

JUPITER

HT1000 Satellite Modem User Guide

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Understanding safety alert messages

Safety alert messages call attention to potential safety hazards and tell you how to avoid them. These messages are identified by the signal words DANGER, WARNING, CAUTION, or NOTICE, as illustrated below. To avoid possible property damage, personal injury, or in some cases possible death, read and comply with all safety alert messages.

Messages concerning personal injury

The signal words DANGER, WARNING, and CAUTION indicate hazards that could result in personal injury or in some cases death, as explained below. Each of these signal words indicates the severity of the potential hazard.



DANGER indicates a potentially hazardous situation which, if not avoided, *will* result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, *could* result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, could result in *minor or moderate* injury.

Messages concerning property damage

A NOTICE concerns property damage only.

NOTICE

NOTICE is used for advisory messages concerning possible property damage, product damage or malfunction, data loss, or other unwanted results—but *not* personal injury.

Safety symbols

The generic safety alert symbol



calls attention to a potential personal injury hazard. It appears next to the DANGER, WARNING, and CAUTION signal words as part of the signal word label. Other symbols may appear next to DANGER, WARNING, or CAUTION to indicate a specific type of hazard (for example, fire or electric shock). If other hazard symbols are used in this document they are identified in this section.

Additional symbols

This document uses the following symbol to indicate a safety alert message that concerns a potential electric shock hazard. This document uses the following hazard symbols:



Indicates a safety message that concerns a potential electric shock hazard.

Chapter 1 Overview

This user guide describes the features and operation of the HT1000 satellite modem, which provides Internet access by satellite. This guide also gives pertinent reference information.

This guide applies to users in the United States and Canada. In this user guide satellite modem and modem both refer to the HT1000 satellite modem.

Description

The HT1000 satellite modem connects to a satellite network to provide Internet service. The modem has an Ethernet port so it can be connected to a computer or LAN. Figure 1 shows the front of the HT1000 satellite modem.

After your HT1000 satellite modem has been installed, you can use your computer's web browser to access the Internet or an intranet. The HT1000 supports local area networks (LANs) to extend Internet connectivity to multiple computers. This requires an Ethernet cable or a wireless or a wired connection to the LAN and proper configuration of the computer's operating system network properties.



Figure 1: HT1000 satellite modem

Operating environment

Observe the following requirements for the modem's operating environment.

Ventilation and heat sources

The modem must be adequately ventilated and kept away from sources of heat.

NOTICE

- Do not block any of the modem's ventilation openings.
- Leave 6 inches of space around the top and sides of the modem to ensure adequate ventilation and prevent overheating.
- Do not place the modem near a heat source such as direct sunlight, a radiator, heat register or vent, oven, stove, amplifier, or other apparatus that produces heat.

Operating position

Operate the HT1000 only in a vertical position, that is, resting on its built-in base as shown in Figure 1 on page 7.

Computer requirements

The computer that connects to the satellite modem should meet the minimum requirements specified by the computer operating system manufacturer and the following networking and browser requirements.

Networking requirements

- Ethernet port
- Ethernet cable (provided)
- Ethernet NIC, 10/100 Mbps, configured as follows:
 - Auto-negotiate
 - Dynamic host configuration protocol (DHCP) enabled (obtain an IP address automatically)

Internet browser

- Internet Explorer 7 or greater, Mozilla Firefox, Safari (for Windows and Mac)
- Browser settings:
 - HTTP 1.1 or greater enabled
 - Proxy settings disabled

Contact information

If you need operational, warranty, or repair support, who you should contact depends on where you purchased your satellite modem. You may be supported by

Hughes Customer Care or another service provider. Please contact your customer service representative in accordance with your service agreement.

For modems purchased from a retail channel or Hughes sales agent in the United States or Canada

If you purchased this product through a retail channel or Hughes sales agent, you have several support options. Please try these options in the order listed until you find the help you need.

Begin at the HughesNet Customer Care page:

- 1. Open a web browser on a computer connected to the satellite modem. Enter the web address www.my.hughesnet.com.
- 2. Click the HughesNet Customer Care link.

The HughesNet Customer Care page opens. Options 1, 2, and 3 below are available on this page:

- 1. Search our Knowledge Base.
 - a. In the Self help section, click Knowledge Base Search.
 - b. Follow the on-screen instructions to find the information you need.
- 2. Email a Customer Care representative.
 - a. In the Contact Hughes section, click Email.
 - b. Complete the email form.
 - c. Click Email Us!
- 3. Chat with a Customer Care representative.
 - a. In the Contact Hughes section, click Chat.
 - b. Complete the chat form.
 - c. Click Chat with Us!
- 4. Call a Customer Care representative.

If none of these options helps you, call Hughes Customer Care at 1 (866) 347-3292.

For modems purchased from a value-added reseller (VAR) in the United States or Canada:

If you purchased this product from a Hughes VAR, do not contact Hughes. Contact your VAR for technical support according to the procedure supplied by them. They are trained to help you with any technical problem.

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Chapter 2 System Control Center

The System Control Center is a set of screens and links you can use to monitor your broadband service and troubleshoot the satellite modem in the event of a problem. The System Control Center provides access to system status, configuration information, and online documentation. You access the System Control Center through a web browser on a computer connected to the satellite modem. Use the System Control Center to find system information for configuring networks or to check system performance if the satellite modem does not seem to be functioning properly.

Accessing the System Control Center

To access the System Control Center, a computer with a web browser installed must be connected to the satellite modem's LAN port. The System Control Center web site is hosted on the modem, consequently the computer does not have to be connected to the Internet.

To open the System Control Center, double-click the System Control Center shortcut on your computer desktop, or follow these steps:

- 1. Open a web browser such as Internet Explorer.
- 2. In the browser address bar, type www.systemcontrolcenter.com and press Enter.

System Control Center home page

The System Control Center home page contains numerous links to satellite modem features and important information regarding operation of your satellite modem.

Figure 2 shows the System Control Center home page before service activation. Notice that the System Status indicator is red which means that system requires

attention. Refer to *Indicator links* on page 13 for more additional information about indicator links.



Figure 2: System Control Center home page before activation

Figure 3 shows the System Control Center home page after service activation. The System Status indicator is green which means that all functions are working within normal parameters.

	System Status System Information
HughesNet	I:S/vsetSAN3 ESN:2107403 Diagnostic Code:0000-0000-0000
HT1000 S Your built-in diagr	ystem Control Center ostic system for viewing performance statistics, getting help and configuring settings.
Home HELP	Download Allowance Status
Connectivity Test Wekome to Hugh	estlet Plan Allowance: 23392 MB
Built in Self Test Additional Premiur	n Services Allowance Remaining: 3381 MB
O Help	Alowance Kemaning: 14% Time Until Alowance Refit: 16:31
	gzots Huchelis
1	

Figure 3: System Control Center home page after activation

Indicator links

At the top of each System Control Center page are two indicators (Figure 4) followed by a link.

- The System Status link
- The System Information link.



Figure 4: Indicators and links

Each link navigates to a page in the System Control Center. See Table 1. The System Status link navigates to the System Status page. The System Status indicator also changes color to indicate the operational status of the satellite router. Figure 5 explains the colors and their meanings for the System Status indicator.

A red indicator means a problem the system has detected that needs attention.
An orange indicator means the system is in FAP condition.
A yellow indicator means the system is operational in degraded condition.
A green indicator means that all functions are operating within normal parameters.

Figure 5: System Status indicator colors and meanings

Note: Hughes maintains a Fair Access Policy (FAP). This policy establishes an equitable balance in Internet access for all HughesNet subscribers. Hughes assigns a Download Allowance to each service plan that limits the amount of data that may be continuously downloaded within specified time periods. Subscribers who exceed this limit will experience a temporary reduction of speed.

The table below identifies the destination page for each link.

Indicator	Destination	Description	
System Status	System Status page	Gives important information about the satellite router's operational status.	
System Information	System Information page	General information screen that identifies software and hardware versions and other important satellite connection information.	

Table 1:	Destination	pages
----------	-------------	-------

Parameters bar

The parameters bar appears at the top of all System Control Center screens as shown in Figure 6. This bar displays three important fields of information:

- SAN Site account number (SAN)
- ESN Electronic Serial Number
- Diagnostic Code Used to troubleshoot problems when calling customer care.

 System Status	System Information

Figure 6: Parameters bar

Center panel text links and information

The System Control Center home page center panel includes the following text links and informational panels once service is activated.:

HELP	Download Allowance Status
Velcome to HughesNet	Plan Allowance: N/A
Additional Premium Services	Allowance Remaining: N/A
Customer Care	Allowance Remaining: N/A
	Refill (days, hr:min): N/A

Figure 7: System Control Center Help panel

HELP area

<u>Welcome to HughesNet</u> - Gives you access to the HughesNet Web Portal, which contains a variety of useful tools, resources, and information. Access to the HughesNet portal is determined by your service plan.

<u>Additional Premium Services</u> - Gives you access to a additional services and self-help information.

<u>Customer Care</u> - Navigates to the Customer Care web page where you manage the various facets of your account.

Download Allowance Status

The Status Meter monitors your Download Allowance and Download Bank. The Download Allowance is the amount of data which can be downloaded without restriction.

Side panel

The following links appear on the left panel of each System Control Center screen as shown in Figure 8.

F	lughesNet
0	Home
0	Connectivity Test
0	Built in Self Test
0	Help

Figure 8: Side panel links

Home - Opens the System Control Center home page.

<u>Connectivity Test</u> - Opens the Connectivity Test page, which you can use to test the connection between the satellite modem and the NOC.

Built in Self Test - Checks the internal operation of the modem.

<u>Help</u> - Opens the Help page. This page includes a variety of topics such as getting started and recommended browser settings.

Note: Some of these links may not appear because they are not enabled by the NOC.

Status and information screens

The System Control Center screens list status and operational parameters and their current values in a tabular form. For example, the following illustration shows the System Status page. The left column list the parameters, and the right column shows the current value of the parameter listed in the left column. This format is used on the following screens.

- System Status page
- System Information page

System Status page

The System Status page lists parameter information vital to the proper operation of the HT1000. Available system status values (as shown in Figure 9) may vary, depending on how your satellite modem is configured.



Figure 9: System Status page

System Information page

The System Information page, shown in Figure 10, provides system information for the satellite modem such as identification information, software versions, and satellite information.



Figure 10: System Information page

Connectivity Test

Use the <u>Connectivity Test</u> link on the side panel to check the connectivity to the Hughes Network Operations Center (NOC). To test your connectivity:

1. Click the <u>Connectivity Test</u> link on the side panel. The Terminal - Gateway Connectivity Test appears in the center of the screen.

2. Click the <u>Start the test</u> link as shown in Figure 11.

HT1000 System Control Center ÷		
	Syste	m Status System Information 2
HughesNet.	SAN:	ESN:2107399 Diagnostic Code:0000-0000-0000-0000
	HT1000 System Cont Your built-in diagnostic system for vie	rol Center wing perfomance statistics, getting help and configuring settings.
Home	HELP	Terminal - Gateway
Connectivity Test Built in Self Test	Welcome to HughesNet Additional Premium Services	Connectivity Test Connectivity Test can be used to verify that your terminal can communicate through the satellite Table test does not
> Help		verify connectivity from your computer to the Internet. This test takes few seconds.
		Start the test

Figure 11: Connectivity Test Start

3. The Terminal - Gateway Connectivity Test panel appears indicating the test has started, as shown in Figure 12.

HT1000 System Control Center		
HughesNet	SAN: ESN:2107399	tem Information Calaportic Cade:0000-0000-0000
	Your built-in diagnostic system for viewing performance st	atistics, getting help and configuring settings.
Connectivity Test	HELP Terminal - Connectivit	Gateway y Test
 Built in Self Test 	Additional Premium Services Please wait.	Þ
 Help 		
	8/2011 HUGHES	

Figure 12: Connectivity Test started screen

When the test completes, the results appear in the center panel. Figure 13 shows the results of the test.

Hughe	sNet 🏙	SAN:	
			ESN:2107399 Diagnostic Code:0000-0000-0000
	1	HT1000 System Col (our built-in diagnostic system for	ntrol Center viewing perfomance statistics, getting help and configuring settings.
Home		HFI P	Terminal - Gateway
O Connectivity T	est	Welcome to HughesNet	Connectivity Test Fri Feb 24 16:54:44 2012
🕟 Built in Self Te	st	Additional Premium Services	PacketLoss: 0.00%
		Customer Care	Average Delay: 112.28 ms
📀 Help			Minimum Delay: 76.62 ms
			Maximum Delay: 155.01 ms
			IP Gateway: orc3staticipgw90
			Result Interpretation: If Packet loss is 0%, you have good access to the gateway If Packet loss is 100%, you have no access to the gateway and have a problem If Packet loss is between 0-100%, you have limited connectivity to the gateway.

Figure 13: Connectivity Test results

Built in Self Test

Use the **Built in Self Test** link on the side panel to check the connectivity of the satellite modem. To initiate the test:

1. Click the **Built in Self Test** link on the side panel.

	Syste	em Status System Ir	nformation
HughesNet.	SAN:HSO10011451	ESN:5015833	Diagnostic Code:Not Available
	HT1000 System Con Your built-in diagnostic system for vie	trol Center wing performance statisti	cs, getting help and configuring settings.
O Home	HELP	BIST Results	
S Connectivity Test	Welcome to HughesNet	MAC Address	passed
Built-In Self Test	Additional Premium Services Customer Care	Danube Lock VCO Monitor	passed passed
Help		ODU Voltage Key Check	passed passed
		KAM TESL	passeu

2. The test results appear below the link as shown in Figure 14.

Figure 14: Built in Self Test screen

HELP

<u>Welcome to HughesNet</u> - The HughesNet web portal contains a variety of useful tools, resources, and information. Access to the HughesNet portal is determined by your service plan. Figure 15shows the Welcome screen.



Figure 15: Welcome to HughesNet screen

<u>Customer Care</u> - Navigates to the Customer Care web page (Figure 16) where you can manage various facets of your account.



Figure 16: Customer Care web page

Additional Premium Services - Gives you access to additional services and self-help information.

Chapter 3 LEDs

The satellite modem has five LEDs on the front panel, as shown in Figure 17. By their appearance (on, off, blinking, or flashing) the LEDs indicate the modem's operating status. The front panel LEDs are all blue when lit.



Figure 17: Front panel LEDS on the HT1000

Table 2 explains what the modem status is when the LEDs are on, off, or blinking. On means the LED is continuously lit. Blinking means the LED is usually on, but

intermittently turns off briefly. Flashing means the LED alternates between on and off for periods of $\frac{1}{2}$ sec to 1 sec.

LED	Appearance	Status
LAN	On	Satellite modem is connected to a computer network card or Ethernet device
	Blinking	Transmitting and/or receiving data
	Off*	No device is connected to the LAN port or the device connected to the LAN port is not working properly
Transmit	On	OK - Transmit path is operational
	Blinking, mostly on	Transmitting data
	Blinking, mostly off	Ranging (The modem is measuring the distance to the satellite to calibrate transmit timing and transmit power.)
	Off*	Condition preventing transmission
Receive	ON	OK - Receive path is operational
	Blinking	Receiving data
	Off*	Condition preventing receipt of data
System	ON	Connection established with the NOC
	Off*	Condition preventing full operation
Power	On	Power is on and the modem is functioning normally
	Red color**	**Indicates overheating
	Flashing	Operating with fallback.bin (backup) version of software
	Off*	No power

Table 2: Front panel LED indications

Bold type indicates LED appearance during normal operation when the satellite modem is transmitting or receiving data. *Indicates an operational problem.

LAN port LEDs

Green and orange LEDs on the LAN (Ethernet) port on the modem's rear panel indicate link status and speed, as explained in Figure 18.



28 | Chapter 3 • LEDs 1039111-0001 Revision A For proper operation of the satellite modem, you may have to change certain settings on the computer that is connected to the modem.

Instructions are provided for configuring a computer to support DHCP.

The following sections explain this procedure.

Understanding the modem address and computer address

The satellite modem and any computer or computers that connect to it must each have their own identifying network address. This network address is known as an *IP address*. An IP address may be *dynamic*, meaning that it can change, or *static*, meaning that it is fixed-it does not change. An IP address may also be public (or *routable*), meaning that it can be used on the Internet. A *private* IP address works on an internal network but not over the Internet. However, to gain access to the Internet, private addresses may be converted by a network address translation (NAT) service to a public IP address that can be used on the Internet. Both private and public addresses can be dynamic or static.

Configuring a computer to use DHCP

DHCP is a protocol that allows a computer to obtain its IP address from a DHCP server on a network when the computer connects to the network. This type of IP address is called a *dynamically assigned* IP address because it can change when the computer disconnects from the network and later re-connects.

The satellite modem incorporates a DHCP server to assign IP addresses to computers that connect to it. The modem can assign *dynamic* IP addresses or *static IP addresses*, depending on the service plan purchased by the satellite modem customer.

Configuring Windows 7 to use DHCP

- 1. From the Windows desktop, select Start > Control Panel > Network and Sharing Center.
- 2. Look for the Local Area Connection link indicated by the arrow in *Figure 19*.

If you do not see a Local Area Connection link or if a red X appears next to the link, the network is not installed correctly. Check your network configuration and connections. You cannot configure your system if the red X is present.

Control Panel Home	View your basic network ir	nformation and	d set up co	nnections	
Change adapter settings	A	-		- 🏟	See full m
Change advanced sharing settings	NPSRT-PC (This computer)	Network 2		Internet	
	View your active networks			Conn	ect or disconn
	Network 2		Access typ	e: Internet	
	Public network		Connectio	ns: 🔋 Local Area Co	onnection

Figure 19: Network and Sharing Center – Windows 7

3. Click the Local Area Connection icon, which represents the satellite modem network connection.

The Local Area Connection Status window opens.

4. Click Properties.

The Local Area Connection Properties dialog appears, as shown in Figure 20.

Note: Depending on the computer's security settings, a message may appear, requesting that you confirm the action before proceeding. If you see this message, click **Continue** to proceed.

🕹 Local Area Connection Properties 🛛 🔹 💽
General Advanced
Connect using:
Intel(R) PRO/100 VM Network Conn Configure
This connection uses the following items:
Client for Microsoft Networks
File and Printer Sharing for Microsoft Networks
Internet Protocol (TCP/IP)
Install Uninstall Properties
D. L.F.

Figure 20: Local Area Connection Properties – Windows 7

- 5. Ensure that both Client for Microsoft Networks and Internet Protocol (TCP/IP) are installed and checked as shown.
- 6. If NetBEUI is installed and checked, uncheck it or uninstall it.

- 7. Highlight the appropriate TCP/IP connection (usually Internet Protocol Version 4). Be careful not to uncheck the checkbox.
- 8. Click Properties.

The Internet Protocol Properties dialog appears as shown in Figure 21.

eneral Altern	ate Configuration					
'ou can get IF his capability. he appropriate	settings assigne Otherwise, you n P settings.	d automatica eed to ask yo	ly if your ur netwo	networ ork adm	k suppi inistrato	orts or for
 Obtain an 	IP address autor	natically				
O Use the f	ollowing IP addre	SS:				
IP address:						
Subnet mas	k:					
Default gate	sway:					
Obtain DI	NS server addres	s automatical	ly .			
O Use the f	ollowing DNS ser	ver addresse	s:			
Preferred DI	NS server:					
Alternate D1	VS server:					
					Advanc	ed

Figure 21: Internet Protocol Properties – Windows 7

- 9. Ensure that both the Obtain an IP address automatically and Obtain DNS server address automatically options are selected.
- 10. Click **OK**.
- 11. Click **Close** to close the Local Area Connection Properties dialog.
- 12. Click **Close** to close the Local Area Connection status dialog.
- 13. Confirm that you have an IP address:
 - a. Press Win+R (Windows key + R).
 - b. Type **cmd** and click **OK**.
 - c. In the command, type **ipconfig/renew** and press **Enter**.
 - d. Make sure an IP address is shown on the line that starts with IPv4 Address or IPv6 Address.

Configuring Windows Vista to use DHCP

 From the Windows desktop, select Start > Settings > Network Connections. A list of network adapters appears as shown in *Figure 19*. The Local Area Connection-NIC Card icon *must* appear under the LAN or High-Speed Internet heading. If it does not, the network is not installed correctly.

File E	⊂ 💽 ► Contri dit View To	ol Panel 🕨 Network	Connections		↓ 49
🖣 Organ	nize 👻 🚆 Vie	ws 🔻 💥 Disable	this network devic	e 🔛 Diagnose this o	connection
Name	Status	Device Name	Connectivity	Network Category	Owner
LAN or H	ligh-Speed Inter Local Area Connection-Mo Network cable (net (2) otherboard unplugged	Local Area C Card Metwork 10	onnection-NIC	

Figure 22: Network connections – Windows Vista

- **Note:** If a red X appears next to the Local Area Connection icon, check your connections. You cannot successfully configure your system if the red X is present.
- Right-click the Local Area Connection-NIC Card icon, which represents the satellite modem network connection, and select **Properties**. The Local Area Connection-NIC Card Properties dialog appears as shown in *Figure 23*.
 - **Note:** Depending on the computer's security settings, a User Account Control message may appear, requesting that you confirm the action before proceeding. If you see this message, click **Continue** to proceed.



Figure 23: Local Area Connection Properties – Windows Vista

- 3. Ensure that both Client for Microsoft Networks and Internet Protocol (TCP/IP) are installed and checked as shown.
- 4. If NetBEUI is installed and checked, uncheck it or uninstall it.

- 5. Highlight the appropriate TCP/IP connection. Be careful not to uncheck the checkbox.
- 6. Click Properties.

The Internet Protocol Properties dialog appears as shown in Figure 24.

seneral	Alternate Configuration				
You car this cap for the	n get IP settings assigned autor ability. Otherwise, you need to appropriate IP settings.	matically if ask your r	your n hetwo	etwork 'k admir	supports istrator
0	otain an IP address automatica	lly			
O Us	e the following IP address: —				
IP ad	ldress:				
Subr	iet mask:				
Defa	ult gateway:		0	х	
0 0	otain DNS server address autor	natically			
O Us	e the following DNS server add	resses:			
Prefe	erred DNS server:	1.1	14	- 22	
Alter	nate DNS server:				
				<u> </u>	
				Adv	anced

Figure 24: Internet Protocol Properties – Windows Vista

- 7. Ensure that both the Obtain an IP address automatically and Obtain DNS server address automatically options are selected.
- 8. Click **OK**.
- 9. Confirm that you have an IP address:
 - a. Click Start > Run.
 - b. Type cmd and click **OK**.
 - c. Type **ipconfig/renew** and press **Enter**.
 - d. Make sure an IP address is shown on the line that starts with IP Address.

Configuring Windows XP to use DHCP

- 1. From the Windows desktop, select **Start > Settings > Control Panel**.
- 2. Double-click the Network and Dialup Connections icon.
 - **Note:** If Control Panel is in category view, select *Network and Internet Connections*; then select *Network Connections*.

A list of network adapters appears as shown in *Figure 25*. A Local Area Connection icon must appear under the LAN or High-Speed Internet heading. If it does not, the network is not installed correctly.



Figure 25: Network connections – Windows XP

- **Note:** If a red X appears next to the Local Area Connection icon, check your connections. You cannot successfully configure your system if the red X is present.
- Right-click the Local Area Connection icon that represents the network adapter connecting the computer to the Satellite Gateway, and select **Properties**. The Local Area Connection Properties dialog appears as shown in *Figure 26*.

ternet Protocol (TCP/IP) Properties
General Alternate Configuration	
You can get IP settings assigned a this capability. Otherwise, you nee the appropriate IP settings.	automatically if your network supports d to ask your network administrator for
 Obtain an IP address automa 	tically
O Use the following IP address	
IP address:	
Subnet mask:	
Default gateway:	
Obtain DNS server address a	automatically
O Use the following DNS serve	r addresses:
Preferred DNS server:	
Alternate DNS server:	· · ·
	Advanced
	OK Cancel

Figure 26: Local Area Connection Properties – Windows XP

- 4. Ensure that both Client for Microsoft Networks and Internet Protocol (TCP/IP) are installed and checked as shown.
- 5. If NetBEUI is installed and checked, uncheck it or uninstall it.
- 6. Highlight Internet Protocol (TCP/IP). Be careful not to uncheck the checkbox.
- 7. Click Properties.

The Internet Protocol Properties dialog appears as shown in Figure 27.

nterne	t Protocol (TC	:P/IP) Pr	opertie	s		?
General	Alternate Configura	ation				
You ca this cap the app	n get IP settings ass ability. Otherwise, yo ropriate IP settings.	igned autom ou need to a	atically if y sk your ne	bur nei twork	twork sup administra	ports tor for
⊙ 0I	otain an IP address a	automatically				
OU	se the following IP a	ddress:				
IP a	ddress:					
Subr	net mask:]
Defa	ult gateway:]
00	otain DNS server ad	dress autom	atically			
OU	se the following DNS	server addr	esses:			
Pref	erred DNS server:					
Alter	nate DNS server:					
					Advar	nced
				ок		Cancel

Figure 27: Internet Protocol Properties – Windows XP

- 8. On the General tab, ensure that both the *Obtain an IP address automatically* and *Obtain DNS server address automatically* options are selected. If not, select them.
- 9. Click OK.
- 10. Confirm that you have an IP address:
 - a. Click Start > Run.
 - b. Type cmd and click **OK**.
 - c. Type **ipconfig/renew** and press **Enter**.
 - d. Make sure an IP address is shown on the line that starts with **IP Address**.

Configuring a Mac computer to use DHCP

1. From the Mac interface, select **System Preferences**. The System Preferences menu appears. 2. Under Internet & Network, click the Network icon. The Network screen appears as shown in *Figure 28*.

ork
c 🛟
)
pleTalk Proxies
\$
DNS Servers (Optional)
Search Domains (Optional) DIRECPC.COM
Example: apple.com earthlink.net

Figure 28: Mac Network screen

- 3. Ensure that the TCP/IP tab is selected.
- 4. Select **Using DHCP** from the Configure drop-down list as shown in *Figure 29*. The *IP Address* field becomes disabled.

000	Network	0
	A @ 🖾	
Show All Displays	Sound Network Startup Disk	
	Location: Automatic	
Show: Built-in Et	hernet 🗧	
ļ	Manually	
	Using DHCP with manual IP address	
Configu	re ✓ Using DHCP	
	Using BootP	
	Divo Servers	(Optional)
IP Addre	ss 139 85 158 186	

Figure 29: Select Using DHCP from the configure drop-down list

5. Click **Apply Now** to close the screen.

Appendix B Standards compliance

The HT1000 satellite modem has been certified to comply with the standards listed in Table 3. Additional information follows the table.

Category	Standard
Safety	UL60950-1 for the USA CAN/CSA-C22.2 No. 60950-1 for Canada
Electromagnetic Interference (EMI)	FCC Part 15 for the USA ICES-003 for Canada
Telecommunications	TIA IPoS

Table 3: HT1000 standards compliance

Safety - Operating conditions for Canada

In addition to the warnings and safety guidelines listed in this document, the following operating conditions apply to the HT1000 when used in Canada:

The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective operational and safety requirements. The Department does not guarantee that the equipment will operate to the user's satisfaction.

Before installing the equipment, users should make sure they are permitted to connect to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs in Canada

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Electromagnetic interference (EMI)

This product conforms to EMI standards of the U.S. FCC, and Canadian CSA, as detailed in the following sections. The installation and maintenance procedures in the installation guide must be followed to ensure compliance with these regulations.

NOTICE

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

FCC Part 15

This section applies to the HT1000 satellite modem. Standards to which conformity is declared: FCC Part 15

The modem 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.

Responsible party's name: Hughes Network System, LLC Address: 11717 Exploration Lane, Germantown, MD 20876

Telephone: 1 (866) 347-3292

Trade name: HUGHES

Type of equipment: Two-way Hughes system

Model number: HT1000 (1502573)

Canada Class B warning

The two-way Hughes system (HT1000) complies with the Canadian ICES-003, Class B standard. Cet appareil numérique de la classe B est conforme á la norme NMB-003 du Canada.

Acronyms and abbreviations

D

DHCP – Dynamic host configuration protocol

Ε

ESN – Electronic Serial Number

F

_____ FAP – Fair Access Policy

L_____

LAN – Local area network

Ν

NetBEUI – Extended User Interface (network transfer protocol)

Networking requirements

S

SAN – Site account number

V

VAR – Valued-added reseller

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