NF18MESH QUICK START GUIDE

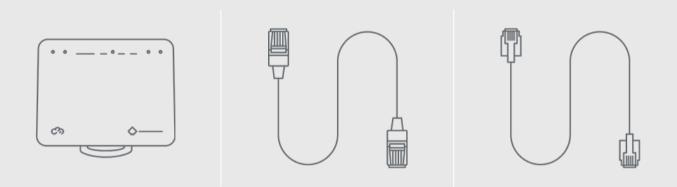


CLOUD MESH

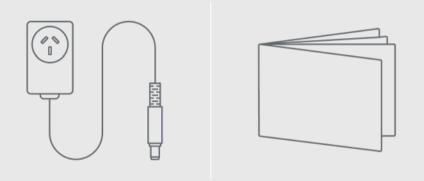




WHAT'S IN THE BOX



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

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.

$\overline{\nabla}$	\uparrow	7
\leftarrow		$] \rightarrow$
	Ś	

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.

	\sim
	<u> </u>
-	

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 your 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 your gateway, see below.
- The **Settings** specific to your type of service.

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

Ethernet WAN

This is the most common access type in Australia and New Zealand and covers fixed line techonologies such as **nbn™ FTTP**, **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.



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 will turn **red**.

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

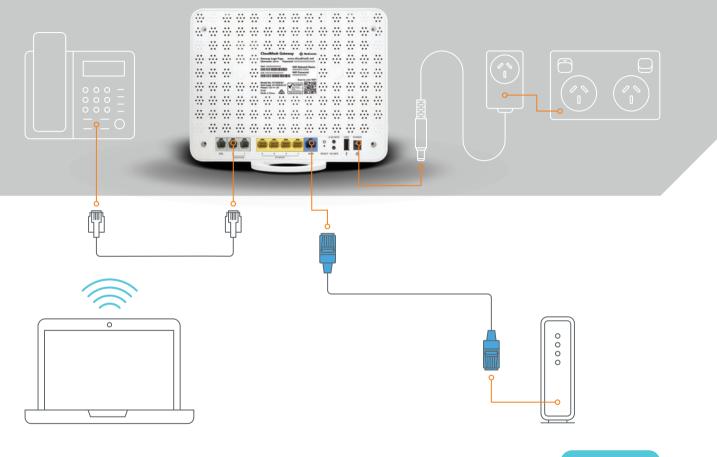


To connect using WiFi, use your computer to scan for wireless networks and select the **WiFi Network Name** and use the **WiFi Password** also printed on the back of the **gateway** to log on.

Alternatively, connect the supplied **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



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 will turn **red**.

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



To connect using WiFi, use your computer to scan for wireless networks, select the **WiFi Network Name** and use the **WiFi Password** also 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 **yellow ETHERNET** ports (1-4) on the back of the **gateway** to.

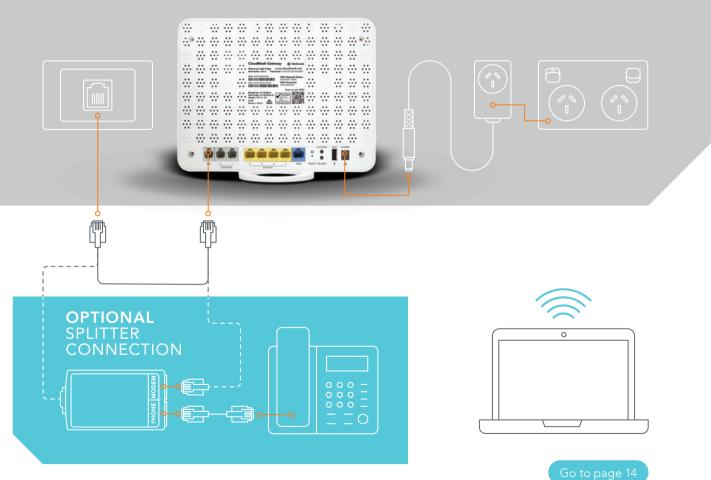
Once the connection is established, go to the **LOG IN** TO THE WEB INTERFACE section of this guide on page 14.

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.



LOGGING IN TO THE WEB INTERFACE

🚖 NetComm			
	LOGIN TO YOU Username Password	JR DEVICE	
		Login >	

1

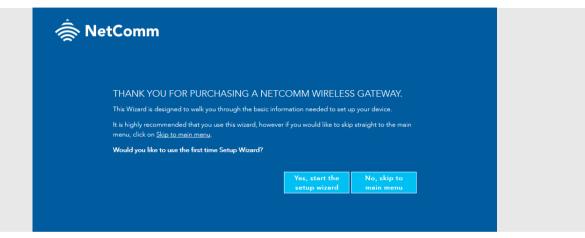
Open a web browser (such as Mozilla Firefox® or Google Chrome™), type **http://cloudmesh.net** into the address bar and press **Enter**. If you encounter difficulties connecting, type **http://192.168.20.1** and press **Enter**.

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



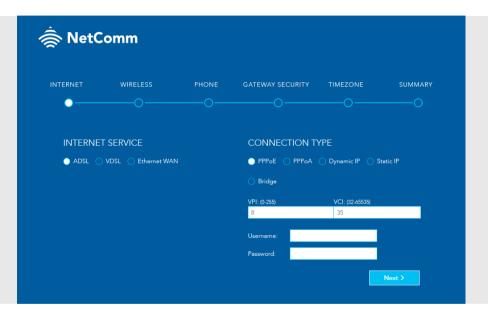
Upon first login, the gateway displays the first-time setup wizard. We recommend using the wizard to configure your internet connection. Click the **Yes, start the setup wizard** button.

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





Under INTERNET SERVICE, select ADSL.

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



Enter the details required for your specific **Connection Type**. See pages 17-19 for details of the respective connection settings for each type.

	TYPE	OR	CONNECTION	TYPE A O Dynamic IP O Static IP O Bridge
VPI: (0-255) 8	VCI: (32-65535) 35		VPI: (0-255) O	VCI: (32-65535) 100
Username:			Username:	
Password:			Password:	
	Next	>		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	nic IP 🔵 Static IP 🔵 Bridge	OR	CONNECTION TYP	E Dynamic IP 🔵 Static IP 🔵 Bridge	
	VPI: (0-255) 8	VCI: (32-65535) 35		VPI: (0-255) 8	VCI: (32-65535) 35	
	5			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	
				Secondery DNS server:	0.0.0.0	
		Next >			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		
	OPPOE OPPOA OD	namic IP 🔵 Static IP 🌔	Bridge
	VPI: (0-255)	VCI: (32-65535)	
	8	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





Under Internet Service, select VDSL.

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



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



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 O Dynamic IP O Static IP Bridge	CONNECTION TYPE
Username:	802.1P: (0-7) -1
Password:	VLAN Tag: (0-4094) -1
802.1P: (0-7) -1	
VLAN Tag: (0-4094) -1	
Next >	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

OPPPoE ODynamic IP	🔵 Static IP 🔵 Bridge		O PPPoE O Dyna	ımic IP 🔵 Stətic IP 🌔 Bridge	
WAN IP Address:	10.10.25.34		802.1P: (0-7)	-1	
WAN Subnet Mask:	255.255.255.0		VLAN Tag: (0-4094)	-1	
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

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

	omm				
TERNET	WIRELESS	PHONE	GATEWAY SECURITY	TIMEZONE	SUMMARY
•					
INTERNET	SERVICE		CONNECTION T	YPE	
	VDSL 🔵 Ethernet WAN		🔵 PPPoE 🔵 Dynamic	: IP 🔵 Static IP 🔵	Bridge
			Username:		
			Password:		
			802.1P: (0-7)	1	
			VLAN Tag: (0-4094)	1	
					Next >



Under Internet Service, select Ethernet WAN.

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



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



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

PPPoE Dynamic IP Static IP Bridge	OR		N TYPE amic IP 🔵 Static IP 🔵 Bridge	
Username:		802.1P: (0-7)	-1	
Password:		VLAN Tag: (0-4094)	-1	
802.1P: (0-7) -1				
VLAN Tag: (0-4094) -1				
Next >				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.

PPPoE Oynamic IP	🔵 Static IP 🔵 Bridge	O PPPoE O Dyne	amic IP 🔵 Static IP 🔵 Bridge	
VAN IP Address:	10.10.25.34	802.1P: (0-7)	-1	
VAN Subnet Mask:	255.255.255.0	VLAN Tag: (0-4094)	-1	
VAN Gateway IP Address:	10.10.25.1			
Primary DNS server:	1.1.1.1			
Secondary DNS server:	2.2.2.2			
302.1P: (0-7) -1				
/LAN Tag: (0-4094) -1				Nex

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

🚔 NetComm					FOR / WIFI
INTERNET WIRELESS	PHONE	GATEWAY SECURITY	TIMEZONE	SUMMARY	Please l Networ
0					WiFi Pa the 2.40
WIRELESS 2.4GHz		WIRELESS 5GHz			networ
🔵 On 💦 Off		🔵 On 🔷 Off			
Network Name NetComm 8218		Network Name NetComm 8218			
Security Key Type WPA2-PSK	~	Security Key Type WPA2-PSK	·	·	
WiFi Password Yiwapaqafi		WiFi Password Yiwapaqafi			
			< 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**.



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

USING THE FIRST-TIME SETUP WIZARD PHONE

Note: Configuration of a telephone is optional. If you do not intend to use a telephone handlet with your routes; click the	
button below to skip this section.	Next
PHONE LINE 1 PHONE LINE 2	
Phone Number Phone Number	
SIP Username SIP Username	
SIP Password SIP Password	
SIP Proxy Server SIP Proxy Server	
SIP Registrar Server SIP Registrar Server	

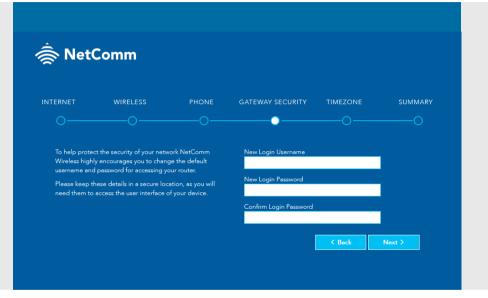


Configuration of a VoIP telephone is optional. If you do not intend to use a telephone handset with your gateway, click the **Next** > button to skip this section. 2

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



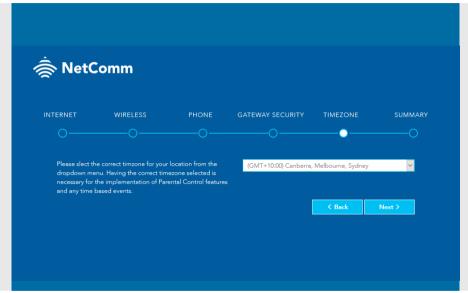
1

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





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



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

USING THE FIRST-TIME SETUP WIZARD SUMMARY

INTERNET				TIMEZONE	SUMMARY
					•
	ons, you have now finished he results of the setup are		✓ Successfi	4	
	settings have failed please	Phone Line 1	In progress	In progress.	
input the info	ormation sent from your IS tis doesn't fix the issue ple	Phone Line 2	In program.		
				Canberra, Mel	lbourne, Sydney
			Login Username	NTCedmin	
			Login Pessword	1qazaw/2	
			Wireless Network (2.4GHz)	NetComm 821	18
			Wireless Password (2.4GHz)	Yiwapaqafi	
			Wireless Network (SGHz)	NetComm 16	12
			Wireless Password (5GHz)	nalatadogo	



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



ANZ HEAD OFFICE SYDNEY

Casa Systems Inc

18-20 Orion Road, Lane Cove NSW 2066, Sydney Australia | +61 2 9424 2070 www.netcomm.com



CORPORATE HEADQUARTERS

Casa Systems Inc 100 Old River Road,

Andover, MA 01810 USA | +1 978 688 6706

www.casa-systems.com