

DPA-6.12 Instruction Manual

12 Channel Amplifier

- NRussound		6 ZONE – 12 CHANNEL AMPLIFIER
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Power	ZONE	
•		•
		DPA-6.12

1. SAFETY INSTRUCTIONS



"WARNING" " TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLI-ANCE TO RAIN OR MOISTURE.

"CAUTION" " TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER -SERVICÉABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED 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 products 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.

Safety Instructions

- 1. Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- Retain Instructions The safety and operating instructions should be 2. retained for future reference.
- Heed Warnings All warnings on the appliance in the operating 3. instructions should be adhered to .
- Follow Instructions All operating and user instructions should be fol-4. lowed.
- Water and Moisture The appliance should not be used near water -5. for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
- Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer. An 6. appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.



- 7. Wall or ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings or, placed in a built in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings. Place the DPA-6.12 in a well-ventilated location, leaving at least 2 inches (5cm) of clearance on all sides, top and rear of unit for air flow. If ventilation is blocked, the DPA-6.12 may overheat and malfunction.
- 9. Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 10. Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 11. Grounding or Polarization The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
- 12. Power Cord Protection Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, receptacles, and the point where they exit from the appliance.
- 13. Cleaning The appliance should be cleaned only as recommended by the manufacturer.

- 14. Non-use Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 15. Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
- 16. Damage Requiring Service The appliance should be serviced by gualified service personnel when:
 - A. The power supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally; or
 - E. The appliance has been dropped or the enclosure is damaged.
- 17. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
- 18. Avoid using a telephone (other than cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- 19. Do not use the telephone to report a gas leak near the leak.

Precautions

- 1. Do Not Touch The DPA-6.12 With Wet Hands. Do not handle the DPA-6.12 or power cord when your hands are wet or damp. If water or any other liquid enters the DPA-6.12 cabinet, take the DPA-6.12 to gualified service personal for inspection.
- Location of the DPA-6.12 Do not expose the DPA-6.12 to direct sun 2. light or heating units as the DPA-6.12 internal components temperature may rise and shorten the life of the components. Avoid damp and dusty places.
- Care From time to time you should wipe off the front and side pan-3. els and the cabinet with a soft cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since this may damage the finish or remove the panel lettering.

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2. INTRODUCTION

Congratulations on your recent purchase of the Russound DPA-6.12 12-channel amplifier. The DPA-6.12 highcurrent, high-quality amplifier is the heart of the home theater or multi-zone system. The DPA-6.12 12-channel amplifier is capable of amplifying six stereo line level sources (CD players, tape decks, preamplifiers, tuners, etc.) simultaneously in multi-zone, multi-source installations. The twelve amplifiers are arranged in pairs to provide six stereo amplifiers. With separate gain controls for each channel, sound levels can be preset to accommodate most rooms. The Main Bus Input allows for two or more stereo amplifiers to share the same audio source. With the stereo/mono selector in the mono position, two amplifiers can serve as mono outputs. In the mono position the six stereo pairs can be bridged to three stereo pairs for higher output power. The DPA-6.12 power output is 50 watts per channel into 8 ohms, and 75 watts into 4-ohms. Bridged adjacent outputs provide 100 watts of power into 8-ohms and 150 watts of power into 4-ohms. All this power is backed by two high output toroidal transformers. Each amplifier output channel incorporates thermal, short circuit protection and Russound's unique Dynamic Clipping Sensor that allows for better headroom and volume without clipping or distortion that is normally heard in most amplifiers.

The Russound DPA-6.12 amplifier is built with pride. Fidelity, reliability and quality are the primary objective. Russound products are guaranteed to provide years of enjoyment.

3. POSSIBLE SYSTEM CONFIGURATIONS

The DPA-6.12 can be configured as an audio distribution system, or used as the main amplifier for a home theater system. As an audio distribution amplifier each zone can independently drive several different sources by using each of the individual line audio inputs for each of the zones. As a home theater amplifier the DPA-6.12 output can be bridged to provide high power out for the front channel while the remaining channels are used to drive the surround effects.



4. FRONT PANEL

Rack Mounting: The DPA-6.12 amplifier can be rack mounted. The amplifier will take four rack spaces. **Power Switch**: Turns on the main power for the amplifier. When the power is on the LED will be illuminated. **Zone Indicator LEDs**: Zone one to six will be illuminated when the zone is in the active mode. When the zone is mute or inactive the LED will not be illuminated.



5. BACK PANEL CONNECTIONS

Main Bus Input / Output: This is used when the input audio signal will be used by more than one zone. The output is to loop out to another DPA-6.12 or other amplifiers.

Line Input: The line audio input at each zone is the left and right dedicated input for that zone. This is a sensing input that will activate the zone when an audio signal is present. When there is no audio the zone will go into standby.

Bus / Line Switch: Selects the Line audio input or the Main bus input for each zone. When the Bus is selected the zone will amplify the audio on the Main Bus input. When line is selected the zone will amplify the audio at the line input for that zone.

Gain Controls: Left and Right gain controls adjust independently the sound level for each channel. When used in the bridge mode only the right control is used.

Stereo / Mono Switch: This selects stereo or mono for the speaker outputs. In the Mono position each Left and Right output is Mono. The Mono selection will also be used to select operation for bridge mode. When Mono is selected the inputs are summed and when in stereo the inputs remain independent to provide a stereo output.







STEREO

BRGD *

MONO



Speaker Outputs: The A and B speaker outputs are in parallel to the amplifier output. When connected to the A or B output either 4-ohm or 8-ohm speakers could be connected. When using both A and B speaker outputs, only 8-ohm speakers can be connected, and this will result in a 4-ohm load at the amplifier. For Bridge amplifier operation, connect the + of the speaker to the R+ of the amplifier and - of the speaker to the L+ of the amplifer.



12 Volt Trigger In and Out: The Trigger output is 12 volts at a maximum of 150ma. This can be used to drive a relay-operated AC outlet or other 12 volt triggered devices. The 12-volt trigger input is used to activate a zone independent from the auto turn on sensing circuit. The delay and audio sensing are bypassed when the 12 volt trigger input is used.



Muting Delay Time: Muting delay can be adjusted from about 2 minutes to 10 minutes. When an audio signal is not present, this delay setting will automatically put the amplifiers into standby mode after the preset period of time.

Power: Two heavy-duty 500va toroidal transformers power the DPA-6.12. Each transformer has three taps to power 3 stereo zones, totaling six taps for the six stereo outputs. The voltage setting for the AC input is set at the factory for operation of either 110 VAC 60Hz or 240 VAC 50Hz. Please reference the voltage rating on the back panel. Includes detachable 3 terminal power cord.



+12V TRIGGER



6. SPECIFICATIONS

Audio power output:	Continuous 50W @ 8 ohms, 75W @ 4 ohms.
Frequency response:	20HZ to 20KHZ -0.3dB.
Total harmonic distortion:	0.05% 8 Ohm, .075% 4 Ohm
Input sensitivity:	400mV line
Input impedance:	22k Line Input
Signal to noise ratio:	85dB
Input trigger:	12VDC 10k
Output trigger:	12VDC 150mA
Auto off delay time:	2 to 10 minutes
Primary fuse:	T4A/250V 115VAC, T2A/250V 240VAC
Secondary fuse:	T6.3A/250V
Power requirements:	Factory set for 110 VAC 60Hz or 240 VAC 50Hz. IEC 320 type connector with 3 terminal detachable power cord. For 240VAC operation, use a power cord (not supplied) rated for 240VAC 6.3 amps or higher.
Weight:	46 lbs.
Dimensions:	19" W x 17"D x 7.5"H

7. WARRANTY

The Russound DPA-6.12 is fully guaranteed for two (2) years from the date of purchase against all defects in materials and workmanship. During this period Russound will replace any defective parts and correct any defect in workmanship without charge for either parts or labor. For this warranty to apply, the unit must be installed and used according to its written instructions. If service is necessary, it must be performed by Russound. The unit must be returned to Russound at the owners expense and with prior written permission. Accidental damage and shipping damage are not considered defects under the terms of the warranty. Russound assumes no responsibility for defects resulting from abuse or servicing performed by an agency or person not specifically authorized in writing by Russound. Damage to or destruction of components due to improper use voids the warranty. In these cases the repair will be made at the owners expense. To return for repairs, the unit must be shipped to Russound at the owners expense, along with a note explaining the nature of the service required. Be sure to pack in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.





