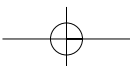
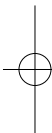
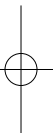




Australia: Tel. +61 3 8823 9111
Canada: Tel. +1 416 620 1440
Hong Kong: Tel. +852 21 04 68 28
Japan: Tel. +81 3 3239 1721

P. R. China: Tel. +86 10 6583 2311
Singapore: +65 65 42 45 50
USA: Tel. +1 603 598 1100

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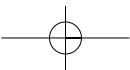
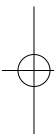
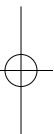
GN 502 USB / 503 USB

US User guide

FR Guide d'utilisation

ES Manual del usuario

PT Guia do utilizador



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GN 502 USB/GN 503 USB user guide

This user guide gives you information and instructions on setting up, using and maintaining your GN 502 USB/GN 503 USB, and contains the following sections:

1. Product information	4
2. Setting up your GN 502 USB/GN 503 USB	6
3. Using your GN 502 USB/GN 503 USB	7
4. Frequently asked questions	9

1. Product information

The GN 502 USB/GN 503 USB headset solution incorporates digital signal processing to enhance your PC communications experience. It is designed to provide the optimum interface for voice communications and streaming media over the Internet/data networks. The GN 502 USB/GN 503 USB headset also boosts the quality of transmitted voice, which is important for transmission clarity and interoperability with voice driven applications, such as speech recognition and recording.

System requirements

The GN 502 USB/GN 503 USB requires the following operating systems and an available USB port:

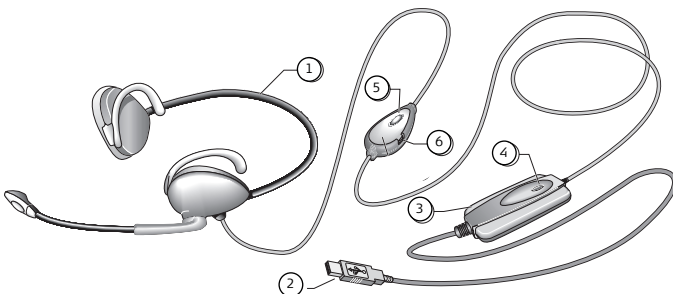
Windows® XP
Windows Me (Millennium Edition)
Windows 2000
Windows 98 SE (Second edition)
Macintosh OS 9.0.4, 9.1, 9.2, 10.1.3 (or greater)

The GN 502 USB/GN 503 USB does not work with earlier releases of these operating systems.

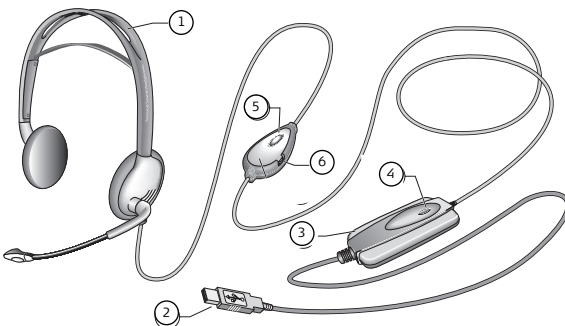
1.1 Parts and Signatures

1. Headset
2. USB connector
3. Digital signal processor
4. In-line connection status LED
5. In-line volume control
6. In-line microphone mute switch

GN 502 USB



GN 503 USB



2. Setting up your GN 502 USB/GN 503 USB

With the Windows XP, Windows 2000 and Macintosh OS 9.0.4 (or greater) operating systems, you are ready to use your GN 502 USB / GN 503 USB and require no software installation. Simply plug the USB connector into any USB port on the computer.

2.1 Installation Windows Me and Windows 98 SE:

To use the GN 502 USB/GN 503 USB for the first time, you need to install the USB drivers necessary for the computer to recognize the device.

Your computer must be on (and boot-up process complete) and no other applications should be running before installing your GN 502 USB/GN 503 USB.

To install the device, simply plug your device into your computer's USB port.

- The first time Windows detects that a new device (hardware) is connected, it will automatically launch the Add New Hardware Wizard.
- On Windows Me, the following drivers will be automatically installed to your computer: USB Composite Device, USB Audio Device and USB HID Device.
- With Windows 98SE, click Next.

2.2 Installation—for Mac

Your computer must be on (and boot-up process complete) and no other applications should be running before installing your GN 502 USB/GN 503 USB. To install the device, complete the following:

1. Plug your device into an available USB port (on your PC or PC's keyboard).

Note: If you plug your device into the PC's keyboard, make sure the keyboard is plugged into the PC's USB port number 1.

2. Specify the input device type to your computer according to the operating system:

For OS 9:

- Click Apple menu
- Select Control Panels
- From Control Panels, select Sound to activate the sound option window.

- Verify that input source is External Mic.
- Close the sound option window.

For OS 10.1.3 and greater:

- Click System Preferences
- Select Sound to activate Sound Option Window for Headphone.
- Select speech to activate microphone.
- Select input, and select USB audio as your device for sound input.

3. Using your GN 502 USB/GN 503 USB

When using your GN 502 USB/GN 503 USB, you will most likely record an audio file and need to adjust the sound recording or playback volume. These are completed slightly differently with PC and Mac operating systems.

Before using your headset, adjust the headset's boom so that it is pointed in the direction of your mouth.

3.1 Use—with PC

Recording an audio file

To record an audio file, complete the following:

1. Go to Start → Programs → Accessories → Entertainment – Sound Recorder.
2. With your headset positioned correctly, click the RECORD button and record your voice file.
3. Click the STOP button when finished recording.
4. To review your record, click the PLAY button.

If you hear your voice, your recording was successful.

Volume adjustment (with Windows 2000, Windows Me and Windows 98 SE)

You can adjust the sound recording or playback volume using the volume slider in your computer's multimedia settings by completing the following:

1. Go to Start → Settings → Control Panel → Sound Speech & Audio Devices → Audio.
2. Confirm that GN 502 USB/GN 503 USB Audio as the preferred device for sound recording/playback. If it isn't, click apply, and then OK.

For Windows 2000 and Windows Me only:

Click the volume button in the Sound Recording/Playback section to open the Volume Control Panel.

For Windows 98SE only:

Click the button with the slider and microphone/speaker.

3. On the Volume Slider Panel, ensure that MUTE is not activated.
4. Adjust volume using the volume slider (Up increases volume and Down decreases).
5. Click apply, and then click OK

Volume adjustment (with Windows XP)

You can adjust the sound recording or playback volume using the volume slider in your computer's multimedia settings by completing the following:

1. Go to Start → Control Pane → Sound Speech & Audio Devices → Sound & Audio Devices.
2. Click on the Audio tab, and confirm that **GN 502 USB/GN 503 USB Audio** as the preferred device for sound recording/playback. If it isn't, click apply, and then OK.
3. Click on the Volume tab, ensure that MUTE is not activated.
4. Adjust volume using the volume slider (Up increases volume and Down decreases).
5. Click apply, and then click OK.

3.2 Use—with Mac**Recording an audio file (with OS 9)**

1. With OS 9: Open the application SimpleSound on your hard drive.
With OS 9.1: Go to the Apple menu → Control Panel → Sound application.
Then click on the Alerts tab, and then click on New Sound.
2. Click Add to open the record window.
3. Click Record and create a voice file.
4. Click the STOP button when finished recording.
5. To review your record, click the PLAY button.
If you hear your voice, your recording was successful.

Recording an audio file (with OS 10.1.3 and greater)

1. Click System Preferences, and then click Speech.
2. Turn Apple Speakable items on.

Volume adjustment (with OS 9)

1. Go to the Apple menu, select Control Panels and Sound to activate the sound option window.
2. Select Output, and select the device you are using.
3. Ensure that MUTE is not activated, and that the volume slider is at least at a medium sound level.

Volume adjustment (with OS 10.1.3 and greater)

Click System Preferences, and then Sound.

Use the volume sliders to adjust listening volume.

Note: No microphone volume level adjust is available.

4. Frequently asked questions**Why isn't my GN 502 USB/GN503 USB working?**

- Verify that you are using a correct operating system (for PC or Mac). See the beginning of this user guide for this information.
- Check that **USB audio device** is selected as your input device. Follow the instructions found in this user guide.
- General instructions for PC environments only:

In Multimedia Properties under Start -> Settings -> Control Panel -> Multimedia, check that your recording preferred device is **USB Audio Device**, and that the **Use Only preferred devices** box is activated.

Check that the device is listed in the Device Manager. Go to Start -> Setting -> Control Panel -> System, and select Device Manager for Windows (For Windows Me and Windows 2000: Hardware tab -> Device Manager tab). Choose View devices by type, select Sound and then select Video and Game Controllers.

USB Audio Device should be listed. Also select **Universal Serial Bus Controllers**. **USB Composite Device** should be listed. If not unplug and replug the device. Reboot your computer.

Why is there no sound output from the headset?

- Increase the volume using the in-line volume control.
- Adjust the audio source's volume control (computer/application control panel), or adjust the output level on other audio playback devices.
- Verify that the headset and all connectors are properly plugged into the correct ports. With a PC, the headset can be plugged into any port. With a Mac, you may plug your device into a USB port on your PC or PC's keyboard. However, if you plug your device into the PC's keyboard, make sure the keyboard is plugged into the PC's USB port number 1.

Why is there no sound input from the microphone?

- Ensure that the microphone isn't in mute mode (the mute switch must be off), and that the volume setting for these devices is at least at the halfway point.
- Adjust the microphone volume settings of the target audio device (computer/application control panel), or adjust the input level on other audio recording devices.
- Verify that the headset and all connectors are properly plugged into the correct ports.

Why is the sound recording quality so low?

- The minimum sampling rate for optimal microphone recording is 22,050Hz, 16 Bit, Mono. If needed, change the Properties of your computer's operating system to achieve this sampling rate. Refer to your operating system's user guide of Help section to change the sampling rate.

Cleaning, safety and maintenance

Clean the headset, including the headset boom arm, by wiping with a slightly damp cloth as required. Dampen the cloth with only water and a little washing-up liquid if needed. Avoid getting moisture into any button sockets or other openings.

The plastic bags and wrapping parts are not toys for children. The bags themselves or the many small parts they contain may cause choking if ingested.

Only authorized dealers or service centers may open the product. If any parts require replacement for any reason, including normal wear and tear or breakage, contact your dealer.

- Never try to dismantle the product yourself. None of the internal components can be replaced or repaired by users.
- Avoid exposing the product to rain or other liquids.

Dispose of the product according to local standards and regulations.

Declarations and Warranty

USA FCC part 15

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Cautionary Notes to Computer Users:

When using any headset with a computer, care should be taken in dry or low humidity environments to protect the user from electrostatic discharge from the monitor (CRT). Computer monitors can induce a substantial electrostatic charge when turned on or off, or when there is a power failure, and the resulting electrostatic discharge can be passed through the headset to ground. A user in close proximity to or touching the computer may feel a common "shock" sensation, similar to touching a door knob after walking across a carpet, causing no harm to the user. This discharge is entirely due to the computer monitor, the headset is merely the shortest path to ground.

To minimize the possibility of electrostatic discharge through the headset, you can:

- Use a grounded screen in front of the monitor.
- Use static dissipative wrist straps.
- Increase the relative humidity in the room to 60% or more.
- Install static dissipative carpets or floor covering.

- Remove the headset before turning the computer on or off.

GN Netcom products meet OSHA, FCC and CSA standards.

USA / Canada Warranty

Limited Warranty

GN Netcom warrants to the original consumer purchaser that, except for the limitations and exclusions set forth below, the product shall be free from defects in materials and workmanship for a period of one (1) year from the date of original retail purchase ("Warranty Period"). The obligation of GN Netcom under this warranty shall be limited to repair or replacement, at GN Netcom option, without charge, of any part or unit that proves to be defective in material or workmanship during the Warranty Period, provided the product is returned to GN Netcom at the address listed under "How to Obtain Warranty Repairs." Except as modified by applicable State Law, this warranty sets forth the extent and limit of GN Netcom obligation to the purchaser and or user of the product.

Exclusions from Warranty

This warranty applies only to defective factory material and factory workmanship. Any conditions caused by accident, abuse, misuse or improper operation in violation of instructions furnished by GN Netcom destruction or alteration, improper electrical voltages or cur-

rents, or repair or maintenance attempted by anyone other than GN Netcom is not a "defect" covered by this Warranty. In such cases, GN Netcom may charge you for materials and labor, even during the Warranty Period. It is the owner's responsibility to operate and care for this product in accordance with the operating instructions and specifications supplied with the product; and repairs resulting from failure to do so are not covered by the Warranty.

The Warranty is void if the serial number, date code label, or product label is removed.

The following parts are considered to be subject to wear and tear in normal usage and are not covered by the Warranty: earhooks, decorative finishes and all foam products (earpads, eargels, microphone covers).

Implied Warranty

Under state law, you may be entitled to the benefit of certain implied warranties. These implied Warranties will continue in force only during the Warranty Period. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Incidental or Consequential Damages

Neither GN Netcom nor your retail dealer or selling distributor has any responsibility for any incident or consequential damages including, without limitation, commercial loss, or for any incidental expenses, loss of time, or inconvenience. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Other Legal Rights

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

How to Obtain Warranty Repairs

For customer service and technical support, call GN Netcom at: 1-800-826-4656 or 1-603-598-1100.

To obtain Warranty repairs, return your unit, shipping prepaid, direct to:

In USA:

GN Netcom
77 Northeastern Blvd.
Nashua, NH 03062 USA

In Canada:

GN Netcom
1515 Matheson Blvd., Unit 104
Mississauga, Ontario L4W 2P5

Please use the original container, if possible, or pack the unit in a sturdy carton with sufficient packing material to prevent shipping damage. Include the following information:

1. Your name, company name, address and telephone number.
2. A description of the problem.
3. A copy of your purchase receipt indicating the model number and date of purchase. Without proof-of-purchase, your warranty is defined as beginning on the date of manufacture as labeled on the product.

For out-of-warranty products, also include:

1. A purchase order authorizing repair.
- During the Warranty Period, shipping charges for return to you will be paid by GN Netcom for a unit requiring any repair covered by the Warranty. Return shipping will be charged to the customer during the Warranty Period for a unit requiring no Warranty repair. These shipping charges will be prepaid by GN Netcom and billed to the customer.

Damage occurring during shipment is deemed the responsibility of the carrier, and any claim should be made directly to such carrier.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

DIM: 110X80mm