

Install Guide

SMCD3USG

DOCSIS 3.0 Universal Services Gateway

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1IN7	FRODUCTION	1
1.1	Warnings	1
1.2	SITE PREPARATION	1
2HA	RDWARE OVERVIEW	2
2.1	LED Indicators	2
2.2	FRONT PANEL PUSH BUTTONS	4
2.2	.1 Finding a Misplaced DECT Handset	4
2.2	.2 Making a Wireless Connection	4
2.2	.3 Registering a DECT Handset	5
2.3	Rear Panel Ports	5
2.4	BOTTOM COMPARTMENTS	6
3HA	RDWARE INSTALLATION	7
3.1	Package Contents	7
3.2	Installing the Gateway	
3.2		
3.2	-	
3.2		
3.2	-	
3.2	.5 Powering on the Gateway	10
3.3	Wall-Mounting the Gateway (optional)	10
4C0	ONFIGURING YOUR COMPUTER FOR TCP/IP	13
4.1	Configuring Microsoft Windows 2000	13
4.2	Configuring Microsoft Windows XP	14
4.3	Configuring Microsoft Windows Vista	15
4.4	Configuring an Apple [®] Macintosh [®] Computer	17
5CO	ONFIGURING YOUR GATEWAY	18
5.1	DISABLING PROXY SETTINGS	18
5.2	DISABLING FIREWALL AND SECURITY SOFTWARE	19
5.3	Confirming Your Gateway's Link Status	19
5.4	Accessing the Gateway's Web Management	19
5.5	Configuring Your Gateway by Using Wizard	21
6RE	SETTING AND REBOOTING THE GATEWAY	23
6.1	Resetting/Rebooting by Using Reset Button	23

Contents

6.1.1	Rebooting the Gateway Only	23
6.1.2	Restoring Factory Defaults	24
6.2 F	Resetting/Rebooting by Using Web Management	24
APPEI	NDIX A. SPECIFICATIONS	25
APPEI	NDIX B. COMPLIANCES	28

1 Introduction

Congratulations on your purchase of the SMCD3USG Universal Services Gateway (hereinafter refers to as "Gateway"). The Gateway is a multimedia gateway based upon DOCSIS 3.0 technology delivering video, voice, data and enabling new home security and automation, DECT Voice and IPTB distribution services. It is the ideal all-in-one solution for the home or business environment. It is the ideal all-in-one solution for the home or business environment. It is the ideal all-in-one solution for the home or business environment. SMC is proud to provide you with a powerful, yet simple communication device for connecting your local area network (LAN) to the Internet.

1.1 Warnings

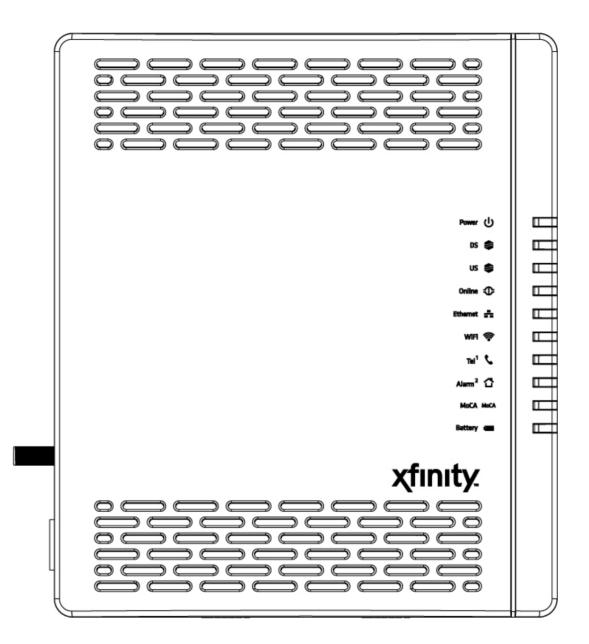
- Read all installation instructions and verify correct equipment installation before connecting the Gateway to its power source.
- Attach only approved power cords to the device.
- Verify that the power connector and socket are accessible at all times during the operation of the equipment.
- Do not install this equipment or work with its power circuits during thunderstorms or other weather conditions that could cause a power surge.
- Verify there is adequate ventilation around the device, and that ambient temperatures meet equipment operation specifications.

1.2 Site Preparation

- Consult your site survey and network analysis reports to determine specific equipment placement, power drops, and so on.
- Assign installation responsibility to the appropriate personnel.
- Identify and document where all installed components are located.
- Provide a sufficient number of power drops for your equipment.
- Ensure adequate, dust-free ventilation to all installed equipment.
- Identify and prepare Cable and Ethernet port connections.
- Verify that cable lengths are within the maximum allowable distances for optimal signal transmission.

2 Hardware Overview 2.1 LED Indicators

The front panel of your Gateway contains a set of light-emitting diode (LED) indicators. These LEDs show the status of your Gateway and simplify troubleshooting. There are also LEDs on the rear panel of the Gateway to show the LINK status. These LEDs indicate either GigE (Green) or 10/100 (Amber) connections to the individual Ethernet ports.

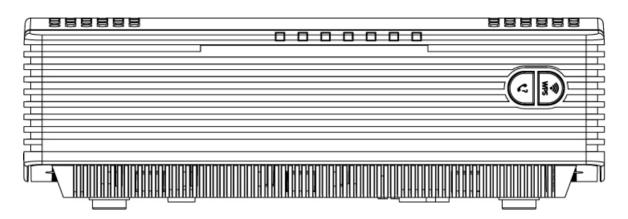


Symbol	LED	Description
(l)	Dowor	ON = power is supplied to the Gateway
U	Power	OFF = power is not supplied to the Gateway
\$	DS	Blinking = scanning for DS channel
~	00	ON = ranged on one or more channels
•		Blinking = ranging is in progress
\$	US	ON = ranging is complete on 1 channel only
		OFF = scanning for DS channel
-		Blinking = cable interface is acquiring IP, ToD, CM configuration
	Online	ON = Gateway is operational
		OFF = Gateway is offline
_		Blinking = data is transmitting
÷-	Ethernet	
		OFF = no Ethernet link detected
	WiFi	Blinking = data is transmitting
Ĩ		ON = Wi-Fi is enabled
		OFF = Wi-Fi is disabled
L.	Tel1	Blinking = phone set off-hook
•		ON = phone set on-hook
습	Alarm2	ON = system failure
	AldIIIIZ	OFF = normal operation
		Blinking = data is transmitting
MoCA	MoCA	ON = Gateway is operational
		OFF = no Cable/MoCA link detected
		Blinking = low battery power
	Battery	ON = high battery power when AC power failure
		OFF = no battery power or no battery when AC power on normal operation*
LEDs on		Blinking = data is transmitting
the rear	Link	Green ON = connected at 1 GMbps.
panel		Amber ON = connected at 10 or 100 Mbps
		OFF = no Ethernet link detected

*: During AC Power Fail with a bad battery, device operation may not be possible due to lack of battery power; all LEDs may be "OFF".

2.2 Front Panel Push Buttons

There are two push buttons on the front side of the Gateway. One is for DECT pager and the other is for DECT Register/WPS settings.



Symbol	Function	Туре	Description
. 7			Press this button to page the misplaced DECT handset. Or,
?	DECT Pager	Button	press this button continuously for more than ten seconds to
			register the DECT handset.
			Press this button to make a wireless connection between the
		Button	Gateway and the WPS-enabled client. Or, press this button to
	DECT Register/ WPS		register a DECT handset.
			Blinking = The Gateway is waiting for a WPS-enabled client to
WPS		LED	associated with. Or, the DECT handset is registering.
		LED	ON = The association between the Gateway and the
			WPS-enable client is done.

2.2.1 Finding a Misplaced DECT Handset

If the handset is misplaced, press this **DECT Pager** button on the front panel of the Gateway. All the handsets registered with that the Gateway will ring. When the handset is found, press this button again to stop ringing. To stop the ringing on an individual handset, press the **Phone Off** key or **End** softkey on the handset.

2.2.2 Making a Wireless Connection

Press **DECT Register/ WPS** button, this LED will blink for 120 seconds.

- If there is no WPS-enabled client associated with the Gateway within 120 seconds, the LED will turn OFF
- If there is a WPS-enabled client associated with the Gateway within 120 seconds, the LED will turn solid ON. After data exchanging completed, this LED turns OFF.

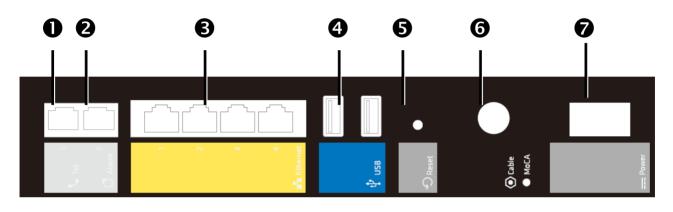
2.2.3 Registering a DECT Handset

There are two methods to register the DECT handset:

- Press **DECT Pager** button continuously for more than ten seconds, the Gateway will go into registration mode for you to register a DECT handset with that Gateway.
- Press the **DECT Register/ WPS** button, this LED will blink continuously to indicate the DECT handset is registering and turn OFF after the registration is done.

2.3 Rear Panel Ports

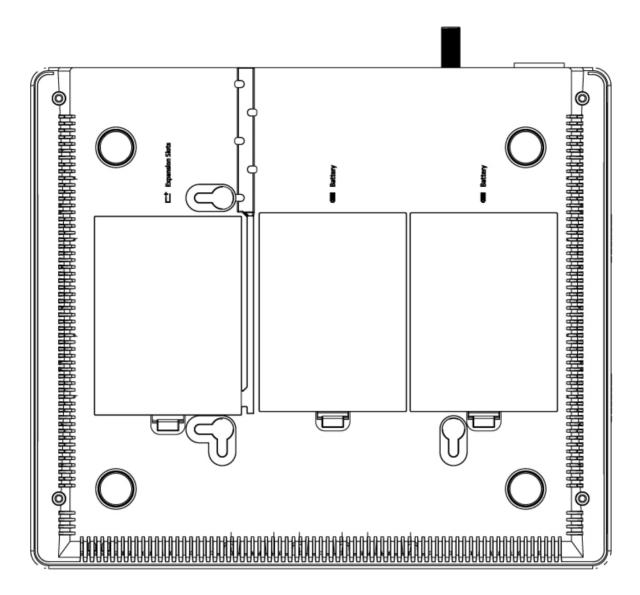
The rear panel of your SMCD3USG contains a reset button and the ports for attaching the supplied power adapter and making additional connections.



Item		Item	Description
0	٩	Tel	Connect the a telephone set to the Gateway
0	Alarm Connect the Gateway to the phone line outlet.		Connect the Gateway to the phone line outlet.
€	-	Ethernet 1-4	Four 10/100/1000 auto-sensing RJ-45 switch ports. Connect devices on your local area network such as a computer, hub, or switch to these ports.
4	Ŷ	USB	This Gateway provides four USB 2.0 high-speed ports. Two of them are on the rear panel and the other two are located at the Expansion Slot on the bottom of the Gateway.USB 2.0 high-speed ports for connecting to USB hard drives and peripherals.
6	Q	Reset	Use this button to reboot the Gateway or restore the default factory settings (see Chapter 6 "Resetting and Rebooting the Gateway"). This button is recessed to prevent accidental resets of your Gateway.
6		MoCA/Cable	Connect your coaxial cable line to this port.
0		Power	Connect the supplied power adapter to this port.

2.4 Bottom Compartments

There are three compartments on the bottom of the Gateway. One is expansion slot which containing two USB port and the other two are battery compartments.



3 Hardware Installation

An Gateway installation includes mounting the Gateway on a wall, connecting the Gateway to the network (LAN and WAN port connection) and applying power.

3.1 Package Contents

Unpack the items in your Gateway contents and confirm that no items are missing or damaged. Your package should include:

- One SMCD3USG Universal Services Gateway
- Wall-mount Kit (containing two screws and two plastic inserters)
- One Power Cord
- One Category 5E Ethernet cable
- One Installation Guide
- One CD that contains this User Manual
- One Diplexer

If any items are missing or damaged, please contact your service provider. Keep the carton, including the original packing material, in case you need to store the product or return it.

3.2 Installing the Gateway

3.2.1 Finding a Suitable Location

Your Gateway can be installed in any location with access to the cable network. All of the cables connect to the rear panel of the Gateway for better organization and utility. The LEDs on the front panel are easily visible to provide you with information about network activity and status.

For optimum performance, the location you choose should:

- Be close to a working AC power outlet.
- Allow sufficient air flow around the Gateway to keep the device as cool as possible.
- Not expose the Gateway to a dusty or wet environment.

3.2.2 Installing the Battery

The Gateway supports two 2600mA rechargeable Lithium-Ion batteries for power failure backup. It provides stand-by operation for eight-hour standby and five-hour talking mode in the event of the power failure.

Before you begin the installation, you must first install the batteries in your Gateway. The following description indicates you how to locate the batteries in the Gateway.

- 1. Place the Gateway on a flat surface and remove the battery cover (with a Battery icon on the side) on the bottom.
- Slide the battery into the battery compartment until it is fully seated. Repeat this step to install the second battery.
- 3. Make sure that the pull-tab on the battery is accessible and does not prevent the battery cover from closing properly.
- 4. Slide the battery cover upward and snap into place.





It may take up to 24 hours for each battery to charge fully when:

- The batteries are installed for the first time.
- The batteries are replaced.
- The batteries are fully discharged.



WARNING: There is danger of explosion if the battery is mishandled or incorrectly replaced. Replace only with the same type of battery. Dispose of the battery in accordance with local regulations and instructions from your service provider.

Do not disassemble it or attempt to recharge the battery outside the system. Do not crush, puncture, dispose of in a fire, short external contacts, or expose to water or other liquids.

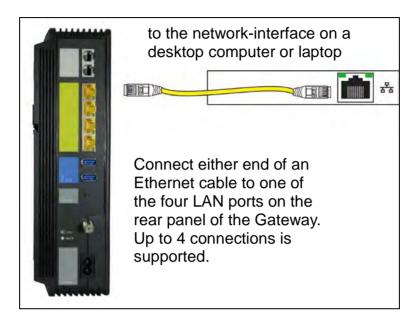


Note: The batteries begin to charge automatically as soon as you attach the modem to the AC electrical outlet. When you first plug in the Gateway, the Power LED illuminates. If you choose to operate the Gateway without a battery, you risk losing your telephone service during a power outage. Under normal circumstances, the battery should last for several years. The Battery LED turns off to indicate that the battery should be replaced soon. Contact your service provider to obtain replacement batteries and for disposal instructions.

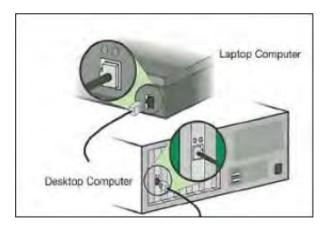
3.2.3 Connecting to the LAN

Using an Ethernet LAN cable, you can connect the Gateway to a desktop computer, notebook, hub or switch. Your Gateway supports auto-MDI/MDIX, so you can use either a standard straight-through or crossover Ethernet cable.

1. Connect either end of an Ethernet cable to one of the four LAN (Ethernet) ports on the rear panel of the Gateway.



2. Connect the other end of the cable to your computer's network-interface card (NIC) or to another network device.



3.2.4 Connecting the WAN

To connect your Gateway to a Wide Area Network (WAN) interface:

- 1. Connect a coaxial cable to the port labeled MoCA/Cable on the rear panel of the Gateway from a cable port in your home or office. Use only manufactured coaxial patch cables with F-type connectors at both ends for all connections.
- 2. Hand-tighten the connectors to secure the connection.
- 3. If the modem was not installed by your cable provider (ISP) or is replacing another cable modem, contact your cable operator to register the Gateway. If the modem is not registered with your cable operator, it will not be able to connect to the cable network system.

3.2.5 Powering on the Gateway

After making your LAN and WAN connections, use the following procedure to power on the Gateway:

- 1. Connect the supplied power cord to the port labeled Power on the rear panel of the Gateway.
- 2. Connect the other end of the power cord to a working power outlet. The Gateway powers on automatically. The Power LED on the front panel goes ON, and the other front panel LEDs show the Gateway's status.



WARNING: Only use the power cord supplied with the Gateway. Using a different power cord can damage your Gateway and void the warranty.

3.3 Wall-Mounting the Gateway (optional)

The Gateway can be also mounted on a wall. Wall mounting requires hanging the Gateway along its width (or length) using the three slots on the bottom of the unit and using the Gateway mounting template (on the next page) for the screws.

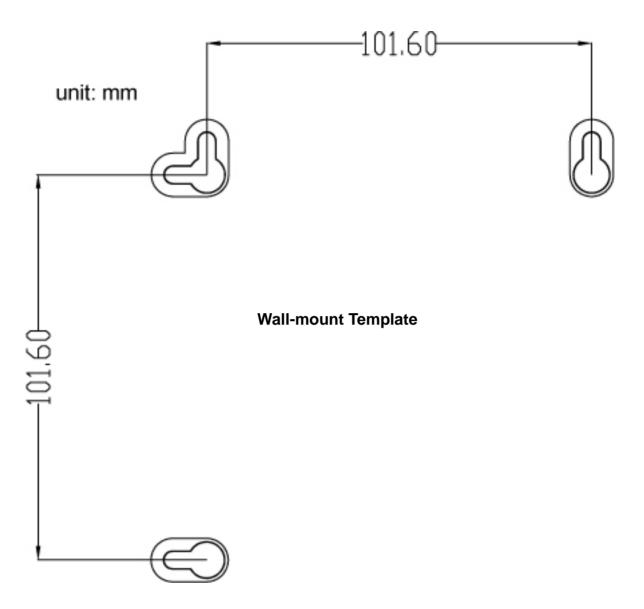


WARNING: The Gateway should be wall mounted to concrete or plaster-wall-board. Before drilling holes, check the structure for potential damage to water, gas or electric lines.

To mount your Gateway on the wall:

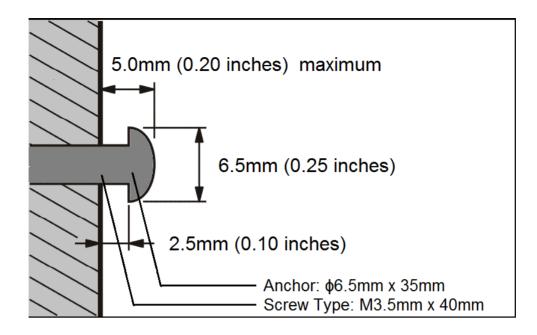
Print the 1:1 wall mounting template on next page of this guide.
 Be sure you print the template at 100% scale. Page scaling should be set to [None] (100%). Do not

reduce or enlarge the scale of the template.



- 2. Measure the gap between holes with a ruler. Dimensionally confirm the template by measuring each value for accuracy before drilling holes.
- 3. Use a center punch to mark the center of the holes.
- 4. Locate the marks on the wall for the mounting holes.
- 5. Drill holes to a depth and diameter appropriate for the size and type of hardware you have selected.
- 6. If necessary, install an anchor in each hole. Use M3.5 x 40 mm screws with a flat underside and maximum screw head diameter of 6.5 mm (0.25 inches) to mount the Gateway.

7. Using a screwdriver, turn each screw until the head protrudes from the wall. The figure below is an example for mounting Gateway on a concrete surface.



- There must be at least 2.5 mm (0.10 inches) between the wall and the underside of the screw head.
- The maximum distance from the wall to the top of the screw head is 5.0 mm (0.20 inches).
- 8. Place the Gateway so the keyholes are above the mounting screws.
- 9. Slide the Gateway down so it stops against the top of the keyhole opening.
- 10. Re-connect the coaxial cable and Ethernet cables. Re-plug the power cord into the Gateway and the electrical outlet.

4 Configuring Your Computer for TCP/IP

After you install your Gateway, configure the TCP/IP settings on a computer that will be used to configure your Gateway.

4.1 Configuring Microsoft Windows 2000

Use the following procedure to configure your computer if your computer has Microsoft Windows 2000 installed.

- 1. On the Windows taskbar, click Start, point to Settings, and then click Control Panel.
- 2. In the Control Panel window, double-click the **Network and Dial-up Connections** icon. If the Ethernet adapter in your computer is installed correctly, the **Local Area Connection** icon appears.
- 3. Double-click the **Local Area Connection** icon for the Ethernet adapter connected to the Gateway. The Local Area Connection Status dialog box appears.

Local Area Connect	tion Statu:	? ×
General		
- Connection		
Status:		Connected
Duration:		5 days 22:22:36
Speed:		100.0 Mbps
Activity	Sent — 🖳 -	- Received
Packets:	179,131	166,497
Properties	<u>D</u> isable	
		<u>C</u> lose

- 4. In the Local Area Connection Status dialog box, click the **Properties** button. The Local Area Connection Properties dialog box appears.
- 5. In the Local Area Connection Properties dialog box, verify that **Internet Protocol (TCP/IP)** is checked. Then select **Internet Protocol (TCP/IP)** and click the **Properties** button.
- 6. Click Obtain an IP address automatically to configure your computer for DHCP.
- 7. Click the **OK** button to save this change and close the Local Area Connection Properties dialog box.
- 8. Click **OK** button again to save these new changes.
- 9. Restart your computer.

4.2 Configuring Microsoft Windows XP

Use the following procedure to configure a computer running Microsoft Windows XP with the default interface. If you use the Classic interface, where the icons and menus resemble previous Windows versions, perform the procedure under "Configuring Microsoft Windows 2000".

- 1. On the Windows taskbar, click **Start**, click **Control Panel**, and then click **Network and Internet Connections**.
- 2. Click the Network Connections icon.
- 3. Click **Local Area Connection** for the Ethernet adapter connected to the Gateway. The Local Area Connection Status dialog box appears.
- 4. In the Local Area Connection Status dialog box, click the **Properties** button. The Local Area Connection **Properties** dialog box appears.

neral Support	
Connection	
Status:	Connected
Duration:	23:52:21
Speed:	100.0 Mbps
Signal Strength:	
Activity	- Received
Packets: 63,12	25 75.301
Properties Disable)

- In the Local Area Connection Properties dialog box, verify that Internet Protocol (TCP/IP) is checked. Then select Internet Protocol (TCP/IP) and click the Properties button. The Internet Protocol (TCP/IP) Properties dialog box appears.
- In the Internet Protocol (TCP/IP) Properties dialog box, click Obtain an IP address automatically to configure your computer for DHCP. Click the OK button to save this change and close the Internet Protocol (TCP/IP) Properties dialog box.
- 7. Click the **OK** button again to save your changes.
- 8. Restart your computer.

4.3 Configuring Microsoft Windows Vista

Use the following procedure to configure a computer running Microsoft Windows Vista with the default interface. If you use the Classic interface, where the icons and menus resemble previous Windows versions, perform the procedure under "Configuring Microsoft Windows 2000".

- 1. On the Windows taskbar, click Start, click Control Panel, and then select Network and Internet Icon.
- 2. Click View Networks Status and tasks and then click Management Networks Connections.
- 3. Right-click the Local Area Connection icon and click Properties.
- 4. Click Continue. The Local Area Connection Properties dialog box appears.
- In the Local Area Connection Properties dialog box, verify that Internet Protocol (TCP/IPv4) is checked. Then select Internet Protocol (TCP/IPv4) and click the Properties button. The Internet Protocol Version 4 Properties dialog box appears.

🔮 Broadcom Net	Xireme Gigabit Ethernet	
This cannection use	s the following items	Configure.
🗹 🕂 Internet Pro		
🗹 — Link-Layer 1	tood Veteron 4 (TCP/Pv Fopology Discovery Map Fopology Discovery Resp III	per I/O Driver
🗹 🗕 Link Layer 1	Copology Discovery Map	per I/0 Driver

6. In the Internet Protocol Version 4 Properties dialog box, click **Obtain an IP address automatically** to configure your computer for DHCP.

eneral	Alternate	Configuratio	0				
this cap	nget (Pisett ability, Othe appropriate	erwise, you	need to as				
۰Ď	btain an IP a	ddress auto	matically				
0	e the follow	ing IP addre	955:				
19 3	filless)						
mili	recmask						
Qela	nir der smak						
	btain DN5 se	rver addres	ss automat	caly			
() U:	e the follow	ing DNS ser	ver addres	5851			
<u>⊇/</u> ∈Ê	erked Ltv6 se	siver:					
<u>Q</u> ka	nale Weşa	ever.	_				
					-		
					(Adya	inced

- 7. Click the **OK** button to save your changes and close the dialog box.
- 8. Click the **OK** button again to save your changes.

Connection IPv4 Connectivity: IPv6 Connectivity: Media State: Duration:	Local Limited Enabled
IPv6 Connectivity: Media State: Durotion:	Limited Enabled
Media State: Duration:	Enabled
Duration:	
Concernation of the second s	
ALC: NOT THE OWNER OF THE OWNER O	00:18:59
Speed: Detais	100.0 Mbps
Sent —	- Received
Bytes: 41,224	33,200
Properties	nose

4.4 Configuring an Apple® Macintosh® Computer

The following procedure describes how to configure TCP/IP on an Apple Macintosh running Mac OS 10.2. If your Apple Macintosh is running Mac OS 7.x or later, the steps you perform and the screens you see may differ slightly from the following. However, you should still be able to use this procedure as a guide to configuring your Apple Macintosh for TCP/IP.

- 1. Pull down the Apple Menu, click System Preferences, and select Network.
- 2. Verify that NIC connected to the Gateway is selected in the **Show** field.
- 3. In the Configure field on the **TCP/IP** tab, select **Using DHCP**.
- 4. Click **Apply Now** to apply your settings and close the TCP/IP dialog box.

00		Networ	k.		
		Location: Automatic			
Show Bui	It-in Ether	net 🗧	1	_	
_	1	TEP/IP PPPoE App	oleTalk Pro	xies	
c	onfigure:	Using DHCP			
			DNS Servers		iOptionali
IP	Address	10.1.28.83 (Provided by DHCP Server)			
Sub	net Mask:	255.255.252.0			
	Router:	10.1.28.254	Search Dom	ains	(Optional)
DHCP	Client ID:				
		(Optional)	and and		1
Etherne	t Address	00:50:e4:00:2e:06		think.net	
Etherne	T ADDRESS	00.30.84.00.22.06	tar	Dillinkunet	

5 Configuring Your Gateway

After configuring your computer for TCP/IP using the procedure appropriate for your operating system, use that computer's Web browser to configure your Gateway.



Note: Before you configure your Gateway, observe the guidelines in the following sections.

5.1 Disabling Proxy Settings

Disable proxy settings in your Web browser. Otherwise, you will not be able to view the Gateway's Web-based configuration pages.

Disabling Proxy Settings in Internet Explorer

The following procedure describes how to disable proxy settings in Internet Explorer 5 and later.

- 1. Start Internet Explorer.
- 2. On your browser's Tool menu, click Options. The Internet Options dialog box appears.
- 3. In the Internet Options dialog box, click the **Connections** tab.
- 4. In the **Connections** tab, click the **LAN settings** button. The Local Area Network (LAN) Settings dialog box appears.
- 5. In the Local Area Network (LAN) Settings dialog box, uncheck all check boxes.
- 6. Click **OK** until the Internet Options window appears.
- 7. In the Internet Options window, under Temporary Internet Files, click Settings.
- 8. For the option Check for newer versions of stored pages, select Every time I visit the webpage.
- 9. Click **OK** until you close all open browser dialog boxes.

Disabling Proxy Settings in Firefox

The following procedure describes how to disable proxy settings in Firefox.

- 1. Start Firefox.
- 2. On your browser's **Tools** menu, click **Options**. The Options dialog box appears.
- 3. Click the Advanced tab.
- 4. In the Advanced tab, click the **Network** tab.
- 5. Click the **Settings** button.
- 6. Click **Direct connection to the Internet**.
- 7. Click the **OK** button to confirm this change.

Disabling Proxy Settings in Safari

The following procedure describes how to disable proxy settings in Safari.

- 1. Start Safari.
- 2. Click the Safari menu and select Preferences.
- 3. Click the **Advanced** tab.
- 4. In the Advanced tab, click the Change Settings button.
- 5. Choose your location from the Location list (this is generally Automatic).
- 6. Select your connection method. If using a wired connection, select **Built-in Ethernet**. For wireless, select **Airport**.
- 7. Click the **Proxies** tab.
- 8. Be sure each proxy in the list is unchecked.
- 9. Click Apply Now to finish.

5.2 Disabling Firewall and Security Software

Disable any firewall or security software that may be running on your computer. For more information, refer to the documentation for your firewall.

5.3 Confirming Your Gateway's Link Status

Confirm that the **Ethernet** LED on the Gateway front panel is ON. If the LED is OFF, replace the Ethernet cable connecting your computer and Gateway.

5.4 Accessing the Gateway's Web Management

After configuring your computer for TCP/IP and performing the pre-configuration guidelines on the previous page, you can now easily configure your Gateway from the convenient Web-based management interface. From your Web browser (Microsoft Internet Explorer or Netscape Navigator, versions 5.0 or later), you will log in to the interface to define system parameters, change password settings, view status windows to monitor network conditions, and control the Gateway and its ports.

To access the Gateway's web-based management screens, use the following procedure.

1. Launch a Web browser.

Note: Your computer does not have to be online to configure your Gateways.

2. In the browser address bar, type http://10.0.0.1 and press the Enter key.



3. The Login User Password screen appears. For example:

Login	
This is intro text. Please login to mana	ge your router.
Username:	
Password:	
	LOGIN

- 4. In the Login screen, enter the default username **mso** and the default password **msopassword**. Both the username and password are case sensitive.
- 5. Click the **LOGIN** button to access the Gateway. The **At a Glance** page appears, showing network status, connected devices, software version and recent network updates information about your Gateway.

xfinity		Logout • Change Password
- Gateway	USG Gateway > At a Glance	
At a Glance		
Comcast Account	TIP: Move the mouse over the devices.	more
▶ Connection		
Firewall	Home Network	Connected Devices
Software	S Ethernet	Home Computer
▶ Hardware	📀 Wi-Fi Home	😧 Ryan's Computer
Wizard	Firewall Security Level: Low	VIEW CONNECTED DEVICES
Connected Devices		
Parental Control	Software Versions	Recent Network Updates Today -
▶ Add-ins	eMTA & DOCSIS Software Version: 3.0.0alpha7	Alerts: (1)
Advanced	DECT Software Version: 1259.64	() 3 DoS attacks on the system.
▶ Troubleshooting	Advanced Services: USG-Adv-1.0	Warnings: (2)
	Packet Cable: 1.5	The firewall security level is currently set to Low
		Latest Firmware upgrade failed

5.5 Configuring Your Gateway by Using Wizard

This automatic setup wizard is made to provide easy access and setup to the Gateway. If you are new to this device, we strongly recommend you use of the Wizard. Launch the wizard and follow the step 1 and 2 to configure necessary settings.

Step 1:

- 1. In the **Wizard Step 1** page, enter a name for you network.
- 2. The first time you log in to the Web management interface, we recommend you change the Gateway's default password to protect it from being tampered with. To change password, type the current password, new password and confirm (re-type) the password.
- 3. Click **NEXT STEP** button to confirm your change and go to next step.

- Gateway	Gateway > Home Network Wizard - Step 1
At a Glance	
Comcast Account	Step 1 of 2
▶ Connection	To configure your home network, we need some basic information
Firewall	Continuous Marriero Librario Continuous
Software	Gateway Name: Home Gateway
▶ Hardware	Current Password:
Wizard	New Password:
Connected Devices	Re-enter New Password:
Parental Control	8-20 characters. Letter and numbers only. No spaces. Case sensitive.
▶ Add-ins	NEXT STEP
Advanced	

Option	Description
Current	Enter the current case-sensitive password. For security purposes, every typed
Password	character appears as a dot (•). The default password is password .
New Password	Enter the new case-sensitive password you want to use. A password can contain up to 32 alphanumeric characters. Spaces count as password characters. For security purposes, every typed character appears as a dot (•).
Re-enter New	Enter the same case-sensitive password you typed in the New Password field. For
Password	security purposes, every typed character appears as a dot (•).

Step 2:

- 4. In the **Wizard Step 2** page, enter a name for you wireless network.
- 5. Select the encryption method from the drop-down list.
- 6. Enter the Wi-Fi network password. The length of password must meet the requirement of its encryption method.
- 7. Click **FINISH** button to complete the basic configuration for your Gateway.

- Gateway	Gateway > Home Network Wizard - Step 2	
At a Glance		
Comcast Account	Step 2 of 2	
▶ Connection	Next, we need to configure your wireless network. Note that your network can be accessed by both the	
Firewall	2.4 Ghz (Wireless B, G, N) and 5 Ghz (Wireless A, N) compatible devices.	
Software	Enter WiFi Network Name: Home Gateway	
▶ Hardware	Encryption Method: Open (risky)	
Wizard	Enter Network Password:	
Parental Control	Open networks do not have a password.	
→ Add-ins	FINISH	

Option	Description
Enter WiFi	Sets a name for your wireless network.
Network Name	
Encryption	Selects an encryption method for your wireless network. Except Open method, you
Method	have to set the password for wireless network.
Enter Network Password	WEP 64: requires a 5 ASCII character or 10 hex character password.
	WEB 128: requires a 13 ASCII character or 16 hex character password.
	WPA-PSK (TKIP): requires an 8-63 ASCII character or a 64 hex character
	password.
	WPA-PSK (AES): requires an 8-63 ASCII character or a 64 hex character password.
	WPA2-PSK (TKIP): requires a 8-63 ASCII character password.
	WPA2-PSK (AES): requires a 8-63 ASCII character password.
	Note: The hex (hexadecimal) character means only A to F and 0 to 9
	(ABCDEF0123456789) characters can be used.

6 Resetting and Rebooting the Gateway

There are two ways to reset the Gateway to the factory default settings: one way is using the Reset button on the Gateway's rear panel and the other way is using the Web Management of the Gateway.

• Gateway	Troubleshooting > Reset / Reboot Gateway	
 Connected Devices Parental Control 	TIP: When all else fails you can reset/restore your gateway.	
▶ Add-ins	Restore / Reset Gateway	
► Advanced Troubleshooting	RESET Press "Reset" button to restart the gateway	
Logs	RESET WI-FI ROUTER Press "Reset Wi-Fi Router" to reset just the Wi-Fi Router.	
Diagnostic Tools Reset/Reboot Gatew iy	RESTORE WIFI SETTINGS Press "Restore WiFi Settings" to activate your Gateway Default Settings for WiFi only. Only your WiFi settings will be lost.	
Change Password	RESTORE FACTORY SETTINGS Press "Restore Factory Settings" to activate your Gateway Default Settings. All your previous settings will be lost.	

Option	Description	
Reset	Restart the Gateway and keep all your previous settings.	
Reset Wi-Fi Router	Reset only the Wi-Fi Router and keep all your previous settings.	
Restore Wi-Fi	Restore only the Wi-Fi settings of the Gateway to the default settings. Only your	
Settings	Wi-Fi settings will be lost.	
Restore Factory	Restore all the Gateway settings to factory default. All your pervious settings will	
Settings	be lost.	

Note: Resetting (rebooting) the Gateway keeps any customized overrides you made to the default settings while restoring factory settings of the Gateway loses all your previous settings.

6.1 Resetting/Rebooting by Using Reset Button

You can use the Reset button on the back panel to either power cycle the Gateway or reset it to its original factory default settings.

6.1.1 Rebooting the Gateway Only

To reboot the Gateway and keep any customized overrides you made to the default settings:

- 1. Leave power plugged into the Gateway.
- 2. Find the Reset button on the back panel, then press and hold it for about 10 seconds.
- 3. Release the Reset button.
- 4. Wait for the Gateway to reboot.

6.1.2 Restoring Factory Defaults

To reset the Gateway to its original factory default settings:

- 1. Leave power plugged into the Gateway.
- 2. Find the Reset button on the back panel, then press and hold it for at least 15 seconds.
- 3. Release the Reset button.
- 4. Wait for the Gateway to reboot with factory default settings.

6.2 Resetting/Rebooting by Using Web Management

You can also reset/reboot the Gateway by using Web Management of the Gateway. To reset/reboot the Gateway by using Reset/Reboot Gateway menu, you must first login to the Web Management of the Gateway and open access the **Reset/Reboot Gateway** page. To access the **Reset/Reboot Gateway** page, click **Troubleshooting** in the menu bar.

Appendix A. Specifications

Battery Backup

Two battery ports are provided for battery backup of lifeline services provided by DECT and the eMTA. With both batteries installed the USG can maintain up to 8 hours of standby time and 5 hours of talk time.

Software upgrade and Support

The USG supports 5 separately upgradeable functions including:

- DOCSIS / Packet Cable
- Advanced Services
- DECT
- Handset
- Cat-iq

Each is individually software upgradeable and configurable using SNMP or DOCSIS / eMTA configuration files.

System Management

- SSH
- Remote management
- TFTP
- SNMP v1,v2,v3
- CLI

Compatibility

- Platform independent works with PC,OSX, Linux, MAC, UNIX
- DOCSIS 1.0/1.1/2.0/3.0 compliant
- Packet Cable 1.5 compliant upgradeable to Packet Cable 2.0
- IEEE 802.3, 802.3u, 802.11ab
- SPI Firewall meet ICSA Guidelines
- Windows Vista-32 bit and 64 bit Certification may be required
- Windows 2000
- Windows XP
- MAC OS
- Windows 7: 32 and 64 bit

LEDs

- Power, Downstream, Upstream, Online, Ethernet, WiFi, Tel 1 Home Alarm, Tel 1, MoCA battery
- Rear panel LED for each of 4 Ethernet ports to indicate traffic

Network Interfaces

- 10/100/1000 Base-T-Ethernet
- 4 USB2.0 host port
- 2.4GHz and 5GHz Wireless 802 .11N MIMO

Ports

- 4 ports 10/100/1000 MDI/MDIX auto sensing switch
- IEEE 802.11n wireless interface 2.4GHz and 5GHz
- 4 ports USB 2.0 Host
- TR-68 coloring for 4 Ethernet port
- Cable Interface F type female 75ohm
- eMTA FXS port
- FXO Port for home alarm and will connect up to 10 DECT handsets

Channel Bonding

- Downstream: Up to 4 channels
- Upstream: Up to 4 channels

Software Features

- GUI display common troubleshooting information, modem status, and feature setup
- Full features CLI provides enhanced troubleshooting and setup
- DHCP server, Ipv6 support coexist Ipv4
- Downloadable configuration files allow for easy setup and installation
- Universal Plug and Play (UPnP) enabling any UPnP devices seamlessly
- Quality of Services (QoS) ensure high quality performance
- SAMBA for USB Host port connection of USB hard drives*
- GUI/SNMP/CLI addition to present PHY usage (multiple channels parameters)
- Port Forwarding, 64/256QAM auto detection, Independent resets for downstream and upstream blocks
- Fragmentation and concatenation enabling Quality of Server (QoS)
- Supports 64/128/256 bit RC4 authentication and encryption
- DLNA 1.5, UPnP

Network Protocols

- DHCP Client/Server, UDP
- DNS Relay, ToD Client, ARP, ICMP
- FTP/TFTP, SSH

Signal Level

-15dBmV to +15dBmV(Automatically Gain Controlled by CM)

Security

- · Password protected configuration access with multiple levels
- Stateful Packet Inspection (SPI) Firewall
- Network Address Translation (NAT)
- Application Level Gateways (ALG)
- Intrusion Detection
- Denial of Service (DoS) prevention
- Trojan Horse Prevention
- Smart Tracking
- Domain Validation
- Multiple User Profiles
- Dynamic Address-User Mapping
- Web based authentication
- Comprehensive Logging
- VPN Passthrough (IPSec, PPTP, L2TP)

- Content and Filtering Features
- DMZ

Receiver

- Demodulation: 64/256QAM, Max speed: 38Mbps (64QAM) / 43Mbps (256QAM) per channel
- DOCSIS 5120kbps/10Mbps (QPSK/16QAM) DOCSIS 41.4 Mbps (64QAM)/55.2Mbps (256QAM) bounding (DOCSIS) per channel, Frequency range 91 to 857 MHz ±30 kHz (Center), DOCSIS 108 to 862 MHz ±30 kHz (Edge) 50 MHz to 1002 MHz (DOCSIS)

External Power

• AC Input: 100V-240V (1.5), 50-60Hz

Dimension

• (L) 253 x (W) 220 x (H) 80 (mm)

Weight:

- 1 Kg (not including battery)
- 1.03 Kg (including two batteries)

Environmental

- Operating Temperature: 0°C ~ 40°C
- Storage Temperature: -10°C ~ 65°C
- Operating Humidity: 10% ~ 95% R.H. (Non-condensing)

Certifications

- Emission: FCC Part15 B/C/D/E
- Safety: CSA 22.2.60950-1 & UL60950-1
- MoCA Alliance, WiFi Alliance
- DLNA, UPnP, Cable Labs
- UL/cUL

Appendix B. Compliances

FCC Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against radio interference in a commercial environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instructions in this manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures are necessary to correct the interference. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device is can be operated in 5.15~5.25GHz frequency range, it is restricted in indoor environment only.

IMPORTANT NOTE:

FCC Radiation Exposure Statement

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Note to CATV System Installer - This reminder is provided to call the CATV systems installer's attention to Section 820-93 of the National Electric Code which provide guideline for proper grounding and, in particular, specify that the Coaxial cable shield shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



Technical Support

From USA and Canada (24 Hours a Day, 7 Days a Week) Toll Free: 800-SMC-4YOU / 800-762-4968 Fax: 949-679-1481

Internet

Email Address: techsupport@smc.com Driver Updates: http://www.smc.com/index.cfm?action=tech_support_drivers_downloads www.smc.com

English: Technical Support information available at www.smc.com English for Asia-Pacific: Technical Support information available at smc-asia.com Deutsch: Technischer Support und weitere information unter www.smc.com Español: En www.smc.com Ud. Podrá encontrar la información relative a servicios de soporte technico Français: Informations Support Technique sur www.smc.com Português: Informações sobre Suporte Técnico em www.smc.com Italiano: Le imformaxioni di supporto tecnico sono disponibili su www.smc.com Svenska: Information om Teknisk Support finns tilligängligt på www.smc.com Nederlands: Technische ondersteuningsinformatie beschikbaar op www.smc.com Polski: Informacje o wsparciu technicznym sa dostepne na www.smc.com Čeština: Technicka podpora je dostupna na www.smc.com Magyar: Műszaki tamogat informacio elerhető -on www.smc.com 簡體中文: 技術支援訊息可通過 www.smc-prc.com 查詢 繁體中文:產品技術支援與服務請上 www.smcnetworks.com.tw 查詢 ไทย: สามารถค้นหาข้อมูลสถานที่�ิติดต่อได้พี่ฒิw.smc-asia.com 한국어: 기술지원관련 정보는 www.smc-asia.com 을참고하시기 바랍니다