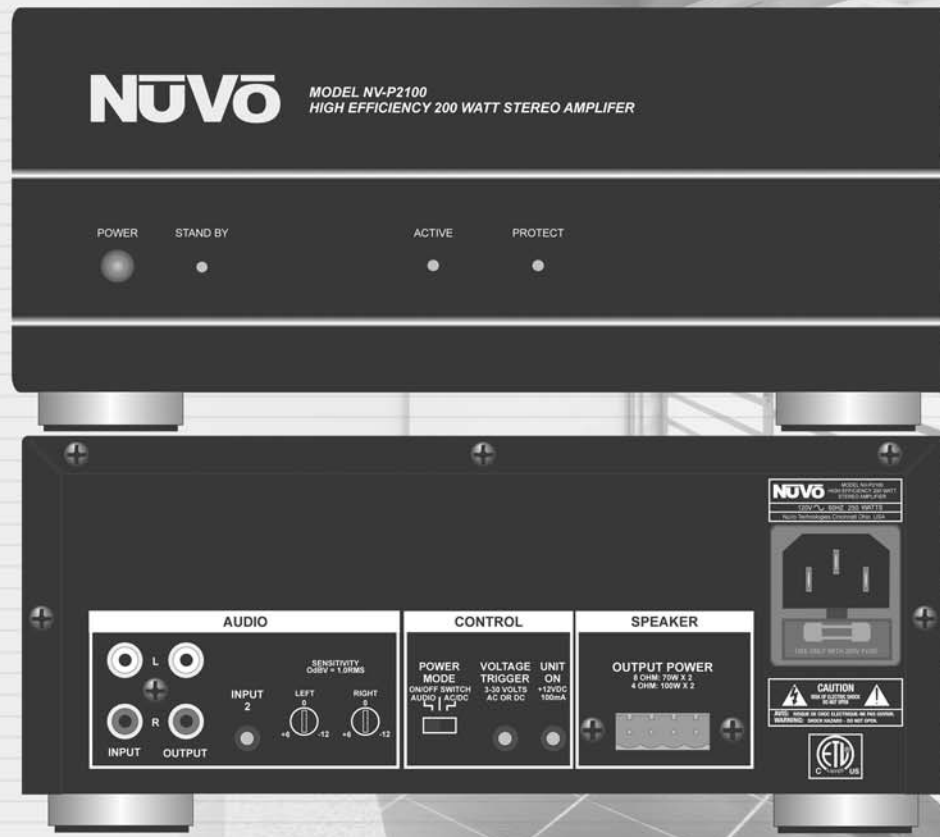


# NÜVÖ™

## The Sound of LiVing.



### NV-P2100

### Audio Amplifier Owner's Manual

## ENGLISH

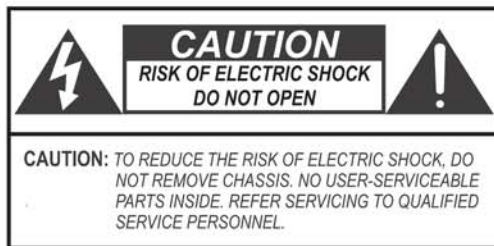
### Danger

Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably to noise induced hearing loss but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time.

The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

DURATION PER DAY (HOURS)	8	6	4	3	2	1
SOUND LEVEL (dB)	90	93	95	97	100	103

According to OSHA, any exposure in the above permissible limits could result in some hearing loss. Ear plugs or protectors in the ear canal or over the ears must be worn when operating this amplification system in order to prevent a permanent hearing loss. If exposure in excess of the limits as put forth above, to insure against potentially harmful exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of inducing high sound pressure levels, such as this amplification system, be protected by hearing protectors while this unit is in operation.



**AVIS: RISQUE DE CHOC ELECTRIQUE-NE PAS OUVRIR.**



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF NON-INSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.



THIS SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE UNIT.

## IMPORTANT SAFETY INSTRUCTIONS

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be kept for future reference.
3. Read and understand all warnings listed on the operating instructions.
4. Follow all operating instructions to operate this product.
5. This product should not be used near water, i.e. Bathtub, sink, swimming pool, wet basement, etc.
6. Only use dry cloth to clean this product.
7. Do not block any ventilation openings, It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
8. Do not install this product near any heat sources ;such as,radiators, heat registers, stove or other apparatus (including heat producing amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the Other.A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord being walked on or pinched, particularly at Plugs, convenience receptacles and the point where they exit from the apparatus. Do not break the ground pin of the power supply cord.
11. Only use attachments specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way; such as, power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
16. **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

## FRENCH

### Danger

L'exposition a des niveaux eleves de bruit peut provoquer une perte permanente de l'audition. Chaque organisme humain reagit differemment quant a la perte de l'audition, mais quasiment tout le monde subit une diminution de l'acuite auditive lors d'une exposition suffisamment longue au bruit intense. Les autorites competentes en reglementation de bruit ont defini les expositions tolerees aux niveaux de bruits:

DURE EN HEURES PAR JOUR	8	6	4	3	2	1
INIVEAU SONORE CONTINU EN dB	90	93	95	97	100	103

Selon les autorites, toute exposition dans les limites citees ci-dessus, peuvent provoquer certaines pertes d'audition. Des bouchons ou protections dans l'appareil auditif ou sur l'oreille doivent etre portes lors de l'utilisation de ce systeme d'amplification afin de prevenir le risque de perte permanente de l'audition. Dans le cas d'expositions superieures aux limites precitees il est recommande, afin de se premunir contre les expositions aux pressions acoustiques l eveses potentiellement dangeure u ses, aux personnes exposees aux equipements capables de delivrer de telles puissances, tels ce systeme d'amplification en fonctionnement, de proteger l'appareil auditif.



CE SYMBOLE A POUR BUT D'AVERTIR L'UTILISATEUR DE LA PRESENCE DE VOLTAGE DANGEREUX NON-ISOLE A L'INTERIEUR DE CE PRODUIT QUI PEUT ETRE DE PUISSANCE SUFFISAMMENT IMPORTANTE POUR PROVOQUER UN CHOC ELECTRIQUE AUX PERSONNES.



CE SYMBOLE A POUR BUT D'AVERTIR L'UTILISATEUR DE LA PRESENCE D'INSTRUCTIONS D'UTILISATION ET DE MAINTENANCE DANS LES DOCUMENTS FOURNIS AVEC CE PRODUIT.

### IMPORTANTES INSTRUCTIONS DE SECURITE

1. Lire avec attention toutes les recommandations et precautions d'emploi avant d'utiliser ce produit.
2. Toutes les recommandations et precautions d'emploi doivent être conservees afin de pouvoir s'y reporter si necessaire.
3. Lire et comprendre tous les avertissements enumerés dans les precautions d'emploi.
4. Suivre toutes les precautions d'emploi pour utiliser ce produit.
5. Ce produit ne doit pas être utilise pres d'eau, comme par exemple baignoires, eviers, piscine, sous-sol humides ... Etc.

6. Utiliser exclusivement un chiffon sec pour nettoyer ce produit.
7. Ne bloquer aucune ouverture de ventilation. Ne pas placer le produit tout contre un mur ou dans une enceinte fermée, cela generait le flux d'air necessaire au refroidissement.
8. Ne pas placer le produit pres de toute source de chaleur telle que radiateurs, arrivees d'air chaud, fourneaux ou autres appareils generant de la chaleur (incluant les amplificateurs producteurs de chaleur) .
9. Ne pas negliger la securite que procure un branchement polarise ou avec raccordement a la terre, Un branchement polarise comprend deux fiches dont l'une est plus large que l'autre. Un branchement a la terre comprend deux fiches plus une troisieme reliee a la terre. Si la fiche secteur fournie ne s'insert pas dans votre prise de courant. consulter un 'electricien afin de remplacer votre prise obsolete.
10. Protéger le cordon d'alimentation de tout ecrasement ou pincement, particulierement au niveau des fiches, des receptacles utilises et a l'endroit de sortie de l'appareil. Ne pas casser la fiche de terre du cordon d'alimentation.
11. Utiliser uniquement les accessoires specifies par le constructeur.
12. Utiliser uniquement avec le chariot de transport, le support, le trepied, la console ou la table specifies par le constructeur ou vendus avec l'appareil. Lors de l'utilisation d'un chariot, bouger avec precaution l'ensemble chariotlappareil afin d'éviter les dommages d'un renversement.
13. Débrancher cet appareil lors d'orages ou s'il n'est pas utilise pendant une longue periode.
14. Des precautions doivent être prises afin qu'aucun objet ne tombe et qu'aucun liquide ne se repande a l'interieur de l'appareil par les orifics de ventilation ou n'importe quelle autre ouverture.
15. Pour toutes interventions techniques s'adresser a un technicien qualifié. L'intervention technique est necessaire lorsque l'appareil a été endommage de n'importe quelle façon, comme par exemple si le cordon secteur ou sa fiche sont detériorés, si du liquide a coulé ou si des objets sont tombés a l'interieur de l'appareil, si l'appareil a été expose a la pluie ou a l'humidité, s'il ne fonctionne pas normalement ou s'il est tombé.
16. ATTENTION: Pour réduire le risque d'incendie ou de choc électrique ne pas exposer l'appareil a la pluie ou a l'humidité.

## **NV-P2100**

### **Audio Amplifier**

Congratulations on your purchase of the NuVo P2100 audio amplifier. The P2100 brings advanced technology of superior home sound together with the simplicity of user-friendly design, all at a price that is easy to live with.

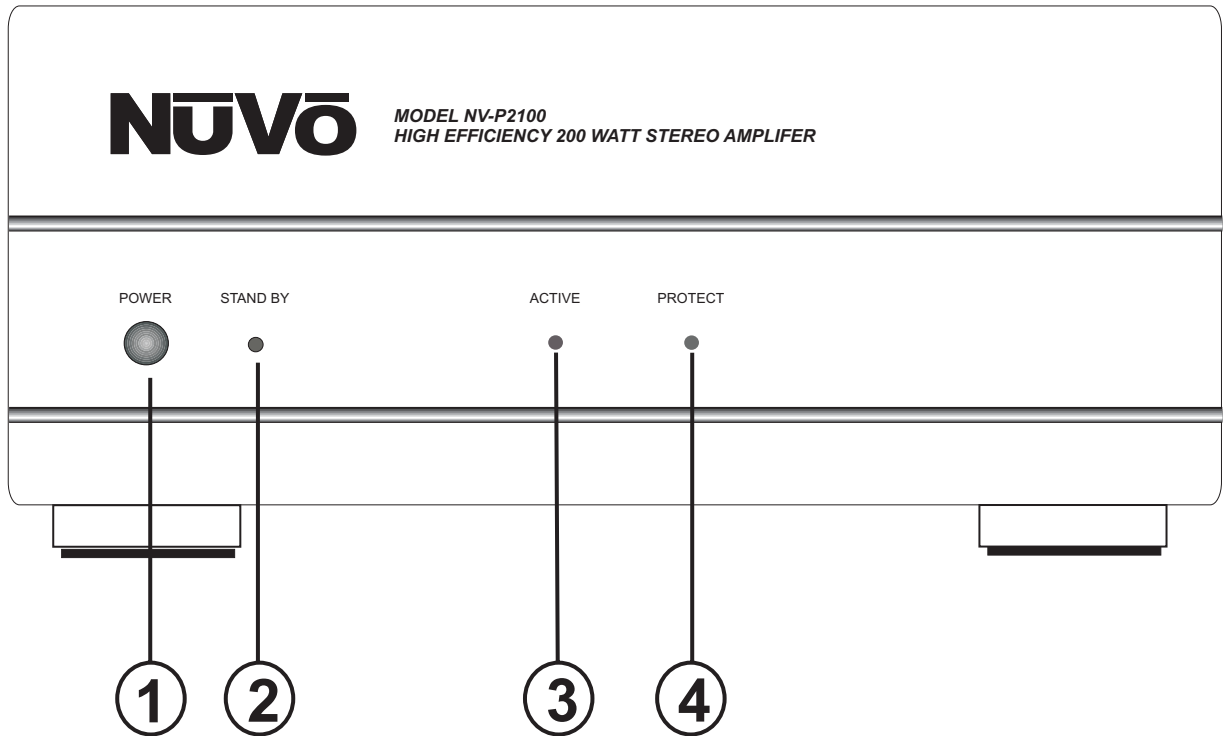
The P2100 offers two channels of clean pure sound and features of typically much more expensive and complex amplifiers in a compact half-rack design. High efficiency technology allows the P2100 to run significantly cooler than other analogue amplifiers and requires less operating power. So placing it in a rack with your expensive and sensitive audiovisual equipment does not pose a heat risk.

The P2100 features a switchable audio sensing trigger allowing it to be turned on from an incoming audio source. This makes it ideal for use in conjunction with whole-house audio systems such as the NuVo Essentia when additional power is need. The P2100 can also be triggered to turn on using an external voltage of 3-30 volts, either AC or DC, enabling the amplifier to be turned on or off from a switched remote power source. Independent left and right channel sensitivity control lets you maximize the potential volume of any audio source. Audio inputs and outputs provide the flexibility to add additional amplifiers to any installation.

Innovative, clear, affordable, simple. With the NuVo P2100 audio amplifier, you will introduce your family to a whole new world of audio enjoyment.

## NV-P2100

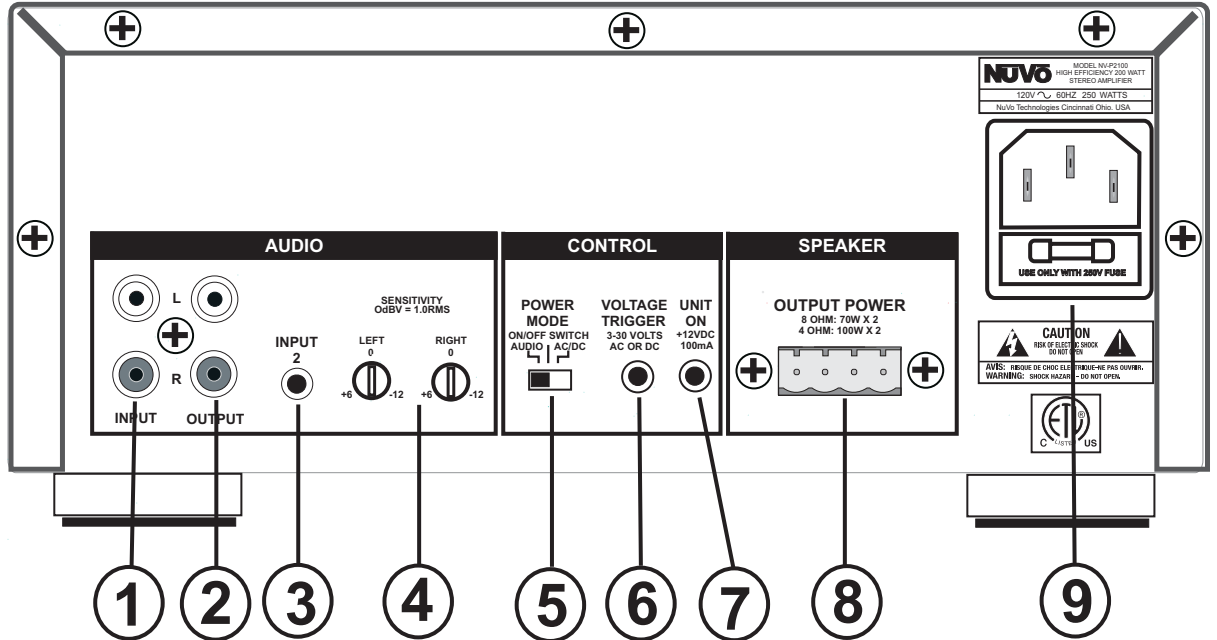
### Audio Amplifier Front Panel



1. **POWER Button:** Pushing this button will manually supply power to the amplifier.
2. **STAND BY LED:** This blue LED (light-emitting diode) will remain lit as long as the P2100 is plugged into an AC power supply.
3. **ACTIVE LED:** This LED lights to indicate that the amplifier is in normal amplification mode.
4. **PROTECT LED:** This LED lights to indicate that the amplifier has overheated or is experiencing an external short in the audio signal, which has caused it to shut down.

## NV-P2100

### Audio Amplifier Back Panel



1. **Audio Source Inputs:** The P2100 will accept any line level stereo audio signal. This can be from the preamp lineout of a multi-source, multi-zone whole-house system such as the NuVo Essentia system, or the audio output of any non-amplified source, such as an AM/FM tuner, CD player, or a Satellite receiver.
2. **Audio Input 2:** This is an alternate audio input for a stereo 1/8" mini plug.
3. **Audio Source Outputs:** These stereo outputs allow the incoming audio source to be daisy chained to another amplifier.
4. **Sensitivity Gain Control:** Left and right channel sensitivity trim pots allow the incoming signal to be increased or decreased to maximize the potential output of the audio source.
5. **POWER MODE:** This switch dictates how the amplifier responds to external triggers. The 2100 has 3 trigger methods; an incoming audio signal, an external voltage input, or the power button on the front of the amplifier.
6. **Voltage Trigger:** This input trigger allows the P2100 to power up whenever a voltage of 3-30 volts AC or DC is present.
7. **Unit On:** This provides a 12V output when the amplifier is powered on. This can be used to turn on external audio equipment, or trigger a relay switching power strip.
8. **Speaker Output:** The speaker output attaches to the amplifier via a modular plug and provides 100 watts per channel output at 4 ohms.
9. **AC Power Cord:** The detachable AC power cord can be plugged into any grounded AC power source.

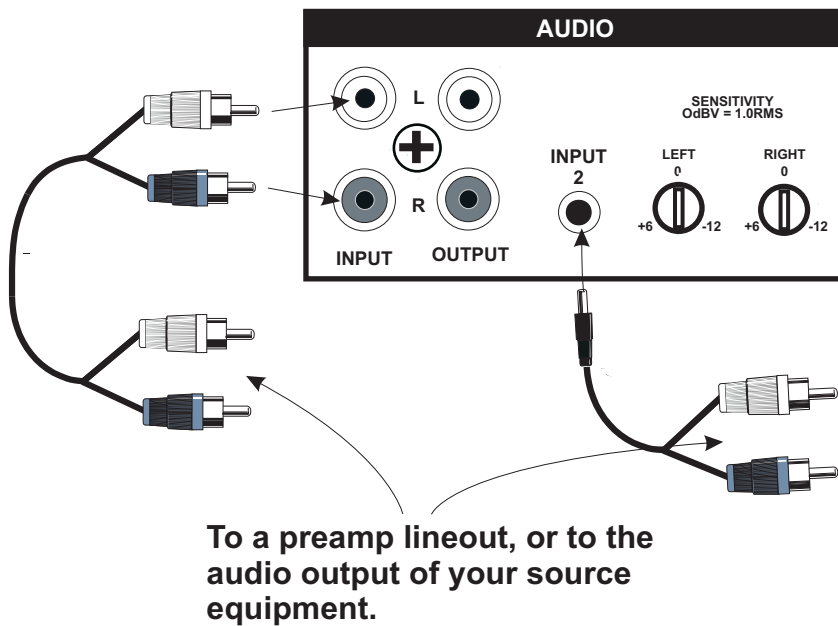
## NV-P2100

### Audio Source Inputs

The P2100 amplifier features two audio inputs designed to accept a line level audio signal. Most audio equipment is equipped with a stereo RCA output that allows the audio signal to be taken directly to the P2100's audio input. This can be accomplished two different ways. Either with a standard stereo audio cable with left and right RCA jacks on each end, or using a cable with left and right RCA jacks at the source end and a stereo 1/8" mini jack into the "AUDIO INPUT 2" on the P2100. Fig. 1.

The P2100 is an ideal accessory for use with a multi-zone audio system such as the NuVo Essentia six-zone system, which has a stereo lineout for each zone. This allows the P2100 to easily integrate with the multi-zone system and provide additional amplification when needed.

Fig. 1

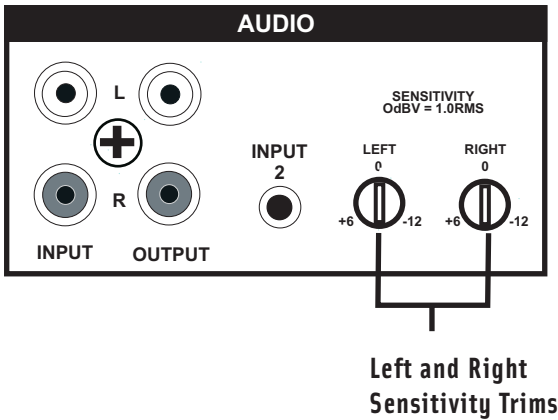


The 1/8" mini plug allows a stereo audio source input with only one connection. Another alternative is to utilize a cable with a stereo 1/8" plug on both ends for use as example from a computer as an audio

## Audio Sensitivity Control

The P2100 allows the flexibility of controlling the left and right channel gain for the incoming audio signal. The Sensitivity allows a control of -12 dB up to +6 dB, and is an excellent tool for maximizing the full output potential of your source equipment. Fig. 2.

Fig. 2



To best utilize this feature, set the volume for the source at its fullest output level. Then adjust the left and right sensitivity trims on the amplifier to allow the fullest possible output from the speakers without distortion.

**+6** or a counter clockwise turn is used to reduce the gain. This would be the preferred setting for a distributed audio system with variable preamp line outs, such as the NuVo Essentia system. Reducing the gain can also be useful for limiting the maximum power going to the speakers.

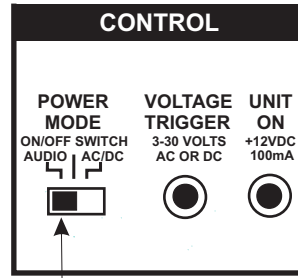
**0** or straight vertically is the factory default. This is the preferred setting for an audio signal from a preamp, such as a distributed audio system with a fixed lineout, or the audio output of a music server or CD player.

**-12** is a high gain position. This is typically used when the incoming audio signal is weak, such as a portable CD player.

## Power Mode

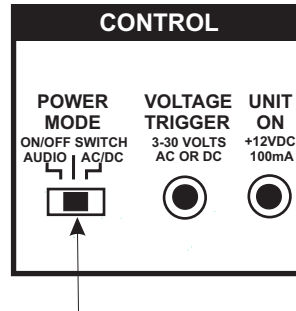
The P2100 provides three basic methods for supplying power to the amplifier. This can be accomplished by simply pushing the POWER button on the front of the unit, by sensing an incoming audio signal, or by supplying a 3-30 volt AC or DC current. The POWER MODE switch sets the amplifier to respond to any of the three options. Fig. 3A, 3B, and 3C.

Fig. 3A



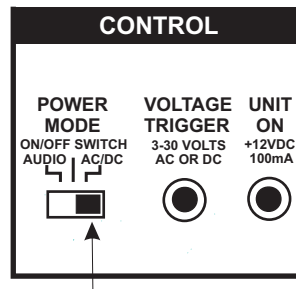
Setting the power mode switch in the left in the AUDIO MODE sets the amplifier to respond to the presence of an audio signal. If you are triggering the amplifier in this way, you should expect a slight delay before it turns on. It will then remain on for approximately three minutes after the incoming audio signal has ended before the unit turns off. This will prevent the unit from inadvertently turning off when the audio signal is very low or stops temporarily.

Fig. 3B



In the center, ON/OFF SWITCH position, the amplifier will turn on or off only when the POWER button on the front of the unit is pushed.

Fig. 3C



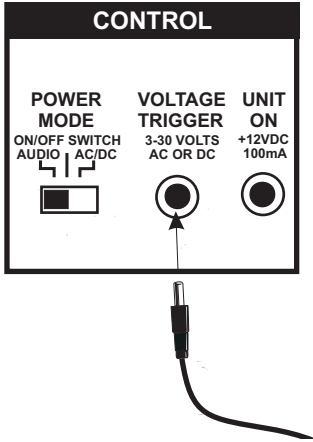
The right, AC/DC position, sets the amplifier to respond to an incoming voltage. This voltage can be AC or DC and anything from 3-30 volts. This is very useful in conjunction with a multi zone system or preamp that has voltage trigger outputs. In this mode the P2100 will turn on or off with the source equipment.



## Voltage Trigger

This input is designed for a mono 1/8" plug to accept a trigger voltage coming in from an external source. Fig. 4.

Fig. 4

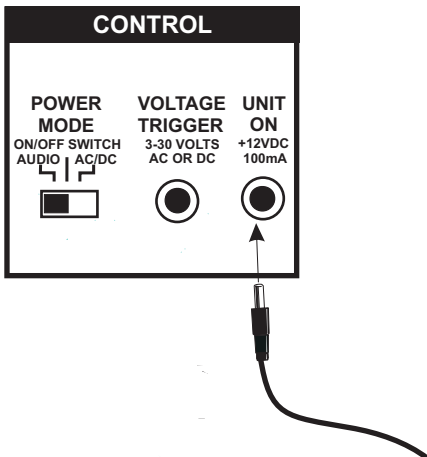


Any voltage ranging from 3 to 30 volts AC or DC will cause the amplifier to turn on when the POWER MODE switch (fig. 3C) is in the AC/DC mode.

## Unit On

This output provides a constant 12 volts DC when the amplifier is powered on. This is useful for powering on external equipment with the P2100 Fig 5.

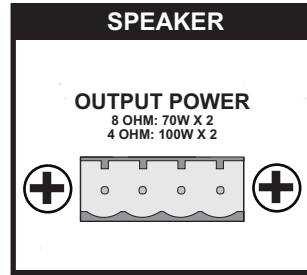
Fig. 5



## Speaker Output

The P2100 provides 100 watts of output power per channel at 4 ohms. It uses a modular plug that will accept up to 14 gage, four conductor, speaker wire. Stranded Four conductor sixteen gage wire is recommended Fig 6.

Fig. 6



The NV-P2100 amplifier is designed to run at a maximum load of 4 ohms. Prolonged operation at less than 4 ohms could cause the amplifier to overheat and do damage to its internal components. Overheating the amplifier due to an excessive load will void the warranty.

# NV-P2100 Specifications

<b>Number of channels</b>	2
<b>Power output</b>	70 Watts at 8 Ohms
Rated continuous power, each channel simultaneously driven , 20 Hz to 20 kHz at rated THD	
<b>Power output</b>	100 Watts at 4 Ohms
Short Term continuous, each channel , both channels driven 1 kHz ,at rated THD.	
<b>Rated THD</b>	<0.8%
<b>Frequency response</b>	20Hz to 20 kHz
at 1 watt + 1 db	
<b>Input sensitivity</b>	Variable
	0dB -1Volt rms
	+6dB - 2 Volts rms
	-12dB - .25 Volts rms
<b>Input impedance</b>	22 kohms

<b>Voltage trigger Ac or Dc</b>	3 to 30 Volts
<b>Unit on / off</b>	+ 12 Volts DC 75 mA
<b>AC power</b>	120 VAC, 60 Hz
	240 VAC, 50 Hz
<b>Power consumption 4 ohms 1 kHz</b>	Off, 6.8 Watts
	On, no signal 7.6 Watts
	1/10 power, 29.2 Watts
	1/3 power, 79.9 Watts
	Full power 405. Watts
<b>Line fuse rating</b>	120 VAC version: 4 amp time lag
	240 VAC version: 2 amp time lag
<b>Dimensions</b>	8.5 in W x 3.75 in H x 13.5
	214 mm W x 96 mm H x 340mm L
<b>Weight (Unit)</b>	12 lbs (4.54kg)
<b>Weight (shipping)</b>	17.2 lbs (6.51kg)

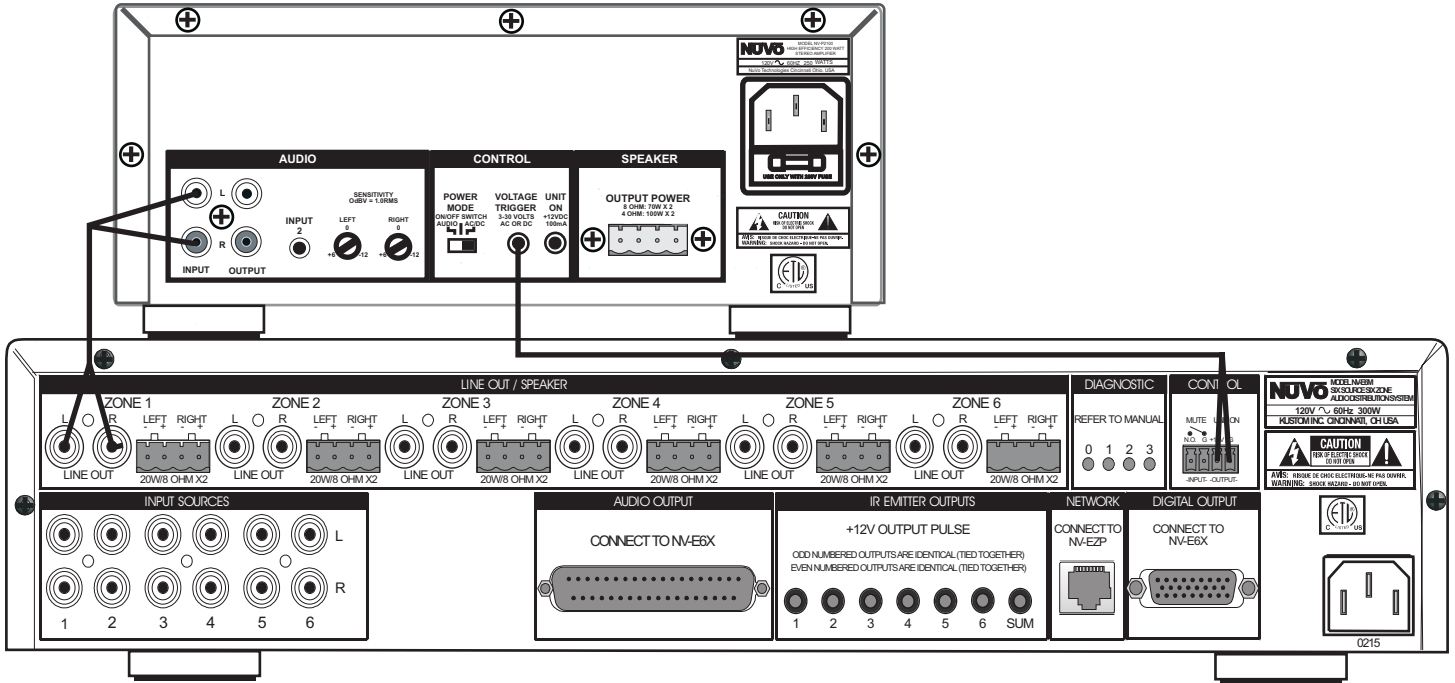
## Warranty

NUVO Technologies warrants this product to be free of defects in workmanship or material for a period of three (3) years from the original date of purchase. This warranty applies to the original purchaser only and is not transferable. This warranty is subject to the following conditions and exclusions:

- Defects caused by wear and tear, misuse, or neglect are not covered by this warranty.
- This warranty will be void if:
  - a. The unit has been altered or modified.
  - b. The serial number has been removed or defaced.
  - c. Original purchase is not from an Authorized NUVO Dealer.
  - d. The warranty card is not completely filled out and mailed within 10 days of the original purchase.

Neither NUVO Technologies, nor NUVO dealers are liable for any incidental or consequential damages resulting from any defect in or failure of NUVO Technologies products. This warranty gives the original owner of NUVO Technologies products specific legal rights, and he or she may also have other rights which vary from state to state. This warranty is expressly in lieu of all other agreements and warranties, expressed or implied, except as may be otherwise required by law.

## NV-P2100 Wiring Diagram



The NuVo P2100 has the ability to be triggered by an incoming audio signal, or by the presence of a voltage as shown in the diagram with the NuVo Essentia system.

The variable line-out of the NuVo Essentia amplifier allow the volume to be controlled by the audio systems keypads. The best sensitivity trim setting for this is +6.



# The Sound of LiVing.

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