SYSTEMS

User's Manual
Manual del Usuario

Network Power Amplifiers

NT2508
NT2504
NT1308
NT1304
NT4004

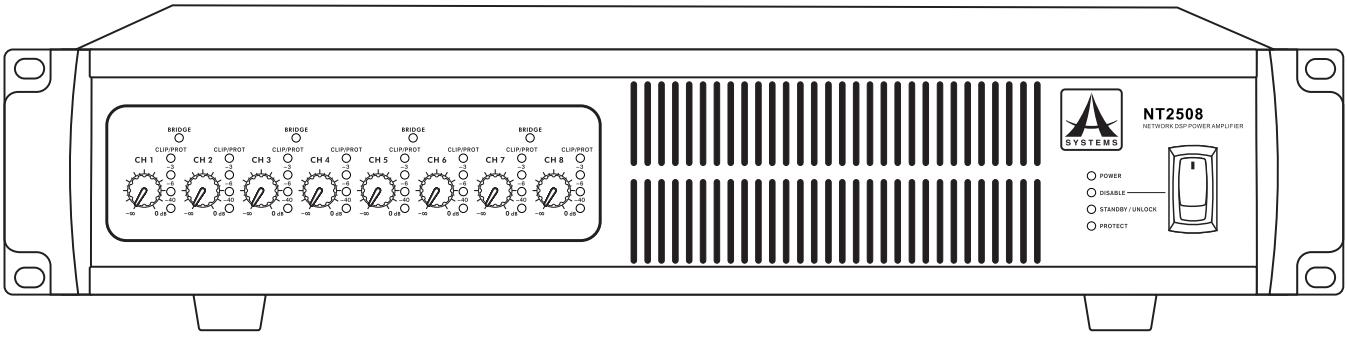


TABLE OF CONTENTS

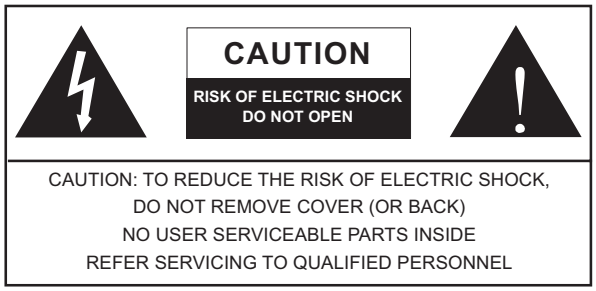
IMPORTANT SAFETY INSTRUCTIONS

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus. The MAINS plug is used as the disconnect device, the disconnect device shall remain readily operable.

Warning: the user shall not place this apparatus in the confined area during the operation so that the mains switch can be easily accessible.

1. Read these instructions before operating this apparatus.
2. Keep these instructions for future reference.
3. Heed all warnings to ensure safe operation.
4. Follow all instructions provided in this document.
5. Do not use this apparatus near water or in locations where condensation may occur.
6. Clean only with dry cloth. Do not use aerosol or liquid cleaners. Unplug this apparatus before cleaning.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including 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 is 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 from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lighting storms or when unused for long periods of time.
14. 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.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.

1. INTRODUCTION

Congratulations on your purchase of a NT series network amplifier. The NT's flexible deisgn will provide you with up to eight channels of audio with advanced DSP processing. A single NT amplifier offers eight-in, eight-out support (or four-in, four-out), and the entire system can be controlled through standard potentiometers or flexible remote software. Internal processing is accomplished through a high quality 40-bit floating point processor, with internal signal processors and routing all handled with ease.

NT series digital network amplifiers offer easy, effective means for injecting signal processors directly into your input and output path, with clear, easy-to-use software both onboard and on your Windows computer. The software offers full performance monitoring for each processor, giving real-time information on the load placed upon DSPs.

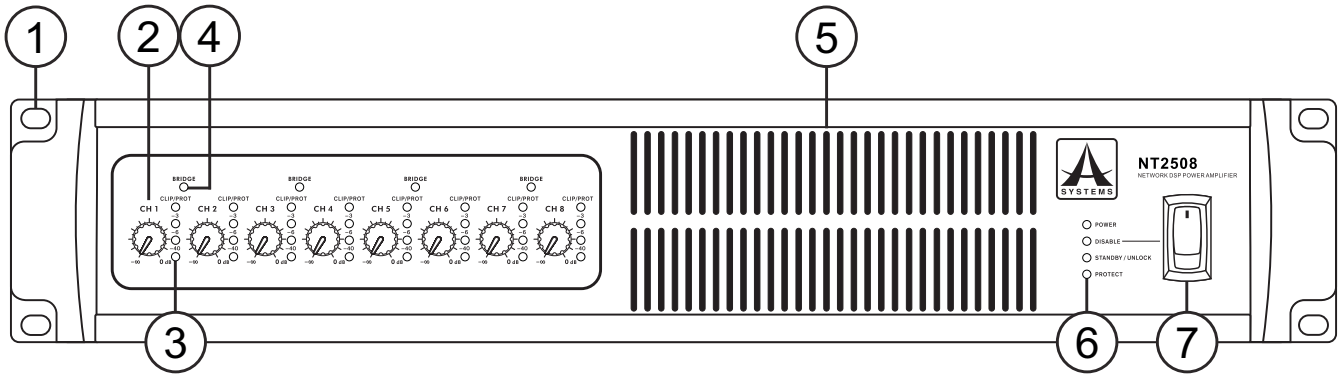
2. FEATURES

- 4 or 8 input channels available via 3-pin Euroblock connections
- Built-in multi-channel amplifier for low-impedance or line distribution application*
- Amplifier provides up to 250 Watts of power per channel (exact output can be found in specs)
- 4x4 or 8x8 matrix routing input channels to any output channel
- 40-bit floating point processor with internal sampling selectable between 44.1 and 48 kHz
- 4x4 or 8x8 networking capabilities through audio streaming LAN card (sold separately)
- Ethernet connectivity for network and internet control application
- Automatic DHCP network IP configuration
- Easy and intuitive control software from Asystems
- 4-band parametric equalizers can be assigned to all inputs
- Adjustable compressors and limiters built-in
- Delay time can be adjusted in meters, feet or milliseconds
- User-defined crossovers available on output channels

*Operating mode is dependent on purchased model.

3. CONTROLS AND I/O

FRONT PANEL



1. **Mounting Holes**
   These holes are for mounting the NT series network amplifier in a standard 19” rack.

2. **Output Level Control Knobs**
   Every output channel is equipped with a rotary knob for adjusting the final output level. These controls can be deactivated using POLE 6 on the rear-panel DIP switch.

3. **IN LEDs**
   Every input channel is equipped with a 4-segment IN LED level meter, including a CLIP/PROTECT indicator.

4. **BRIDGE LED**
   This LED lights when the two corresponding channels are bridged with one another.

NOTE: Every input channel is equipped with one output level control knob, one **IN** LED and 1 level meter. Each channel pair features a **BRIDGE** LED.

5. **Cooling Inlet Vents**
   Cool air is drawn in here. Please do not cover these vents for any reason as you risk overheating the NT.

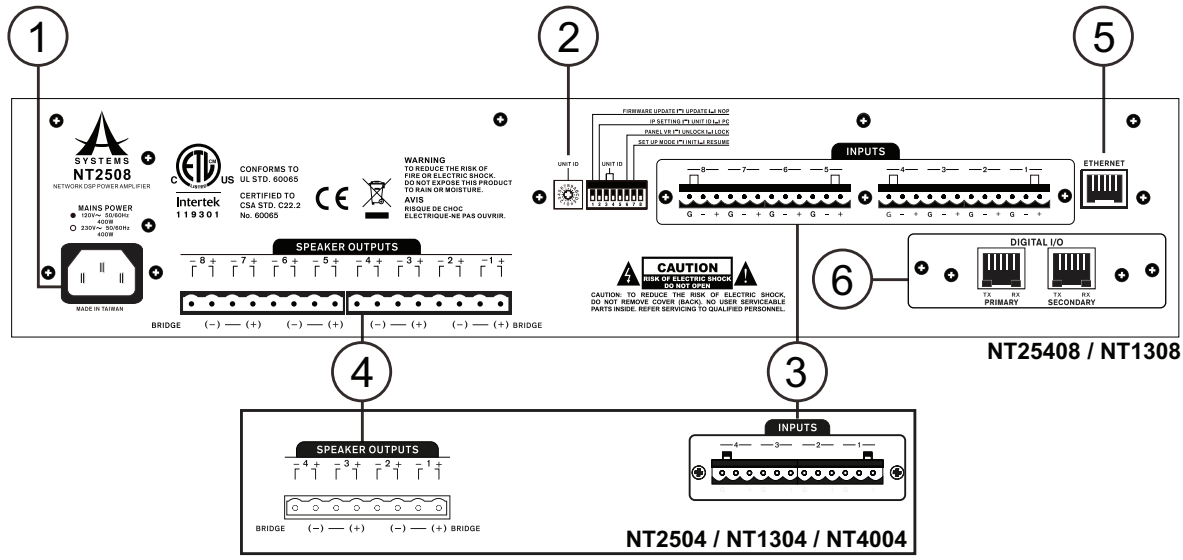
6. **Indicators**
   POWER: Lights when the device is on.
   DISABLE: Lights when the power switch is disabled.
   STANDBY/UNLOCK: Lights when the NT system is in the Standby mode.
   PROTECT: Lights when the protect circuity is active.

7. **Power Switch**
   Flick this switch to turn the unit on and enter it into STANDBY mode. Please note that this switch can be disabled through the onboard software. If the power switch becomes unresponsive, check your power settings.

WARNING: The NT requires up to 2 minutes to be fully discharged after the power is turned off. During this time the system cannot be powered on properly.

REAR PANEL

The Asystems **NT2508**, **NT2504**, **NT1308, NT1304** and **NT4004** share the same basic I/O design and layout. The major difference is that the **NT2508** and **NT1308** have **8** line input channels and **8** speaker output channels, while the **NT2504, NT1304** and **NT4004** all have **4** input connectors and **4** speaker output channels (as shown below).



1. **AC Power Connector**
   This power inlet is for connecting a standard IEC power cable. Under no circumstances should the user remove the grounding pin on the power cable.

2. **Unit ID Controls**
   The Unit ID controls consist of a single rotary switch as well as 8-pin DIP switch. These essentially adjust various controls and settings as well as things like firmware updates. More information on Unit ID settings can be found in the relevant area of this manual. These controls extend to IP address settings and initialization.

3. **INPUT Connectors**
   Line-level Euroblock input connectors are offered.

4. **SPEAKER OUTPUTS (Amplified Output)**
   For connecting passive loudspeakers.

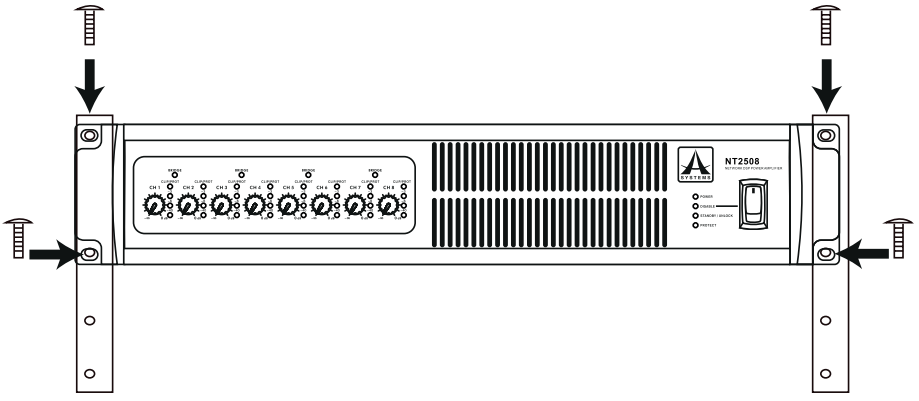
5. **ETHERNET Connector**
   RJ-45 connector for connecting the NT series network amplifier to a PC or local area network.

6. **DIGITAL I/O**
   This slot is for Asystems' DT44 or DT88 Dante Networking card to enable the NT as a networking portal to other Dante-enabled devices. The Dante Networking card is sold separately.

4. INSTALLATION AND SETUP

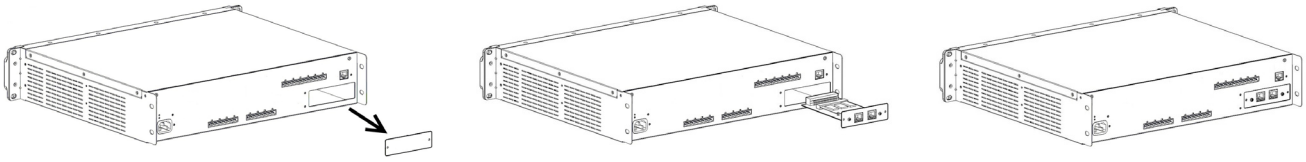
4.1 RACK MOUNTING

NT2508, **NT1308**, **NT2504, NT1304** and **NT4004** are compatible with standard 19" audio equipment racks. Slide the NT in to the **rack** and secure it with four Phillips screws and appropriate square nuts. The NT network amplifiers each take up 2 standard units of rack space.



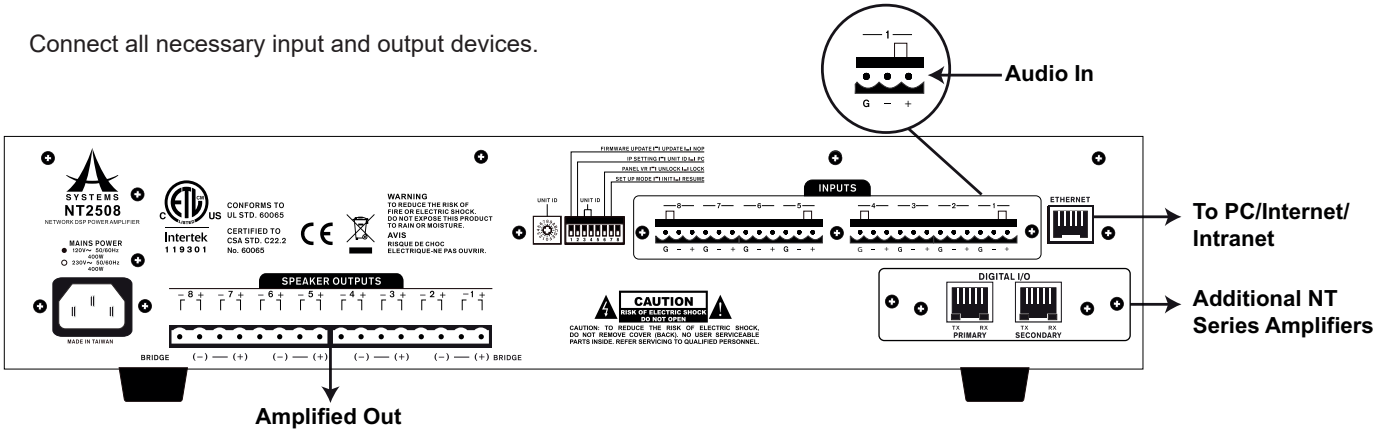
4.2 INSTALLING THE DANTE NETWORK CARD

To install the optional Dante networking card, simply remove the 2 screws from the network port, then slide the DT44 or DT88 networking card into the network port. Replace the 2 screws to secrure it firmly into place.

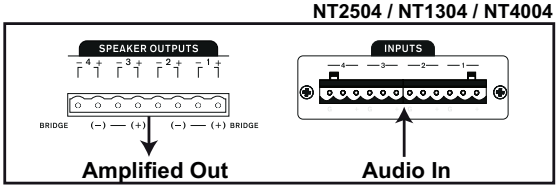


4.3 CONNECTIONS

Connect all necessary input and output devices.



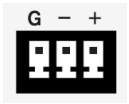
NT2504 / NT1304 / NT4004



AUDIO INPUT

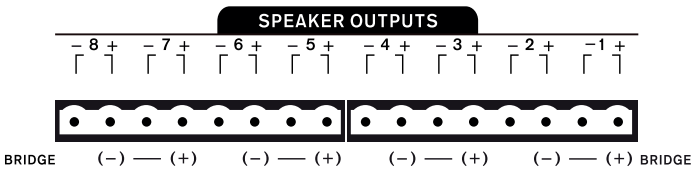
Input can be achieved through correctly wiring the Euroblock connectors.

Euroblock Connectors



Balanced
PIN 1: Shield/Ground
PIN 2: Cold (-)
PIN 3: Hot (+)

Unbalanced
PIN 1: Shield/Ground
PIN 2: Link to PIN 1
PIN 3: Hot (+)



AUDIO OUTPUT

These euroblock outputs are used to connect speakers, either in low-impedance or distributed lines depending on your model. Amplified outputs are wired like so:

PIN 1: Cold (-)
PIN 2: Hot (+)

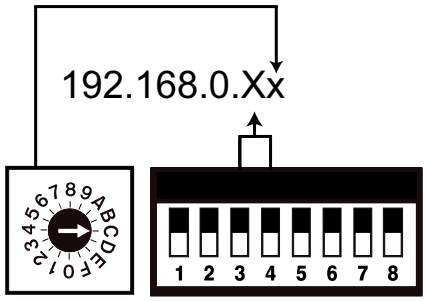
Each pair of amplified output channels can be bridged into one channel. This combines the output power of both channels creating a single channel with twice as much power.

To bridge channels, just wire the “+” pin of an odd-numbered channel to the “+” pin of the next even channel. When bridged, the “+” pin of the even channel becomes the “-” pin of the bridged new output.

When activating bridge mode, be sure to go into the Control Panel menu of the NT software and click the corresponding “Bridged” button.

4.4 IP ADDRESS SETUP

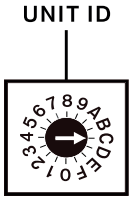
Connecting the NT series network amplifier to a computer for remote operation requires the user to enter an IP address for the unit. There are two controls that help determined the IP address of the NT network amplifiers. The first is the UNIT ID rotary control, that lets you select 0 – 9 and A – F. The second is the DIP switch located directly beside the rotary switch. The 3rd and 4th poles of the DIP switch can be used to set a numerical value between 0 and 3. These combine with the UNIT ID rotary switch to form a hexadecimal value for the last value of the IP address (as indicated below).



These values can be calculated in decimal using a programmer's calculator, or by checking the chart provided at the bottom of this page. The below image indicates how the last part of the IP address is determined using these switches

The DIP switch allows the first digit shown below to be selected between 0, 1, 2 and 3 with the configurations shown below. This determines the first digit of the IP address (in hexadecimal).

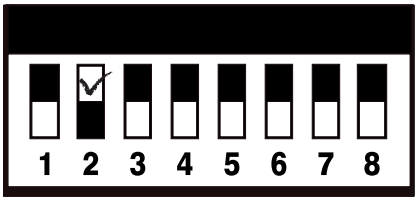
Value	3rd Pole	4th Pole
0	OFF	OFF
1	ON	OFF
2	OFF	ON
3	ON	ON



The UNIT ID rotary control allows a value between 0 and F to be selected. This determines the second digit of the IP address (in hexadecimal).

Once both digits of the hexidecimal IP address have been selected, it still needs to be converted to decimal for the user to have an accurate IP address. This is where the table below comes into play. If the DIP switches are set as "2" and Unit ID is F, this equals a hexidecimal value of 2F which converts to a decimal value of 47 (shown below). Therefore, in this example, the IP will be 192.168.0.47.

When setting the IP address using the UNIT ID controls, the second pole of the DIP switch must be set to the upper position. When in the lower position, the system will use the IP address set through the Windows Remote software.



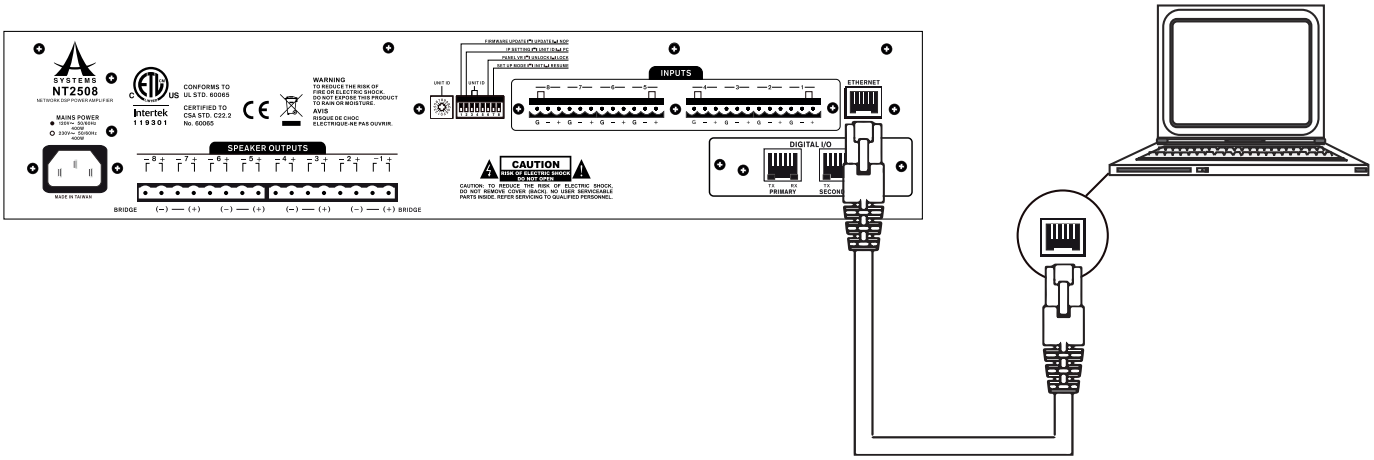
Hexadecimal to Decimal Conversion

HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC	HEX	DEC
01	1	0E	14	1B	27	28	40	35	53
02	2	0F	15	1C	28	29	41	36	54
03	3	10	16	1D	29	3A	42	37	55
04	4	11	17	1E	30	2B	43	38	56
05	5	12	18	1F	31	2C	44	39	57
06	6	13	19	20	32	2D	45	3A	58
07	7	14	20	21	33	2E	46	3B	59
08	8	15	21	22	34	2F	47	3C	60
09	9	16	22	23	35	30	48	3D	61
0A	10	17	23	24	36	31	49	3E	62
0B	11	18	24	25	37	32	50	3F	63
0C	12	19	25	26	38	33	51		
0D	13	1A	26	27	39	34	52		

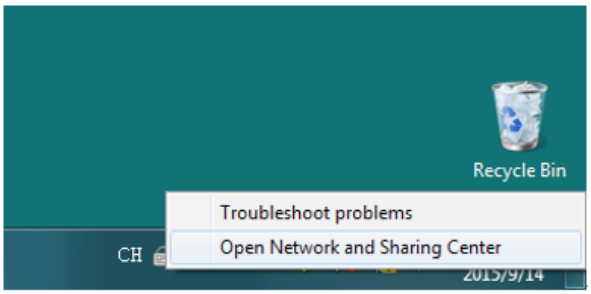
4.5 REMOTE SOFTWARE CONNECTION

NT2508, **NT1308**, **NT2504**, **NT1304** and **NT4004** can be controlled via a connected Windows-based PC. The instructions below assume users have already set their unit's IP address as described on the previous page.

1. Connect the Ethernet port of the NT network amplifier to the Ethernet port of your computer with a CAT5 RJ-45 Ethernet cable.

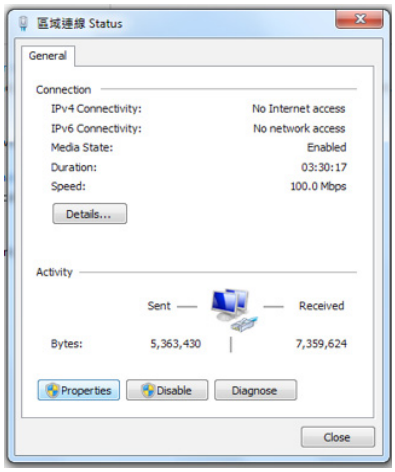


2. On your PC, right click your network icon and select **"Open Network and Sharing Center"**.

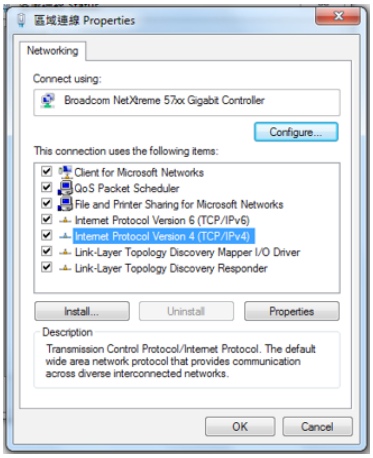


3. Double click your main connection located next to the **"Connections".**

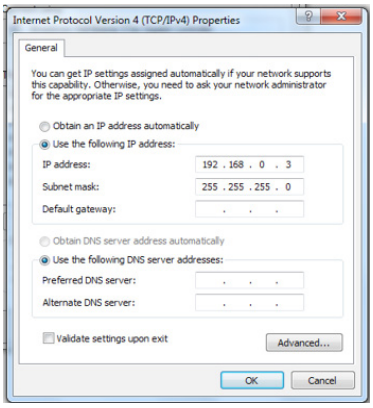
4. Click **"Properties"** Properties button.



5. Select **"Internet Protocol Version 4 (TCP/IPv4)"** and then click the **"Properties"** Properties button.



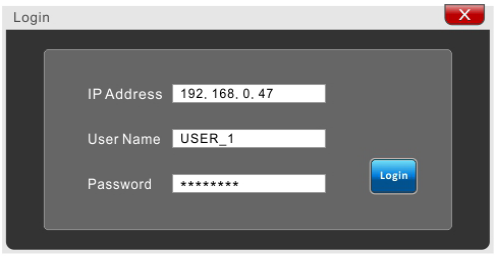
6. Change the field **"IP address"** to "**192.168.0.3"**, and then click **"OK"**.



7. Launch the control software by double clicking the executable file. The latest version of the NT control software can always be found on the Asystems website.

8. Within the **Login** box of the NT control software, enter the following:

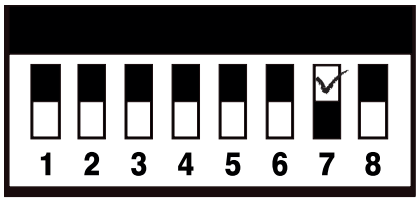
IP Address: 192.168.0.47
User Name: USER_1
Password: ASYSTEMS



9. Click 

4.6 RESTORE FACTORY SETTINGS

1. Switch POLE 7 on the rear panel DIP Switches to the ON position.



2. Power on the NT series network amplifier.

3. Switch POLE 7 to OFF.

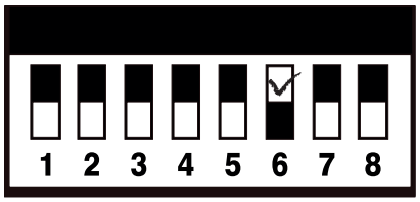
4. Switch the Power Switch to the "I" position (stand by).

5. Now your NT is restored to the factory default settings.

NOTE: A factory restore is particularly helpful in the event that user names and passwords are forgotten. Restoring to factory default settings will restore user names back to default values.

4.7 ACTIVATING ROTARY CONTROLS

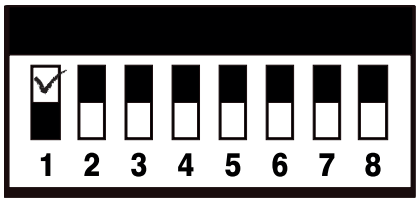
Use pole 6 on the rear panel DIP switch to turn the front panel controls on and off. When OFF, the rotary volume controls on the front of the NT will be deactivated. In the event that controls are not functioning, be sure to check this before taking further action.



In addition to this switch, each and every individual control can be deactivated within the software. Within the Control Panel page, the ON/OFF buttons at the very bottom of each channel will allow you to turn the front panel rotary controls on and off.

4.8 FIRMWARE UPDATE

When performing a firmware update, a few steps need to be followed. First of all, set the first pole of the DIP switch to the upper-most position.

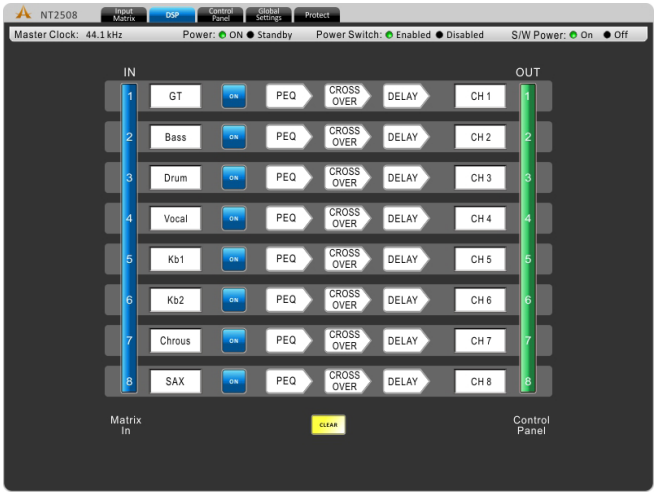


A connection needs to be established between the NT system and the Windows remote software. After this is done, enter the Global Settings tab and the Utility menu. At the very bottom of the page, click the "Update" button under the Firmware section. Users will be prompted to select the firmware file (available on the Asystems website) and the firmware update process will begin.

5. CONTROL SOFTWARE

DSP

The DSP page will give you an overall profile of input and output mixes as well as signal processors.



Name Cell: The white boxes at the left and right of each row will display the name of each input and output channel. Users can edit the name for each channel by double-clicking on the white box.

ON/OFF: This button will allow the user to switch the corresponding input channel on and off.

Signal Processor Cells: Every input/output channel has a row of three arrow shaped cells. The signal processors included are the PEQ, crossover and delay. These signal processors are set by default but can be bypassed by the user.

Channel In: Clicking the blue bar to the left of the screen will jump directly to the “Channel In Matrix” tab.

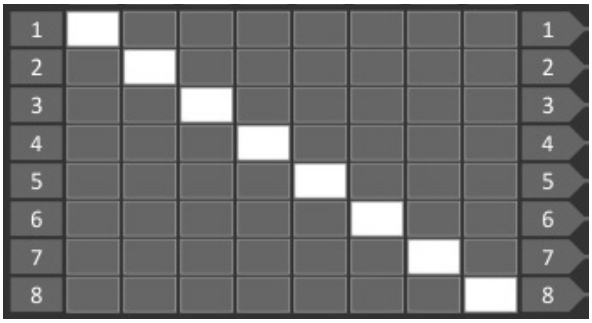
Channel Out: Clicking this green bar allows the user direct acccess to the “Control Panel” tab.

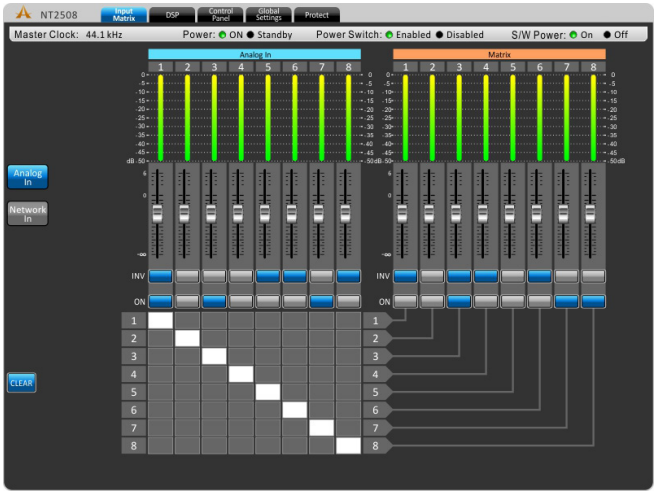
Clear: Clicking this button resets all DSP configurations.

Analog In Matrix

In this page, you can assign any input source to any output channel by clicking the corresponding cell in the cell matrix.

Example:
The image below shows how to assign input channels 1 through 8 to their corresponding outputs.





Analog In and Network In: Use these two buttons to view analog input sources connected via rear panel, as well as digital input sources from the Dante card.

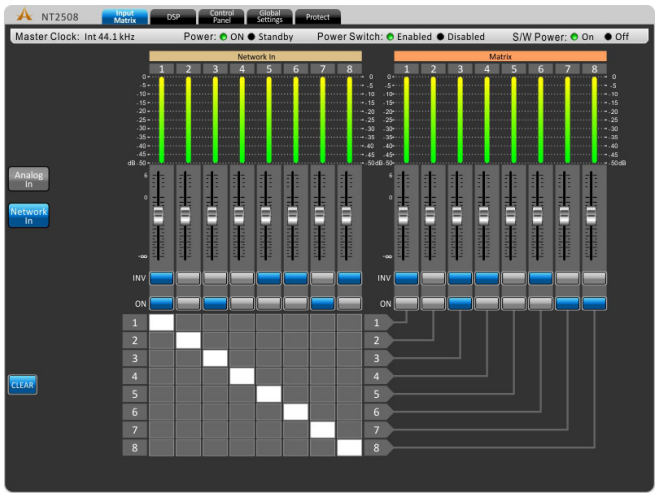
INV: Select this button to invert the phase of the corresponding channel.

ON: Select this button to turn the corresponding signal on and off.

CLEAR: Clicking this button erases all assigned input/output routing.

Network Matrix

By pushing the Network In button you can access the Network routing page. Here you can assign your Network signals to the various output channels. All controls are as same as controls under the Analog In Matrix page.



Control Panel

The control panel menu offers complete control of output channels. This menu includes level controls, metering, and a host of other parameters that can be edited.

Channel Name: A pre-selected channel name can be viewed or edited in this screen.

Fader: The input level can be adjusted using this onscreen fader.

OUT: The input and output signal level of the channel can be viewed through these meters. They can be adjusted between pre- and post-fader meters.

GR: The gain reduction meter will provide a real-time indication of any reduction in gain applied by the internal DSP processes (including compressors-limiters, equalizers, etcetera).

Limiter: This button will activate the internal limiter function for the corresponding channel. The limiter can be adjusted through the Global Settings > Lim page.

Pre/Post: This button allows you to adjust the output meter between a pre-fader and post-fader meter.

INV: This button will invert the phase of the corresponding signal.

ON/OFF: This button will turn the corresponding channel on and off.

Bridged: When the speaker outputs are wired for bridge mode, users must push this button to bridge the outputs of the two channels.

Front Level Control: The Control Panel page also includes an on/off button for the front-panel level controls. These can be used in addition to the rear panel DIP (pole 6) to deactivate individual front panel rotary controls. In addition to this button, users can view the position of their front panel rotary controls through the virtual rotary controls featured at the bottom of the page.

Global Settings

LIM - Limiter/Compressor Settings

This menu allows compressors and limiters to be applied to channel outputs.

Limiter Threshold: This control determines the threshold for the limiter function. This means that no signal will surpass the selected threshold, being ‘compressed’ at a ratio of infinity:1.

Compressor Threshold: Use this control to set the threshold of the compressor function. Any signals that surpass the selected threshold will be compressed at the selected ratio.

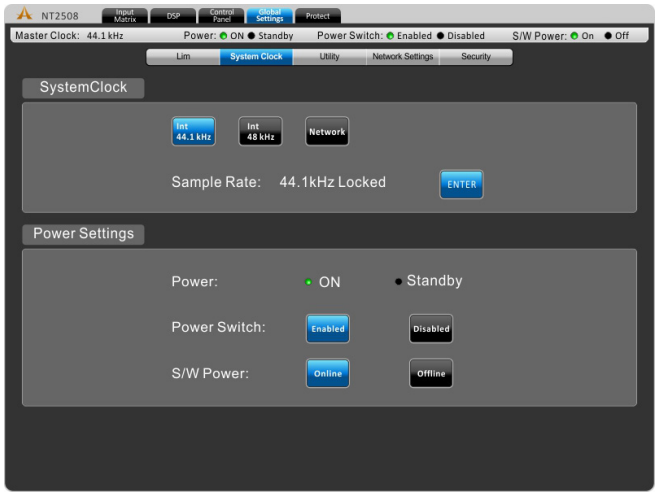
Compressor Ratio: This control can be used to set the ratio for the compressor. The ratio is expressed as <input>:<output>.

Compressor Attack: This control adjusts the attack time of the compressor, essentially determining the time taken for the compressor to kick in after it passes the selected threshold.

Compressor Release: The release control determines the time the NT will wait before disengaging the compressor when the signal bypasses the selected threshold.

System Clock

System Clock: This menu allows you to select a master clock source for digital devices. Selecting 44.1 or 48 kHz will set the NT as the master clock source and determine the sampling rate. Selecting AES/EBU, Network, or Word Clock will set these as the master clock. Whenever a new clock source is selected, the ENTER button must be pushed to confirm.



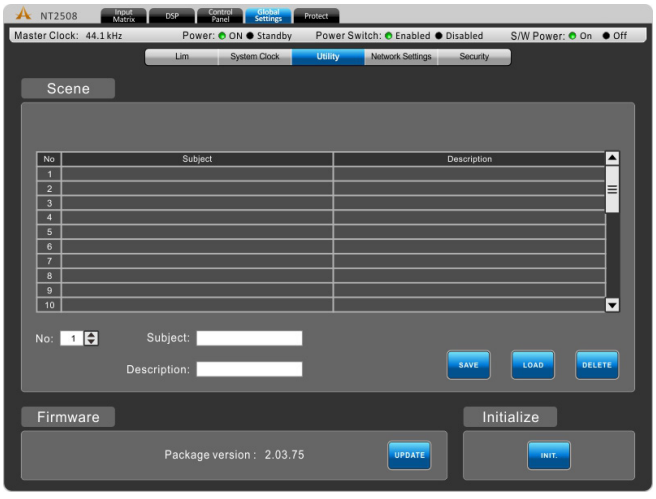
Power Settings: There are three power settings on the NT. The software power can be turned on and off, essentially enabling the NT to be turned on and off via the software – including event scheduling. The hardware power can be selected on and off, essentially allow the unit to be activated and deactivated using the hardwired switch on the front of the NT.

Utility

All of the DSP processes can have their settings saved for later use. While there are a number of factory presets available, users are always encouraged to find their own settings and save them for later use. The NT has onboard storage for a number of settings to be saved, or users can connect USB flash drives to save settings.

Also available in the Utility menu is a firmware update button. When a new version of firmware is available it can be installed using the “Update” button. Place the firmware update file on a formatted USB flash drive and insert it into a USB port. The “Update” button should take care of the rest.

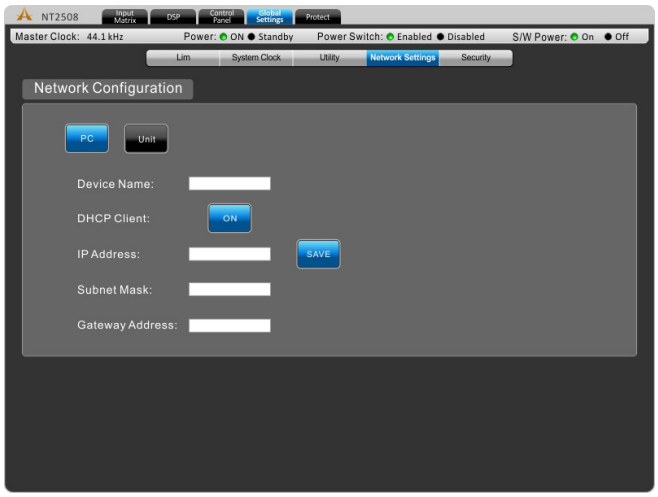
After the firmware is updated, the initialize button can be selected to reset the device. Save any settings (or “scenes”) before initializing the system.



English

Network

There are two pages under this tab.



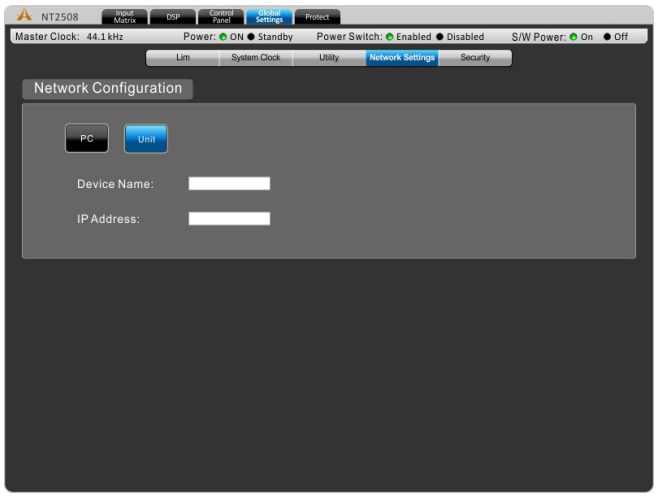
PC

The PC menu offers a number of fields for network configuration. The user can offer a device name in this menu, while also including fields for the IP Address, Subnet Mask and Gateway Address.

The DHCP button allows users to enable a Dynamic Host Configuration Protocol on the unit. Enabling the DHCP allows your network to automatically provides an Internet Protocol (IP) host with its IP address and other related configuration information such as the subnet mask and default gateway.

Unit

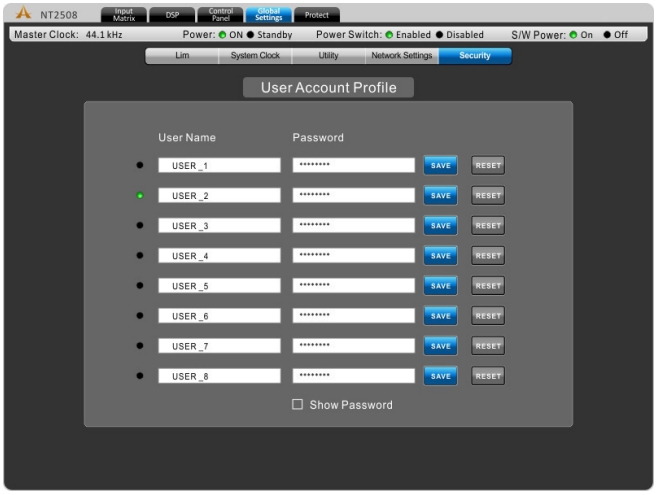
The Unit menu allows users to view the device name and IP address assigned to the NT series network amplifier.



Security

Users can adjust their User Account Profiles through this menu. Up to 8 user-specific accounts can be created, with the default names all being USER_x (where x is a number, 1 through 8). The default password is ASYSTEMS. Simply select the user name and password fields on screen to change them for each account. Once a user name and password are defined, click “SAVE” to store.

User names and passwords are all restored to defaults when the system is restored to factory default settings.



Remote Control From PC
Enter necessary information to log in.
Default values are:

IP Address: 192.168.0.xx
User Name: USER_1
Password: ASYSTEMS

Protect

The protect menu gives real-time updates on the system performance. Everything from the system temperature to the output wattage is represented on this page. If the Protect LED on the front of the NT amplifier lights up, this menu can be viewed to better understand the issue.

English

SPECIFICATIONS

		NT1304	NT1308	NT2504	NT2508	NT4004
Low Z, Stereo Mode, all channels driven (RMS Power Ouput Per Channel)						
8Ω, 20Hz-20kHz 1%THD		80W	80W	150W	150W	250W
4Ω, 20Hz-20kHz 1%THD		130W	130W	250W	250W	400W
Low Z, Bridge Mode, all channels driven (RMS Power Output)						
8Ω, 20Hz-20kHz 1%THD		260W	260W	500W	500W	800W
Distributed Output (RMS Power Output Per Channel)						
70V, 100V, 20Hz-20kHz 1%THD		130W	130W	250W	250W	400W
Models Available		4Ω and 8Ω / 70.7V Constant Voltage / 100V Constant Voltage Please consult your sales assistant for information on ordering the model that is best for you				
System	Amp Circuitry	D				
	Input Sensitivity	1.42 Vrms				
	Distortion (SMPTE-IM)	<0.02%				
	Noise (Unweighted 20 Hz - 20 kHz below rated power)	107 dB				
	Damping Factor	>300 @ 8Ω				
	Frequency Response	20 Hz-20kHz +-1dB; -3dB: 5Hz-50kHz				
	Input Impedance	20 kΩ balanced; 10 kΩ Unbalanced				
	Cooling	Variable Speed Fans - front to rear flow				
	Indicators	-10dB,-20dB, Signal, Peak, Bridge (one per two-channel group), Power, Protection, Power Off				
	Front Panel	AC power switch & gain control				
Control	Operation Mode	Stereo / Bridge Mono				
	Voltage Gain	40 x (32 dB)				
	Network Control	Built-in Ethernet, 10/100 Mbit/s				
Connections	Input	4 x 3-pin Euroblock Connectors	8 x 3-pin Euroblock Connectors	4 x 3-pin Euroblock Connectors	8 x 3-pin Euroblock Connectors	4 x 3-pin Euroblock Connectors
	Output	4 x 3-pin Euroblock Connectors	8 x 3-pin Euroblock Connectors	4 x 3-pin Euroblock Connectors	8 x 3-pin Euroblock Connectors	4 x 3-pin Euroblock Connectors
Protection Circuitry	Amplifier Protection	Totally Short / Open / Overheat / VLF / RF protection / Mismatched loads stabilize the transition				
	Load Protection	On / Off squelch / AC coupling / Triac crowbar (each channel)				
Power Supply	Power Consumption	180W	400W	375W	750W	600W
	Power Requirements (Region Dependent)	100 - 120VAC, 220 - 240VAC, 50/60Hz				

PARAMETERS

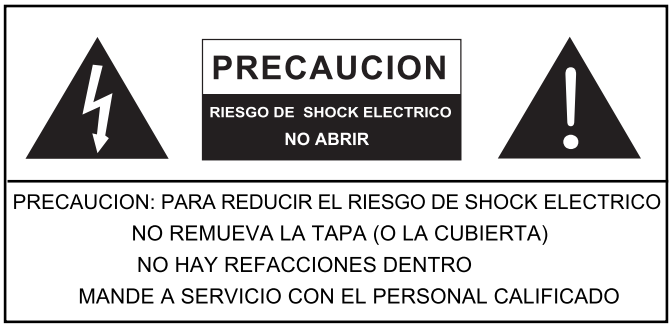
Function	Parameter	Range
Compressor / Limiter	Compressor Threshold	-50 dB to 0 dB
	Ratio	1:1 to 20:1
	Limiter Threshold	-50 dB to 0 dB
	Output Gain	0 dB to 18 dB
	Attack / Release	1 ms to 8 seconds
Delay	Delay Time (mS)	0.0 to 680.0 ms
	Delay Time (meters)	0.0 to 245.5
	Delay Time (feet)	0.0 to 805.4
	Temperature (C)	0° to 50°
	Temperature (F)	32° to 122°
4-band Equalizer	Type	BPF, Notch, Peak, HPF, LPF, High Shelf, Low Shelf
	Gain	-18 dB to +18 dB
	Frequency	20 Hz to 20 kHz
	Q	0.1 to 10
Crossover	HPF / LPF Type	Butterworth 12dB, 18dB, 24dB
	HPF / LPF Frequency	20 Hz to 20 kHz

ÍNDICE

INSTRUCCIONES DE SEGURIDAD

1. Lea estas instrucciones antes de operar este aparato.
2. Mantenga este instructivo para futuras referencias.
3. Preste atención a todas las advertencias para asegurar una operación adecuada.
4. Siga todas las instrucciones indicadas en este instructivo.
5. No utlize este aparato cerca del agua o en lugares donde se puedan dar condensaciones.
6. Limpie solamente con lienzos secos. No utilice aerosol ni limpiadores líquidos. Desconecte este aparato antes de limpiarlo.
7. No bloque ninguna de las aberturas de ventilación. Instale según las instrucciones del fabricante.
8. No lo instale cerca de cualquier fuente de calor como radiadores, registros de calor, estufas, u otro aparato (incluyendo amplificadores) que produzcan calor.
9. No deshaga la opción de seguridad del plug polarizado o aterrizado. Una clavija polarizada tiene dos cuchillas una más grade que la otra. Una clavija del tipo polarizado tiene dos cuchillas y un diente. La cuchilla más ancha o el tercer diente esta incluido para su seguridad. Si esta clavija no se acomoda en su toma corriente, consulte un electricista para que cambie el toma corriente obsoleto.
10. Proteja el cable de electricidad de ser pisado o picado particularmente en la clavija, los receptaculos y en el punto donde estos salgan del aparato. No pise los cables de alimentación de AC.
11. Utilice solamente accesorios o demás cosas especificadas por el fabricante.
12. Transporte solamente con un carro, pedestal, tripie abrazaderas o mesas espedicifadas por el fabricante, o incluidas con el aparato. Si se utiliza un carro, tenga precaución cuando mueva el carro con el aparato para evitar lesiones de cualquier tipo.

13. Desconecte este aparato durante tormentas eléctricas o cuando no se ocupe en periodos largos de tiempo.
14. Refiera todo el servicio al personal calificado. Se requiere de servicio cuando el aparato a sido dañado en cualquier manera, por ejemplo cuando el cable de alimentación de voltaje o la clavija han sido dañados, si se ha derramado liquido o si algun objeto a caido en el aparato, o si el aparato ha sido expuesto a la lluvia o a la humedad, no funcione normalmente o si ha sufrido una caída.



El simbolo con una flecha encerrado en un triangulo equilátero, es para alertar al usuario de la presencia de ´´voltaje peligroso´´ no aislado dentro del chasis del producto que pudiera ser de magnitud suficiente para constituir un riesgo de shock eléctrico a las personas.

El punto de exclamación dentro de un triangulo equilátero es para alertar al usuario de la presencia de instrucciónes importantes de operación y mantenimiento (servicio) en la literatura que acompaña el equipo.

ADVERTENCIA: Para reducir el riesgo de shock o fuego eléctrico no exponga este aparato a la lluvia o a la humedad.

PRECAUCION: No use controles, ajustes, no realice procedimientos diferentes a los especificados, esto puede resultar en una peligrosa exposición a la radiación.

PARAMETROS

Función	Parameter	Traducción de Parámetros en Español	Rango
Compressor / Limiter (Compresor / limitador)	Compressor Threshold	Umbral de Compresion	-50 dB a 0 dB
	Ratio	Muestreo	1:1 a 20: 1
	Limiter Threshold	Umbral del limitador	-50 dB a 0 dB
	Output Gain	Ganancia de salida	0 dB a 18 dB
	Attack / Release	Ataque / Liberación	1 ms a 8 segundos
Delay (Función Retraso de señales)	Delay Time (mS)	Tiempo de retardo (ms)	0,0 a 680,0 ms
	Delay Time (meters)	Tiempo de retardo (metros)	0 - 245,5
	Delay Time (feet)	Tiempo de retardo (pies)	0 - 805,4
	Temperature (C)	Temperatura (C)	0° a 50°
	Temperature (F)	Temperatura (F)	32° a 122°
4-band Equalizer (Ecualizador de 4 bandas)	Type	Tipo	BPF, Notch, Peak, HPF, LPF, High Shelf, Low Shelf
	Gain	Ganancia	-18 DB a +18 dB
	Frequency	Frecuencia	20 Hz a 20 kHz
	Q	Q	0,1 a 10
Crossover	HPF / LPF Type	Tipo HPF / LPF	Butterworth 12 dB, 18 dB, 24 dB
	HPF / LPF Frequency	Frecuencia HPF / LPF	20 Hz a 20 kHz

PARAMETROS

www.asystems-sys.com