

English – GN 8210 user guide

This user guide provides you with information on setting up, using and maintaining your GN 8210.

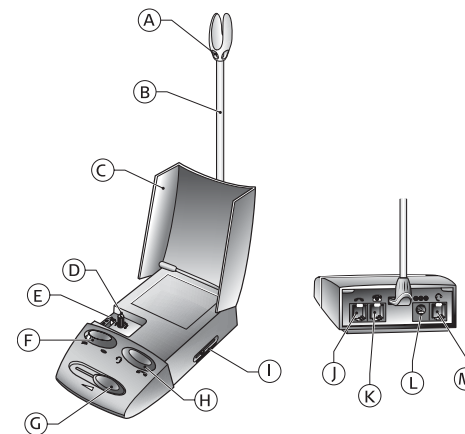
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1. Parts and signatures

- A) On-line indicator
- B) Headset stand
- C) Top cover
- D) Microphone volume adjustment control
- E) Audio mode switch
- F) Mute switch with indicator light
- G) Manual headset volume control
- H) Handset/headset switch
- I) Telephone termination switch
- J) Handset socket
- K) *Telephone socket
- L) Power adapter socket
- M) *Headset socket

* The telephone and headset are not included in the GN 8210 box.



The reference letters found through-out this user guide refer to this illustration.

2. Product information

Congratulations on purchasing the GN 8210, a digital headset amplifier that enables you to connect your GN Netcom headset to your telephone. With its advanced digital technology, the GN 8210 provides you with enhanced sound quality and protection against excessively-loud sounds. The GN 8210 operates in one of three user-selected audio modes to suit the protection needs and sound quality preferences of each user.

Follow the instructions in this user guide carefully and in the same order they are presented to fully benefit from your GN 8210.

2.1 GN 8210

- What's in the box

- GN 8210 amplifier with headset stand
- Power adapter
- Telephone connection cord
- Quick Disconnect connector (to connect headset's cord)



Note:

The telephone and headset are not included in the GN 8210 box.

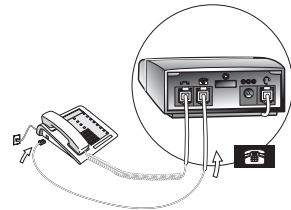
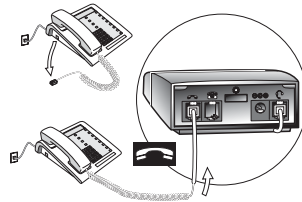
3. Setting up the GN 8210

To set up the GN 8210, first complete the assembly (3.1), then adjust for clear dial tone (3.2) and transmit volume (3.3), and finally choose the audio mode (3.4).

3.1 Assembly

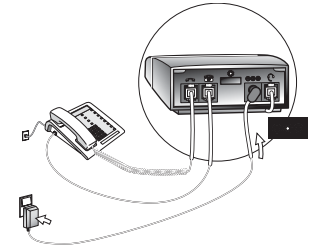
To connect the GN 8210 to your telephone, complete the following:

1. Disconnect the handset cord from the telephone's handset socket, and connect it to the handset socket (J) on the GN 8210.
2. Connect the telephone connection cord to the telephone's handset socket.

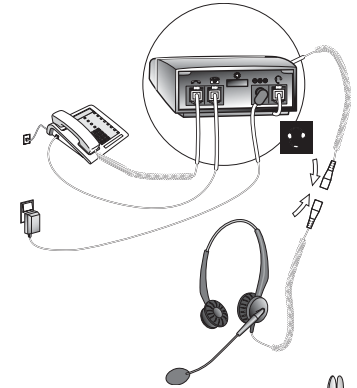


Note: The telephone connection cord is already connected to the GN 8210's telephone socket (K) from factory.

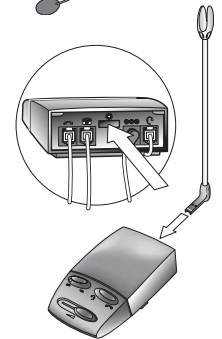
3. Connect the power adapter to the power adapter socket (L) at the back of the amplifier, and then connect it to a power socket. The amplifier indicates power connection and functioning status with 2 seconds of rapid flashing on the mute switch (F) and on-line indicator (A).



4. Connect your headset to the headset connection cord, using the Quick Disconnect connector.



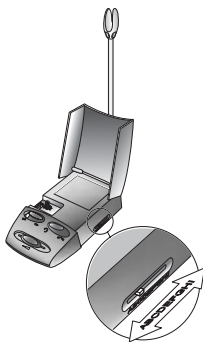
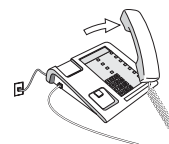
5. (Optional) Insert the headsetstand to the back of the amplifier by pressing it in.



3.2 Clear dial tone adjustment

In order to hear a dial tone, you must select the telephone termination setting. Complete the following:

1. Put on your headset. Make sure that the headset/handset switch (H) is set to headset position, and volume (G) is set to mid-range.
2. Remove the telephone's handset from the telephone and listen for a dial tone in your headset.
3. If there is no dial tone or it is not clear, stepwise slide the termination switch (I) through all 9 settings (along the "A-I" range), listening for the clearest possible dial tone. If the dial tone is just as clear in position "A" as in position "I", leave the switch in position "A".
4. When you hear the clearest dial tone, you have located the correct termination setting.



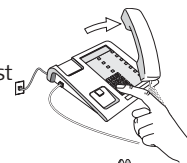
3.3 Microphone volume adjustment

Adjust the volume of transmitted sound according to an appropriate level. You will need to make a call to adjust the volume.

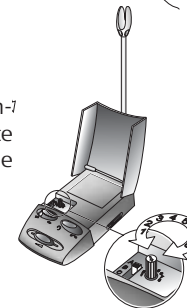
Complete the following instructions to adjust the volume:

1. Put on your headset and make sure that the microphone is placed 2 cm from your mouth, and that mute switch (F) is set to talk position.

2. Make a telephone call to someone who will act as your test person.



3. While speaking, adjust the microphone volume adjustment control (D) until your test person hears your voice at an appropriate level. If you start hearing an echo of your own voice, adjust the control to a lower level.



3.4 Choosing the audio mode

The GN 8210 operates in one of three user-selectable audio modes to match individual protection needs and sound quality preferences.

The three audio modes for customised sound enhancement and protection setting:







Europe and Asia/Pacific only:

AUDIO MODE		PROTECTION	
A	TrebleBoost • pitch • high tones accentuated		• advanced protection • EU Health and Safety compliant
B	CrystalClear • level • all tones accentuated		• enhanced protection • EU Health and Safety compliant
C	TT-4 • bass-rich • low tones accentuated		• Superior • TT4 compliant

Description

- For all earpads: Superior sound quality and good protection with extra emphasis on treble tones (for people who prefer a sound with more pitch or those with a high frequency hearing loss) .
- For all earpads: Superior sound quality and good protection (If you prefer a level sound with normal pitch, this will be your preferred setting)
- For all earpads: Good sound quality and superior protection (For those requiring highest protection according to the Australian TT4 standard)

For USA only:

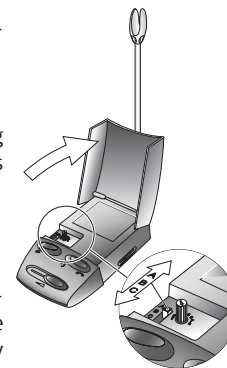
		Headset Earpad		Audio Mode		Protection
A	Treble-Boost	Foam		<ul style="list-style-type: none"> pitch high tones accentuated 		<ul style="list-style-type: none"> advanced protection NIOSH compliant
B	Crystal Clear 1	Foam		<ul style="list-style-type: none"> level all tones accentuated 		<ul style="list-style-type: none"> advanced protection NIOSH compliant
C	Crystal Clear 2	Leatherette		<ul style="list-style-type: none"> level all tones accentuated 		<ul style="list-style-type: none"> advanced protection NIOSH compliant

Description

- For foam earpads: Superior sound quality and good protection with extra emphasis on treble tones (for people who prefer a sound with more pitch or those with a high frequency hearing loss) .
- For foam earpads: Superior sound quality and good protection (If you prefer a level sound with normal pitch, this will be your preferred setting) .
- For leatherette earpads: Superior sound quality and good protection (If you use leatherette earpads and prefer a level sound with normal pitch, this will be your preferred setting) .

If you want to select a different audio mode, complete the following:

- Open the top cover (C).
- Select the desired audio mode (setting "A", "B" or "C") using the audio mode switch (E). A beep in the headset indicates that a new audio mode has been selected.
- Close the top cover (C).



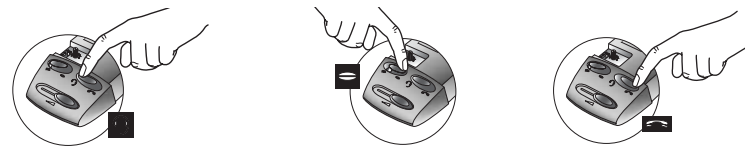
Note: The GN 8210 provides you with protection against excessively-loud sounds only when using your headset. If you use the telephone's handset, you will not have this protection or enjoy the GN 8210's sound quality enhancement.

If you want to know more about the GN 8210's protection compliance, please refer to Section 6 "Operational and Safety Information" on page 13.

4. Features and use

Before using your GN 8210 for the first time, verify the following settings:

- Handset/headset switch (H) is set to the headset position
- Mute switch (F) is set to the talk position, indicated by an unlit mute switch indicator
- Headset volume (G) is set to mid-range



4.1 Answering and making telephone calls

To answer or make a telephone call:

1. Put the headset on.
2. Make sure that the handset/headset switch (H) is set to headset, and that the mute switch (F) is not activated. (The mute indicator light should not be flashing).
3. Lift the telephone's handset out of its cradle and answer the call/dial the number.
4. To end the call, replace the handset on the telephone.

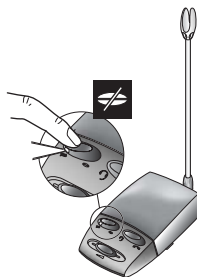
To answer or make a telephone call using a handset:

1. Make sure that the handset/headset switch (H) is set to handset.
2. Lift the telephone's handset out of its cradle and answer the call/dial the number.
3. To end the call, replace the handset on the telephone.

Note: It is recommended that you always use the headset, otherwise you will not benefit from the GN 8210's features and protection.

4.2 Muting a call

To mute a call so that the other party is not able to hear you, set the mute switch (F) to the mute position. The mute indicator (F) will flash and low beeps will be heard in the headset every 10 seconds to indicate that mute is activated.



4.3 Automatic Volume Adjust

The volume of incoming calls is regulated by the Automatic Volume Adjust function, which is built into the amplifier. Automatic Volume Adjust automatically adjusts each incoming call's volume to the same level as that of the previous call, giving you a consistent volume for each and every call you receive.

At any time, you may change the volume of incoming calls by adjusting the manual headset volume control (G). The volume of your next incoming call will then be at this new level.

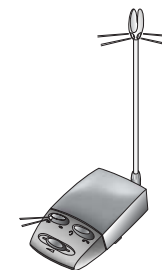
4.4 Visual indicators

The amplifier has two visual indicators: the on-line indicator (A) on the headset stand and the mute indicator (F).

On-line indicator

The on-line indicator (A) flashes when speech is detected, indicating to others that you are on a call.

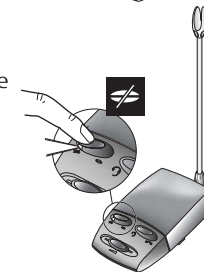
When the amplifier is first connected to power through the power adapter, the on-line indicator (A) flashes rapidly for 2 seconds.



Mute indicator

A flashing mute indicator (F) indicates that you have muted the call, and that the other party is not able to hear you.

When the amplifier is first connected to power through the power adapter, the mute indicator flashes rapidly for 2 seconds.



Functions	On-line indicator	Mute indicator
Power-up, system check	Short flashes for 2 seconds	Short flashes for 2 seconds
On-line	Flashes when speaking	
Muted		Flashes when muted

5 Frequently Asked Questions

GN 8210 is a digital amplifier - can I use with both analogue and digital telephone systems?

- Yes, the GN 8210 works with both analogue and digital telephone systems.

Why can't I hear a dial tone when the headset is on?

- Make sure you have inserted both the headset and handset cords into the appropriate sockets located on the rear of GN 8210.
- Make sure the handset/headset switch is in headset position.
- You may have the telephone termination switch in a position that does not correspond with your telephone. Lift the amplifier top cover and move the telephone termination switch to another position.

Why does the other party have a hard time hearing me?

- Make sure that the mute switch is in talk position.
- Check the position of the headset microphone boom arm and make sure it is placed approximately 2 cm from your mouth.
- The transmit volume control may be set too low. Lift the amplifier top cover and adjust the transmit volume clockwise to a higher number.
- You may have the telephone selector switch in a position that does not correspond with your telephone. Lift the amplifier top cover and move the telephone selector switch to another position.

Why do I have a hard time hearing the other party or why does he/she sound different?

- Depending on your selected audio mode, the incoming volume may seem low compared to what you are used to.
- If you have selected TT-4 Protection mode (setting C), you should be aware that this mode is a very strict protection standard, designed to enhance your protection against acoustic shrieks. By providing this protection the standard does not allow high-pitched sounds and high volume levels to get through to your ear. This can influence the level and the sound of the conversation, but your ears should typically adjust to this mode after a short time.

Why do I hear my own voice in my headset when I talk?

- The microphone volume control may be set too high. Lift the GN 8210 top cover and adjust the microphone volume counter clockwise to a lower number.

Why doesn't the on-line indicator light or flash?

- Make sure the headset stand/on-line indicator is plugged all the way into the port on the rear of the GN 8210.
- Make sure that the power adapter is connected to a functioning wall socket.

6. Operational and safety information

Clean the GN 8210 by wiping with a dry or slightly damp cloth as required. Dampen the cloth with soapy water if needed. The headset stand, power adapter and cords may be dry-dusted as required.

Avoid getting moisture or other liquids into any button sockets or other openings. Do not immerse the GN 8210 in water.

Keep out of reach of children:

The plastic bags the GN 8210 and its parts are wrapped in are not toys for children. The bags themselves or the many small parts they contain may cause choking if ingested.

Never try to dismantle the product yourself. None of the internal components can be replaced or repaired by users.

Only authorised dealers or service centres may open the product. If any parts of your GN 8210 require replacement for any reason, including normal wear and tear or breakage, contact your dealer.

Avoid exposing the product to rain or other liquids.

Dispose of the product according to local standards and regulations.

Audio Mode settings

The three audio modes for customized sound enhancement and protection setting (A, B & C) covers the following standards and recommendations. Setting:

A, B & C	The EU directive 2003/10/EC on the minimum health and safety requirements regarding the exposure of workers risks arising from physical agents (noise). "Specifying max average output to a maximum of 85dB(A)."
A, B & C	The NIOSH Publication No. 98-126 "Occupational Noise Exposure". "NIOSH compliant" "Specifying max time -weighted average (TWA) output to 85dB."
A, B & C	The ACIF Draft Guideline DR ACIF G616:2003 "Acoustic safety for telephone equipment"
C (EU & APAC)	The "TT4" Telstra Publication - Technical Reference TP TT404B51. "Headset & Limiting Amplifier. Acoustic Protection."

EUROPE Declaration

This product is CE marked according to the provisions of the R & TTE Directive (99/5/EC). Hereby, GN Netcom as declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. For further information please consult <http://www.gnnetcom.com>.

Only to be used together with the delivered certified AC mains adapter or with a similar with a GS mark.

ACTA Required Customer Information

This equipment complies with part 68 of the FCC rules and the requirements adopted by the ACTA. On case of this equipment (GN 8210 Telephone Headset Amplifier) is a label that contains, among other information, a product identifier in the format US:1LSKXNANGN8210. If requested, this number must be provided to the telephone company.

If this equipment (GN 8210 Telephone Headset Amplifier) causes harm to the telephone network the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations and/or procedures that could affect the operation of this equipment (GN 8210 Telephone Headset Amplifier). If this happens, the telephone company will provide advanced notice in order for you to make the necessary modifications to maintain uninterrupted service. If trouble is experienced with this equipment (GN 8210 Telephone Headset Amplifier), for repair or warranty information, please contact: GN Netcom Inc., 77 Northeastern Blvd., Nashua, NH 03062, Tel.no. 1-800-826-4656 / 1-603-598-1100, Fax: 1-603-598-1122, www.gnnetcom.com

If this equipment (GN 8210 Telephone Headset Amplifier) is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is solved.

There are no repairs that the customer can perform. Defective units must be returned to GN Netcom for repair.

Australia CAUTION Notice

- The Telephone Headset may hold small objects in the area of the earpiece.
- Do not use in areas where there are explosive hazards.

If you have any problems or questions regarding the product, please contact your vendor or go to <http://www.gnnetcom.com>

There is an international patent pending for the GN 8210.