



ACCESS 241-FXO

ACCESS 241 · ACCESS 211

VoIP GATEWAY

(AC-241-FXO·AC-241·AC-211)

USER GUIDE

Revision History

Revision	Date	Description
A01	April 01, 2004	<ol style="list-style-type: none">1. Adapted for UL/FCC2. Section 10.4 formerly for H.323 and SIP is now separated – now Section 10.4 for SIP with revised rules for Hold call, Call waiting, Transfer call, and Conference (flash without following digits), and Section 10.5 for H.323 with contents as before.
B	March 02, 2005	Adapted for Version 4.53.29
C	July 2005	Added AC-241 to AC-211 UG. Adapted for Version 4.56
D	September 2005	Added AC-241-FXO. Adapted for AC-241FXO version 5.1, AC-241 and AC-211 version 4.57

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Introduction

Thank you for purchasing this product. We at Telco Systems are confident that you will obtain full satisfaction from your new VoIP gateway. Please read this guide carefully in order to make use of all the advanced features provided by this product.

This guide is intended for users connecting to the Internet or Intranet with VoIP service set up by a VoIP provider and the Access 241-FXO/Access 241/Access 211 Gateway factory pre-configured. If this is not the case, refer to the administrator's manual.

Terminology

Throughout this guide, the Access 241-FXO, Access 241 and Access 211 will be referred to as “the Gateway”, excluding cases when referring specifically to the Access 241-FXO, the Access 241 or Access 211.

How to Get Help

For technical support, please contact the local distributor that supplied the unit.

Access 241-FXO Overview and Installation

Overview

The Access 241-FXO (AC-241-FXO) is a terminal Voice-over-IP (VoIP) WAN gateway device and telephone adaptor. The Access 241-FXO has two independent phone ports (FXS) and one PSTN port (FXO). The FXS phone ports enable you to connect one or two independent analog telephone or Fax lines and communicate over the Internet Intranet. The PSTN (FXO) port is used to connect to the Public Switched Telephone Network (PSTN). The combination of both FXS and FXO ports enables to use your telephone to communicate over the internet, intranet and public telephone network.

The Access 241-FXO has 1 WAN and 4 LAN ports; all are 10/100Mbps Ethernet ports. The WAN port connects to your modem and the LAN ports connect to up to 4 PCs.

The Access 241-FXO supports all standard analog DTMF telephones and accessories, including:

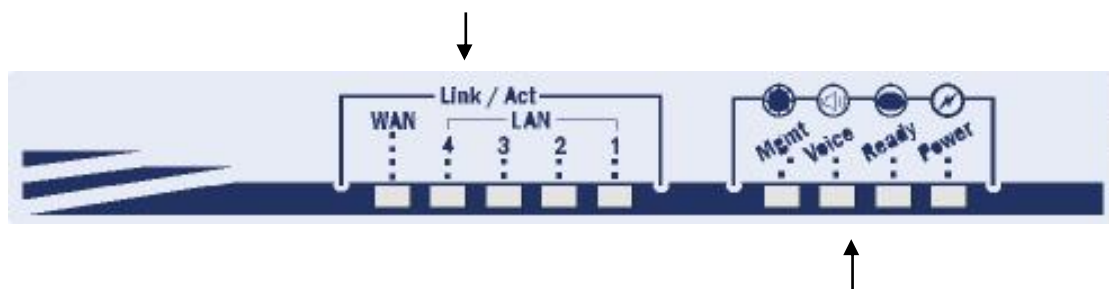
- Single-line touch-tone telephones.
- Multiple-line touch-tone telephones.
- Touch-tone telephones with redial or speed-dial features.
- Phones or accessories that support Caller ID.
- Answering machines with touch-tone support.
- Phones or accessories that support Distinctive Ring.

NOTE Pulse-dial telephones and accessories are not supported.

The Front Panel

The Access 241-FXO Gateway's front panel contains nine LEDs:

- Five link LEDs indicate Link and Activity status for the WAN and LAN ports. Steady glow indicates Link, and blinking indicates Activity.



Four status LEDs provide operating information explained in the following table.

Status LED Indicators

LED	Mode	H.323, MGCP, SIP Status	Downloader Status
Power	Steady glow	Power OK	Power OK
Ready	Blinking	Application OK	Loader OK
Voice	Steady glow	Gateway registered with Gatekeeper / Call Agent / SIP Server	
Mngt	Blinking	Management activity	Management activity
LAN (1,2,3,4)	Steady Glow	Link is up	Link is up
	Blinking	LAN Activity	LAN Activity
WAN	Steady Glow	Link is up	Link is up
	Blinking	WAN Activity	WAN Activity

The Rear Panel

The rear panel contains the phone connectors, one WAN, four LAN connectors and the input DC power connector, as shown in the following figure. The PSTN socket on the left is designed to provide a public telephone network connection.



CAUTION Never connect the Phone1 and Phone2 connectors to the public telephone outlet, or to each other.

Before You Install

Before you begin to install your Access 241 VoIP Gateway, make sure that the temperature and humidity of the operating environment are always kept within the following range limits:

Ambient temperature: 0°C - 45°C (32°F - 113°C)

Humidity: 10% - 90% non-condensing

Required Equipment List

- Optionally, up to four PCs or laptop computers with LAN card, web browser and Telnet.
- One 10/100BaseTX (RJ-45) Ethernet cable (supplied) for the Ethernet connection from the Access 241 Gateway to your router or modem.
- Additional 10/100BaseTX (RJ-45) Ethernet cables (not supplied) to connect the Gateway to the computers.
- Two push-button telephones with DTMF (tone signal) capability (not supplied).
- An AC/5VDC power adapter (supplied).

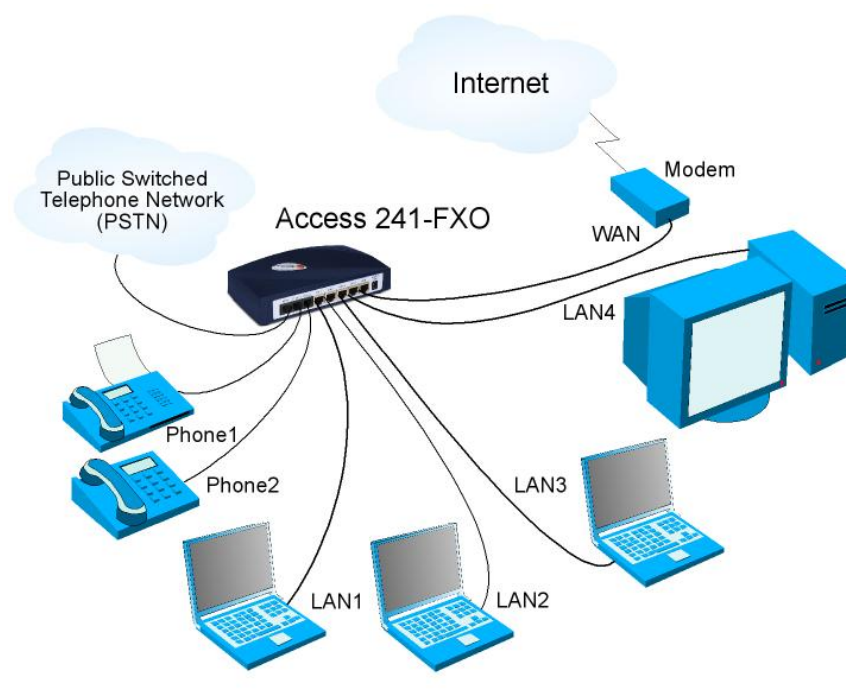


The Access 241 Gateway must be powered by an external UL listed limited power source or Class II power source (AC/DC adapter), rated input: 100 - 240 V, 47-63Hz, 0.5A, output: 5VDC @ 2.6A.

The phone ports (Phone1 and Phone2) are intended for indoor connections only and must not be connected to the public telephone network.

ONLY the PSTN port can be connected to the public telephone network outlet.

Installing your Access 241-FXO VoIP Gateway



1. Unpack the Gateway unit.
 2. Verify you have the components listed in the [Required Equipment](#) list above.
 3. Place the Gateway on a desktop or other level surface, or mount it on a wall. Choose a location that is near the devices to be connected and close to an electrical outlet. If you want to mount the unit on the wall, refer to [Details for Wall Mounting the Gateway Unit](#).
 4. Connect the WAN port on the Gateway's rear panel to the Ethernet socket on your broadband modem using an Ethernet cable.
 5. Connect a LAN port on the Gateway's rear panel to the network socket on your PC using an Ethernet cable.
 6. Connect additional PCs to the other LAN ports as described in the previous step.
 7. Use Phone cables to connect the telephones to the Phone1 and Phone2 ports on the rear of the Gateway. (If your provider enables only one phone line, connect the phone to the Phone1 port)
- It is possible to connect up to five phones in parallel to each phone port. To do so, connect a 5-way splitter to the phone port. (If your provider enables only one phone line, use the Phone1 port on the Gateway).
8. Connect the Phone cable from the PSTN wall socket to the Gateway's PSTN port.

9. Verify that all system components are properly installed. Make sure that all cable connectors are securely positioned in the appropriate ports.
10. Connect the power adapter to the Gateway's power connector on the rear of the unit. Connect the power adapter to a wall socket.
11. Check that the **Power** LED on the Gateway's front panel glow steadily.
12. Turn on the PCs. For each PC perform the following:
 - 12a. If you are using a DSL modem, you will need to enable PPPoE on the Gateway and disable PPPoE on the PC. To enable PPPoE on the Gateway:
 - 1) Open the web browser and put the IP of the Gateway in the address field (the factory default IP address of the LAN interface is 192.168.100.1).
 - 2) In the vertical menu bar on the left of the Gateway Web page, select **WAN**. The **WAN Status** page appears.
 - 3) In the horizontal menu bar of the **WAN** page, select **PPPoE**. The **WAN PPPoE Configuration** page appears.
 - 4) Select **Yes** in the **Enable PPPoE** drop-down list box.
 - 5) Fill in the username and password in the **Authentication** fields as supplied by your DSL provider. Optionally you can enter the service name for the requested service. To select a specific provider, enter his access name in the AC name field.
 - 6) Click **Save PPPoE Settings**.
 - 7) After entering and saving all configurations, you must reset the Gateway. In the vertical menu bar of the current page, select **Reset**. The **Reset** page appears.
 - 8) Select **Power on reset** and click the Reset button. The Gateway power cycles and the application's home page opens with the new configuration settings.

For more information see section "[Enabling Point-to-Point Protocol over Ethernet \(PPPoE\)](#)".
 - 12b. If you are using a cable modem, note that some cable modems need to be powered off and then on after being connected to the Gateway. For such modems you can also power off the Gateway and then power on for faster connection.
13. Wait for the **Voice** LED on the Gateway front panel to glow, indicating connection to your Internet and VoIP providers. It may take a minute or two for these connections to be established.
14. Verify that your broadband Internet service functions properly.
15. Pick up the phone on each line to verify that you can hear the dial tone.

Once the installation is complete, you can use your Gateway for telephone calls and for the Internet, assuming that you have a connection supplied by your VoIP provider.

If any problems are experienced during the installation of the unit, please contact your local vendor.

Access 241 Overview and Installation

Overview

The Access 241 (AC-241) is a terminal Voice-over-IP (VoIP) WAN gateway device. The Access241 has two phone ports, which enable you to connect one or two independent analog telephone or Fax lines and communicate over the Internet or Intranet.

In addition, there are 1 WAN and 4 LAN ports; all are 10/100Mbps Ethernet ports. The WAN port connects to your modem and the LAN ports connect to up to 4 PCs.

The Access 241 supports all standard analog DTMF telephones and accessories, including:

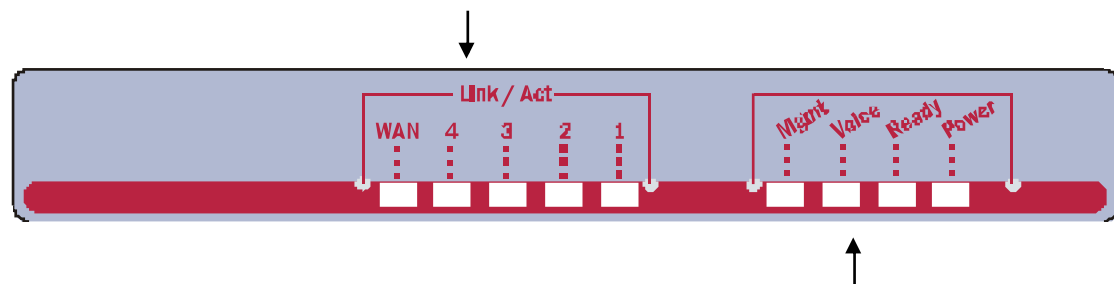
- Single-line touch-tone telephones.
- Multiple-line touch-tone telephones.
- Touch-tone telephones with redial or speed-dial features.
- Phones or accessories that support Caller ID.
- Answering machines with touch-tone support.
- Phones or accessories that support Distinctive Ring.

NOTE Pulse-dial telephones and accessories are not supported.

The Front Panel

The Access 241 Gateway's front panel contains nine LEDs:

- Five link LEDs indicate Link and Activity status for the WAN and LAN ports. Steady glow indicates Link, and blinking indicates Activity.



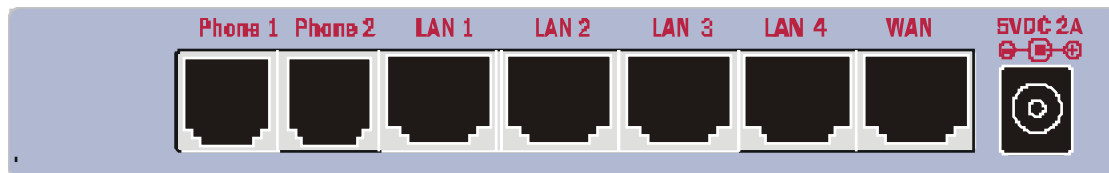
Four status LEDs provide operating information explained in the following table.

Status LED Indicators

LED	Mode	H.323, MGCP, SIP Status	Downloader Status
Power	Steady glow	Power OK	Power OK
Ready	Blinking	Application OK	Loader OK
Voice	Steady glow	Gateway registered with Gatekeeper / Call Agent / SIP Server	
Mngt	Blinking	Management activity	Management activity
LAN (1,2,3,4)	Steady Glow	Link is up	Link is up
	Blinking	LAN Activity	LAN Activity
WAN	Steady Glow	Link is up	Link is up
	Blinking	WAN Activity	WAN Activity

The Rear Panel

The rear panel contains the phone connectors, one WAN, four LAN connectors and the input DC power connector, as shown in the following figure.



CAUTION Never connect the Phone connectors to the public telephone outlet, or to each other.

Before You Install

Before you begin to install your Access 241 VoIP Gateway, make sure that the temperature and humidity of the operating environment are always kept within the following range limits:

Ambient temperature: 0°C - 45°C (32°F - 113°C)

Humidity: 10% - 90% non-condensing

Required Equipment List

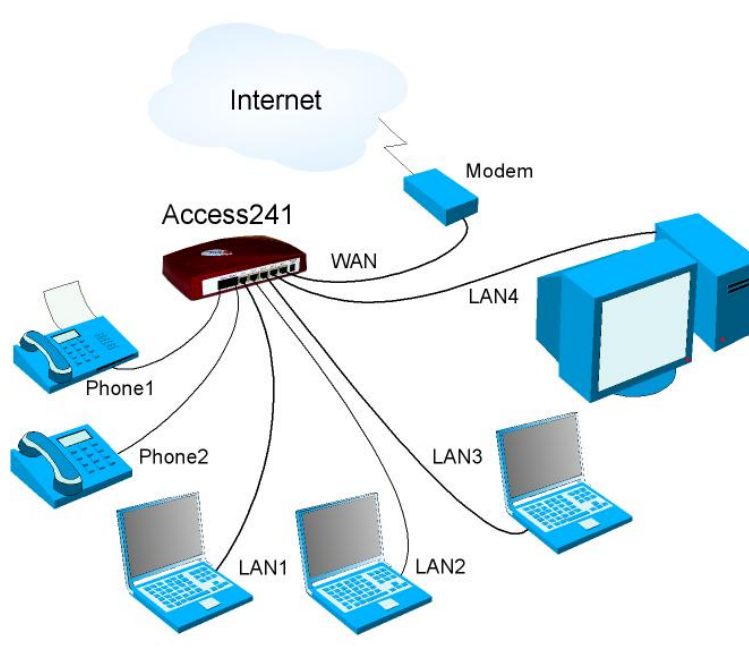
- Optionally, up to four PCs or laptop computers with LAN card, web browser and Telnet.
- One 10/100BaseTX (RJ-45) Ethernet cable (supplied) for the Ethernet connection from the Access 241 Gateway to your router or modem.
- Additional 10/100BaseTX (RJ-45) Ethernet cables (not supplied) to connect the Gateway to the computers.
- Two push-button telephones with DTMF (tone signal) capability (not supplied).
- An AC/5VDC power adapter (supplied).



The Access 241 Gateway must be powered by an external UL listed limited power source or Class II power source (AC/DC adapter), rated input: 100 - 240 V, 47-63Hz, 0.5A, output: 5VDC @ 2A.

The phone ports (Phone1 and Phone2) are intended for indoor connections only and must not be connected to the Public Telecommunication Network.

Installing your Access 241 VoIP Gateway



1. Unpack the Access 241 Gateway unit.
 2. Verify you have the components listed in the [Required Equipment](#) list above.
 3. Place the Gateway on a desktop or other level surface, or mount it on a wall. Choose a location that is near the devices to be connected and close to an electrical outlet. If you want to mount the unit on the wall, refer to [Details for Wall Mounting the Gateway Unit](#).
 4. Connect the WAN port on the Gateway's rear panel to the Ethernet socket on your broadband modem using an Ethernet cable.
 5. Connect the LAN port on the Gateway's rear panel to the network socket on your PC using an Ethernet cable.
 6. Connect additional PCs to the other LAN ports as described in the previous step.
 7. Use Phone cables to connect the telephones to the Phone1 and Phone2 ports on the rear of the Gateway. (If your provider enables only one phone line, connect the phone to the Phone1 port)
- It is possible to connect up to five phones in parallel to each phone port. To do so, connect a 5-way splitter to the phone port. (If your provider enables only one phone line, use the Phone1 port on the Gateway).
8. Verify that all system components are properly installed. Make sure that all cable connectors are securely positioned in the appropriate ports.

9. Connect the power adapter to the Gateway's power connector on the rear of the unit. Connect the power adapter to a wall socket.
10. Check that the **Power** LED on the Gateway's front panel glows steadily.
12. Turn on the PCs. For each PC perform the following:
 - 12a. If you are using a DSL modem, you will need to enable PPPoE on the Gateway and disable PPPoE on the PC. To enable PPPoE on the Gateway:
 - 9) Open the web browser and put the IP of the Gateway in the address field (the factory default IP address of the LAN interface is 192.168.100.1).
 - 10) In the vertical menu bar on the left of the Gateway Web page, select **WAN**. The **WAN Status** page appears.
 - 11) In the horizontal menu bar of the **WAN** page, select **PPPoE**. The **WAN PPPoE Configuration** page appears.
 - 12) Select **Yes** in the **Enable PPPoE** drop-down list box.
 - 13) Fill in the username and password in the **Authentication** fields as supplied by your DSL provider. Optionally you can enter the service name for the requested service. To select a specific provider, enter his access name in the AC name field.
 - 14) Click **Save PPPoE Settings**.
 - 15) After entering and saving all configurations, you must reset the Gateway. In the vertical menu bar of the current page, select **Reset**. The **Reset** page appears.
 - 16) Select **Power on reset** and click the Reset button. The Gateway power cycles and the application's home page opens with the new configuration settings.

For more information see section "[Enabling Point-to-Point Protocol over Ethernet \(PPPoE\)](#)".
 - 12b. If you are using a cable modem, note that some cable modems need to be powered off and then on after being connected to the Gateway. For such modems you can also power off the Gateway and then power on for faster connection.
13. Wait for the **Voice** LED on the Gateway front panel to glow, indicating connection to your Internet and VoIP providers. It may take a minute or two for these connections to be established.
14. Verify that your broadband Internet service functions properly.
15. Pick up the phone on each line to verify that you can hear the dial tone.

Once the installation is complete, you can use your Gateway for telephone calls and for the Internet, assuming that you have a connection supplied by your VoIP provider.

If any problems are experienced during the installation of the unit, please contact your local vendor.

Access 211 Overview and Installation

Overview

The Access 211 (AC-211) is a terminal Voice over IP (VoIP) WAN gateway device. The VoIP functionalities are available with a regular analog telephone.

The Access 211 has two phone ports, which enable you to connect one or two independent regular telephone or Fax lines and communicate over the Internet or Intranet. In addition, you can connect a regular telephone line to the Gateway's Lifeline port. This ensures continuous telephone service in the event of a power outage or a VoIP network failure.

The Gateway has one WAN and one LAN port, both are 10/100Mbps Ethernet ports. The WAN port connects to your modem and the LAN port connects to your PC.

The Access 211 supports all standard analog DTMF telephones and accessories, including:

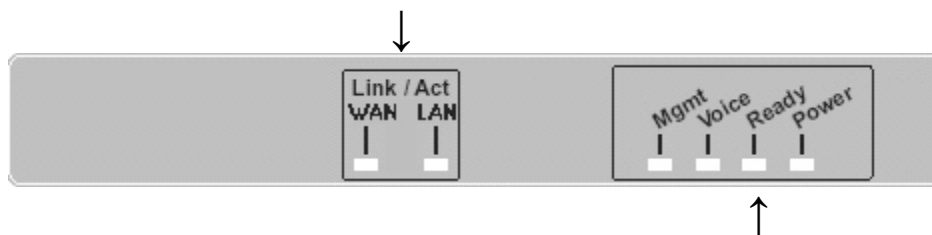
- Single-line touch-tone telephones.
- Multiple-line touch-tone telephones.
- Touch-tone telephones with redial or speed-dial features.
- Phones or accessories that support Caller ID.
- Answering machines with touch-tone support.
- Phones or accessories that support Distinctive Ring.

NOTE **Pulse-dial telephones and accessories are not supported.**

The Front Panel

The Access 211 Gateway's front panel contains six LEDs:

- Two link LEDs indicate Link and Activity status for the WAN and LAN. Steady glow indicates Link, and blinking indicates Activity.



Four status LEDs provide operating information explained in the following table.

Status LED Indicators

LED	Mode	H.323, MGCP, SIP Status	Downloader Status
Power	Steady glow	Power OK	Power OK
Ready	Blinking	Application OK	Loader OK
Voice	Steady glow	Gateway registered with Gatekeeper / Call Agent / SIP Server	
Mngt	Blinking	Management activity	Management activity
LAN	Steady Glow	Link is up	Link is up
	Blinking	LAN Activity	LAN Activity
WAN	Steady Glow	Link is up	Link is up
	Blinking	WAN Activity	WAN Activity

The Rear Panel

The rear panel contains the phone connectors, the LAN and WAN connectors and the input DC power connector, as shown in the following figure. The optional Life Line socket on the left is designed to provide a public network connection in the event of power failure.



CAUTION Never connect the Phone connectors to the public telephone outlet, or to each other. Only the Life Line connector, if provided, may be connected to the public telephone outlet.

Before You Install

Before you begin to install your Access 211 VoIP Gateway, make sure that the temperature and humidity of the operating environment are always kept within the following range limits:

Ambient temperature: 0°C - 45°C (32°F - 113°F)

Humidity: 10% - 90% non-condensing

Required Equipment List

- Optionally, a PC or a laptop computer with a LAN card, a web browser and Telnet.
- One 10/100BaseTX (RJ-45) Ethernet cable (supplied) for the Ethernet connection from the Access 211 Gateway to your router/switch or modem.
- One 10/100BaseTX (RJ-45) Ethernet cable (not supplied) to connect the unit to your computer devices.
- Two push-button telephones with DTMF (tone signal) capability (not supplied).
- An AC/5VDC power adapter (supplied).

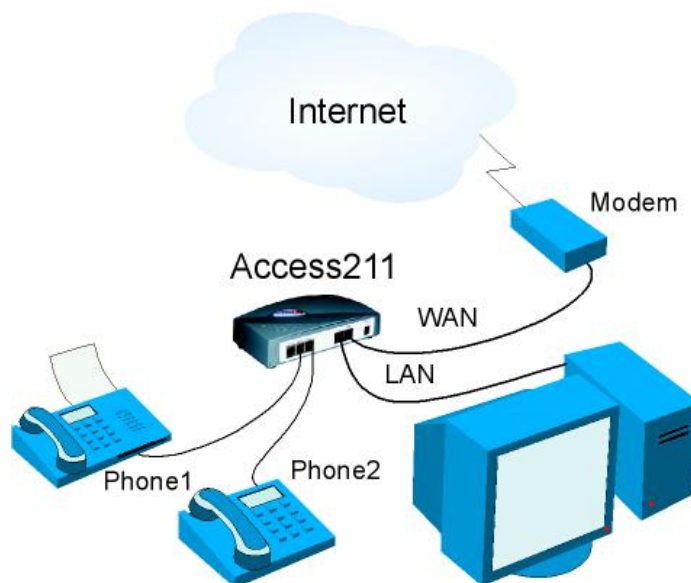


The Access 211 Gateway must be powered by an external UL listed limited power source or Class II power source (AC/DC adapter), rated input: 100 - 240 V, 47-63Hz, 0.5A, output: 5VDC @ 2A.

ONLY the Life Line port can be connected to the Public Telecommunication Network. The phone ports (Phone1 and Phone2) are intended for indoor connections only and may not be connected to the Telecommunication Network.

To reduce the risk of fire, use only No. 26 AWG or larger gauge wires to connect the PSTN (Life Line) port to the Telecommunication Network.

Installing your Access 211 VoIP Gateway with a Single PC

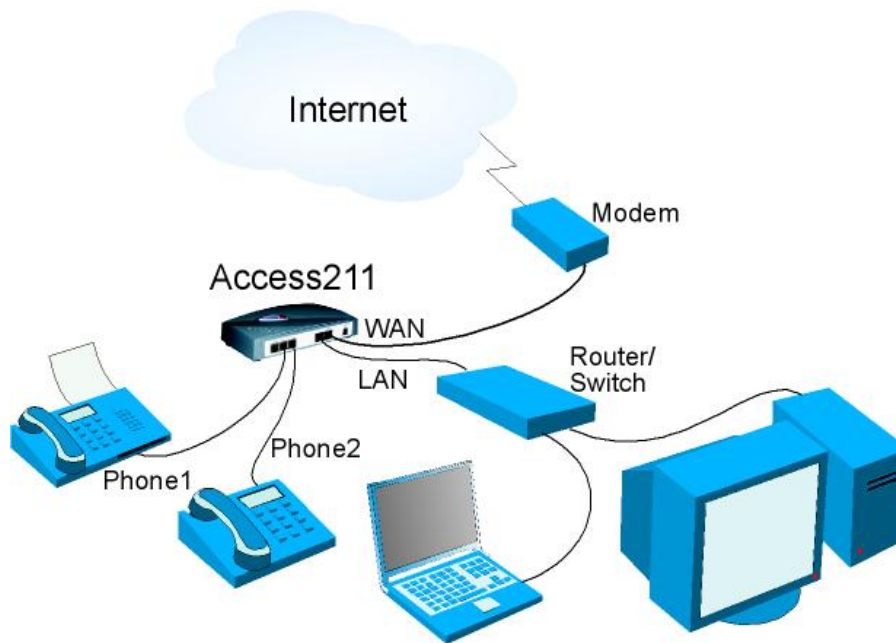


1. Unpack the Gateway unit.
2. Verify you have the components listed in the [Required Equipment](#) list above.
3. Place the Gateway on a desktop or other level surface, or mount it on a wall. Choose a location that is near the devices to be connected and close to a wall socket.
If you want to mount the unit on the wall, refer to [Details for Wall Mounting the Gateway Unit](#).
4. Connect the WAN port on the Gateway's rear panel to the Ethernet socket on your broadband modem using an Ethernet 10/100BaseTX (RJ-45) cable.
5. Connect the LAN port on the Gateway's rear panel to the network socket on your PC using an Ethernet 10/100BaseTX (RJ-45) cable.
6. Use Phone cables to connect the telephones to the Phone1 and Phone2 ports on the rear of the Gateway. (If your provider enables only one phone line, connect the phone to the Phone1 port)
It is possible to connect up to five phones in parallel to each phone port. To do so, connect a 5-way splitter to the phone port. (If your provider enables only one phone line, use the Phone1 port on the Gateway).
7. Verify that all system components are properly installed. Make sure that all cable connectors are securely positioned in the appropriate ports.
8. Connect the power adapter to the Gateway's power connector on the rear of the unit. Connect the power adapter to a wall socket.
9. Check that the Power LED on the Gateway's front panel glows steadily.

10. Turn on the PCs. For each PC perform the following:
 - 10a. If you are using a DSL modem, you will need to enable PPPoE on the Gateway and disable PPPoE on the PC. To enable PPPoE on the Gateway:
 - 1) Open the web browser and put the IP of the Gateway in the address field (the factory default IP address of the LAN interface is 192.168.100.1).
 - 2) In the vertical menu bar on the left of the Gateway Web page, select WAN. The WAN Status page appears.
 - 3) In the horizontal menu bar of the WAN page, select PPPoE. The WAN PPPoE Configuration page appears.
 - 4) Select Yes in the Enable PPPoE drop-down list box.
 - 5) Fill in the username and password in the Authentication fields as supplied by your DSL provider. Optionally you can enter the service name for the requested service. To select a specific provider, enter his access name in the ACname field.
 - 6) Click Save PPPoE Settings.
 - 7) After entering and saving all configurations, you must reset the Gateway. In the vertical menu bar of the current page, select Reset. The Reset page appears.
 - 8) Select Power on reset and click the Reset button. The Gateway power cycles and the application's home page opens with the new configuration settings.

For more information, see section [“Enabling Point-to-Point Protocol over Ethernet \(PPPoE\)”](#).
 - 10b. If you are using a cable modem, note that some cable modems need to be powered off and then on after being connected to the Gateway. For such modems you can also power off the Gateway and then power on for faster connection.
 11. Wait for the Voice LED on the Gateway's front panel to glow, indicating connection to your Internet and VoIP providers. It may take a minute or two for these connections to be established.
 12. Verify that your broadband Internet service functions properly.
 13. Pick up the phone on each line to verify that you can hear the dial tone.

Installing Your Access 211 VoIP Gateway with a Home Network



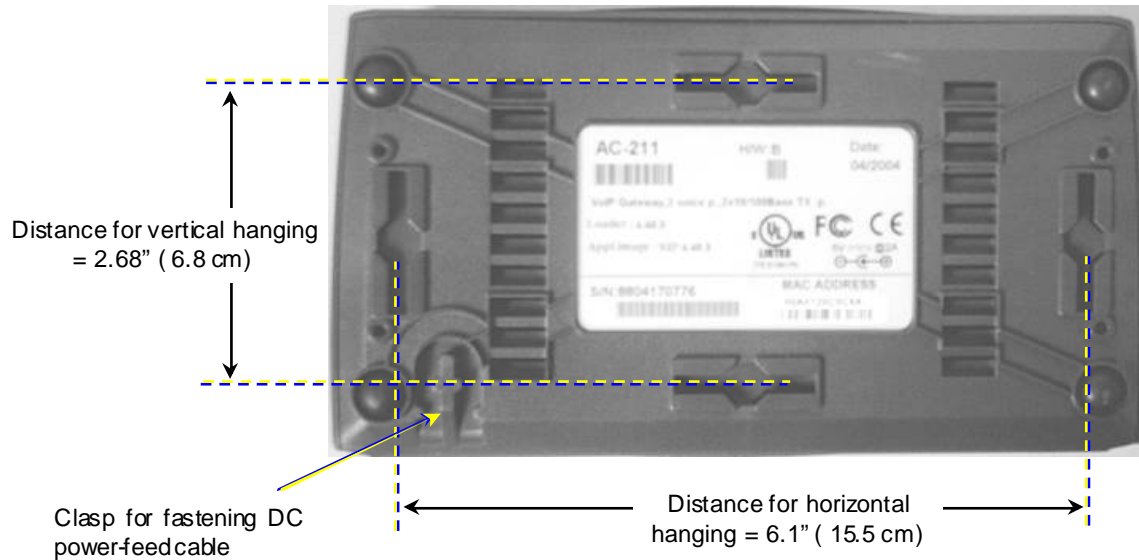
1. Unpack the Gateway unit.
2. Verify you have the components listed in the [Required Equipment](#) list above.
3. Place the Gateway on a desktop or other level surface, or mount it on a wall. Choose a location that is near the devices to be connected and close to a wall socket.
4. Connect the WAN port on the Gateway's rear panel to the Ethernet socket on your broadband modem with an Ethernet 10/100BaseTX (RJ-45) cable.
5. Connect the LAN port on the Gateway's rear panel to an open Ethernet LAN port on your router or switch using the supplied Ethernet 10/100BaseTX (RJ-45) cable, in accordance with the instructions provided with your router or switch.
6. Connect the phones to the Phone1 and Phone2 sockets on the Gateway rear panel with RJ-11 Phone cables. Up to five phones in parallel may be connected to each port. (If your provider enables only one phone line, use the Phone1 port).
7. Verify that all system components are properly installed. Make sure that all cable connectors are securely positioned in the appropriate ports.
8. Connect the power adapter to the power connector of the Gateway and to a wall socket.
9. Check that the Power LED on the Gateway front panel glows steadily.

If you are using a DSL modem, you will need to enable PPPoE as described in section [“Enabling Point-to-Point Protocol over Ethernet \(PPPoE\)”](#), and disable PPPoE on your router.

10. If the Voice protocol parameters are configured, wait for the Voice LED on the Gateway front panel to glow, indicating connection to your Internet and VoIP providers. Otherwise, refer to section on [“Advanced Configuration via the Web”](#), later in this guide. It may take a minute or two for these connections to be established.
11. Reset your router and verify that your broadband modem and your router are working. Verify that your broadband Internet service functions properly.
12. Pick up the phone on each line to verify that you can hear the dial tone.

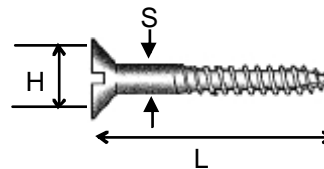
Wall-Mounting the Gateway Unit

In order to mount the unit on the wall, use two wood screws 6.1" (15.5 cm) apart for horizontal positioning or 2.68" (6.8 cm) apart for vertical positioning. Use screws as specified below. Holes for mounting on the wall are situated at the bottom of the unit, as shown in the following figure.



Mounting Screws Maximum Dimensions

Head diameter (H):	Max 9 mm (0.35")
Shank diameter (S):	Max 3.5 mm (0.138")
Length (L):	25-30 mm (1"-1.2")



Using the Gateway

Placing a telephone call with the Gateway is the same as using a telephone with a standard telephone provider.

First Call

If you have two lines, you can place the first call from one phone line to the second phone line on your Gateway. This step ensures that the Gateway is operating properly and that all configuration information is correct.

PSTN Port Calling with Access 241-FXO

PSTN Outgoing Calls

- Check with your VoIP provider which numbers are dialed through the PSTN port.
- PSTN outgoing calls can be dialed from telephones connected to the Phone1 or Phone2 ports (even though Phone2 might not have a dial tone if the port was not enabled by your provider).

PSTN Incoming Calls

- An incoming PSTN call is always received on the Phone1 port.
- **Call Waiting** is activated if Phone1 is engaged in a VoIP call.

PSTN Call Behavior during Unit Power-down or Inactive VoIP Service (Voice LED is off)

- The phone connected to the Phone1 port will operate as a PSTN phone. Only regular public telephone service is available.

Life Line Port Calling with Access 241

Life-line Port Calls during Unit Power-down or Inactive VoIP Service (Voice LED is off)

- The phone connected to the Phone1 port will operate as a PSTN phone. Only regular public telephone service is available.

Advanced Calling Features for SIP

In the following subsections:

- An expression such as “dial flash + 7” implies “press on flash, then press on 7” (the dialing sequence progresses as read from left to right).
- The Star (or Asterisk) key is represented by the symbol “*”.
- The term *destination number* within an expression implies “dial the destination number”.

The following features are only available for the VoIP calls and not for the PSTN calls unless otherwise stated.

Call Waiting

If you are engaged in a VoIP call and a third party calls your line, you hear a short tone on your line. The caller hears a normal ring tone.

For Access 241-FXO, the Call Waiting tone will also be heard if you receive a **PSTN** call while you are engaged in a VoIP call on the Phone1 port. Press **flash** to toggle between calls.

Caller ID Display, Caller Identity on Call Waiting

The Gateway displays the Caller ID of the current caller and the Caller ID of a third party calling during a conversation.

Conference Call

To establish a **Conference Call**, call the first number, dial **flash** to hold the call, dial the second number and before or after being answered, dial **flash** once more to establish the 3-way call.

Call Forwarding

To set the **Forward** option, dial * + **2** + *destination number*.

All calls to the phone with **Forward** set will be received at the destination number.

To unset the **Forward** option, dial * + **3**.

Conditional Call Forwarding

To activate **Conditional Call Forwarding**, dial * + **1** + *destination number*. If the call has been made and the phone has not been picked up within 20 seconds, the call is forwarded to the destination number. To cancel Call Forwarding, dial * + **3**.

Attended Transfer Call

To perform an **Attended Transfer Call** (the first callee is part of the transfer until a new callee answers), dial **flash** to hold the call, dial the new number and wait to hear the ring. When the phone rings or after the new callee answers, put the handset down.

Before the new callee picks up the handset the phone will ring both at the destination number and at your line.

By picking up the handset, the callee at the destination number will be engaged in the call with the original caller.

If the callee at the destination number does not pick up the handset, you can receive the call by picking up the handset as long as the phone rings.

Blind Transfer Call

To perform a **Blind Transfer** (a new call is automatically set between the caller and the second callee and the first callee is immediately removed from the call) when a call is received dial ***98** and then the **destination number**. The phone will ring at the destination number and the first callee will have a dial tone.

Hold

To hold a call that you are receiving, press **flash** once. The caller will be on hold. To retrieve the call, press **flash** once more.

When the caller is on hold, you can run another call by dialing another number. When you put the handset down the phone will ring. Pick up the call and you will be engaged in a call with the original caller. If you wish you can then transfer the call as described [above](#), or just proceed with the original call.

Do Not Disturb (DND)

To activate DND, dial *4. The caller will hear the "busy" tone. To cancel DND, dial *5

Redialing of Last Received Call

To dial the last received call, dial *69.

Block Last Received Caller

To block the last received caller, dial *60. To start accepting calls from the blocked number again, dial *80, or dial *60 to accept the previously blocked number and block the latest received caller.

Auto Redial

When a number is dialed and the dialed number is busy, the Caller can activate Auto Redial by hanging up, dialing *66 and laying the handset down again. The Gateway will periodically dial the busy number for a default period of 30 minutes. When the dialed number is reached the Caller will be notified with a special distinctive ring. By picking up the phone, the caller will be immediately in the call.

If the called party hangs up and the caller does not pick up the phone when the special ring tone is heard, then on the next attempt to use the phone the Caller will get a busy signal indicating that the Auto Redial service succeeded. To place the next call, the caller needs to hang up and pick up the phone again.

To cancel the periodic Auto Redialing before the timeout has been reached, dial *86.

Block Caller ID

To **block** sending your Caller ID before dialing, dial *70 and then the required telephone number.

Anonymous Call Rejection

To **reject** anonymous calls, dial *77.

To **accept** anonymous calls dial *78.

Advanced Calling features for H.323

In the following subsections:

- An expression such as “dial flash + 7” implies “press on flash, then press on 7” (the dialing sequence progresses as read from left to right).
- The Star (or Asterisk) key is represented by the symbol “*”.
- The term *destination number* within an expression implies “dial the destination number”.

Call Waiting

If you are engaged in a call and another party calls your line, you hear a short tone on your line. The caller hears a ringtone.

To accept the new call, dial **flash** + *. To return to the origin call, dial **flash** + * again.

Conference Call

If you are engaged in a call and wish to add a third party, dial **flash** + 7, then dial the third party's number. Once the third party answers the call, a 3-way call is established.

To drop the conference, dial **flash** + 8.

Call Forwarding

To set the **Forward** option, dial * + 2 + *destination number*.

All calls to the phone with **Forward** set will be received at the destination number.

To unset the **Forward** option, dial * + 3.

Transferring a Call

To transfer a call that you are receiving to another number, dial **flash** + 4 + *destination number* and put the handset down.

The phone will ring both at the destination number and at your line.

By picking up the handset, the callee at the destination number will be engaged in the call with the original caller. Your phone will stop ringing.

If the callee at the destination number does not pick up the handset, you can receive the call by picking up the handset as long as the phone rings.

Hold

To hold a call that you are receiving, press **flash** + 1. The caller will be at hold.

You can then run another call by dialing another number. When you put the handset down the phone will ring. Pick up the call and you will be engaged in a call with the original caller. If you wish you can then transfer the call as described above, or just proceed with the original call.

Advanced Calling Features for MGCP

Advanced calling features are supported. Refer to your Call Agent for the advanced calling features supported.

Advanced Configuration via the Web

If you need to change the default configuration of your Gateway, proceed as follows.

- Connect a PC to one of LAN ports on the rear panel of the unit.
- Open the Web browser on the PC.
- In the Web browser's address field, type 192.168.100.1 (the default LAN IP address of the unit) to open the home page of the unit.
- To update a setting, proceed as described in the following sections. Enter the required settings on the appropriate Web pages and then save the changes by clicking on the **Save** button at the bottom of each page.
- Once all settings have been saved, select the **Reset** option on the left-hand side of the Web page to reset the VoIP Gateway and effectuate the new settings.

WAN Configuration

To change the WAN mode from DHCP default configuration to fixed IP configuration, or to assign a different fixed IP address, perform as follows:

1. Configure the PC to dynamically acquire an IP address (DHCP) or set it to a fixed IP address in the subnet 192.168.100.xxx.
2. Enter the IP address of the unit into the PC Web browser. (The default LAN IP address is 192.168.100.1). The Access VoIP Gateway home page appears (Figure 1).

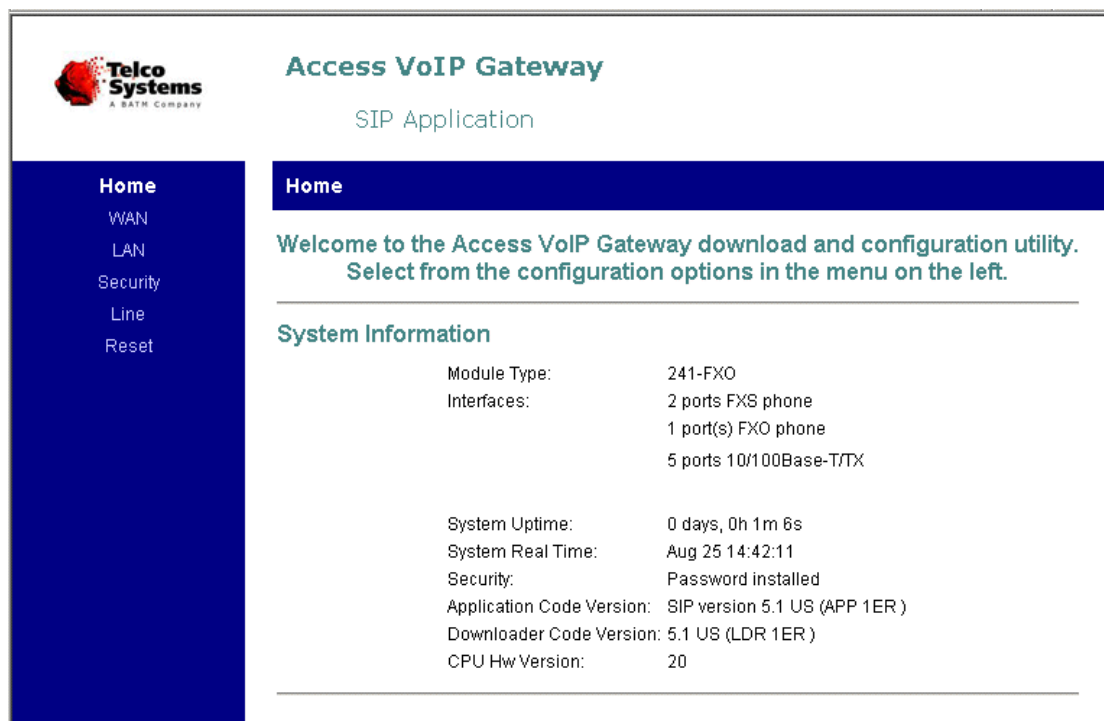
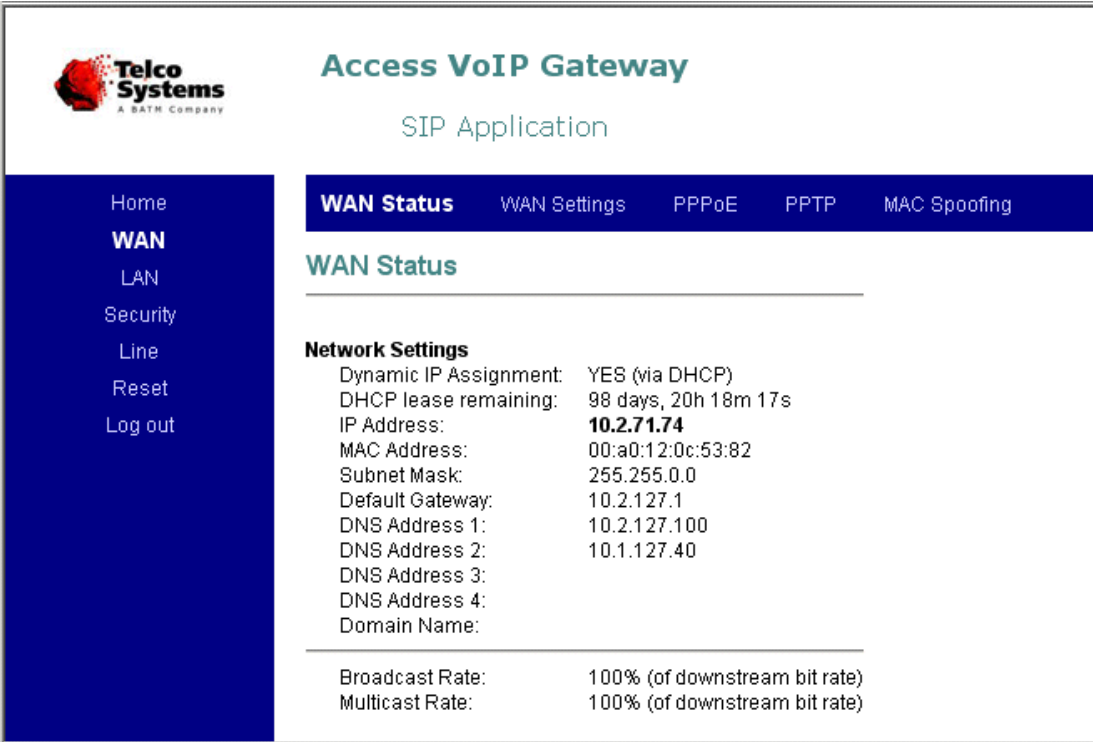


Figure 1: Example Access VoIP Gateway Home Page

4. In the vertical menu bar on the left, select **WAN**.

The **WAN Status** page appears:



Telco Systems
A BATM Company

Access VoIP Gateway

SIP Application

WAN Status | WAN Settings | PPPoE | PPTP | MAC Spoofing

WAN Status

Network Settings

Dynamic IP Assignment:	YES (via DHCP)
DHCP lease remaining:	98 days, 20h 18m 17s
IP Address:	10.2.71.74
MAC Address:	00:a0:12:0c:53:82
Subnet Mask:	255.255.0.0
Default Gateway:	10.2.127.1
DNS Address 1:	10.2.127.100
DNS Address 2:	10.1.127.40
DNS Address 3:	
DNS Address 4:	
Domain Name:	

Broadcast Rate:	100% (of downstream bit rate)
Multicast Rate:	100% (of downstream bit rate)

Figure 2: WAN Status Page

- To change network and VoIP IP settings, select **WAN Settings** on the horizontal menu bar. The **WAN Configuration** page appears (Figure 3).

Telco Systems
A BATM Company

Access VoIP Gateway

SIP Application

Home
WAN
LAN
Security
Line
Reset
Log out

WAN Status **WAN Settings** PPPoE PPTP MAC Spoofing

WAN Configuration

☒ **Obtain WAN configuration dynamically**

☐ **Specify fixed WAN configuration**

IP Address:

IP Netmask:

IP Gateway:

IP DNS Server 1: 2:

Host Name:

Domain Name:

MTU:

Multicast Rates

Broadcast Rate: % (of Ethernet connection bitrate)

Multicast Rate: % (of Ethernet connection bitrate)

Figure 3: WAN Configuration Page

6. Select either of the following options.

To dynamically obtain a WAN IP address:

- Select **Obtain WAN configuration dynamically**.

OR

To specify fixed values for the WAN IP address, mask, gateway, DNS Server, etc:

- Select **Specify fixed WAN Configuration**
- The following fields, associated with fixed IP addressing should be filled in or changed only if your broadband provider requires them. Use the values supplied by your broadband provider:

IP Address, IP Netmask, IP Gateway, IP DNS Server 1 and 2, Host Name and Domain Name.

8. **Multicast Rates** – Limits for Multicast and broadcast traffic, as percentage of Ethernet bit-rate traffic:

- **Broadcast Rate**
- **Multicast Rate**

9. Scroll down to the bottom of the Web page, and click **Save WANSettings**.
10. Select **Reset** in the vertical menu bar, to reset the Gateway (see section “[Completing the Gateway Configuration](#)”).

Enabling Point-to-Point Protocol over Ethernet (PPPoE)

If you have a DSL modem and are NOT using a router between the Gateway and the modem, configure PPPoE as follows:

1. In the horizontal menu bar of the **WAN** page, select **PPPoE**.
The **WAN PPPoE Configuration** page appears (Figure 4).

The screenshot shows the 'Access VoIP Gateway' web interface. At the top left is the Telco Systems logo. The main title is 'Access VoIP Gateway' with 'SIP Application' below it. A horizontal menu bar contains 'WAN Status', 'WAN Settings', 'PPPoE' (which is highlighted), 'PPTP', and 'MAC Spoofing'. On the left is a vertical menu bar with 'Home', 'WAN' (highlighted), 'LAN', 'Security', 'Line', 'Reset', and 'Log out'. The main content area is titled 'WAN PPPoE Configuration'. It contains three sections: 'Enable PPPoE' with a dropdown menu set to 'No'; 'Authentication' with fields for 'User Name' and 'Password'; and 'Settings' with fields for 'Idle Timeout' (with a 'minutes' label), 'Service Name', and 'AC Name'. At the bottom is a 'Save PPPoE Settings' button.

Figure 4: WAN PPPoE Configuration Page

2. Select **Yes** in the **Enable PPPoE** drop-down list box.
3. Fill in the username and password in the **Authentication** fields as supplied by your DSL provider. Optionally you can enter the service name for the requested service. To select a specific provider, enter his access name in the ACname field. Click **Save PPPoESettings**.
4. Select **Reset** in the vertical menu bar, to reset the unit (see “[Completing the Gateway](#)”).

[Configuration](#)” on page 44).

Enabling Point-to-Point T Protocol (PPTP)

If you need a PPTP connection configure PPTP as follows:

1. In the horizontal menu bar of the **WAN** page, select **PPTP**.
The **WAN PPTP Configuration** page appears (Figure 5).

The screenshot shows the 'Access VoIP Gateway' interface with the 'SIP Application' section. The left sidebar contains a vertical menu with options: Home, WAN (selected), LAN, Security, Line, Reset, and Log out. The top horizontal menu bar includes: WAN Status, WAN Settings, PPPoE, PPTP (selected), and MAC Spoofing. The main content area is titled 'PPTP Configuration' and contains the following fields:

- Enable PPTP:** A drop-down menu currently set to 'No'.
- Authentication:**
 - User Name:** A text input field.
 - Password:** A text input field.
- Settings:**
 - Server Address:** A text input field.

At the bottom of the configuration area is a button labeled 'Save PPTP Settings'.

Figure 5: WAN PPTP Configuration Page

2. Select **Yes** in the **Enable PPTP** drop-down list box.
3. Fill in the username and password in the **Authentication** fields as supplied by your provider.
4. Enter the Server Address in the text box. Click **Save PPTP Settings**.
4. Select **Reset** in the vertical menu bar, to reset the unit (see section “[Completing the Gateway Configuration](#)” on page 44).

MAC Spoofing

MAC spoofing may be required in cases that your broadband provider associates a particular service to a specific device (e.g. your computer).

To override the MAC address of the device that you supplied to your broadband provider

1. In the horizontal menu bar of the **WAN** page, select **MAC Spoofing**.
The **MAC Spoofing Configuration** page appears (Figure 6).

Figure 6: MAC Spoofing Configuration Page

- 2a. If you know the MAC address of your device, enter it into the WAN MAC Address (Spoofed) field and click **Save MAC Spoofing Settings**.
- 2b. If you do not know the MAC address of your device, copy the value from the Learnt MAC's field to the WAN MAC Address field, click **Save MAC Spoofing Settings** and click **Reset** to reset the Gateway.

LAN Configuration

- The LAN Configuration Web pages allow you to configure the following LAN settings:
LAN IP address and subnet mask;
- LAN broadcast and multicast traffic limitation;
- Rate control;
- DHCP Server settings;
- Port forwarding – to enable access to local ports from an external network;
- Enable/disable NAT IPsec Traverse

To open the LAN Configuration pages:

In the vertical menu bar on the left of the Access VoIP Gateway Web page, select **LAN**.
The **LAN Configuration** page appears (Figure 7).

Telco Systems
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Access VoIP Gateway

SIP Application

Home
WAN
LAN
Security
Line
Reset
Log out

LAN Settings DHCP Port Forwarding NAT

LAN Configuration

Network Settings

IP Address:

Subnet Mask:

Multicast Rates

Broadcast Rate: % (of Ethernet connection bitrate)

Multicast Rate: % (of Ethernet connection bitrate)

Rate Control

☒ Disable Rate Limits

☐ Dynamic Rate Limits

User Upload Rate (Kbps):

Current LAN Rate Limit (Kbps):

☐ Fixed Rate Limits

LAN Rate Limit(Kbps):

Figure 7: LAN Configuration Page

Configuring LAN Settings

To configure LAN settings, broadcast and multicast traffic limits and/or rate control, proceed as follows:

1. In the **LAN Configuration** page, enter the LAN IP address and subnet mask.
2. Optionally, set the broadcast and multicast limits in the appropriate fields.
3. Select one of the following **Rate Control** options:
 - **Disable Rate Limits** (this is the default setting)
OR
 - **Dynamic Rate Limits**
OR
 - **Fixed Rate Limits**

With the Rate control feature you can limit the bandwidth allocated to the device(s) connected

to the LAN port. This is especially important for broadband users where the upload link to the ISP is considerably lower than the download link from the ISP. Setting the Rate control parameters will insure that voice quality is preserved even while running heavy bandwidth applications on the devices connected to LAN port.

Select **Fixed Rate Limits** to limit the bandwidth received from the LAN to the value of the LAN Rate Limit that is specified in the text box (in Kbps). If you change this value, the actual rate limit will be rounded to the nearest multiple of 32 Kbps.

If you want to select the **Dynamic Rate Limit** option you must first set the **User Upload Rate** parameter to the value of the user's available upload bandwidth on the WAN connection. The Access gateway will dynamically reserve bandwidth for the active calls and limit the bandwidth for the LAN device to the remaining available bandwidth. By default the **User Upload Rate** is set to 32 Kbps, however, you may choose values from 12 to 131040 Kbps. You can view the actual bandwidth allocated to the LAN device in the **Current LAN Rate Limit** parameter.

- 4 Click Save LAN Settings.

DHCP Server Configuration

To use a DHCP Server to automatically assign IP addresses and subnet masks to devices connected to the LAN port, proceed as follows:

1. In the horizontal menu bar on the **LAN** page, select **DHCP**.
The **DHCP Server Configuration** page appears (Figure 8).

Telco Systems
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Access VoIP Gateway

SIP Application

Home | WAN | **LAN** | Security | Line | Reset | Log out

LAN Settings | **DHCP** | Port Forwarding | NAT

DHCP Server Configuration

Server Settings

☒ Enabled ☐ Disabled

Client IP Address Range: 192.168.100. -

Scan network for given leases upon reboot: ☒ Yes ☐ No

Client Network Information

Domain Name:

DNS Server 1: 2:

Default Lease Time: seconds

Static Address Assignments

Identify Using	Host Identifier	Internal Address	
<input type="text" value="Hostname"/>	<input type="text"/>	192.168.100. <input type="text"/>	<input type="button" value="Add"/>

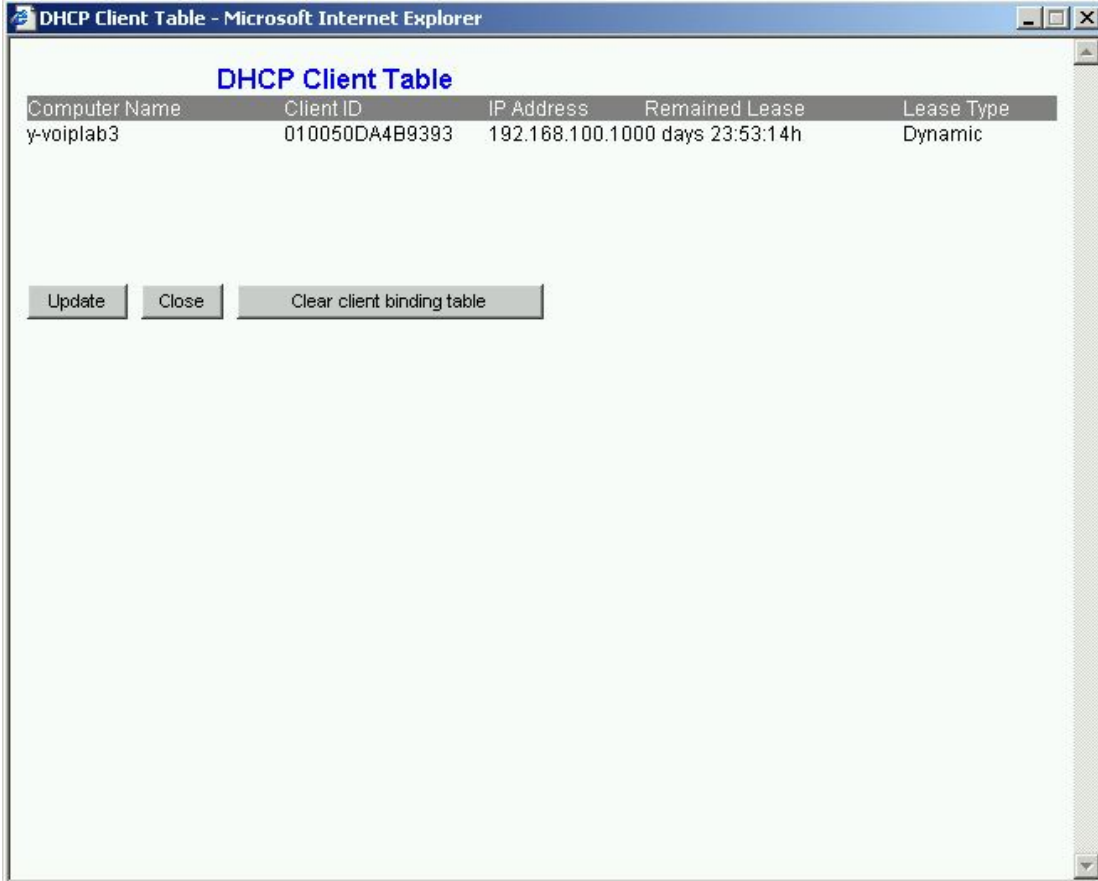
Figure 8: DHCP Server Configuration Page

2. To enable the DHCP Server, select the **Server Settings Enabled** option.
3. For **Scan network for given leases upon reboot**, the **Yes** option should be selected in order to prevent the need to reset all devices that are connected to the network on reboot.
4. Fill in the following fields:
 - **Client IP Address range** – up to 24 IP addresses are allowed. To change the LAN IP, see “[Configuring LAN Settings](#)” on page 34.
 - **Domain Name** – optionally enter the domain name for the local LAN.
 - **DNS Server 1 and 2** – if left blank, the DNS Server IP addresses will be acquired from the WAN connection. If you want to use different DNS Server addresses, enter their IP's here. These addresses will appear at the top of the computer's DNS Servers list.
 - **Default Lease Time** – the default value is 86400 seconds (24 hours). The

available time range is from 30 seconds to 30 days.

- **Static Address Assignments** - you can define LAN devices manually. The devices can be defined by Host name or by MAC address:
 - **Identify Using** – Select the type of identifier, Host name or MAC, you wish to use in the next field.
 - **Host Identifier** – Enter the appropriate value (Host name or MAC).
 - **Internal Address** – static IP of the local host.

5. To view the DHCP Client table (Figure 9), click on **View DHCP Table**.



Computer Name	Client ID	IP Address	Remained Lease	Lease Type
y-voiplab3	010050DA4B9393	192.168.100.1000	days 23:53:14h	Dynamic

Update Close Clear client binding table

Figure 9: DHCP Client Table Page

Port Forwarding

Port forwarding associates local port ranges to local IP addresses. This enables external network users to access local devices, without the need for the local servers to first access the global network.

To configure port forwarding:

1. In the horizontal menu bar of the **LAN** page, select **Port Forwarding**. The **Port Forwarding Configuration** page appears (Figure 10).

Telco Systems
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Access VoIP Gateway

SIP Application

Home
WAN
LAN
Security
Line
Reset
Log out

LAN Settings DHCP **Port Forwarding** NAT

Port Forwarding Configuration

Reserved Ports
The following ports have been reserved by the CPE, and may not be forwarded to the LAN
68, 16384-16403, 80, 23

Port Forwarding to LAN

Port Range	Protocol	Destination Address
<input type="text"/> - <input type="text"/>	Both	192.168.100. <input type="text"/>

Demilitarized Zone
Demilitarized Zone Server IP: 192.168.100.

Save NAPT Settings

Figure 10: Port Forwarding Configuration Page

2. Enter an allowed port range (do not use any of the port numbers that are specified in the **Reserved Ports** list), and specify the low byte number of the destination address in decimal notation.
3. Click on **Add**.
4. Repeat for additional port forwarding associations as required. Up to 10 devices can be defined.
5. Click **Save NAPT Settings**.

Enabling the Network Address Translator (NAT)

The IPsec NAT Traverse feature supports IPsec VPN passing through NAT.

NOTE



Users with NAT-T (UDP tunnel for VPN traffic) should **not** enable this feature. This option is disabled by default.

The objective of the Network Address Translator, NAT, is to provide functionality as if the private network had globally unique addresses and the NAT device was not present. Basic NAT allows a one-to-one mapping between one private address and one public address. In its simplest

configuration, the NAT operates on a router connecting two networks together. One of these networks (designated as inside) is addressed with either private or obsolete addresses that need to be converted into legal addresses before packets are forwarded onto the other network (designated as outside). The translation operates in conjunction with routing, so that NAT can simply be enabled on a customer-side Internet access router when translation is desired.

NAPT (Network Port Address Translator) maps a single public address to one or many internal addresses and all network IP addresses on the connected computers are local and cannot be seen by the outside world.

NAT with Port Address Translation (NAPT) is an extension to NAT in that NAPT uses TCP/UDP ports in addition to network addresses (IP addresses) to map many private network addresses to a single outside address.

To enable the Network Address Translator:

1. In the horizontal menu bar of the **LAN** page, select **NAT**. The **NAT IPSec traverse configuration** page appears (Figure 11).

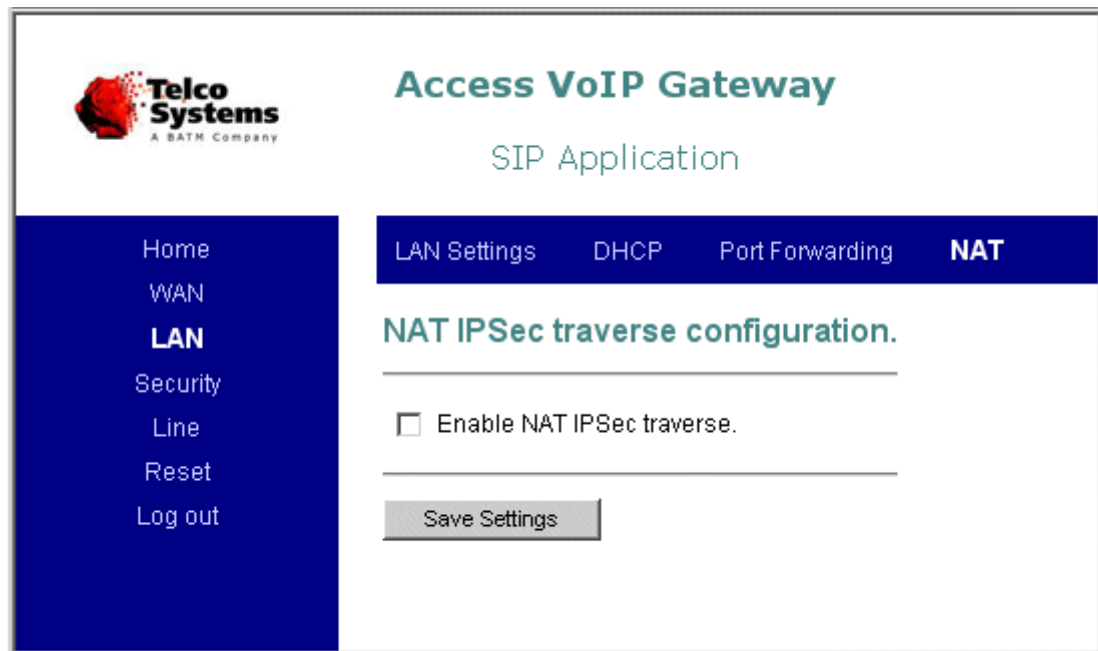


Figure 11: NAT IPSec Traverse Configuration Page

2. Check in the **Enable NAT IPSec traverse** check box.
3. Click **Save Settings**.

Security Configuration

The **Security Configuration** Web page allows you to configure your User Password.

- Maximum length of password is up to 20 characters.
- You can use any character to build your password.

To configure a new User Password:

1. In the vertical menu bar of the current **Gateway** Web page, select **Security**.
2. In the **New Password** text box, type in your User Password. You may use any character to form your password. The password must be no longer than 20 characters.

The screenshot shows the 'Access VoIP Gateway' web interface. On the left is a blue vertical menu with the following items: Home, WAN, LAN, **Security** (which is highlighted), Line, and Reset. The main content area has a header with the Telco Systems logo and the text 'Access VoIP Gateway' and 'SIP Application'. Below this is a section titled 'Password' with a subtitle 'Set Security User Password'. The text 'No password installed' is displayed. There are two text input fields: 'New password:' and 'Confirm new password:'. At the bottom of this section is a button labeled 'Save Password'.

Figure 12: User Password Configuration Page

3. Re-enter the password in the **Confirm new password** text box.
4. Click **Save Password**. The following window appears:



This unit is password protected

Please enter the correct password to access the web pages

Figure 13: Password Protection Page

4. Enter your User Password.
5. Click **Authenticate**. The application home page opens.

Once you have created a password, the Gateway's Web management system will logout automatically after 10 minutes. It is recommended to **Logout** after configuration.

Line Configuration

The **Line Configuration** Web pages, **Line1**, **Line 2** and **Line3**, allow you to configure the Call Forwarding settings and volume (Gain) settings.

Call Forward Line Configuration

The following **Call Forward** settings are available for Line 1 and Line 2:

- Disabled
- Unconditional

The call is always diverted to another destination.

- Conditional

Callees frequently wish to redirect incoming calls to an alternative destination if the primary destination fails to answer within 20 seconds. The reasons for failure include busy callee, callee's phone is disconnected, callee does not answer, or callee denying the incoming call. The alternative destination is typically a voicemail system but it may also be another human or some other SIP device.

The Forwarding settings can be selected for each line separately.

Gain Control Configuration (Volume)

The following **Gain Control Configuration** settings for (VoIP) internet telephone communication are available for **Line 1** and **Line 2 (FXS)**:

- The **Line (input) Gain** range is <+12 to -12>. This sets the volume at which the callee hears you.
- The **Headset (output) Gain** range is <+12 to -12>. This sets the volume at which you hear through the headset. If this volume is too high, there is an echo in the headset.

The following **Gain Control Configuration** settings for PSTN communication are available for **Line 3 (FXO)**:

- The **Line (input) Gain** range is <+12 to -12>. This sets the volume at which the callee hears you.
- The **Headset (output) Gain** range is <+12 to -12>. This sets the volume at which you hear through the headset. If this volume is too high, there is an echo in the headset.

To configure settings for Line 1:

1. In the vertical menu bar of the current **Gateway** Web page, select **Line**.
2. In the horizontal menu bar of the **Line** page, select **Line 1**.
3. In the **Call Forward Line Configuration** field, select the desired option.
4. In the Gain Control Configuration, Line (input) Gain field, select the required volume.
5. In the Gain Control Configuration, Headset (output) Gain field, select the required volume.
6. Click **Save Line Settings**.

The screenshot shows the 'Access VoIP Gateway' web interface for a SIP Application. On the left is a blue sidebar menu with the following items: Home, WAN, LAN, Security, **Line** (highlighted), and Reset. The main content area has a header with 'Line1', 'Line2', and 'Line3' tabs, with 'Line1' selected. Below the tabs, the 'FXS Line Status' section shows 'Registration status' with 'Registration state: Registered'. The 'Line Configuration' section includes 'Call Forward Line Configuration' with a dropdown menu set to 'Disabled'. The 'Gain Control Configuration' section has two dropdown menus: 'Line (input) gain' and 'Headset (output) gain', both set to '-3'. At the bottom of the configuration area is a 'Save Line Settings' button.

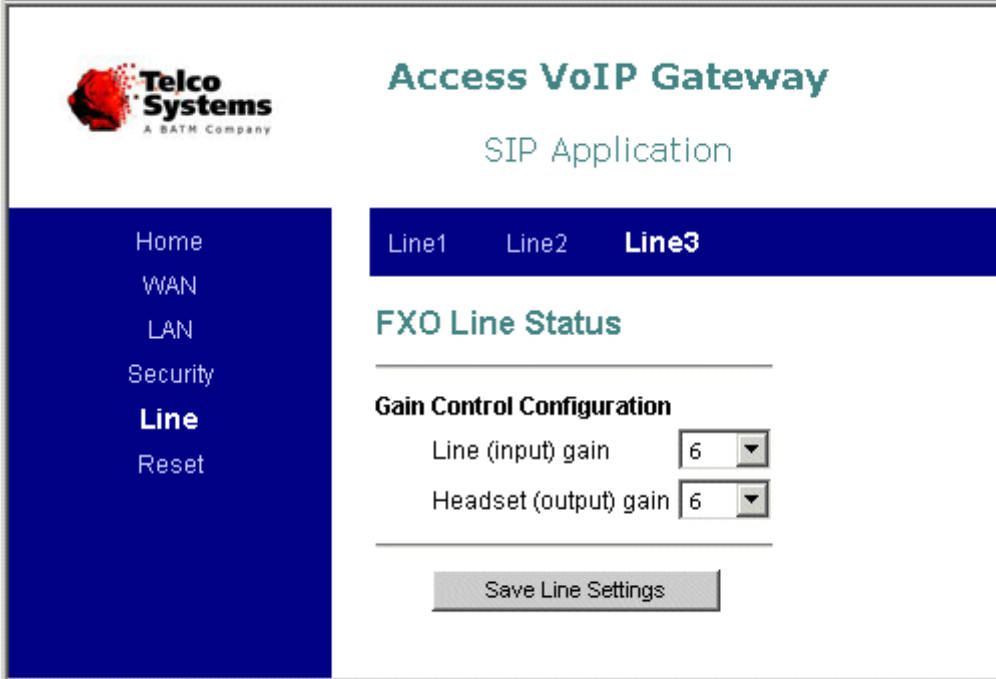
Figure 14: Example for Setting Call Forwarding for Line 1

To configure settings for Line 2:

1. In the horizontal menu bar of the **Line** page, select **Line 2**.
2. In the **Call Forward Line Configuration** field, select the desired option.
3. In the **Call Forward Line Configuration** field, select the desired option.
4. In the Gain Control Configuration, Line (input) Gain field, select the required volume.
5. In the Gain Control Configuration, Headset (output) Gain field, select the required volume.
6. Click **Save Line Settings**.

To configure settings for Line 3:

1. In the Gain Control Configuration, Line (input) Gain field, select the required volume.
2. In the Gain Control Configuration, Headset (output) Gain field, select the required volume.
3. Click **Save Line Settings**.



The screenshot displays the Telco Systems Access VoIP Gateway SIP Application interface. On the left is a blue sidebar menu with options: Home, WAN, LAN, Security, **Line**, and Reset. The top right area shows the title 'Access VoIP Gateway' and 'SIP Application'. Below this is a horizontal menu with 'Line1', 'Line2', and **Line3**. The main content area is titled 'FXO Line Status' and contains a 'Gain Control Configuration' section. This section has two dropdown menus: 'Line (input) gain' and 'Headset (output) gain', both currently set to '6'. At the bottom of this section is a 'Save Line Settings' button.

NOTE After entering and saving all configurations, you **MUST** reset the Gateway.



Completing the Gateway Configuration

After entering and saving all configurations, you must reset the Gateway.

To reset the Gateway:

1. In the vertical menu bar of the current page, select **Reset**.
The **Reset** page (Figure 15) appears.
2. Click the **Reset** button. The Gateway reboots and the application home page opens with the new configuration settings.

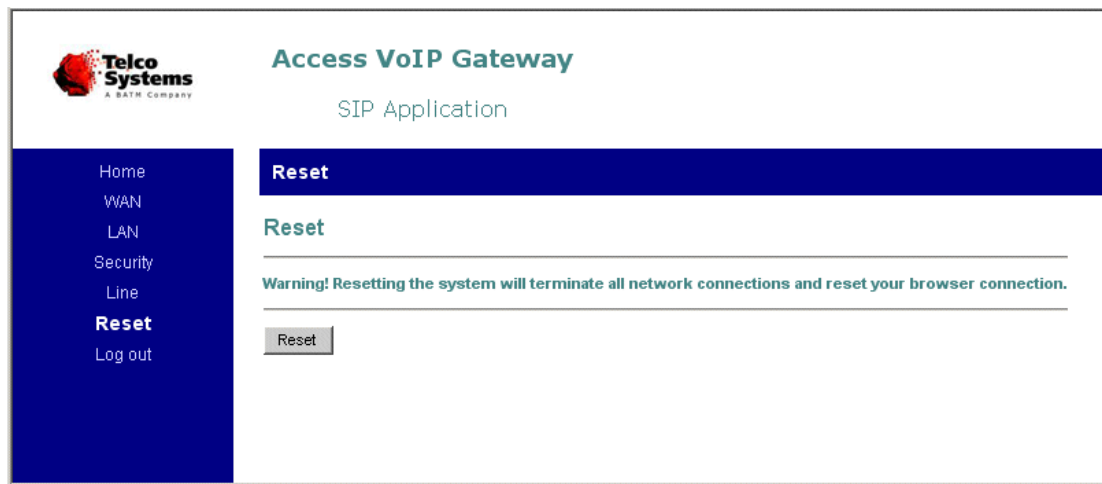


Figure 15: Reset Page

Troubleshooting

Problem	Solution
The unit does not function. The Power LED is off.	Check that the AC/DC adapter is properly connected, and that power is supplied to the wall power outlet.
No dial tone	<p>(a) Verify that the phone line is securely plugged into the Phone1 or Phone2 port.</p> <p>(b) Verify that the WAN Link/Act LED on the front of the Gateway is lit. If it is not, check that the WAN cable is properly connected.</p> <p>(c) If there is still no dial tone, check with your VoIP and broadband service providers.</p>
The Internet service does not work properly (single PC connection, without a router).	<p>(a) Verify that the WAN and the LAN Link/Act LEDs on the front of the Gateway are lit. If not, verify that the Ethernet cables are properly connected.</p> <p>(b) Connect your PC directly to the broadband modem and check the Internet service.</p> <p>If the Internet service functions properly when the Gateway is not connected, review the LAN settings according to the LAN configuration instructions above.</p>
The Internet service does not work properly (local network connected through a router).	Follow the instructions supplied with your router.

Specifications

Dimensions	4.75"(W) x 7.36"(L) x 1.77"(H) 120(W) x 187(L) x 45(H) mm
Weight:	1.32 lbs (0.6 kg)
Operating temperature:	0°C - 45°C (32°F - 113°C)
Humidity:	10% - 90% non-condensing
Power source:	5 VDC@2 A – External power supply (Access 211 and Access 241) 5 VDC@2.6 A – External power supply (Access 241-FXO)
Emission and safety regulations:	FCC Class B, UL, CUL, CE