® or Google Chrome™), type <http://cloudmesh.net> into the address bar and press **Enter**.
If you encounter difficulties connecting, type <http://192.168.20.1> and press **Enter**.

2

At the login screen, type **admin** into the **Username** field. In the **Password** field, enter the password printed on the gateway label (affixed to the back panel of the gateway) then click the **Login >** button.

Note – The graphics that appear in this section represent the display from a Windows browser. The same graphics will display differently when viewed on a hand held device.

USING THE FIRST-TIME SETUP WIZARD



THANK YOU FOR PURCHASING A NETCOMM WIRELESS GATEWAY.

This Wizard is designed to walk you through the basic information needed to set up your device.

It is highly recommended that you use this wizard, however if you would like to skip straight to the main menu, click on [Skip to main menu](#).

Would you like to use the first time Setup Wizard?

Yes, start the
setup wizard

No, skip to
main menu

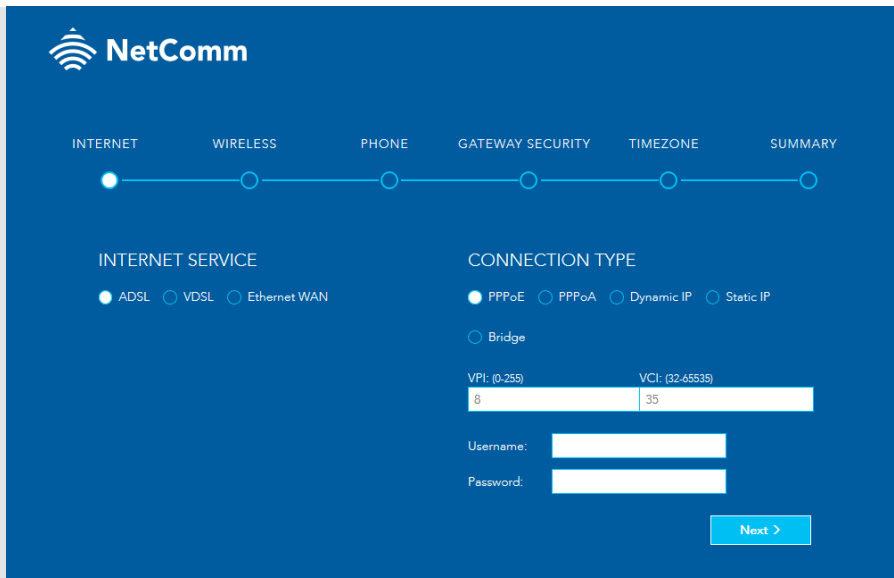
Upon first login, the gateway displays the first-time setup wizard. We recommend using the wizard to configure your internet connection. Click the **Yes, start the setup wizard** button.

NEXT STEPS

If your **INTERNET SERVICE** is:

- **ADSL** go to page 16
- **VDSL** go to page 20
- **Ethernet WAN** go to page 23

USING THE FIRST-TIME SETUP WIZARD **INTERNET** ADSL



The screenshot shows the NetComm first-time setup wizard. At the top is the NetComm logo. Below it is a progress bar with six steps: INTERNET, WIRELESS, PHONE, GATEWAY SECURITY, TIMEZONE, and SUMMARY. The INTERNET step is currently active, indicated by a white dot. Below the progress bar, there are two main sections: 'INTERNET SERVICE' and 'CONNECTION TYPE'. Under 'INTERNET SERVICE', there are three radio button options: ADSL (selected), VDSL, and Ethernet WAN. Under 'CONNECTION TYPE', there are four radio button options: PPPoE (selected), PPPoA, Dynamic IP, and Static IP. Below these options, there are two input fields for VPI and VCI. The VPI field contains the number 8, and the VCI field contains the number 35. Below these fields are two more input fields for Username and Password. At the bottom right of the form is a blue button labeled 'Next >'.

NetComm

INTERNET WIRELESS PHONE GATEWAY SECURITY TIMEZONE SUMMARY

INTERNET SERVICE

☒ ADSL ☐ VDSL ☐ Ethernet WAN

CONNECTION TYPE

☒ PPPoE ☐ PPPoA ☐ Dynamic IP ☐ Static IP

☐ Bridge

VPI: (0-255) VCI: (32-65535)

8 35

Username:

Password:

Next >

1

Under **INTERNET SERVICE**, select **ADSL**.

If you are unsure of your service type, contact your ISP.

2

Under **CONNECTION TYPE**, select the type of connection your ISP has configured for you, i.e. **PPPoE**, **PPPoA**, **Dynamic IP**, **Static IP** or **Bridge**.

3

Enter the details required for your specific **Connection Type**.

See pages 17-19 for details of the respective connection settings for each type.

CONNECTION TYPE

☒ PPPoE ☐ PPPoA ☐ Dynamic IP ☐ Static IP ☐ Bridge

VPI: (0-255) VCI: (32-65535)

Username:

Password:

Next >

OR

CONNECTION TYPE

☐ PPPoE ☒ PPPoA ☐ Dynamic IP ☐ Static IP ☐ Bridge

VPI: (0-255) VCI: (32-65535)

Username:

Password:

Next >

PPPoE

Enter the VPI and VCI values and the username and password required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

PPPoA

Enter the VPI and VCI values and the username and password required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

USING THE FIRST-TIME SETUP WIZARD **INTERNET ADSL**

OR

CONNECTION TYPE

☐ PPPoE ☐ PPPoA ☒ Dynamic IP ☐ Static IP ☐ Bridge

VPI: (0-255)

8

VCI: (32-65535)

35

Next >

OR

CONNECTION TYPE

☐ PPPoE ☐ PPPoA ☐ Dynamic IP ☒ Static IP ☐ Bridge

VPI: (0-255)

8

VCI: (32-65535)

35

WAN IP Address:

0.0.0.0

WAN Subnet Mask:

255.255.255.0

WAN Gateway IP Address:

0.0.0.0

Primary DNS server:

0.0.0.0

Secondary DNS server:

0.0.0.0

Next >

DYNAMIC IP

Enter the VPI and VCI values required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

STATIC IP

Enter the VPI and VCI values, WAN IP Address, WAN Subnet Mask, WAN Gateway IP Address, Primary DNS server and Secondary DNS server required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

OR

CONNECTION TYPE

☐ PPPoE ☐ PPPoA ☐ Dynamic IP ☐ Static IP ☒ Bridge

VPI: (0-255)

8

VCI: (32-65535)

35

Next >

BRIDGE

Enter the VPI and VCI values required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go DIRECTLY to the GATEWAY SECURITY settings, see page 28.

USING THE FIRST-TIME SETUP WIZARD **INTERNET** VDSL

The screenshot shows the NetComm first-time setup wizard. At the top, the NetComm logo is on the left, and a progress bar with six steps (INTERNET, WIRELESS, PHONE, GATEWAY SECURITY, TIMEZONE, SUMMARY) is in the center. The 'INTERNET' step is selected, indicated by a white dot. Below the progress bar, the 'INTERNET SERVICE' section has three radio buttons: 'ADSL' (unselected), 'VDSL' (selected), and 'Ethernet WAN' (unselected). The 'CONNECTION TYPE' section has four radio buttons: 'PPPoE' (selected), 'Dynamic IP' (unselected), 'Static IP' (unselected), and 'Bridge' (unselected). Below these are four input fields: 'Username:' (empty), 'Password:' (empty), '802.1P: (0-7)' (containing '-1'), and 'VLAN Tag: (0-4094)' (containing '-1'). A 'Next >' button is at the bottom right.

1

Under **Internet Service**, select **VDSL**.

If you are unsure of your service type, contact your ISP.

2

Under **Connection Type**, select the type of connection your ISP has configured for you, i.e. **PPPoE**, **Dynamic IP**, **Static IP** or **Bridge**.

3

Enter the details required for your specific **Connection Type**.

See pages 21-22 for details of the respective connection settings for each type.

CONNECTION TYPE

☒ PPPoE ☐ Dynamic IP ☐ Static IP ☐ Bridge

Username:

Password:

802.1P: (0-7)

VLAN Tag: (0-4094)

[Next >](#)

OR

CONNECTION TYPE

☐ PPPoE ☒ Dynamic IP ☐ Static IP ☐ Bridge

802.1P: (0-7)

VLAN Tag: (0-4094)

[Next >](#)

PPPoE

Enter the username and password, 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

DYNAMIC IP

Enter the 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

USING THE FIRST-TIME SETUP WIZARD **INTERNET VDSL**

OR

CONNECTION TYPE

☐ PPPoE ☐ Dynamic IP ☒ Static IP ☐ Bridge

WAN IP Address:

WAN Subnet Mask:

WAN Gateway IP Address:

Primary DNS server:

Secondary DNS server:

802.1P: (0-7)

VLAN Tag: (0-4094)

Next >

OR

CONNECTION TYPE

☐ PPPoE ☐ Dynamic IP ☐ Static IP ☒ Bridge

802.1P: (0-7)

VLAN Tag: (0-4094)

Next >

STATIC IP

Enter the WAN IP Address, WAN Subnet Mask, WAN Gateway IP Address, Primary DNS server and Secondary DNS server, 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26

BRIDGE

Enter the 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go directly to the GATEWAY SECURITY settings, see page 28.

USING THE FIRST-TIME SETUP WIZARD **ETHERNET WAN**

The screenshot shows the NetComm first-time setup wizard. At the top, the NetComm logo is displayed. Below it, a progress bar indicates the current step is 'INTERNET', with other steps being 'WIRELESS', 'PHONE', 'GATEWAY SECURITY', 'TIMEZONE', and 'SUMMARY'. The 'INTERNET SERVICE' section has three radio buttons: 'ADSL', 'VDSL', and 'Ethernet WAN', with 'Ethernet WAN' selected. The 'CONNECTION TYPE' section has four radio buttons: 'PPPoE', 'Dynamic IP', 'Static IP', and 'Bridge', with 'PPPoE' selected. Below these are input fields for 'Username:', 'Password:', '802.1P: (0-7)', and 'VLAN Tag: (0-4094)', each with a corresponding text box. A 'Next >' button is at the bottom right.

1

Under **Internet Service**, select **Ethernet WAN**.

If you are unsure of your service type, contact your ISP.

2

Under **Connection Type**, select the type of connection your ISP has configured for you, i.e. **PPPoE**, **Dynamic IP**, **Static IP** or **Bridge**.

3

Enter the details required for your specific **Connection Type**.

See pages 24-25 for details of the respective connection settings for each type.

USING THE FIRST-TIME SETUP WIZARD **ETHERNET WAN**

CONNECTION TYPE

☒ PPPoE ☐ Dynamic IP ☐ Static IP ☐ Bridge

Username:

Password:

802.1P: (0-7)

VLAN Tag: (0-4094)

Next >

OR

CONNECTION TYPE

☐ PPPoE ☒ Dynamic IP ☐ Static IP ☐ Bridge

802.1P: (0-7)

VLAN Tag: (0-4094)

Next >

PPPoE

Enter the username and password, 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

DYNAMIC IP

Enter the 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

OR

CONNECTION TYPE

☐ PPPoE ☐ Dynamic IP ☒ Static IP ☐ Bridge

WAN IP Address: 10.10.25.34

WAN Subnet Mask: 255.255.255.0

WAN Gateway IP Address: 10.10.25.1

Primary DNS server: 1.1.1.1

Secondary DNS server: 2.2.2.2

802.1P: (0-7) -1

VLAN Tag: (0-4094) -1

Next >

OR

CONNECTION TYPE

☐ PPPoE ☐ Dynamic IP ☐ Static IP ☒ Bridge

802.1P: (0-7) -1

VLAN Tag: (0-4094) -1

Next >

STATIC IP

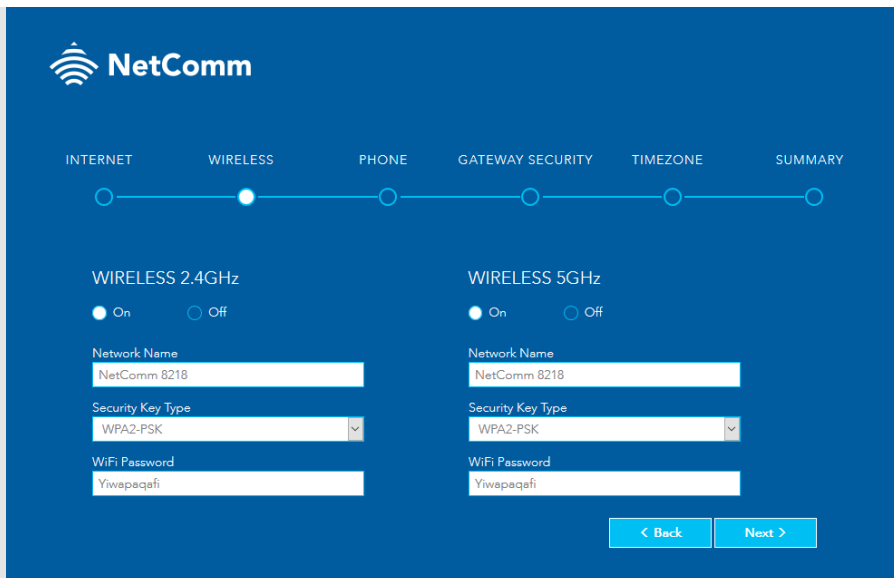
Enter the WAN IP Address, WAN Subnet Mask, WAN Gateway IP Address, Primary DNS server and Secondary DNS server, 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP.

When you have finished, click the **Next >** button to go to the WIRELESS settings, see page 26.

BRIDGE

Enter the 802.1P priority and VLAN Tag required by your ISP. If you are unsure of these, contact your ISP. When you have finished, click the **Next >** button to go directly to the GATEWAY SECURITY settings, see page 28.

USING THE FIRST-TIME SETUP WIZARD WIRELESS



The image shows the NetComm first-time setup wizard, specifically the WIRELESS tab. At the top, the NetComm logo is displayed. Below it, a progress bar shows six steps: INTERNET, WIRELESS (current), PHONE, GATEWAY SECURITY, TIMEZONE, and SUMMARY. The WIRELESS section is divided into two columns: WIRELESS 2.4GHz and WIRELESS 5GHz. Each column has an 'On' radio button selected and an 'Off' radio button. Below the radio buttons are three input fields: 'Network Name' (pre-filled with 'NetComm 8218'), 'Security Key Type' (a dropdown menu with 'WPA2-PSK' selected), and 'WiFi Password' (pre-filled with 'Yiwapeqafi'). At the bottom right, there are two buttons: '< Back' and 'Next >'. The background is a solid blue color.

NetComm

INTERNET WIRELESS PHONE GATEWAY SECURITY TIMEZONE SUMMARY

WIRELESS 2.4GHz

☒ On ☐ Off

Network Name
NetComm 8218

Security Key Type
WPA2-PSK

WiFi Password
Yiwapeqafi

WIRELESS 5GHz

☒ On ☐ Off

Network Name
NetComm 8218

Security Key Type
WPA2-PSK

WiFi Password
Yiwapeqafi

< Back Next >

FOR A SEAMLESS WIFI EXPERIENCE

Please keep the same Network Names and WiFi Passwords for both the 2.4Ghz and 5Ghz networks settings.

1

On this page you can configure the wireless networks of the gateway. Enter the **Network Name** (the name displayed on client devices when they scan for wireless networks), the **Security Key Type** (encryption type) and the **WiFi password**.

2

When you have finished, click the **Next >** button.

USING THE FIRST-TIME SETUP WIZARD PHONE

The image shows a NetComm first-time setup wizard interface. At the top, the NetComm logo is displayed. Below it, a progress bar shows six steps: INTERNET, WIRELESS, PHONE, GATEWAY SECURITY, TIMEZONE, and SUMMARY. The 'PHONE' step is currently selected, indicated by a white circle. Below the progress bar, a note states: "Note: Configuration of a telephone is optional. If you do not intend to use a telephone handset with your router, click the Next button below to skip this section." The main area is divided into two columns for 'PHONE LINE 1' and 'PHONE LINE 2'. Each column contains five input fields: 'Phone Number', 'SIP Username', 'SIP Password', 'SIP Proxy Server', and 'SIP Registrar Server'. There is also an optional field for 'SIP Outbound Proxy *' at the bottom of each column. At the bottom right, there are two buttons: '< Back' and 'Next >'. A footnote at the bottom center reads: '* Optional field, leave blank if you don't have this information.'

1

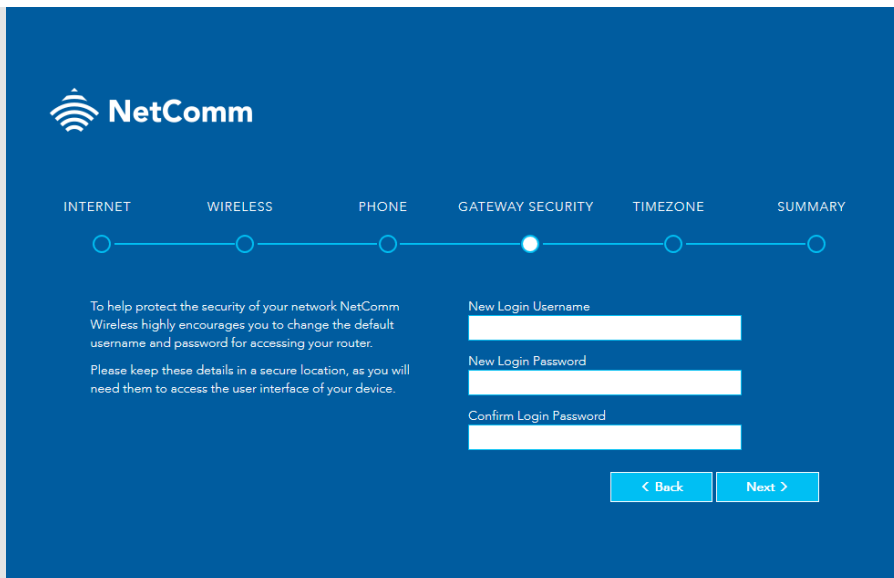
Configuration of a VoIP telephone is optional. If you do not intend to use a telephone handset with the gateway, click the **Next >** button to skip this section.

2

To configure a telephone, enter the details into the fields shown for each line you wish to use. If you do not know the values to enter, contact your ISP.

Click the **Next >** button when you have finished.

USING THE FIRST-TIME SETUP WIZARD **GATEWAY SECURITY**



The screenshot shows the NetComm Gateway Security Setup Wizard. At the top left is the NetComm logo. Below it is a progress bar with six steps: INTERNET, WIRELESS, PHONE, GATEWAY SECURITY (the current step, indicated by a white dot), TIMEZONE, and SUMMARY. The main content area has a blue background. On the left, there is instructional text. On the right, there are three input fields for 'New Login Username', 'New Login Password', and 'Confirm Login Password'. At the bottom right, there are two buttons: '< Back' and 'Next >'.

NetComm

INTERNET WIRELESS PHONE **GATEWAY SECURITY** TIMEZONE SUMMARY

To help protect the security of your network NetComm Wireless highly encourages you to change the default username and password for accessing your router.

Please keep these details in a secure location, as you will need them to access the user interface of your device.

New Login Username

New Login Password

Confirm Login Password

< Back Next >

1

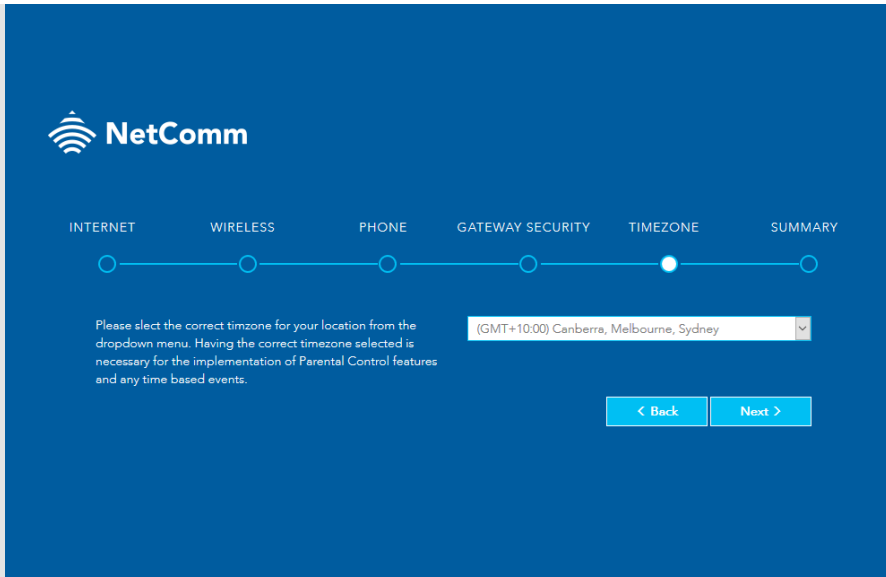
We highly recommend that you configure a new username and password to access the gateway.

2

Usernames and passwords are case sensitive, can be up to 16 characters in length and may comprise letters, special characters and numbers without spaces.

When you have finished entering the new credentials, click the **Next >** button.

USING THE FIRST-TIME SETUP WIZARD **TIMEZONE**



The screenshot shows the NetComm First-Time Setup Wizard at the TIMEZONE step. At the top left is the NetComm logo. Below it is a progress bar with six steps: INTERNET, WIRELESS, PHONE, GATEWAY SECURITY, TIMEZONE (highlighted with a white dot), and SUMMARY. Below the progress bar, there is a text instruction: "Please select the correct timzone for your location from the dropdown menu. Having the correct timezone selected is necessary for the implementation of Parental Control features and any time based events." To the right of this text is a dropdown menu showing "(GMT+10:00) Canberra, Melbourne, Sydney" with a downward arrow. At the bottom right are two buttons: "< Back" and "Next >".

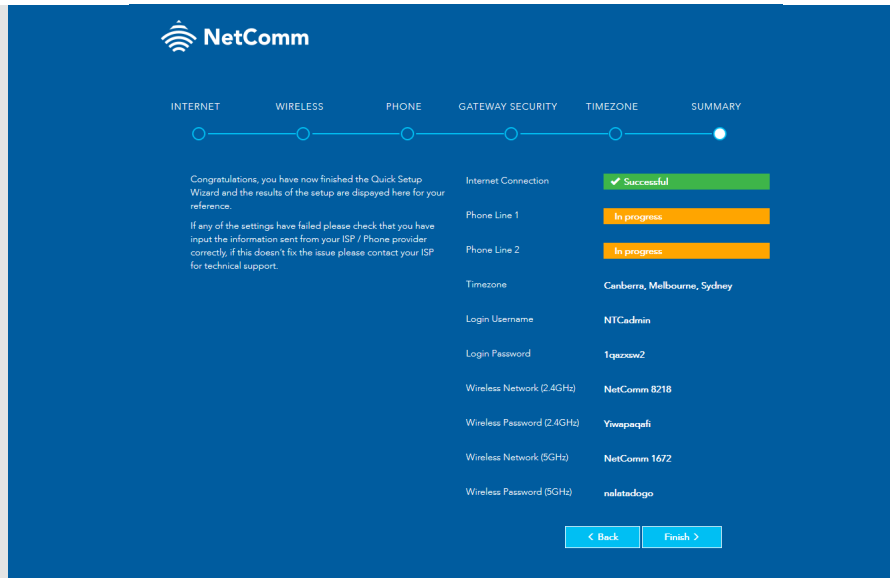
1

Specify the timezone where the gateway is located for correct time keeping and the log-keeping function of the gateway.

2

Click the **Next >** button when you have chosen the correct timezone.

USING THE FIRST-TIME SETUP WIZARD SUMMARY



1

The wizard displays a summary of the entered information. Check that the details are correct. If they are correct, click the **Finish >** button.

If they are not, click the **< Back** button to go back to the relevant screen to make changes.

2

When you click the **Finish >** button, the gateway returns you to the SUMMARY page.

CONNECTING WIRELESS DEVICES



On your WiFi device, scan for **wireless networks** and select the **network name** that you specified during the setup wizard. Enter the **WiFi password** that you specified during the setup wizard.

CONGRATULATIONS!

Your **CloudMesh Gateway** is now ready for use.

SOURCE CODE

GNU General Public License

This product includes software code that is subject to the GNU General Public License ("GPL") or GNU Lesser General Public License ("LGPL"). This code is subject to the copyrights of one or more authors and is distributed without any warranty.

A copy of this software can be obtained by contacting NetComm.



NetComm Wireless Limited was acquired by Casa Systems, Inc.
Casa Systems, the future of NetComm

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