

HD SERIES HIGH DEFINITION BASS AMPLIFIER

HD 4001 , HD 5001, HD 7001 & HD 9001 STEREO POWER AMPLIFIER

- HD 9001: 2X3100Watts into 2 Ohms; 2x2400watts into 4Ohms; 6200Watts into 4Ohms (bridge mode).
- HD 7001: 2X2600Watts into 2 Ohms; 2x2000watts into 4Ohms;5200Watts into 4Ohms (bridge mode).
- HD 5001: 2X2000Watts into 2 Ohms; 2x1600watts into 4Ohms; 4000Watts into 4Ohms (bridge mode).
- HD 4001: 2X1300Watts into 2 Ohms; 2x1000watts into 4Ohms; 2600Watts into 4Ohms (bridge mode).
- Precise Power, Signal, Clip LEDs to monitor performance.
- Neutrik XLR and 1/4" TRS input connectors for compatibility with any source
- Neutrik speakon and "touch-proof" binding posts support most speaker wiring system.
- Selectable Low-frequency filters (30Hz) remove distracting infra-sound frequencies.
- Independent limiters per channel offer reliable protection against overload and distortion.
- High-current toroidal transformer for ultra high transient response and absolute reliability.
- Ultra reliable Onsemi power transistors.
- Independent DC and thermal protection on each channel automatically protects amplifier and speakers without shutting down the show.
- "Back to front" ventilation system including air filters for reliable operation.
- "Built like a tank" impact resistant, high strength rear ear with aluminum front panel.
- High quality components and exceptionally rugged construction ensure long life.
- Bass Enhancer in HD 9001 for better bass response.
- The lowest power consumption is less than 0.1A when working without load.
- Carling switch Circuit breaker for safety.
- Works perfect even at low voltage "Make for India"
- Conceived and Designed by AERONS INDIA, India.



The HD 4001, HD 5001, HD 7001 & HD 9001 have everything a professional DJ's & Musicians requires. They need excellent sound quality, road-worthy toughness and reliability, low noise operation and incredible power. With 4000, 5000, 7000 & 9000 Watts respectively, the HD 4001, HD 5001, HD 7001 & HD 9001 are perfect for medium & large sized club gigs, mobile PA systems, Holy services or public space.

Everything you need, nothing you don't

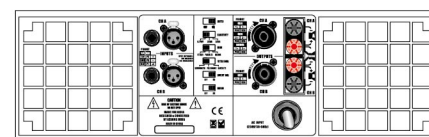
The uber simple front panel controls of these amplifier gives you all of your sound's vital signs at a glance. After flipping the MAIN switch, the POWER LED will light when amplifier is ready for action. Both channels have independent gain controls as well as clip LEDs that indicate when signal distorted and you need to reduce gain. there are also SIGNAL LEDs that light up when a signal is present at the input.

Panel Discussion

A panel of switches found on the back panel offers an array of cool options to apply to both channels of HD series

amplifier. The Clip Limiter lets you get even more out of the amplifier without overdriving either it or your speaker system. Built-in circuitry automatically senses when the HD series amplifier is being overdriven into "clipping" and then momentarily reduce the input level to avoid clipping distortion. This all happens in a few thousandths of a second, so its an inaudible way of avoiding audible clipping distortion. Of course you can turn the Limiter off if you need full control of amplifier.

Ultra low frequency sounds (infrasonics) are caused by rickety stage vibrations, mic thumps and wind noise. While technically inaudible, they can cause huge drain on amplifier power, potential damage to your speakers and a sludgy sound in the audible bass range. HD series features a defeatable Low Cut filter that chops off unwanted frequencies below 30Hz. The same panel contains the switches that allow you to use amplifier in Stereo, Parallel or Bridge mode (mono). In HD series you can connect other amplifier by taking signal out from one amplifier and connect to other.



AERONS (INDIA)

www.paequipments.com



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These amplifier have guts

These are plenty of awesome features on the outside of HD series, but there is also a team of cool components on the inside to do the job right. They comes loaded with famously reliable Onsemi power transistors as well as high-current toroidal transformer for ultra high transient response and further reliability even at low voltage. Independent DC and thermal overload protection on each channel automatically protects the amplifier and speakers from any show-stopping meltdowns. There are no need for fuses, giving you one fewer potential mid-gig headache.

- Special CKLD sound dynamic processing circuit: 0.5dB-0.8dB limiter delay, plus 8V limiter and accurate DC protection value. Different frequency makes the different delay value. This CKLD can make the best sound dynamic with electric feel and peak power
- Special KCL short circuit protection. When the output is short circuit, it can mute the input signal and switch off the relay. At the same time, it locks the amp by circuit. You need to switch off the amp and then switch on again to restart the amp. KCL short circuit protection can make sure of the reliability of the whole sound system.
- Perfect SL input overload limiter protection. You'll never hear distortion. And it can protect the loudspeakers very well. Moreover, SL is working with sound dynamic. Different frequencies and temperature, SL is working differently to make sure of the protection of amps and speakers, and the nice sound dynamic. The current inrush protect is 15A and very sensitive. This can protect the amp very well.
- The DC protect is $\pm 1.5V$. This can protect your loudspeakers effectively.
- There's thermal switch inside the transformer. Upon 110 degree, the thermal switch will be switched off to protect. This can keep the transformer from becoming too hot.
- It has soft start up protect. This can keep the amp from the break of high current inrush.
- We do not make the transformer with too much rest power, but we increase the capacitance of the capacitors to ensure very nice performance when it meets sound dynamic.
- The slew rate is more than $25V/\mu s$. Again, this ensures very nice sound. Even for the most fast and strongest music signal. It can deliver well without losing any signal.
- Special TAP clip limiter circuit
This circuit can work independent of the impedance load and the frequencies. The limiter range is much wider and smoother. Even with much stronger music signal, there is no clipping. This can effectively protect the whole sound system.
- Special HP crossover circuit design
This circuit design is built with 24dB/oct Link with Riley filters. They have the best impulse and additional response, while the total power consumption is much lower.
- The crossover frequency is 120Hz, which fits into the most subwoofer and satellite speaker systems.
- The power design can match with the speaker very well, easy for you to build up a sound system.
- The front ear is 3mm thick, very strong. The back ear is especially designed for your easy usage. It provides great advantage for

the installation of the amp to the fly case.

- The S/N is more than 100dB, and Channel separation is more than 60dB.
- Carling switch circuit breaker ensures very good DC inrush protection.

The HD series have both XLR and 1/4" TRS inputs. Even the outputs are totally flexible, consisting of Speakon compatible output and five way binding posts. Whether you are dealing with bare wire or boutique audiophile cabling, the HD series are right always.

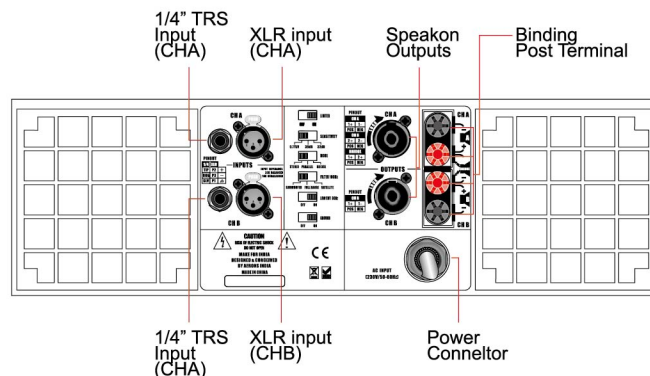
The exhaust fan, visible on the rear panel, is the final stage of an internal back-to-front cooling system that keeps these amplifier working in the mild temperatures they love, even through period of extended use. Finally, an impact resistant combination of steel and aluminium rack mount chassis help these workhorses stand up all the rigors of the road.

Knock-out punch

it takes huge pulse of energy (current and voltage) to propel a woofer cone come out fast enough to match a bass beat. That's called Transient response and it's the holy grail of amplifier designers. By carefully selecting transistors and with extremely high slew rates and optimizing other proprietary parts of our circuitry, our amps are able to react instantly to even the most demanding electronic bass impulses. If the woofers in your PA system can keep up, your audience will hear a tighter, crisper, more natural sound.



CHA Controls
CHB Controls
POWER Switch

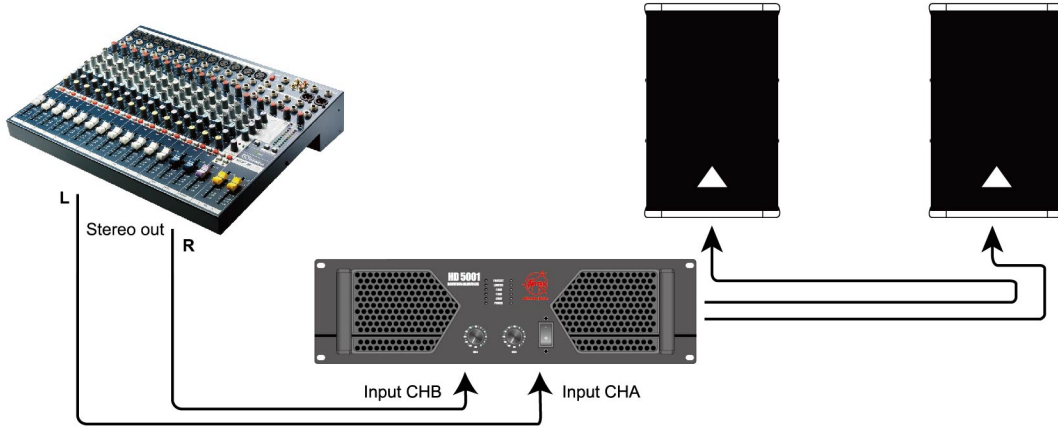


1/4" TRS Input (CHA)
XLR input (CHA)
Speakon Outputs
Binding Post Terminal
1/4" TRS Input (CHB)
XLR input (CHB)
Power Connector

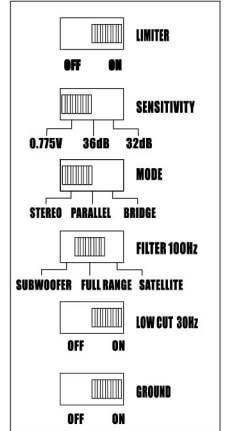
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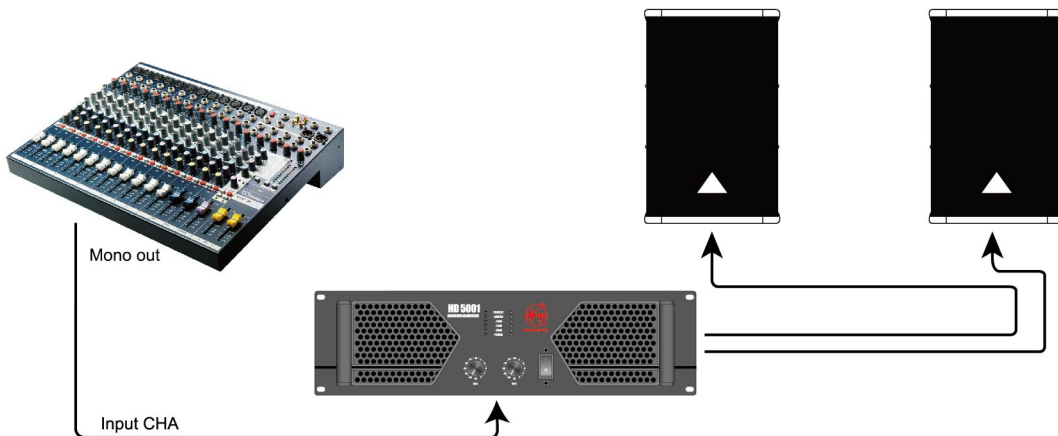
Stereo Mode



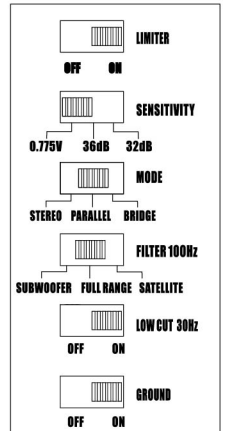
HD5001(Stereo Mode)



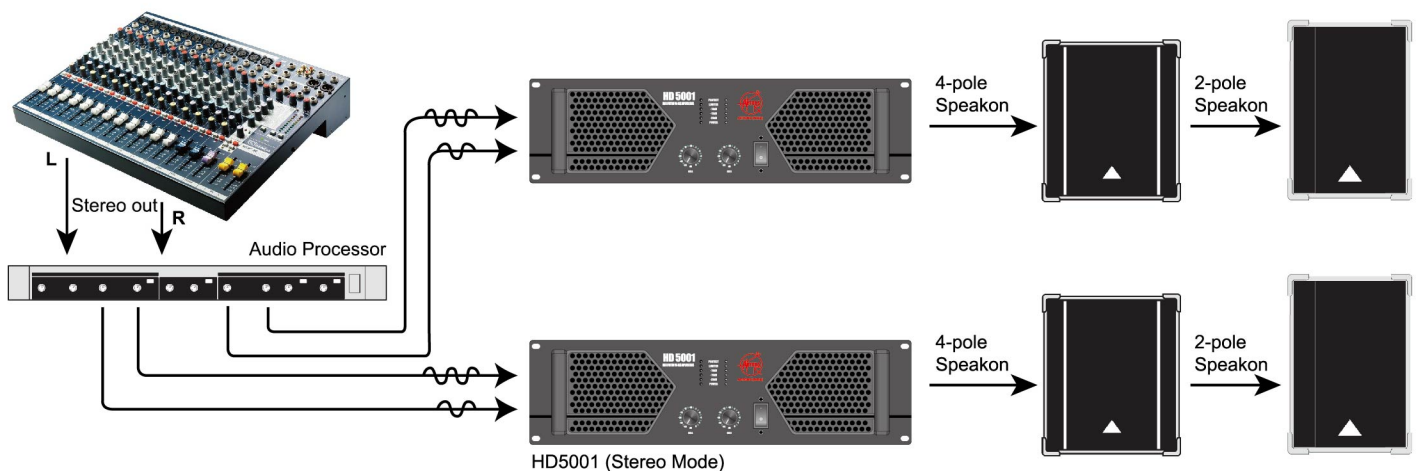
Parallel Mode



HD5001(Parallel Mode)



Bi-Amp Mode with Subwoofer



HD5001 (Stereo Mode)

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SPECIFICATIONS

Rated Power (1 KHz, THD+N=0.1%)

HD4001	
8Ω stereo	2×600W
4Ω stereo	2×1000W
2Ω stereo	2×1300W
8Ω bridge	2000W
4Ω bridge	2600W

HD5001	
8Ω stereo	2×1000W
4Ω stereo	2×1600W
2Ω stereo	2×2000W
8Ω bridge	3200W
4Ω bridge	4000W

HD7001	
8Ω stereo	2×1300W
4Ω stereo	2×2000W
2Ω stereo	2×2600W
8Ω bridge	4000W
4Ω bridge	5200W

HD9001	
8Ω stereo	2×1500W
4Ω stereo	2×2400W
2Ω stereo	2×3100W
8Ω bridge	4800W
4Ω bridge	6200W

Crossover

HD4001/HD5001/HD7001/HD9001	
High pass	160Hz
Low pass	160Hz

HD4001/HD5001/HD7001/HD9001

Protection	
DC protection	√
Short circuit protection	√
High temperature protection	√
Output overload protection	√
Soft startup protection	√

Frequency Response (1W 8Ω stereo)	20Hz~20KHz(±2dB)
Sensitivity (8Ω stereo & 1KHz)	0.775V, 36dB, 32dB
Mode	Stereo/Parallel/Bridge
Fan Speed Regulation	Two-speed

Crosstalk (20Hz~20KHz Rated Power 8Ω)	≥60dB
S/N ratio (8Ω, Rated Power 8Ω)	≥105dB
Intermodulation Distortion	≤0.5%
Total Harmonic Distortion (20Hz~20KHz Rated Power, 8Ω)	≤0.5%

Phase Response (1W, 8Ω 20Hz~20KHz)	+10° -70°
Slew Rate	≥40V/μs

Input Impedance

Balanced	20K
Unbalanced	10K

Connectors (Each channel)

Input connectors	Jack & female XLR (Neutrik®)
Output connectors	Binding post & speakon (Neutrik®)

Filter Capability

HD4001	10000μf / 63V × 8
HD5001	10000μf / 80V × 8
HD7001	10000μf / 100V × 12
HD9001	15000μf / 100V × 12

Damping Factor (1KHz, 8Ω)

HD4001	≥350
HD5001	≥650
HD7001	≥800
HD9001	≥1000

HD4001/HD5001/HD7001/HD9001

Output Circuitry	Class H+
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Dimension (W×H×D)

HD4001/HD5001	483×88×448mm
HD7001/HD9001	483×132×491mm

Gross Weight

HD4001	25.7kg
HD5001	34.76kg
HD7001	39.0kg
HD9001	42.0kgs