

OWNER'S MANUAL

INFINITE 4 - 6 V2 POWER AMPLIFIERS



	<h1>CAUTION</h1>	
<p>TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE TOP OR BOTTOM COVERS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DISCONNECT POWER CORD BEFORE REMOVING REAR PANEL COVER TO ACCESS GAIN SWITCH.</p>		<p>Shock Hazard - Do Not Enter Choc Hasard - N'entrent Schocke Hazard - Test Nicht Betrete Urto Hazard - Do Non Entrano</p>

<h1>WARNING</h1> <h2>TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE!</h2>

Magnetic Field

CAUTION: Do not locate sensitive high-gain equipment such as preamplifiers or tape decks directly above or below this unit. Because this amplifier has a high power density, it has a strong magnetic field which can induce hum into unshielded devices that are located nearby. This field is strongest just above and below the unit. If an equipment rack is used, we recommend locating the amplifier(s) at the bottom of the rack and the preamplifier or other sensitive equipment at the top.

The lightning bolt triangle is used alert the user to the risk of electric shock

The exclamation point triangle is used to alert the user to important operating and/or maintenance instructions.

Printed on recycled paper.

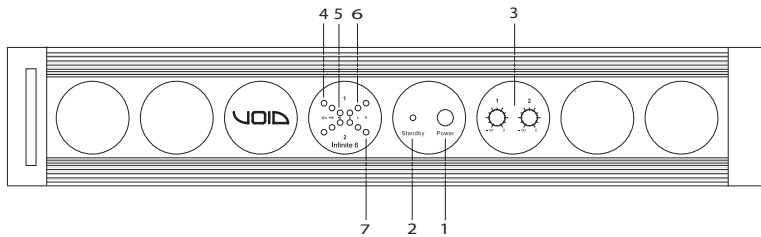
Features

- ▲ Rugged, touring grade chassis. E.I.A. Standard 19" (48.3cm) rack-mountable.
- ▲ Ultra reliable 'Super G' class output stage provides maximum stability even into 2 ohm loads*.
- ▲ 'VSP' Velocity Sense Protection circuitry protects speakers from over excursion.
- ▲ 'CEP' Clip Elimination Protection prevents clipped waveforms from reaching the outputs.
- ▲ Independent crossover networks with adjustable frequencies and outputs for both channels.
- ▲ Ultra Hi grade Sanken output transistors provide esoteric Hi Fi sound quality.
- ▲ Stereo, parallel and bridge operation for optimal load matching.
- ▲ Independently selectable 25Hz Hi pass filters for greater woofer protection
- ▲ Relay control power switch with soft start for loudspeaker protection.
- ▲ Complete protection against shorted outputs, mismatched loads, overheating and DC input/output.
- ▲ Three year warranty and guarantee.

Precautions

Although your amplifier is protected from external faults, the following safety precautions are recommended:

1. **Do not change the position of the bridge mode switch, parallel switch or 25Hz Hi pass filters until the input levels have been turned down.**
 2. There are important differences between Stereo, Parallel and Bridge mode operation. Please refer to page 8 for a detailed description of the different modes and their uses.
 3. Switch off the amplifier or turn down the inputs before connecting to the in/out XLR's.
 4. Do not short the ground lead of an output cable to the input signal ground. This will form a ground loop and may cause oscillations.
 5. Do not connect both channels positive outputs together in parallel or stereo modes. And never connect any channels positive output to chassis ground.
 6. Do not operate the amplifier from AC mains in excess of 10% variation above or below the selected line voltage, and only at the specified line frequency.
- * 2 ohm stable only when driving speakers from 100Hz upwards.



Front Panel

1. Power Switch

Used to turn the amplifier on or off.

2. Standby LED

Indicates that the amplifier is connected to the mains but has not been switched on.

3. Level Controls

Used to control CH 1 & 2's output levels.

4. Power LED's

The Power LED's indicate that each channel is active.

5. Signal LED's

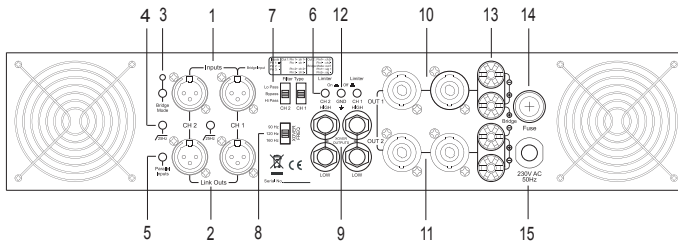
When illuminated the LEDs indicate an audio signal is present at the channel's output.

6. 'CEP' LED's (L)

The CEP LED's indicate the Clip Elimination circuit is active. The CEP circuit works by examining the audio output signal, it then regulates many circuits within the amplifier to reduce clipping at the output. Note that the CEP circuit can only prevent a clipped waveform from be generated within the amplifier itself, it cannot remove a clipped waveform that has been produced from a component earlier in the chain.

7. Protect LED's (P)

The protect LED's light up when the amplifier detects speaker over excursion, dangerous subsonic frequencies, DC or thermal overload. Note the protect LED's also indicate the soft start circuit is active, so will illuminate during power on. See page 8 for more details about the VSP protection circuit.



Rear Panel

1. **Input XLR's**
The input impedance of the balanced XLR's is 20Kohms. Pin 2 is signal +
2. **Output XLR's**
Linked outputs from the inputs.
3. **Bridge Mode Switch**
Selects Bridge Mode. A red LED will illuminate when the amplifier is operating in bridge mode. Use input 1 in bridge mode. See page 8 for more details.
4. **25Hz Hi Pass Filter Switches**
Turns each channels 25Hz 18 dB/oct butterworth Hi Pass filter on or off. For maximum protection leave both filters on (pressed in position).
5. **Parallel Mode Switch**
Links input 1 with input 2. See page 8 for more details.
6. **Limiter Switches**
Turns each channels limiter on or off. For maximum protection leave in the on position (pressed in).
7. **Filter Select Switches**
Independent channel selection of Hi Pass, Lo Pass or bypassed filters.
8. **Crossover Frequency Switch**
Selects the crossover frequency point between the Lo and Hi Pass filters.
9. **Crossover outputs**
Jack outputs for both Hi and Lo pass filters. See page 8 for more details.
10. **CH1 Speakon Outputs**
In stereo/parallel mode use +1 and -1. In bridge mode use +1 and +2. CH2 output is on pins +2 and -2.
11. **CH2 Speakon Outputs**
In stereo/parallel mode use 1+ and 1-. Pins +2 and -2 are not used.
12. **Ground Switch**
Ground is connected when pressed in and lifted when pressed out.
13. **Output Binding Posts**
Accepts both 4 mm plugs or bare wire. Use CH1 + and CH 2 + for bridge out.
14. **Fuse**
Replaceable fuse for amplifier protection.
15. **Power Cable**
AC power in 230 VAC 50Hz. Fitted with UK 3 pin fused mains plug. (16 Amp CEE Form on Infinite 6)

TECHNICAL SPECIFICATIONS For Infinite models 4 - 6 V2

FREQUENCY RESPONSE ref.100W@8Ω	20Hz - 20kHz +0.04 dB / -0.06 dB
THD ref. 4Ω, 1KHz	Infinite 4 - 5 0.01% - Infinite 6 0.02%
S/N 20Hz-20kHz, ref full output	106 dB
INPUT SENSITIVITY	1.4 Vrms
INPUT IMPEDANCE	20kΩ balanced
CROSSTALK	>95dB
CMRR ref. 1KHz	>90dB
SLEW RATE	Infinite 4 - 5 60V/us - Infinite 6 55V/us
DAMPING FACTOR 1kHz and Below	Infinite 4 - 5 >680 - Infinite 6 >700
CONNECTORS	Input: balanced XLR Output: Speakon + Binding posts
COOLING	2 Variable speed fans
AMPLIFIER PROTECTION	Full short circuit, open circuit, thermal, ultrasonic, and RF protection, stable into reactive or mismatched loads
VOLTAGE RANGE	230 VAC 50Hz +/- 10%

		Infinite 4		Infinite 5		Infinite 6	
Mode	Impedance	RMS Output Power per ch		RMS Output Power per ch		RMS Output Power per ch	
		0.1%THD+N	0.1%THD+N	0.1%THD+N	0.1%THD+N	0.1%THD+N	0.1%THD+N
		1kHz	10Hz-20kHz	1kHz	10Hz-20kHz	1kHz	10Hz-20kHz
Stereo (Both CH Driven)	4	680	672	890	882	1200	1190
	8	440	434	540	535	740	733
Bridge Mode	4	1680	1670	2190	2179	2700	2687
	8	1360	1344	1780	1764	2400	2380
Voltage Gain (8 Ω)		42x (36dB)		48x (37dB)		60x (38.5dB)	
Maximum Current Draw		both ch - 2 ohms 9.5 Amps		both ch - 2 ohms 12.3 Amps		both ch - 2 ohms 15.6 Amps	

Infinite 4 to 6 V2 amplifiers are only stable into 2 ohm loads per channel when driving midtop speakers, i.e. from 100Hz upwards. The minimum impedance for bass use must be 4 ohms per channel, i.e. two 8 ohm speakers in parallel from each amplifier channel.

Dimensions :

48.3 cm (19") wide, 8.9 cm (3.5") high and 46.2 cm (18.2") deep.

Weight:

Infinite 4 :

20.2 Kg (44.5 pounds) net.
24.0 Kg (52.9 pounds) shipping weight.

Infinite 5 :

22.0 Kg (48.5 pounds) net.
25.8 Kg (56.9 pounds) shipping weight.

Infinite 6 :

24.0 Kg (52.9 pounds) net.
27.8 Kg (61.3 pounds) shipping weight.

Service

This unit has very sophisticated circuitry and should only be serviced by a fully trained technician.

No user serviceable parts inside
Refer servicing to a qualified technician

Worldwide Service

Service may be obtained from your local authorised service centre. To obtain service, simply present your sales receipt as proof of purchase along with the defective unit to an authorised service centre. They will handle the necessary paperwork and repair. Remember to transport your unit in the original factory packaging.

1. When sending an infinite Series product to an authorised service centre for service, please write a detailed description of the fault and list any other equipment used in conjunction with the faulty product. Send the fault description with the faulty product, do not send it separately.
2. Ensure safe transportation of your unit to the authorised service centre. Ship it in the original factory packaging if possible.
3. Do not ship the unit in any kind of rack. Ignoring this warning may result in extensive damage to the unit and the equipment rack. Accessories are not needed. Do not send the instruction manual, cables or any other hardware.
4. Before returning your faulty product for repair, please remember to get a return authorisation number from the dealer whom you purchased your product from. Failure to do so could delay the repair of your product.

Warranty Registration

Please take time to fill out the warranty registration form at the back of this manual and return it to Void Acoustics.

Environmental



WEEE Mark

If you want to dispose of this product, do not mix with general household waste. There are separate collection systems for used electronic products in accordance with legislation under the WEEE Directive (Directive 2002/96/EC) and is effective only within the European Union.

This product is Rohs compliant



Notes

Bridge Mode

When driving bass speakers the minimum load in bridge mode must be 8 ohms.

Connect to input 1 only and use the two CH1 speakon outputs or both + binding posts.

Use +1 for signal + and +2 for signal - Minimum impedance in bridge mode must be 8 ohms for bass use or 4 ohms for midtop use. The amplifier is mono when running in bridge mode and both CH1 speakons output the same signal. When using the binding posts for bridge mode, CH 1 + terminal is signal + and CH2 + terminal is signal -

Parallel Switch

Input 1 is linked to input 2. Connect to input 1 or input 2, the same signal will output from both CH1 and CH2 outputs. Each channels level is set with its own level control.

Note that parallel operation on Infinite amplifiers is not like the parallel mode on some amplifiers that allow you to drive into very low impedances. Parallel mode on Infinite series amplifiers makes both inputs receive the same signal.

VSP Velocity Sense Protection

All version 2 Infinite amplifiers are equipped with velocity sensing protection. The VSP circuit monitors back EMF and will attenuate the output for a very brief period if the amplifier detects over excursion or potential damage to a speaker.

If very severe overload conditions are detected and speaker failure is imminent, the amplifier will mute its output for a brief period. Reducing the amplifiers output level will stop the protection circuit from muting the output in this situation.

Please note that the VSP circuit can only assist with protecting your speakers. It in no way guarantees complete protection against any component failure and safe working practices should always be followed with regard to matching amplifier output levels to speaker input ratings.

Onboard Filter Network

The onboard filter network allows both Hi and Lo pass filters to be set on individual channels. A typical arrangement might be to set a Lo pass filter on channel 1 and use it to drive bass speakers and to set a Hi pass filter on channel 2 and use it to drive midtop speakers. The frequency select switch would be used to set the crossover frequency in this case. The crossover frequency can be 90Hz, 120Hz or 160Hz.

Both Hi and Lo sections of the crossover are also output from the 4 rear panel jack sockets, permitting the onboard crossover to feed other amplifiers in the system. The Hi outputs are from the Hi Pass section and the Lo outputs are from Lo Pass section. This allows for the amplifier with the crossover to drive bass speakers and other amplifiers to drive midtop speakers, or vice versa. Note that the crossover outs, output both Lo and Hi crossover sections irrespective of what the amplifiers channel filters are set to.

LIMITED WARRANTY

THE WARRANTY

For a period of three (3) years from the date of delivery to the original purchaser (as shown on the original invoice or sales receipt), Void Acoustics (hereinafter "Void") warrants to the ORIGINAL OWNER of each new Infinite Series product (provided it was purchased at an Authorised Void Dealer) that it is free of defects in materials and workmanship and that each product will meet or exceed all factory published specifications for each respective model. Void agrees to repair or replace (at its discretion) all defective parts at no charge for labour or materials; subject to following provisions:

WARRANTY VIOLATIONS

Void shall take no responsibility for repair or replacement as specified under this warranty, if the damaged product has been subject to misuse, accident, neglect or failure to comply with normal maintenance procedures; or if the serial number has been defaced, altered or removed. Nor will Void accept responsibility for, or resulting from, improper alterations or unauthorised parts or repairs. This warranty does not cover any damage to speakers or any other consequential damage resulting from breach of any written or implied warranty.

VOID WARRANTY PROVISIONS

Void will remedy any defect, regardless of the reason for failure (except as excluded) by repair, or replacement. Void will remedy the defect and ship the product within a reasonable time after receipt of the defective product at an Void Authorised Service Centre.

TO OBTAIN WARRANTY SERVICE

In the event that a Void product requires service, the Owner must contact Void or an Authorised Void Service Centre to receive an R.A.N. (Return Authorisation Number) and instructions on how to return the product to the Void Authorised Service Centre, or to the factory. Void (or its Authorised Service Centre) will initiate corrective repairs upon receipt of the returned product. Please save the original carton and all the packing materials in case shipping is required. All products being returned to the factory or service centre for repairs must be shipped prepaid.

If the repairs made by Void or the Void Authorised Service Centre are not satisfactory, the Owner is instructed to give written notice to Void. If the defect or malfunction remains after a reasonable amount of attempts by Void to remedy the defect or malfunction, the Owner shall then have the option to elect either a refund or replacement of said Void product free of charge. The refund shall be an amount equal to but not greater than the actual purchase price, not including any taxes, interest, insurance, closing costs and other finance charges (minus reasonable depreciation on the product). If a refund is necessary, the Owner must make the defective or malfunctioning product available to Void free and clear of all liens or other restrictions.

MODIFICATIONS OF EQUIPMENT

Void reserves the right to modify or change equipment (in whole or part) at any time prior to delivery thereof, in order to include therein electrical or mechanical improvements deemed appropriate by Void, but without incurring any liability to modify or change any equipment previously delivered, or to supply new equipment in accordance with any earlier specifications.

DISCLAIMER OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

YOU, THE OWNER, ARE NOT ENTITLED TO RECOVER FROM VOID ANY INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN THE VOID PRODUCT. THIS INCLUDES ANY DAMAGE TO ANOTHER PRODUCT OR PRODUCTS RESULTING FROM SUCH A DEFECT.

WARRANTY ALTERATIONS

No person has the authority to enlarge, amend, or modify this Warranty. This Warranty is not extended by the length of time which the Owner is deprived of the use of product. Repairs and replacement parts provided pursuant to the Warranty shall carry only the non-expired portion of the Warranty.

THIS STATEMENT OF WARRANTY SUPERSEDES ALL OTHERS CONTAINED IN THIS MANUAL

Technical and design specifications are subject to change without notice

Warranty Registration

Thank you for purchasing this Void product. Please complete this warranty registration card and cut off this part and send it to the address overleaf.

Date of purchase

Model

Serial number

Suppliers name and address

Post code :

Tel :

Your name and address

Post code :

Tel :

Owner's Warranty Copy

Date of purchase

Model

Serial number

Suppliers name and address

Post code :

Tel :

What to do if your Void product needs repair

Contact the dealer from whom you purchased the product and get a return authorisation number.

Return the product (preferably in its original box) to :

Void Acoustics, Unit 15, Dawkins Road Ind Est, Poole,
Dorset, BH15 4JY, UK.



Void Acoustics Warranty



This Void Acoustics product is guaranteed against defects due to faulty materials or workmanship for a period of 12 months from the date of original purchase, subject to the following restrictions.

1. This warranty is only valid in the country of purchase.
2. That the product has not been abused or operated in conjunction with unsuitable or faulty apparatus.
3. That the product has not been modified, disassembled or tampered with by any person other than Void Acoustics technical staff.
4. That the product has not suffered damage in transit.

Do not send goods to Void Acoustics without first obtaining a return authorisation number.

Carriage costs to Void Acoustics will be returned to the customer if warranty work proves necessary. Packing, insurance and freight on the return journey will be paid by Void Acoustics or its authorised dealers.

This warranty in no way affects your statutory rights.

Void Acoustics

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