

# HPA class AB Power Amplifier.

HPA2240N



This Series of amplifiers are designed to work with a 100 V line especially for sound systems installed in office blocks , shopping centers , supermarkets , bars , public buildings , Airport , Metro , Railways , auditoriums, institutions etc.

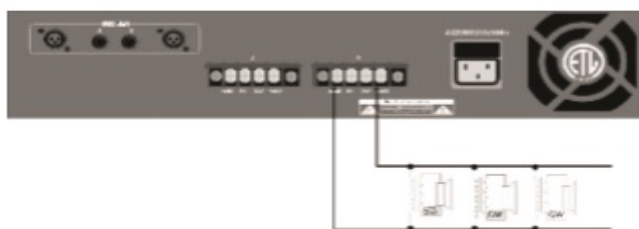
The main advantage of a 100V system is the reduced thickness of the speaker cables as compared to low voltage amplifiers . This is because the higher output voltage allows a much lower current flow for the same power. Another advantage of the high output voltage is the amplifier 's ability to cope up more easily with voltage -drop when using long speaker cables. On all HPA series amplifiers, the output stage is powered by a low voltage allowing not only use with mains voltage, but also 24VDC (or 18VDC). Voltage switching is automatic and completely silent. The output stage utilizes a specially wound transformer to allow full acoustic operation at high frequencies.

A modified push-pull configuration is used for the output stage. This has the advantage of working a similar way to a bridge configuration allowing a decrease of the filtering volume by as much as a half. In contrast to conventional push-pull configurations , our output stage is fully complementary, giving, amongst other advantages, lower distortion, without losing advantages of a push-pull configuration.

The output stage circuitry is protected with the same devices used in stage -amplifiers . This includes: thermal protection, input and output transformer protection, short circuit and overload protection, return limiter and soft switching (soft start). Thanks to these features, it can be used in far more demanding conditions and gives greater fire safety protection.

The HPA Amplifiers are equipped with priority inputs, switched automatically as soon as additional signals are detected . The PVA series also has test inputs for connection of an ultrasonic remote control to test the efficiency of connections. Balanced inputs allow the use of long cables without the risk of humming or mains distortion . Subsonic filters protect the speaker which are, in this kind of installation , relatively low quality. This Also protects the amplifier from saturation of the output transformer.

The forced-cooling fan constantly adjusts its speed according to the temperature of the heat sink. The result of this is that when the amplifier operates at low volume , the fan works at minimum speed or stops altogether, minimizing dust intrusion and increasing the amplifier's life



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# HPA class AB Power Amplifier.

HPA224N



## TECHNICAL PROPERTIES

## MAIN PROPERTIES:

<b>Model</b>		<b>HPA 2240N</b>
Power Output (0.5%THD, 1zHz)		240W two channel
S/N Ratio		80dBr (ref 100V)
Power Bandwidth (-3db + db)		40Hz-15kHz(at half)
<b>Power</b>		
Size (WxHxD)		483 x 88 x430mm
Net Weigth		18kg
Shipping Dimensions (WxHxD)		540 x 230 x 480mm
Shipping Weight		22kg
THD (1kHz, 1dB)		better than 0.5
Sensitivity		1 V
Impedance		10k ohm
<b>Mains Current Draw (WxHxD)</b>		
Full Power		6.3
1/3 Power		3.8
1/8 Power		2.4
Idle		0.4
<b>24V DC</b>		
Full Power		30.3
1/3 Power		21.4
1/8 Power		13.9
Idle		1.5
<b>Thermal Output (W)</b>		
Full Power		409.1
1/3 Power		388.9
1/8 Power		284.7
Idle		70.0
<b>Thermal Output (BTU/HR)</b>		
Full Power		1396
1/3 Power		1327
1/8 Power		971
Idle		239