SONANCE®

INSTRUCTION MANUAL

SONAMP® MULTI-CHANNEL POWER AMPLIFIER WITH SONARC

DSP 8-130

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INSTRUCTION MANUAL

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SONANCE®

Important Safety Information

You should always follow these basic safety precautions when using your Sonamp DSP 8-130, to reduce the risk of fire, electric shock, and injury to persons:

1. **Read and retain instructions:** Read all the safety and operating instructions before operating the amplifier, and retain them for future reference.
2. **Heed warnings:** Adhere to all warnings and precautions listed on the amplifier and in the operating instructions.
3. **Follow instructions:** Follow all operating instructions.
4. **Water:** Never use the amplifier next to water.
5. **Carts and stands:** The amplifier should be used only with a cart or stand that is recommended by the manufacturer. An amplifier and cart combination should be moved with care.

6. ***CAUTION: TO PREVENT ELECTRIC SHOCK, DO NOT USE THE POLARIZED PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLETS UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.***
7. **Ventilation:** Situate the amplifier so that its location does not interfere with its proper ventilation.
8. **Heat:** Situate the amplifier away from heat sources such as radiators, stoves, or other appliances (including amplifiers) that produce heat.
9. **Grounding or polarization:** Grounding or polarization are precautions that should be taken so that these attributes are not defeated.
10. **Power-cord protection:** Route power supply cords so that they will not be walked on or pinched by items placed on or against them.
11. **Cleaning:** To clean the amplifier, use "canned air" or wipe the amplifier with a soft cloth. Do not use solvents, as they may damage the amplifier.
12. **Non-use periods:** Unplug the amplifier's power cord from the outlet when the amplifier will be left unused for a long period of time.
13. **Object entry:** Care should be taken so that objects do not fall through the opening of the enclosure.
14. **Moisture:** Do not expose the amplifier to dripping or splashing. Do not place objects filled with liquids, such as vases, on the amplifier.
15. **Damage requiring service:** Have the amplifier serviced by a qualified service personnel when:
    - The power supply cord or the plug has been damaged.
    - Objects have fallen, or liquid has been spilled into the amplifier.
    - The amplifier has been exposed to rain.
    - The amplifier does not appear to operate normally or exhibits a marked change in performance.
    - The amplifier has been dropped, or the enclosure damaged.
16. **Servicing:** The user should not attempt to service the amplifier beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
17. **Lifting:** Improper lifting of the 18 lbs. DSP 8-130 amp can cause personal injury.
18. **Power requirement:** Do not connect the Sonamp to the accessory outlet of any other component. A minimum 15 amp (20 amp preferred) grounded wall outlet is required.

WARNING: THE POWER (MAINS) PLUG SERVES AS THE AMPLIFIER'S DISCONNECT DEVICE. THE DISCONNECT DEVICE SHALL REMAIN READILY OPERABLE DURING OPERATION. TO ENSURE THAT THE DISCONNECT DEVICE (POWER PLUG) IS EASILY ACCESSIBLE, THE USER SHALL NOT PLACE THE AMPLIFIER IN A CONFINED AREA DURING OPERATION.

19. **Storms:** To prevent damage to components, unplug all electronic equipment during thunderstorms.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK)
NO USER SERVICEABLE PARTS INSIDE
REFER SERVICING TO AUTHORIZED
SERVICE PERSONNEL.

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 PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. THE APPLIANCE SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING. NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPLIANCE.

INSTRUCTIONS IMPORTANTES CONCERNANT LA SÉCURITÉ

1. Lisez soigneusement ces instructions.
2. Conservez-les en lieu sûr pour toute référence future.
3. Respectez scrupuleusement tous les avertissements de sécurité.
4. Suivez toutes les instructions indiquées.
5. Ne pas utiliser cet appareil près de l'eau.
6. Nettoyez cet appareil uniquement avec un chiffon sec.
7. Ne jamais obstruer ses ouïes de ventilation. Installez cet appareil suivant les instructions recommandées par son fabricant.
8. Ne jamais installer cet appareil près d'une source dechaleur, comme les radiateurs, bouches de chaleur, fours ettout autre appareil (y compris les amplificateurs de puissance) générant de la chaleur.
9. Ne jamais démonter la prise polarisée ou la broche de mise à la terre de la prise secteur. Une prise polarisée possède deux lames, l'une étant plus large que l'autre (standard américain). Une prise avec mise à la terre possède trois broches, dont une centrale déportée par rapport aux deux autres. Ces différents brochages ont été conçus pour votre sécurité. Si la prise de l'appareil ne rentre pas dans la prise d'alimentation secteur de votre installation, veuillez consulter un électricien agréé pour le remplacement de la prise murale (certainement pas aux normes actuelles).
10. Protégez le câble d'alimentation secteur de telle manière qu'il ne puisse pas être écrasé ou pincé, particulièrement au niveau des prises, du passage dans des goulettes prévues à cet usage, ou à l'endroit où il sort de l'appareil.
11. N'utilisez que les systèmes de fixation et accessoires prévus et conseillés par le fabricant.
12. N'utilisez que des tables, supports, pieds, bras de fixation prévus ou conseillés par le fabricant, ou vendus avec l'appareil. Si un support mobile est utilisé, toujours procéder avec une grand précaution lors du déplacement dece support afin d'éviter que l'appareil ne tombe et puisse blesser physiquement une personne.

13. Débranchez complètement l'appareil pendant un orage ou une longue période de non-utilisation.
14. Pour toute intervention sur l'appareil, adressez-vous exclusivement à du personnel qualifié et agréé. Une interventions' avérera nécessaire si l'appareil a été endommagé, pour quelque raison que ce soit, et par exemple si le câble d'alimentation secteur ou sa prise sont endommagés, si du liquide a pénétré à l'intérieur de l'appareil, ou un objet y est tombé, ou bien si l'appareil a été exposé à la pluie ou à l'humidité, ou bien est tombé, ou encore ne fonctionne pas de manière normale.
15. Ne jamais exposer cet appareil à des risques de coulures ou d'éclaboussures de liquides ; ne jamais poser d'objets remplis de liquide – comme des vases, sur l'appareil.

Le symbole de l'éclair terminé par une pointe de flèche, dans un triangle équilatéral, est utilisé pour indiquer à l'utilisateur la présence d'une tension électrique potentiellement dangereuse, à l'intérieur de l'appareil, d'un niveau suffisamment élevé pour présenter des risques d'électrisation aux personnes physiques.

Le symbole du point d'exclamation, dans un triangle équilatéral, est utilisé pour indiquer à l'utilisateur, dans les manuels accompagnant l'appareil, la présence d'un point très important, concernant le fonctionnement ou la maintenance de l'appareil, à respecter impérativement.

ATTENTION: POUR RÉDUIRE TOUT RISQUE D'ÉLECTROCUTION, NE JAMAIS EXPOSER CET APPAREIL À LA PLUIE OU L'HUMIDITÉ.

ATTENTION : AFIN DE RÉDUIRE LES RISQUES D'ÉLECTRISATION, NE JAMAIS ÔTER LE CAPOT DE L'APPAREIL. IL N'Y A À L'INTÉRIEUR AUCUNE PIÈCE SUSCEPTIBLE D'ÊTRE MODIFIÉE PAR L'UTILISATEUR. TOUJOURS FAIRE APPEL À UN TECHNICIEN AGRÉÉ.

WARNING: Any 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.

Introduction

Thank you for purchasing the Sonance Sonamp DSP 8-130 amplifier. When properly installed, this amplifier will give you many years of entertainment pleasure. To get the most out of your new amplifier, please read this manual thoroughly before you begin installation.

To achieve the best performance, Sonance recommends that this amplifier be installed by a Sonance Authorized Dealer/Installer.

Box Contents

Your Sonamp DSP 8-130 box should contain:

(1) Instruction manual

(1) Network Connection Instructions

(1) Sonamp DSP 8-130 amplifier

(1) IEC power cord

(4) Feet

(2) Rack ears

Unpacking

Save the carton and polystyrene inserts for future safe transport in case the amplifier is moved or requires shipping for repair.

Before proceeding with installation, locate the serial number on the rear panel of the unit and note it here for future reference:

S/N:_____

Placement

Place the amplifier on a level surface, in an upright position, out of direct sunlight and away from windows through which rain may enter.

Situate the amplifier away from heat sources such as hot air ducts or radiators. Be sure that the amplifier is adequately ventilated by convection or suitable cabinet fans.

- Never place any object on or against the amplifier.
- Never operate the amplifier on a carpeted surface as this will compromise ventilation.
- When the amplifier is installed in any cabinet, the front or back must be open during operation. Alternately, install fans in the cabinet to assure continuous ventilation.

FIGURE 1: SONAMP DSP 8-130 MULTI-CHANNEL POWER AMPLIFIER

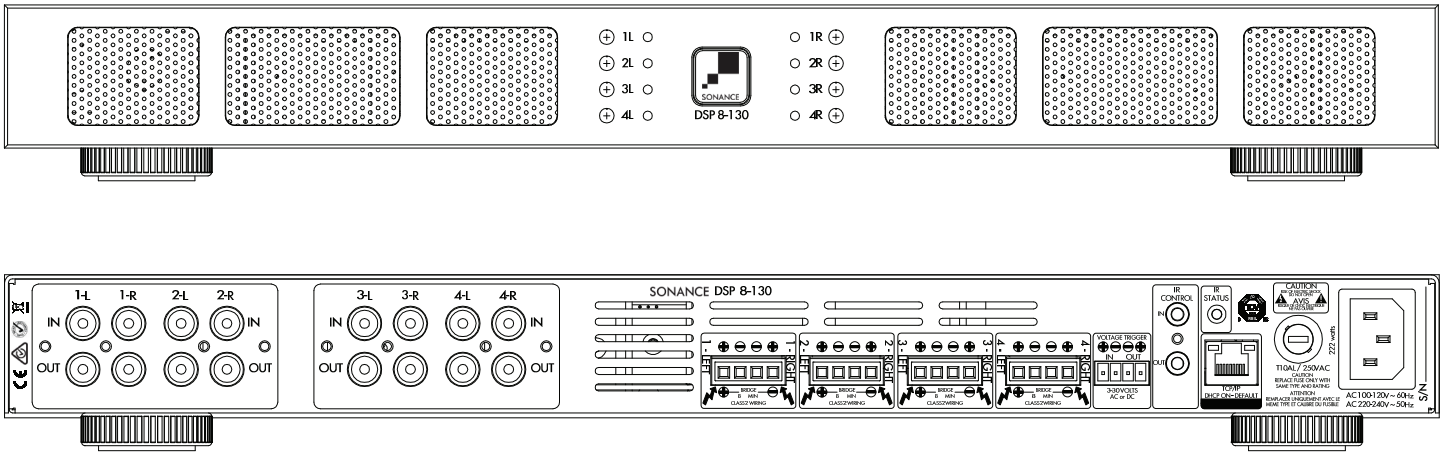
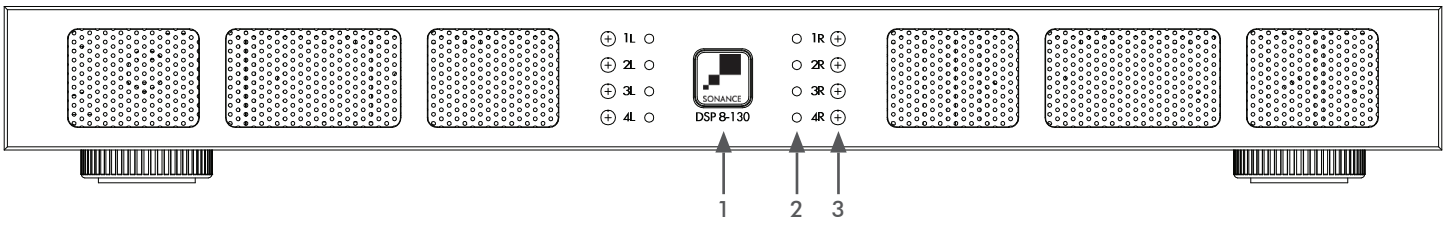


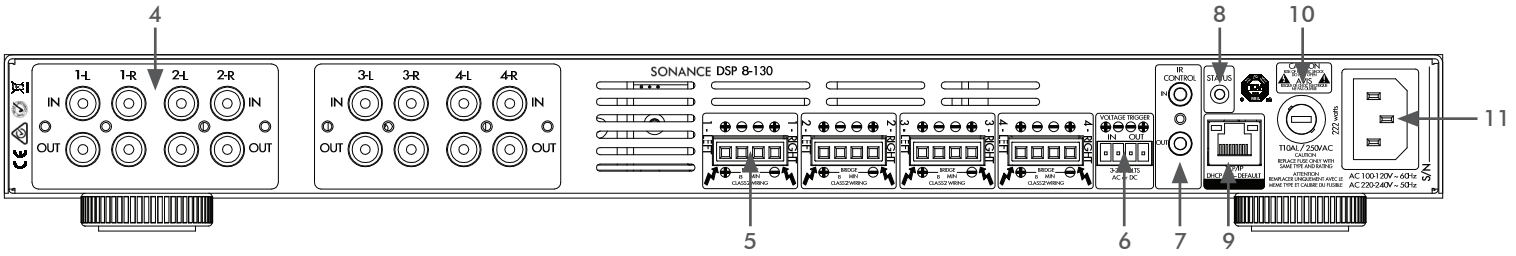
FIGURE 2: SONAMP DSP 8-130 MULTI-CHANNEL POWER AMPLIFIER FRONT PANEL



DSP 8-130 Front Panel

1. Illuminated Power Button
2. Power, Active & Protection Indicator LED
3. Recessed Volume Level Controls

FIGURE 3: SONAMP DSP 8-130 MULTI-CHANNEL POWER AMPLIFIER BACK PANEL



DSP 8-130 Rear Panel

4. L/R Line In/Loop Outputs
5. Speaker Block Connector
6. Trigger Input/Output Connector
7. IR Control In/Out
8. IR Status Light
9. RJ-45 Input
10. AC Fuse Holder
11. Power Cord Connection

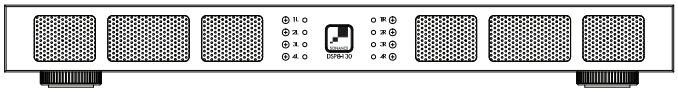


FIGURE 4: SONAMP DSP 8-130 AMPLIFIER FRONT PANEL VIEW

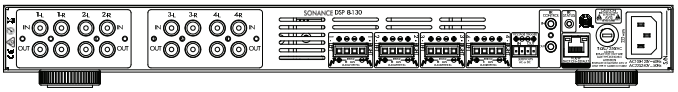


FIGURE 5: SONAMP DSP 8-130 AMPLIFIER REAR PANEL VIEW

Front Panel

Power Switch
The power switch turns the amplifier on and off.

When the Sonance logo on the power switch is lit solid white, the amplifier has power and is turned ON and ready to operate.

When the Sonance logo is slightly dimmed the amplifier is in standby mode.

When the Sonance logo on the power switch is blinking white, the amplifier power supply is in thermal protection. The channel LEDs will also light red when the power supply is in thermal protect mode.

NOTE: Upon initial power up there will be an approximately 12 second boot up cycle. This is normal.

Input/Output Lights
When each channel is active, the LED will light green as long as a signal is present.

When the LED blinks red, this is an indication that the channel is being overdriven.

When the LED lights are solid red this is an indication the amplifier is in protect mode. While in protect mode the LED lights will periodically light green to retest the output to determine if the short has been removed. Protect mode could be caused by a short in the wire, overheating of the amplifier or possibly an internal problem with the amplifier.

NOTE: WHEN ANY OF THE LEDS ARE LIT RED TURN THE AMPLIFIER OFF IMMEDIATELY. DETERMINE THE CAUSE OF THE PROBLEM BEFORE TURNING THE AMPLIFIER ON.

Volume Level Control
Each channel on the amplifier has volume adjustments found in the SONARC software or from the front panel recessed volume controls.

Rear Panel

Line Inputs/Loop Outputs
The DSP 8-130 amplifier has four pair of LINE INPUTS and four pair of loop OUTPUTS.

The loop outputs are non buffered, the maximum number of amplifiers that can be looped together will depend on the output capability of your source component

Speaker Connections
The removable block connectors used on the Sonamp amplifiers will accept up to 12 gauge wire.

Follow the connection layout on the rear panel of the amplifier. Make sure no bare wires come in contact with the amplifier chassis. When bridging channels, use the two outside connections on each connector. The positive wire from the speaker should be on the left side connection and the negative connection should be on the right side.

Auto On - Voltage In/Out Trigger
The Sonamp amplifiers can be turned on and off using 3-30 volts AC or DC. The Voltage Output supplies a 12 volt DC signal to control additional amplifiers or other equipment.

IR Control
IR control is via the IR control In/Out jacks. IR controls On/Off, volume, muting and input source selections. Connectivity can be seen with IR status light.

IP Control
IP control is via the RJ-45 input. IP controls power On/Off, volume, muting and input source selections.

AC Fuse Holder
To replace the fuse, unplug the power cord from the Power Cord Connector and use a screwdriver to remove the fuse holder.
DSP 8-130 - 15 amp AC (T15-AL)

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE, REPLACE THE FUSE WITH ONLY THE SAME TYPE AND RATING.

Power Cord
The Sonamp amplifiers feature removable IEC power connectors. Plug the female end of the power cord into the Power Cord Connector on the amplifier rear panel and plug the male end into a grounded wall socket.

DO NOT plug the amplifier's power cord into a convenience outlet on any other audio or video component. If you need to use an extension cord, use only a heavy duty (14-GAUGE OR LARGER) extension cord to avoid starving the amplifier of the current necessary for full operation.

Powering the Amplifier

The Sonamp DSP 8-130 features a removable IEC power connector (Figure 6). A 14-gauge EIA standard 120-volt grounded power cable is included with the amplifier.

Each time the amplifier's power cord is initially plugged in and the POWER switch is turned ON, all channel outputs are disconnected for approximately 12 seconds and all PROTECTION LEDs will illuminate briefly while the amp boots up.

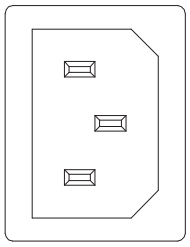


FIGURE 6: IEC POWER CORD CONNECTION

IMPORTANT: DO NOT PLUG THE POWER CORD INTO THE WALL OUTLET UNTIL ALL SYSTEM CONNECTIONS HAVE BEEN MADE AND VERIFIED.

Plug the female end of the power cable into the Power Connector on the amplifier's rear panel and plug the male end directly into a grounded 15 amp or 20 amp wall outlet.

IMPORTANT: DO NOT PLUG THE AMPLIFIER'S POWER CORD INTO A CONVENIENCE OUTLET ON ANY OTHER AUDIO OR VIDEO COMPONENT.

If the electrical service is subject to frequent sags, spikes, or brownouts, a power conditioner designed for use with high fidelity equipment should be employed to protect the amplifier.

CAUTION: FOR CONTINUED PROTECTION AGAINST FIRE, REPLACE THE FUSE WITH ONLY THE SAME TYPE AND RATING.

Amplifiers Power Requirements:

Model	Input Voltage	Output Power (sinewave)	Draw Watts	15 AMP Breaker Qty of Amplifiers	20 AMP Breaker Qty of Amplifiers
DSP 8-130	100-120V AC	Full Power All Channels @8 ohms	1160	1	1
		Full Power All Channels @4 ohms	1512	1	1
		1/8 Power All Channels @8 ohms	181	7	10
		1/8 Power All Channels @4 ohms	226	6	8
		@ Idle	35		
		IP/IR Standby	1.1		
		@ Standby	0.45		

Model	Input Voltage	Output Power (sinewave)	Draw Watts	13 AMP Breaker Qty of Amplifiers	20 AMP Breaker Qty of Amplifiers
DSP 8-130	220-240V AC	Full Power All Channels @8 ohms	1097	1	1
		Full Power All Channels @4 ohms	1440	1	1
		1/8 Power All Channels @8 ohms	182	7	10
		1/8 Power All Channels @4 ohms	219	6	8
		@ Idle	31		
		IP/IR Standby	1.2		
		@ Standby	0.48		

FIGURE 7: SONAMP DSP 8-130 MULTI-CHANNEL AMPLIFIER POWER REQUIREMENTS

Speaker Connections

For the best sound you should use premium speaker wire, that complies with fire rating codes. Be sure to check local codes governing wire that may be installed within walls or ceilings. Sonamp amplifiers are stable with any reputable brand of speaker wire or cable. The Sonamp amplifiers use speaker block connectors that can accommodate up to 12 gauge wire (see Figure 9).

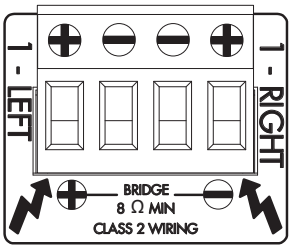


FIGURE 9:
SPEAKER CONNECTORS

NOTE: ALWAYS CHECK LOCAL BUILDING CODES BEFORE INSTALLING WIRE IN WALLS OR CEILINGS.

Bridging Channels DSP 8-130

IMPORTANT: THE MINIMUM SPEAKER IMPEDANCE FOR BRIDGED OPERATION IS 8 OHMS. DO NOT OPERATE A ZONE IN THE BRIDGED MODE INTO A SPEAKER THAT IS LESS THAN 8 OHMS NOMINAL IMPEDANCE.

Bridging channels is accomplished using the SONARC software. On the second page IN/OUT Settings go to the output setup area to bridge mode and make your selections with the drop down buttons.

1. Use the left audio input when operating the amplifiers output in bridged mode (see figure 10).
2. Select ON in the bridge mode (see figure 10).
3. Connect the speaker's "+" lead to the left side of the connector marked "+" (see Figure 11).
4. Connect the speaker's "–" lead to the right side of the connector marked "+" (see Figure 11).
5. Connect the line level audio input to the LEFT channel input on the amplifier.

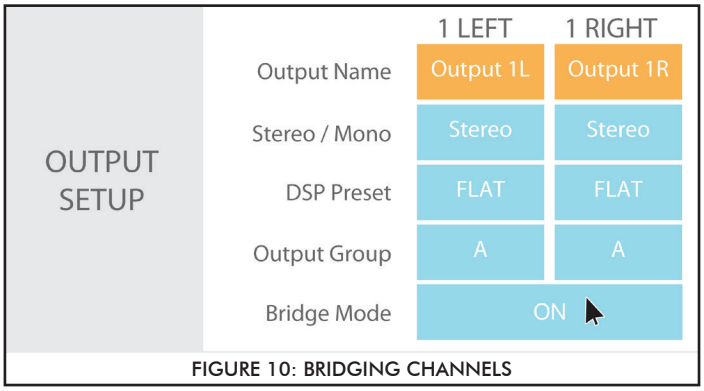


FIGURE 10: BRIDGING CHANNELS

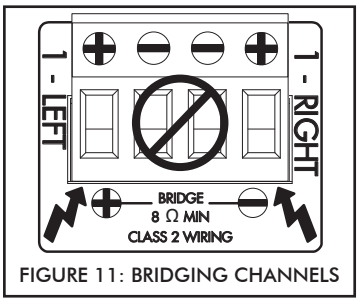


FIGURE 11: BRIDGING CHANNELS

Source Connections DSP 8-130

On the left side of the rear panel are the left and right audio inputs for all eight channels. In addition to the audio inputs there are also loop outputs for each channel.

The loop outputs allow multiple amplifiers to share common audio sources. The loop outputs on the amplifiers are not buffered. The number of amplifiers that can be connected in series will depend on the output level of your audio source. The source connected to the LEFT and RIGHT LINE IN Inputs pass through the LEFT and RIGHT LINE Outputs (see Figure 12).

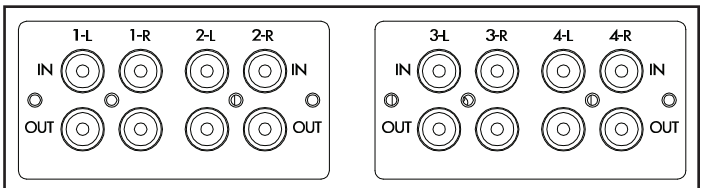


FIGURE 12: SONAMP DSP 8-130 LEFT, RIGHT LINE INPUTS/OUTPUTS

Volume Level Control

Volume can be controlled from the individual recessed volume level control screws, located on the front panel (see Figure 13). These volume controls balance the desired sound levels per channel.

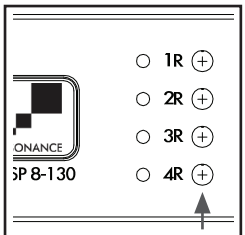


FIGURE 13: VOLUME LEVEL CONTROLS

Volume can be controlled three different ways with SONARC (see Figure 14).

1. Output volume
2. Turn on volume
3. Maximum volume

Output volume ranges between -70 to 12. **The volume level controls are set at 0**.

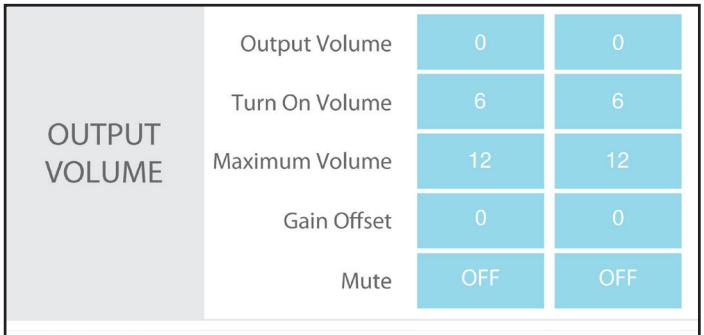


FIGURE 14: SONARC PAGE IN/OUT SETTINGS OUTPUT VOLUME

IMPORTANT: USE CAUTION WHEN SETTING VOLUME LEVELS EITHER ON THE AMPLIFIER OR AN AUDIO SWITCHER AS NOT TO OVERDRIVE AND POSSIBLY DAMAGE SPEAKERS. VERIFY ALL SOURCES AS OUTPUT VOLTAGE VARIES FROM DEVICE TO DEVICE.

Protection Circuitry and LEDs

The Sonamp amplifiers have a multi-stage protection system to prevent damage to your amplifier and speakers.

Amplifier Channel Protection DSP 8-130
If a channel encounters a short-circuit (in bridged mode the protection circuitry will sense a short circuit across both positive speaker terminals), or extremely low impedance will cause the affected channel outputs to automatically mute. The output of the effected channel will remain muted until the fault has been corrected. Only the effected channels output will mute, all other channels will continue to operate normally.

Amplifier Channel Protection Indication DSP 8-130
On the front panel of the Sonamp DSP 8-130 amplifiers are dual color LEDs that illuminate to indicate the current operating status of each amplifier channel.

When the LED blinks red this is an indication that the channel is being overdriven.

When the LED lights are solid red this is an indication the amplifier is in protect mode. While in protect mode the LED lights will periodically light green to retest the output to determine if the short has been removed. Protect mode could be caused by a short in the wire, overheating of the amplifier or possibly an internal problem with the amplifier.

IMPORTANT: ALLOWING THE AMPLIFIER TO OPERATE WITH ONE OR MORE CHANNELS IN PROTECT MODE FOR AN EXTENDED PERIOD OF TIME CAN DAMAGE THE AMPLIFIER.

Amplifier Power Supply Protection DSP 8-130
The amplifier also has protection for the power supply. If the power supply heat sink temperature exceeds the design maximum, the protection circuit will activate, disconnecting all channel outputs. This is indicated by a blinking light on the front panel power switch.

IMPORTANT: ANY TIME THE PROTECTION CIRCUITS ARE TRIGGERED, UNPLUG THE AMPLIFIER'S POWER CORD FROM THE WALL OUTLET BEFORE TROUBLESHOOTING.

Rack Ear Installation DSP 8-130

The DSP 8-130 ships with two rack ears. Unscrew the four Phillips head screws (M4 x 0.7 pitch x 10mm long) found on each side of the left and right forward section of amplifier. Use these screws to connect the included rack ears to the amplifier (see Figure 15).

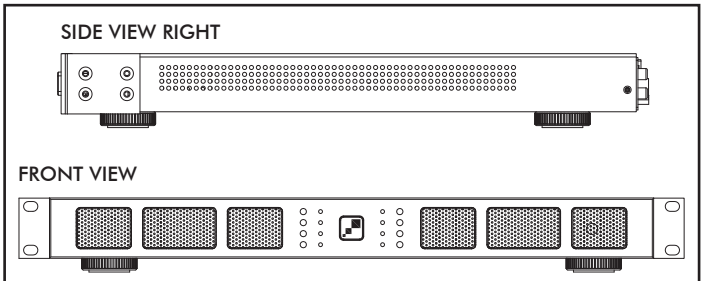


FIGURE 15: RACK EAR INSTALLATION DSP 8-130

Amplifier Stacking

The DSP 8-130 is capable of being directly stacked with the feet removed (see Figure 16) for use in low to moderate output applications. For high-output applications, it is recommended to leave at least 1U space between amplifiers for increased ventilation.

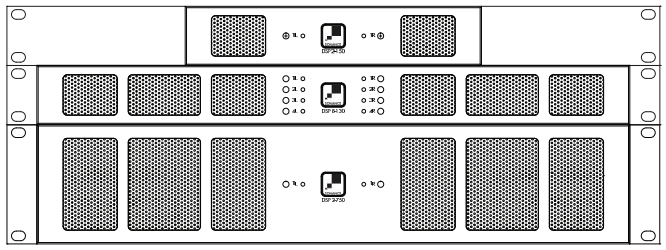


FIGURE 16: STACKED CONFIGURATION DSP 2-150, DSP 8-130, DSP 2-750

Shelf Mounting

If shelf mounting, attach the four included feet by screwing them into the threaded openings, no tool is required.

NETWORK CONNECTION INSTRUCTIONS

Equipment List for Mac and PC

1. Computer or tablet
2. Network router with DHCP service enabled
3. Two RJ-45 cables (one when using wireless)

Color Coded Interface

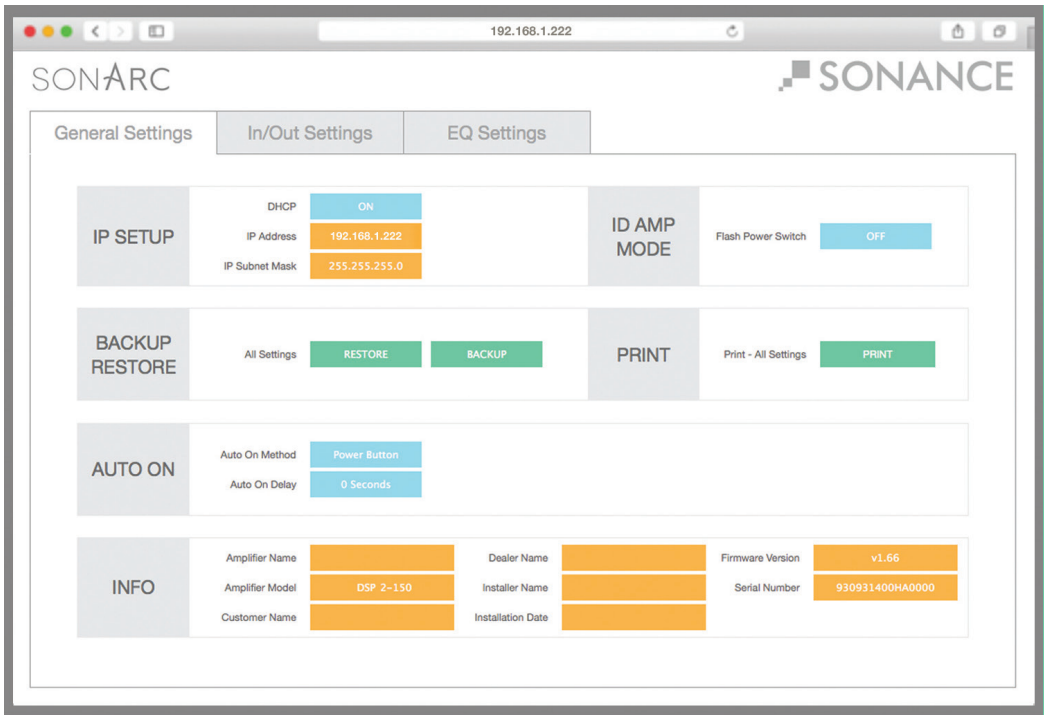
Toggle/Pull-down Menu

Free Type Field

Single Action Menu

Macintosh DHCP

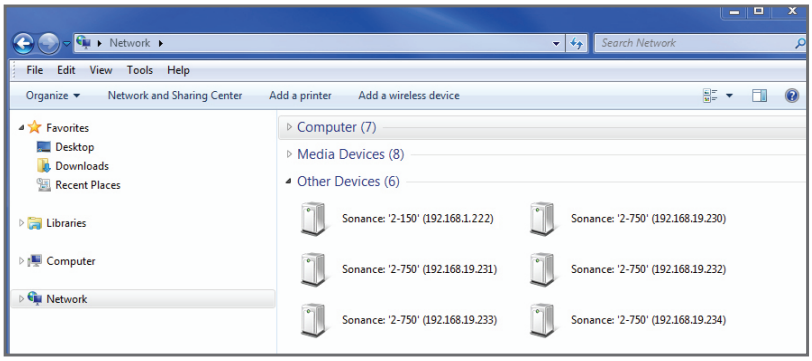
1. The amplifier factory settings has DHCP set to ON.
2. Connect the amplifier to a network with router.
   Make sure the computer and amplifier are on the same network.
3. Turn on the amplifier.
4. The amplifier will be issued an IP address by the router.
5. Use an IP Scanner to determine the IP Addresses of the Sonance DSP amps on the network.
   We recommend Fing app for IOS. https://itunes.apple.com/us/app/fing-network-scanner/id430921107?mt=8
6. Network devices will show up and the amplifier will be named **Sonance**.
7. Open up Safari or Chrome for Mac.
   In the URL address window at the top enter the IP address of the Sonance DSP amplifier to configure.



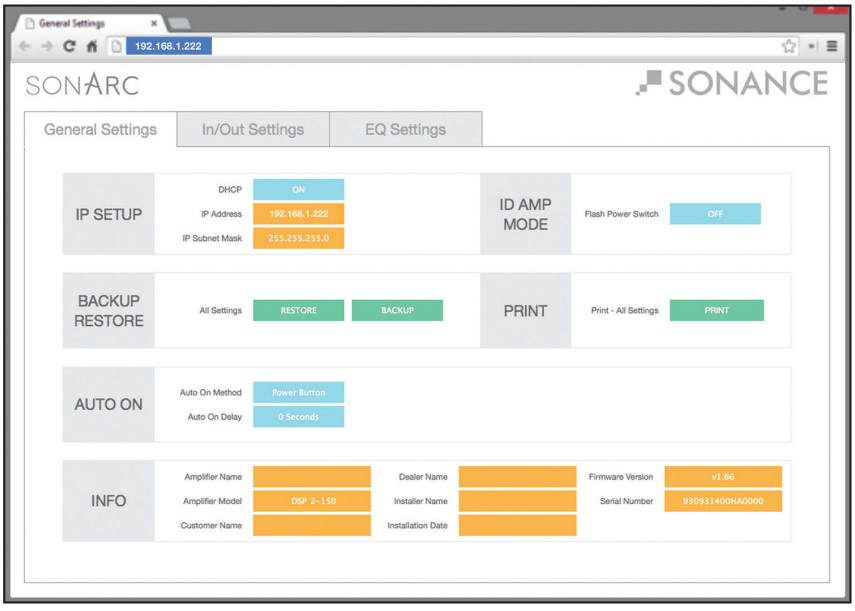
NETWORK CONNECTION INSTRUCTIONS

Windows DHCP

1. The amplifier factory settings has DHCP set to ON.
2. Connect the amplifier to a network with router.
   Make sure the computer and amplifier are on the same network.
3. Turn on the amplifier.
4. The amplifier will be issued an IP address by the router.
5. Click on Start and select Computer ("This PC" Windows 7 or 8 or higher).
   a. For Windows XP download **Advanced IP for Windows** -
   http://www.advanced-ip-scanner.com



6. Select the Network from the list on the left.
7. Double click on the Sonance DSP amplifier, for example **Sonance '2-150' (192.168.1.222)**, you want to configure under "Other Devices".
   A browser will automatically open and you will see the General Settings page.



Quick Setup Page

If you will be using the Sonance DSP amplifier with a control system and only want to make basic changes to the SONARC software these instructions will guide you through the process.

Quick Setup

Follow the SONARC Network Setup instructions to access the SONARC software.

General Settings Tab - Auto On
Select the AUTO ON method you would like to use.

NOTE: IF EITHER AUDIO OR VOLTAGE TRIGGERS ARE SELECTED, THE AMPLIFIER HAS A 12 SECOND CYCLE TIME FROM STANDBY TO PLAY AN AUDIO SIGNAL. THIS IS NORMAL AND REQUIRED TO COMPLY WITH THE EU < .5 WATT ERP DIRECTIVE. (EC/1275/2008). SELECT OFF TO BYPASS THIS FEATURE. SEE POWER CONSUMPTION TABLE FOR IDLE POWER USE (SEE PAGE 6, FIGURE 7). AUDIO AUTO ON IS THE ONLY MODE THAT ALLOWS THE AMPLIFIER TO DRAW 0.5 WATTS AT STANDBY.

NOTE: WHEN VOLTAGE, POWER BUTTON, IP OR IR IS SELECTED THE AMPLIFIERS POWER SAVING FEATURE WILL BE DISABLED.

In/Out Settings Tab - Output Setup
Select the preloaded DSP preset that matches your Sonance speaker.

If the DSP preset for your Sonance speaker is not included in the amplifier, follow the instructions to the right to add DSP presets.

In/Out Settings Tab - Output Source
The amplifier default is Input 1 to Output 1, Input 2 to Output 2, etc. If your application is different, assign the correct input to each of the output channels you will be using. Any left Input can be assigned to any left Output. Any right Input can be assigned to any right Output.

In/Out Settings Tab - Output Volume
If you are using a control system to adjust the volume you can skip these steps.

1. Set the Output Volume for each channel.

2. Set the Turn On Volume the same as the Output Level.
    a. Its important to set the Turn On Volume the same in case the amplifier power is shut off accidentally.

The basic setup is complete!

Apply DSP Preset

Follow the SONARC Network Setup instructions to access the SONARC software if not completed already.

Each Sonance DSP amplifier has 50 slots with pre-configured DSP curves for Sonance speaker models pre-loaded. If the speaker model in your application is not on the pre-loaded list, hundreds of DSP files are available for download from the Sonance website.

Sonance Website
Download the preset for your specific Sonance speaker model at www.sonance.com/electronics/amplifiers/dsp

DSP presets are also available for download on individual speaker web pages.

Save the new preset in a location on your computer you will be able to find later.

EQ Settings - Tab
1. In the blue box labeled SELECT EQ PRESET choose which preset number you would like to use to store your new EQ Preset. You can overwrite presets you will not use.

2. Press the Green Import Single EQ Preset button.

3. Select the file you downloaded from the Sonance website.

4. The file will now be loaded into the preset location you have selected.

5. If necessary edit the name of the preset.

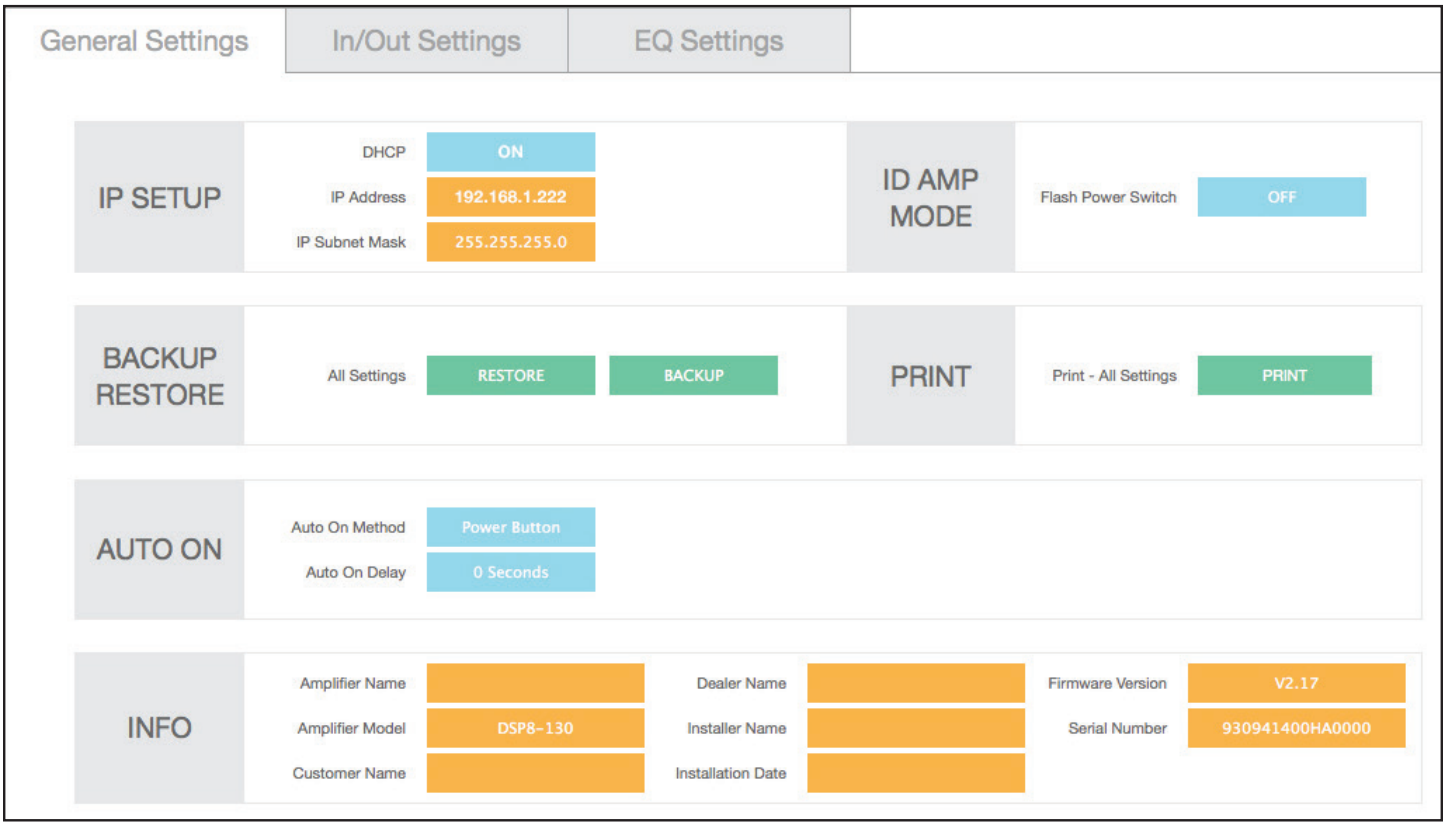
In/Out Settings Tab - Output Setup
Select the new EQ Preset from the drop down list and apply it to the appropriate amplifier channels.

Your new EQ preset has been applied!

You can now apply the EQ preset to the channel on the EQ Settings page at the top.

Color Coded Interface

Toggle/Pull-down Menu | Free Type Field | Single Action Menu



ACCESSING SONARC

In order to access the SONARC software on a DSP amplifier the amplifier needs to be on and connected to a router. The router will provide the DSP amplifier with an IP address automatically.

Using a Windows computer running Windows 7 or 8 the amplifier can be found in your network connections. The DSP amplifiers feature UPnP (Universal Plug and Play) allowing them to be displayed as easily accessible network devices. When multiple amplifiers are connected to the same network they will appear individually.

To find the IP address on a Mac computer or iOS device you will need to use an IP address scanner software or app. The manufacturer name should be displayed as Sonance on the DSP amplifier in your IP scanning software.

Once you have the IP address you can use any internet browser to access the SONARC software. Type the DSP amplifier's IP address into the URL address window. When the page loads you should be presented with the SONARC General Settings tab.

IP SETUP

DHCP On/Off
DHCP ON / OFF is the first option in IP SETUP. All Sonance DSP series amplifiers ship with DHCP (Dynamic Host Connection Protocol) ON. In most installations DHCP should be left ON. If you are controlling the DSP series amplifier using IP then we suggest you turn DHCP OFF and use a static IP address.

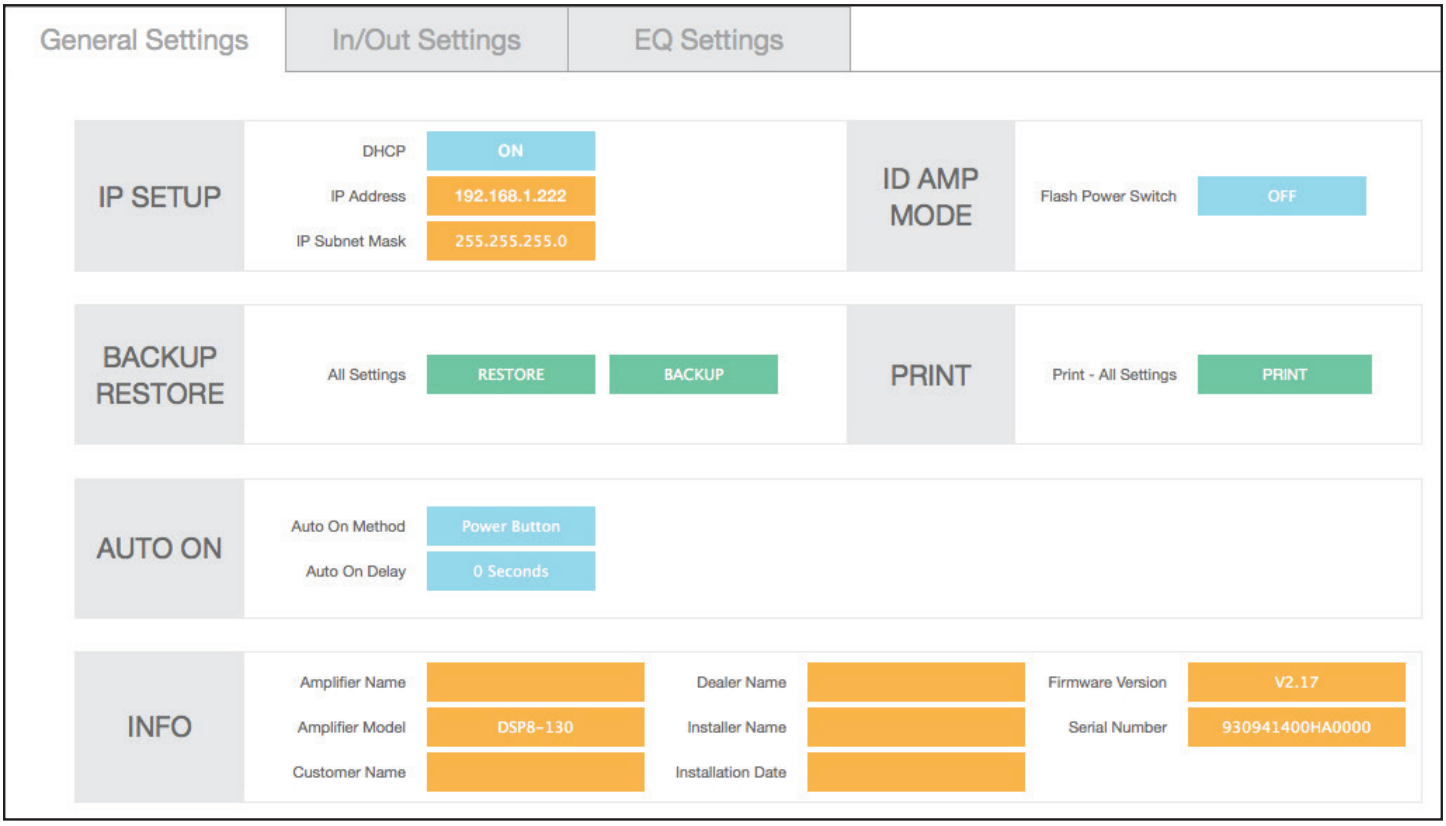
IP Address
The second setting in the IP SETUP section is the IP address.

When DHCP is ON the current IP address will be displayed. To change the IP address DHCP must be set to OFF.

When DHCP is turned off the IP address that the router assigned to the amplifier will still be applied. This IP address is a good place to start since it is not being used by another network device. If you wish to change the IP address you should perform a scan of the network and only assign an unused IP address within the range of your router. As a general rule only change the last three digits of the IP address in the amplifier settings and only assign numbers between 1 and 254. Following this suggestion will minimize the chance of making the amplifier inaccessible.

It is critical to type in the correct IP address. If the wrong IP address is entered, the amplifier could become inaccessible. Make changes to the IP settings only if you fully understand network setup.

IP Subnet Mask
The third setting in the IP SETUP section is the IP Subnet Mask. This is an advanced network setup function. Under most circumstances this field should not need to be edited. Making changes in this field should only be done by experienced network administrators.



ID Amp Mode

When flash power switch is turned ON the power button on the front of the amplifier will flash to indicate which amplifier you are programming. This will make the amplifier easy to identify in a multi-amp installation.

Backup Restore

The green BACKUP and RESTORE buttons take all of the settings of the amplifier including the DSP settings and encapsulates them into one file. This allows you to transfer these settings into another amp of the same model. This is a proprietary file type, agnostic to PC or Mac.

Print

The print button will output a complete list of all settings for the amplifier. It is always a good idea to keep a backup hard copy of the settings for each installation.

Auto On

Auto On Method
Simply select the auto on method you would like to use with the blue pull down menu. The five methods are listed below.

It is strongly recommended that you set the auto on method to POWER BUTTON to avoid unintended shut offs while configuring the amplifier. You can return at anytime to this setting and select the final method of auto-on for your installation.

Voltage
When a AC or DC voltage from 3-30 volts is applied to the rear panel connector the amplifier will turn on and off.

IP
When the amplifier is connected to a network and an IP command is sent to the amplifier it will turn the amplifier on and off.

IR
When you wish to turn the amplifier ON and OFF via an IR command.

Audio
When an Audio signal is sensed on any input the amplifier will turn on. When the signal is removed the amplifier will enter standby after 15 minutes.

Power Button
The Power Button option restricts turn on and off to the front panel power button and will not enter standby.

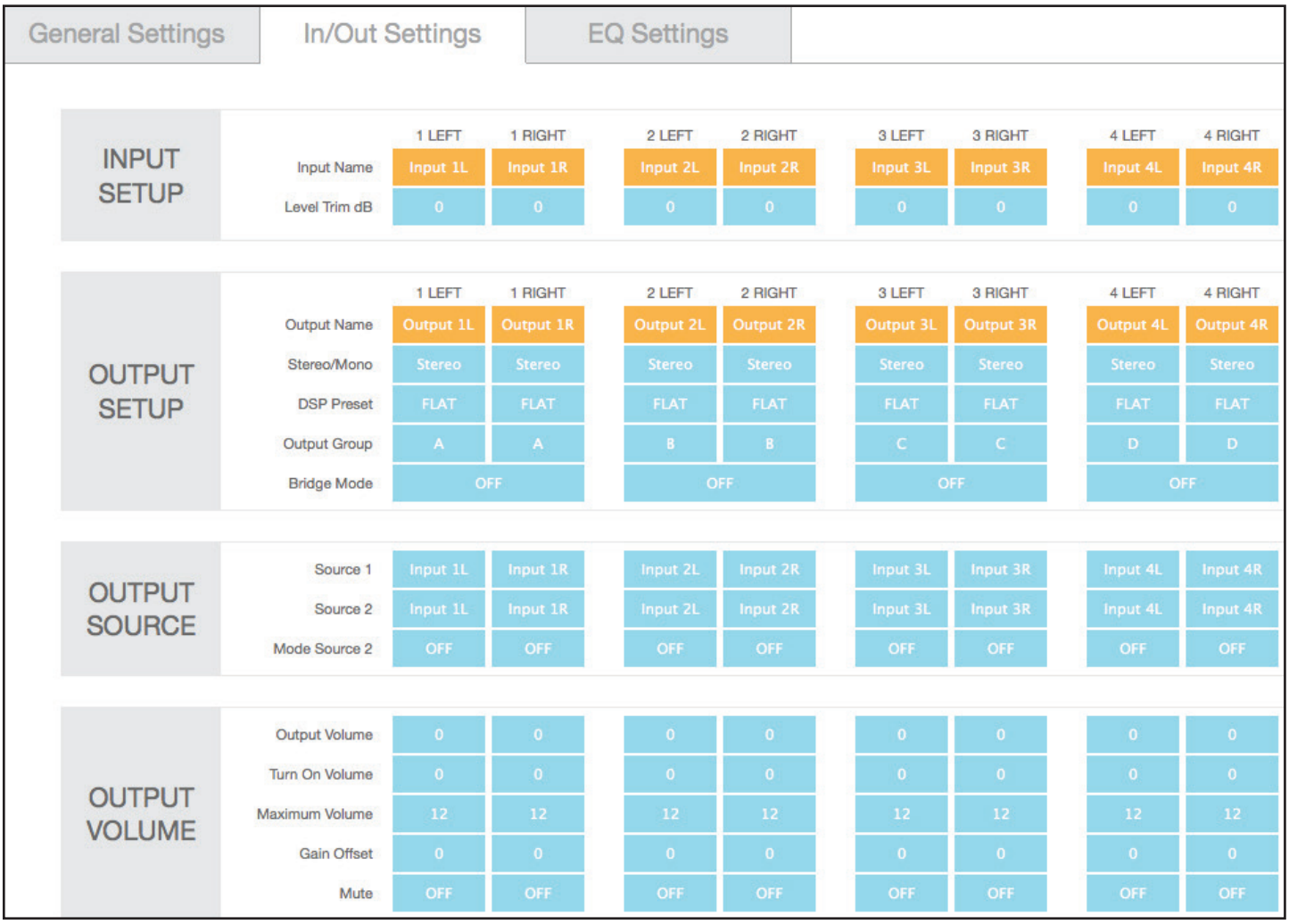
Auto On Delay
If multiple amplifiers are connected to the same electrical circuit it might be necessary to stagger the turn on of each amplifier. Under normal conditions this can be set to 0 milliseconds.

NOTE: IF EITHER AUDIO OR VOLTAGE TRIGGERS ARE SELECTED, THE AMPLIFIER HAS A 12 SECOND CYCLE TIME FROM STANDBY TO PLAY AN AUDIO SIGNAL. THIS IS NORMAL AND REQUIRED TO COMPLY WITH THE EU < .5 WATT ERP DIRECTIVE. (EC/1275/2008). SELECT OFF TO BYPASS THIS FEATURE. SEE POWER CONSUMPTION TABLE FOR IDLE POWER USE (SEE PAGE 6, FIGURE 7). AUDIO AUTO ON IS THE ONLY MODE THAT ALLOWS THE AMPLIFIER TO DRAW 0.5 WATTS AT STANDBY.

NOTE: WHEN VOLTAGE, POWER BUTTON, IP OR IR IS SELECTED THE AMPLIFIERS POWER SAVING FEATURE WILL BE DISABLED.

Info

All the orange blocks are installer entered data. Each field has a maximum of 16 characters.



Input Setup

Input Name
This is a user entered field with a maximum of 16 characters. Use these fields to describe the type of input connected.

Input Trim dB
This pull down menu allows for input levels to be adjusted +/-6dB.

This gives you the ability to level out all your inputs so when you switch from input to input the levels will be equal. This can eliminate any harsh transitions between sources with different output voltages. Select the pull down menu in each channel to adjust the level trim between plus or minus 6dB in increments of .5dB

Output Setup

Output Name
This is a user entered field with a maximum of 16 characters. Use these fields to describe the location of the speakers.

Stereo / Mono
Allows each channel to be set for Stereo or Mono operation. When Mono is selected the Left and Right of the input selected will be combined to create Mono.

DSP Preset
Apply any of the available Sonance DSP presets to each channel of the amplifier independently.

You can apply any open preset and then make modifications on the EQ Settings page.

Output Group
The DSP 8-130 has eight Output Group options A-H.

When using IP or IR to control the amplifier, commands are sent to an output group and not to a specific channel.

Bridge Mode
When more power is required two channels can be bridged. Follow the instructions on page 7 for connecting the wires then select Bridge ON.

General Settings | In/Out Settings | EQ Settings

		1 LEFT	1 RIGHT	2 LEFT	2 RIGHT	3 LEFT	3 RIGHT	4 LEFT	4 RIGHT
INPUT SETUP	Input Name	Input 1L	Input 1R	Input 2L	Input 2R	Input 3L	Input 3R	Input 4L	Input 4R
	Level Trim dB	0	0	0	0	0	0	0	0

		1 LEFT	1 RIGHT	2 LEFT	2 RIGHT	3 LEFT	3 RIGHT	4 LEFT	4 RIGHT
OUTPUT SETUP	Output Name	Output 1L	Output 1R	Output 2L	Output 2R	Output 3L	Output 3R	Output 4L	Output 4R
	Stereo/Mono	Stereo	Stereo	Stereo	Stereo	Stereo	Stereo	Stereo	Stereo
	DSP Preset	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT	FLAT
	Output Group	A	A	B	B	C	C	D	D
	Bridge Mode	OFF		OFF		OFF		OFF	

		1 LEFT	1 RIGHT	2 LEFT	2 RIGHT	3 LEFT	3 RIGHT	4 LEFT	4 RIGHT
OUTPUT SOURCE	Source 1	Input 1L	Input 1R	Input 2L	Input 2R	Input 3L	Input 3R	Input 4L	Input 4R
	Source 2	Input 1L	Input 1R	Input 2L	Input 2R	Input 3L	Input 3R	Input 4L	Input 4R
	Mode Source 2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

		1 LEFT	1 RIGHT	2 LEFT	2 RIGHT	3 LEFT	3 RIGHT	4 LEFT	4 RIGHT
OUTPUT VOLUME	Output Volume	0	0	0	0	0	0	0	0
	Turn On Volume	0	0	0	0	0	0	0	0
	Maximum Volume	12	12	12	12	12	12	12	12
	Gain Offset	0	0	0	0	0	0	0	0
	Mute	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Output Source

Source 1
This is the primary source you will direct to the speakers. Any of the inputs available on the amplifier can be selected. When channels are in the same Output Group the inputs will all change in unison. Left inputs default to left outputs and right inputs to right outputs.

Source 2
This is a secondary source that based on the Mode Source 2 setting described below will either override or mix with Source 1. This input could be used for a doorbell or paging for example.

Mode Source 2

OFF
When set to OFF the second source has no effect on the operation of the channel.

MIX
When set to MIX Source 1 and Source 2 will be blended together when a signal is present on Source 2.

MUTE
When set to MUTE Source 1 will be muted while Source 2 is active.

Output Volume

Output volume ranges between -70 to 12.
The default volume level controls are set at 0.

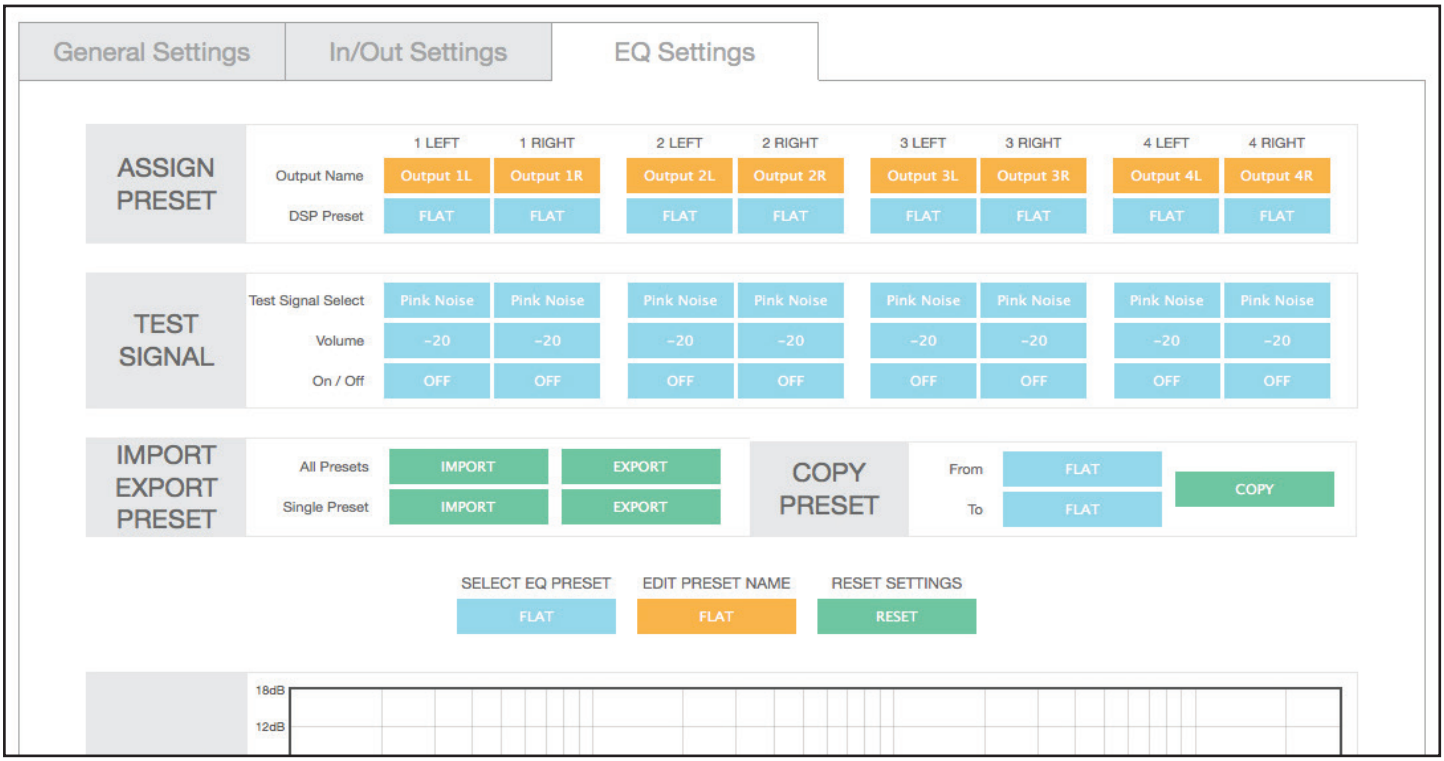
Output Volume
This is the main volume level control for each channel. When channels are placed in the same Output Group the levels will change simultaneously.

Turn On Volume
This determines what volume level the amplifier will default to when it is turned on. Channels placed in the same Output Group will automatically have identical levels. Turn On Volume level is implemented when the amplifier is turned off with the power switch or goes into standby mode.

Maximum Volume
This is an independent setting for each channel. This can be used to limit how loud the speakers will play in certain areas. The Output Group selected does not affect this setting.

Gain Offset
The gain offset setting allows channels in the same Output Group to have their levels adjusted independently by +/-6dB. This is an independent setting not affected by the Output Group.

Mute
The mute setting eliminates the output from the speakers. Channels placed in the same Output Group will change simultaneously.



Assign Preset

Output Name
These can be named Output 1L & Output 1R or room names such as Kitchen L and Kitchen R. These are a duplicate of the Output Name on the IN/OUT Settings page.

DSP Preset
Select your DSP preset with the blue pull down menu. This will auto populate in the IN/OUT Settings page.

Test Signal

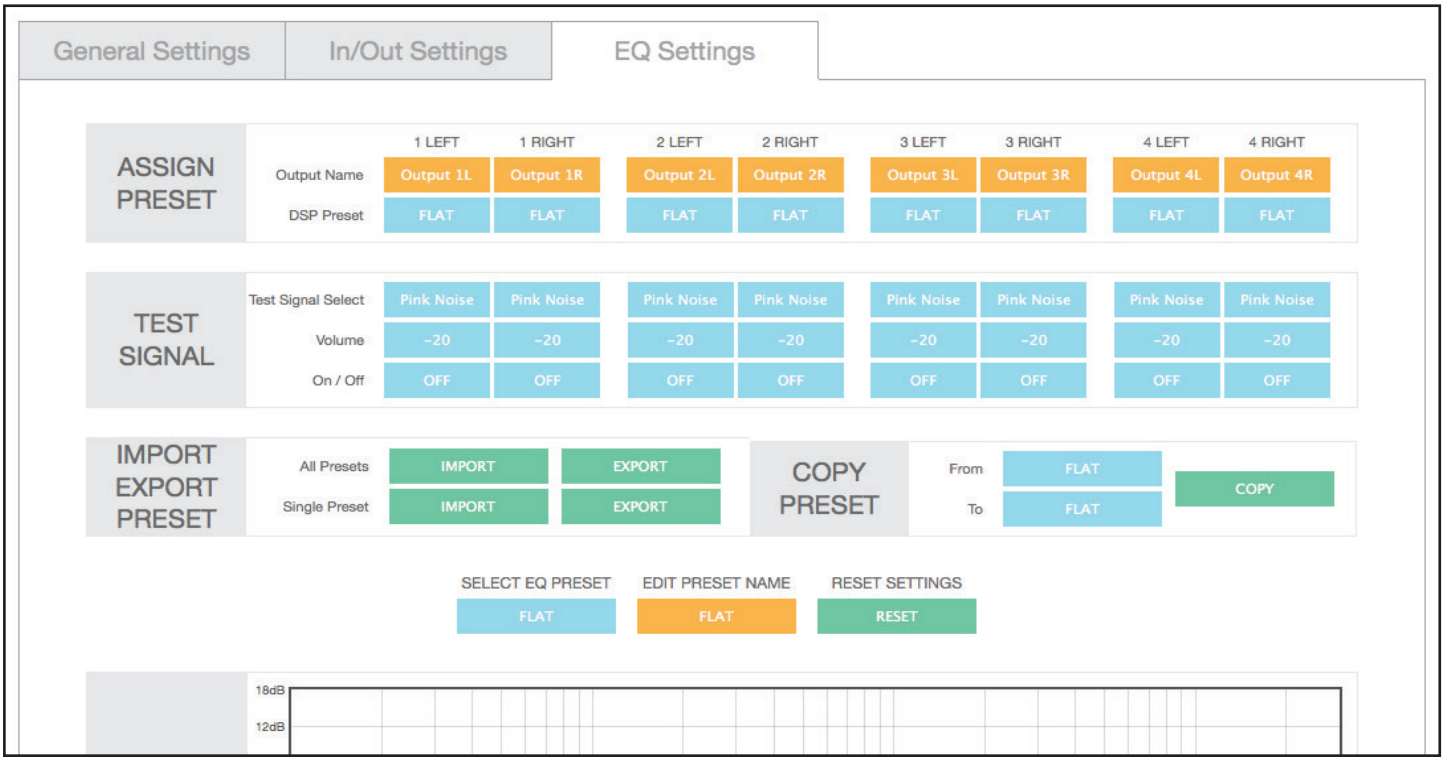
The SONARC software includes a built in pink noise generator. The pink noise signal can be used in conjunction with a real time analyzer to measure speakers.

Test Signal Select
You have the option of pink noise or test signals fed into line level inputs. Use the blue pull down menu to select between pink noise or line level inputs as a source for the test signal.

Volume
Select your desired volume.

On/Off
Toggles between on and off.

The pink noise signal should not be left on for more than 10 minutes to minimize the risk of damaging the speakers.



Import Export Preset

All Presets
The green IMPORT EXPORT buttons allow you to save all 50 presets in one file. This option can be useful when setting up multiple amplifiers.

Single Preset
The green IMPORT EXPORT buttons allow you to import or export presets individually.

Export Single Preset

1. Use the blue pull down menu on the SELECT EQ PRESET, located under the IMPORT EXPORT green buttons.
2. Select the preset you choose to export from the pull down menu.
3. Press the green EXPORT button. Depending on your web browser the exported file will be saved in your Downloads folder or you will be prompted where you would like to save the file.

Import Single Preset

1. Import speaker preset to a location on your computer. This can be accomplished by saving a DSP preset downloaded from Sonance website.
2. Select the location you would like to store the new preset using the SELECT EQ PRESET pull down menu. You can save the new preset in any of the open preset locations or you can overwrite an existing preset you do not need.
3. Press the green IMPORT button.
4. You will be directed to my computer or FINDER.
5. Find and Select the new preset you would like to import
6. You will be directed to a screen that says Upload Successful.
7. Press the Click Here To Go Back to the highlighted text
8. The preset will now be saved in the location you selected.

Copy Preset
From / To the blue pull down menus allow you to pull a preset from one location and assign it to another location. Press green copy button to activate.

Select EQ Preset

This is a pull down menu that allows the selection of any one of the 50 available presets.

When you want to edit a particular preset you simply select it in the Select EQ Preset pull down menu. Any changes you make are saved immediately.

Edit Preset Name

This field allows the name of the preset to be edited. There is a maximum of 16 characters that can be entered.

Reset Settings

This is a simple reset button to cancel edits and return to the original preset if you are unable to achieve the target frequency response.

IMPORTANT: ONLY MODIFY THE EQ SETTINGS TAB IF YOU HAVE A STRONG UNDERSTANDING AND EXPERIENCE WITH MANUALLY CALIBRATING PARAMETRIC CURVES AND HAVE THE NECESSARY TEST EQUIPMENT. IF NOT, IT IS STRONGLY RECOMMENDED THAT YOU DO NOT MAKE ANY ADJUSTMENTS ON THE EQ SETTINGS TAB. ONLY USE THE PRE-PROGRAMMED DSP CURVES AVAILABLE ON TAB 2. NEVER MAKE ADJUSTMENTS ON THIS TAB BY EAR.

Output Frequency Response Example Image

This graph reflects the changes made below.

The above EQ image shows EQ4 ON at 500Hz, the Q is set to 3 with a -6dB gain, creating a gradual dip in the lower midrange.

EQ9 shows ON at 3000Hz, the Q is set to 10 with a -6dB gain, creating a sharp dip in the midrange.

EQ10 shows ON at 10000Hz, the Q is set to 1 with a +4dB gain, creating a very gradual slope in the high frequencies.

Parametric EQ

All Sonance DSP amplifier models feature a 10 band parametric EQ. Adjustments made to the EQ will be displayed on the Output Frequency Response graph. We strongly suggest not adjusting the EQ without proper measurement equipment.

EQ On/Off
Turns each of the 10 parametric EQ filters on and off.

EQ Frequency Hz
Enter the frequency in Hz that you would like to adjust.

EQ-Q
This setting determines the width of the adjustment range. The lower the number the wider the bandwidth. The higher the number the narrower the bandwidth.

EQ Gain +/-dB
The level of each parametric adjustment can be set +/-12dB. Careful adjustment of the EQ Gain is necessary to prevent damage to the speakers. Always increase the level as little as possible. The first choice should always be to reduce the output to achieve the target frequency response.

Limiter

The limiter operates as a brick wall limit on the output of the amplifier. The limiter drop down menu has -3dB, -6dB and -12dB options. The maximum outputs for each of the models:

	No Limiter	-3dB	-6dB	-12dB
DSP 8-130	130 watts	65 watts	32.5 watts	8.1 watts

All of the above output power ratings are when connected to an 8 ohm load.

Delay

Delay is shown in Milliseconds, Feet and Meters. You can make an entry in any of the three fields and the other fields will be calculated automatically.

The minimum delay is .01 milliseconds, the maximum delay is 25 milliseconds.

This function is useful when compensating for distance between satellites and subwoofers for instance.

Crossover

LP Xover / HP Xover
This setting turns the high and low pass crossovers ON and OFF.

Frequency
In this field you can enter any frequency between 20Hz-20kHz.

Filter Type
6dB, 12dB, 18dB and 24dB per octave Butterworth filters are available in the pull down menu.

The higher the number the faster the speakers output will be reduced below or above the crossover frequency.

In a typical satellite subwoofer system the crossover frequency would be around 80-100Hz for both the high and low pass filters.

Crossover/Tilt Control Example Image

The above EQ image shows High Tilt set to ON, frequency at 5000Hz with a +5dB gain, creating a gradual tilt in the high frequencies.

HP Xover set to ON at 90Hz with a 24dB Filter Type.

This is an example only to explain the settings. Your settings will differ.

Tilt Control

The tilt controls are very sophisticated bass and treble control. By selecting a start frequency and level you can ramp the bass and or treble up or down.

The effect of the tilt control is visible in the Output Frequency Response graph.

Low Tilt / High Tilt
This setting turns the Low and High tilt controls ON and OFF.

Frequency
Enter the start frequency of the tilt in Hz.

To boost the low frequencies you would typically set the Low Tilt to 100Hz. To boost the high frequencies you would set the High Tilt to around 5kHz.

Gain
The gain can be set in 1dB steps +/-12dB.

When setting the gain use as little positive gain as possible to minimize the risk of damage to the loudspeakers.

SPECIFICATIONS

SONAMP 8-130

Number of Channels	8 (4 stereo pairs)
Output Power - 8 ohms (Stereo)	130 Watts RMS per channel (all channels driven)
Output Power - 4 ohms (Stereo)	145 Watts RMS per channel (all channels driven)
Output Power - 8 ohms (Bridged)	300 Watts
Frequency Response	5Hz – 50kHz (bandwidth limited)
Total Harmonic Distortion	0.15% (1kHz, 8 ohms) 0.1% (1kHz, 4 ohms)
Signal to Noise Ratio	–100dB (20Hz-20kHz)
Input Gain	29dB
Input Sensitivity	100mV for 1 Watt Output @8 ohms 1140mV for 130 Watts Output @8 ohms
Input Impedance	20k ohms
Loop Output Impedance	600 ohms
Maximum Source Input Voltage	2.9V VAC RMS
Communication Protocol	TCP/IP (RJ-45 10/100 Base T)
Power Consumption 120V AC	
@8 ohms (sinewave, full power)	1160 Watts (all channels driven)
@4 ohms (sinewave, full power)	1512 Watts (all channels driven)
@8 ohms (sinewave, 1/8 power)	181 Watts (all channels driven)
@4 ohms (sinewave, 1/8 power)	226 Watts (all channels driven)
@idle	35 Watts
@IP or IR Standby	1.1 Watts
@standby	0.45 Watts
Power Consumption 220V AC	
@8 ohms (sinewave, full power)	1097 Watts (all channels driven)
@4 ohms (sinewave, full power)	1440 Watts (all channels driven)
@8 ohms (sinewave, 1/8 power)	182 Watts (all channels driven)
@4 ohms (sinewave, 1/8 power)	219 Watts (all channels driven)
@idle	31 Watts
@IP or IR Standby	1.2 Watts
@standby	0.48 Watts
Heat Output	
@8 ohms (sinewave, full power)	737 BTU (all channels driven)
@4 ohms (sinewave, full power)	1365 BTU (all channels driven)
@8 ohms (sinewave, 1/8 power)	215 BTU (all channels driven)
@4 ohms (sinewave, 1/8 power)	303 BTU (all channels driven)
AC Voltage	100-120V@60Hz, 220-240V@50Hz
AC Fuse	10A (T10AL ~ 250V)
Rack Space Requirement	1U
Dimensions w/ Feet (W x H x D)	17 1/4" x 2 1/8" x 16 13/16" (438mm x 54mm x 427mm)
Dimensions w/ Rack Ears w/o Feet (W x H x D)	19" x 1 3/4" x 16 13/16" (482mm x 44mm x 427mm)
Shipping Weight	18 lbs (8.2kg)

CAD Files available for download at www.sonance.com/electronics/amplifiers/dsp

NOTES

LIMITED TWO (2) YEAR WARRANTY

Sonance warrants to the first end-user purchaser that this Sonance-brand product ("Product"), when purchased from an authorized Sonance Dealer/Distributor, will be free from defective workmanship and materials for the period stated below. Sonance will at its option and expense during the warranty period, either repair the defect or replace the Product with a new or remanufactured Product or a reasonable equivalent.

EXCLUSIONS

TO THE EXTENT PERMITTED BY LAW, THE WARRANTY SET FORTH ABOVE IS IN LIEU OF, AND EXCLUSIVE OF, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY SONANCE. ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, IMPLIED WARRANTY OF FITNESS FOR USE, AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED.

No one is authorized to make or modify any warranties on behalf of Sonance. The warranty stated above is the sole and exclusive remedy and Sonance's performance shall constitute full and final satisfaction of all obligations, liabilities and claims with respect to the Product.

IN ANY EVENT, SONANCE SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, ECONOMIC, PROPERTY, BODILY INJURY, OR PERSONAL INJURY DAMAGES ARISING FROM THE PRODUCT, ANY BREACH OF THIS WARRANTY OR OTHERWISE.

This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to period of Sonance's express warranty.

Your Product Model and Description: Sonamp DSP 8-130 Multi-Channel Power Amplifier

Warranty Period for this Product: Two (2) years from the date on the original sales receipt or invoice or other satisfactory proof of purchase.

Additional Limitations and Exclusions from Warranty Coverage: The warranty described above is non-transferable, applies only to the initial installation of the Product, does not include installation of any repaired or replaced Product, does not include damage to allied or associated equipment which may result for any reason from use with this Product, and does not include labor or parts caused by accident, disaster, negligence, improper installation, misuse (e.g. overdriving the amplifier or speaker, excessive heat, cold or humidity), or from service or repair which has not been authorized by Sonance. Obtaining Authorized Service: To qualify for the warranty, you must contact your authorized Sonance Dealer/Installer or call Sonance Customer Service at (949) 492-7777 within the warranty period, must obtain a return merchandise number (RMA), and must deliver the Product to Sonance shipping prepaid during the warranty period, together with the original sales receipt, or invoice or other satisfactory proof of purchase.

SONANCE®

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SONANCE • 212 Avenida Fabricante • San Clemente, CA 92672-7531 USA
(949) 492-7777 • FAX: (949) 361-5151 • Technical Support: (949) 492-7777

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