

# TECHNICAL SPECIFICATIONS

## VX150

## VX200

## V150L

Power output per channel at clip, 1KHz. Both chan. driven	80 watts into 4Ω 50 watts into 8Ω	105 watts into 4Ω 68 watts into 8Ω	150 watts into 4Ω 105 watts into 8Ω
Bridged Mono Bal. output, 8 ohm load	35V line output 160 watts	41V line output 210 watts	N/A*
Power output per chan. into 4Ω for 0.02% T.H.D. at 1KHz. Both chan. driven	75 watts	100 watts	N/A
Rated power output per ch. into rated load of 8Ω. Both chs. driven. Test frequency 1KHz.	45 watts	60 watts	100 watts
T.H.D. at rated power output in the band 20Hz to 20KHz Less than—	0.03%	0.03%	0.03% (40Hz to 20KHz)
Intermodulation distortion at rated output power	Less than 0.03% using frequencies of 50Hz and 7KHz in 4:1 ratio.		
Input Sensitivity	0dB m. ref 600Ω (775mV) input for full output power into a 4Ω load.		
Input Impedance	Greater than 15K ohms.		
Input Options	Electronic Balance, Transformer Balance or Non Balanced inputs selectable from 3 position switches on rear.	Transformer Balance or Non Balanced Inputs.	
Common Mode Rejection	Greater than 60dB.		
Damping Factor	Greater than 300 at 100Hz ref. 8ohms load.		
Hum and Noise	Greater than 100dB down ref. full output. 20Hz to 20KHz. (unbal. mode selected).		
Power Frequency Response	+0, -1dB 10Hz to 50KHz	+0, -1dB 10Hz to 50KHz	100V line output -3dB 30Hz to 10KHz 4-16Ω output +0, -1dB 30Hz to 50KHz
Output Slew Rate	70V/μS	70V/μS	45V/μS
Channel Separation	Greater than 70dB at 1KHz.		N/A
Output Rise Time	3μS or less (10% to 90%) of 1V at 1KHz.		
Input Connectors	1 × 3 Pin XLR + 1 stereo jack per channel		1×3 Pin in XLR + 1 stereo jack per channel
Output Connectors	1 pair binding posts per channel	1 pair binding posts + 1 XLR per channel	1 pair binding posts + 1 XLR per output
Indicators	'PEAK' LED illuminates 1dB before clip point. 'THERMAL' illuminates when thermal shut down occurs. 1 of each per channel. 'MONO' illuminates when Bridged mode selected.		'PEAK' & 'THERMAL' LED's only.
Protection	Electronic protection against short circuit, open circuit and load mismatch conditions. Primary and secondary fuses. Thermal protection against heatsink over temperature (inadequate ventilation).		
Cooling	Convection	Convection	Convection
Rack Height	1U	2U	2U
Mains Supply	100, 120, 220, 240V 50-60Hz internally pre-set by voltage selection links.		
Power requirement	225VA	300VA	225VA
Dimensions (w×h×d)	483×45×305mm 19"×1½"×12"	483×89×305mm 19"×3½"×12"	483×89×384mm 19"×3½"×15"
Weight	6.3kg	9.6kg	10.5kg

## AM8/17

Maximum power output	50W continuous into 4 ohms or 8 ohms
Total harmonic distortion: at 1KHz over the range 40Hz-10KHz	<0.01% all powers 8 ohms (0.004% typical) <.03% all powers 8 ohms
Input impedance	> 10K ohms balanced
Noise	-60dB <sub>z</sub> (20Hz-20KHz) relative continuous max. output
S/N ratio	89dB RMS min. relative to 50W into 8 ohms
Max. overall voltage gain	40dB
Min. input level for full output	-20dB <sub>r</sub> programme
Max. input for rated distortion	+20dB <sub>u</sub>
Amplitude/frequency response	20Hz-20KHz ±0.3dB
Reduced power output: 220V ac Battery	40W continuous into 4 ohms or 8 ohms 20W continuous into 4 ohms or 8 ohms
Power requirements: mains emergency battery operation	240V ac ±10% 120VA Two batteries to supply ±24V, 1A
Connectors: mains input audio input	XLR-LNE PO Jack XLR male—3 pin
battery input loudspeaker input	XLR male—4 pin XLR female—3 pin
Ambient temperature	0—40°C
Dimensions	350×210×85mm
Weight	4.5kg

## AM8/12

Maximum power output	30W RMS into 15 ohms 45W RMS into 8 ohms 75W RMS into 4 ohms
Total harmonic distortion: over the range 20Hz-20KHz	<0.1% at 25W 8 ohms
Input impedance	> 10K ohms
Input sensitivity	0-25V RMS for full output into 15 ohms 20Hz-20KHz
S/N ratio	80dB relative to 25W into 15 ohms
Damping factor	> 100 ref 7.5 ohms load at 100Hz
Slew rate	> 5V/μS
Protection	Proof against short and open circuit operation
Power requirements: mains	115, 210, 220, 230, 240V 50/60Hz
Connectors: mains input audio input	XLR-LNE Rendar Jack (3 pole) J821/A0/F2 Painton 310035 Multicon 4 way Painton 1S9F 11 pole socket
output	
Ambient temperature	up to 50°C without forced ventilation
Dimensions	247×155×89mm
Weight	4.1kg

# THE AM8/12 AND V150L



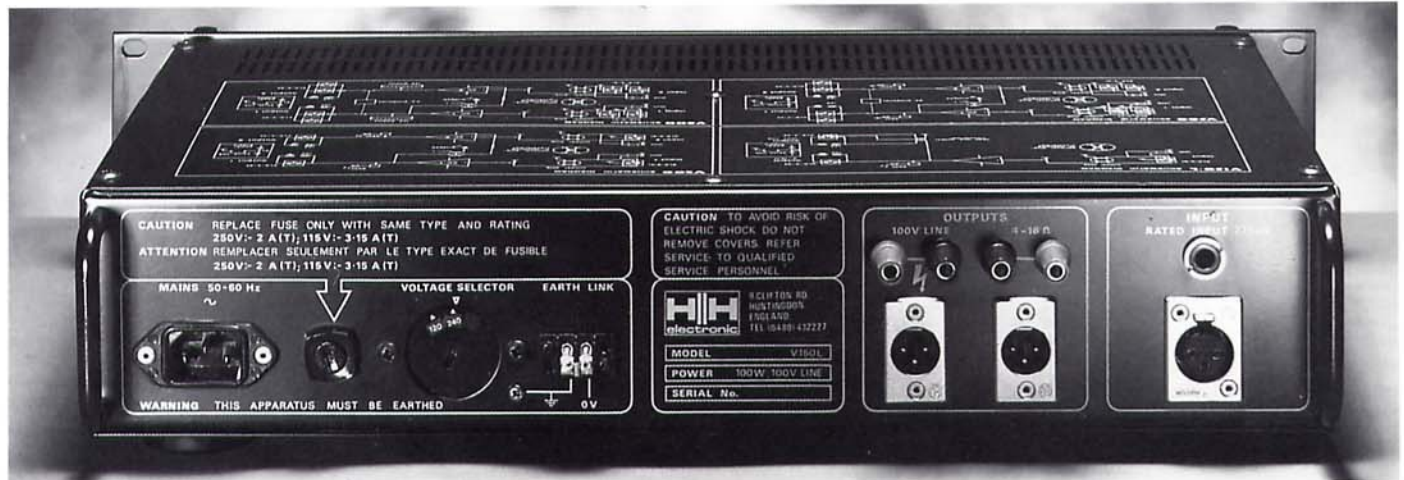
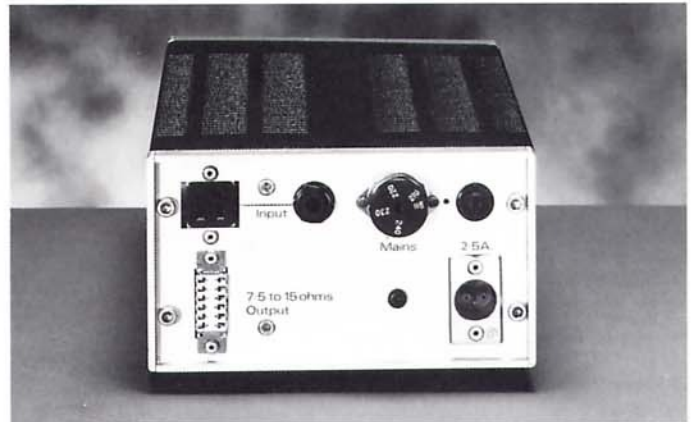
## AM8/12

### Broadcast studio amplifier

The AM8/12 is a 75 watt single channel power amplifier designed for the professional broadcast engineer's general audio requirements, where excellent sound reproduction quality and reliability are essential.

Designed for the BBC, the unit provides high quality performance where space is limited and may easily be accommodated in the actual loudspeaker enclosure for monitor applications. The AM8/12 incorporates equalised pre-amplifier, 10K ohm balanced input transformer, Painton connectors, XLR mains connector and integral power supply.

Full detailed specifications on page 4.



## V150L

### Single channel MOS-FET power amplifier

Designed for demanding professional applications that require a single channel power amplifier of exceptional performance and reliability.

A choice of internal input/output balanced matching transformers permits adaption to a variety of applications:

- Broadcast or recording studio monitor amplifier.
- Sound distribution amplifier with balanced 100V line output.
- High performance professional PA amplifier.

Two separate outputs are provided, 100 volt centre tapped balanced line for sound distribution systems, plus a normal low impedance 4 to 16 ohms output. Other output matching transformer options are available and XLR or binding post connectors are provided for both outputs.

Power output is 105 watts RMS into 8 ohms or 150 watts RMS into 4 ohms, 100 volt balanced line output—100 watts RMS.

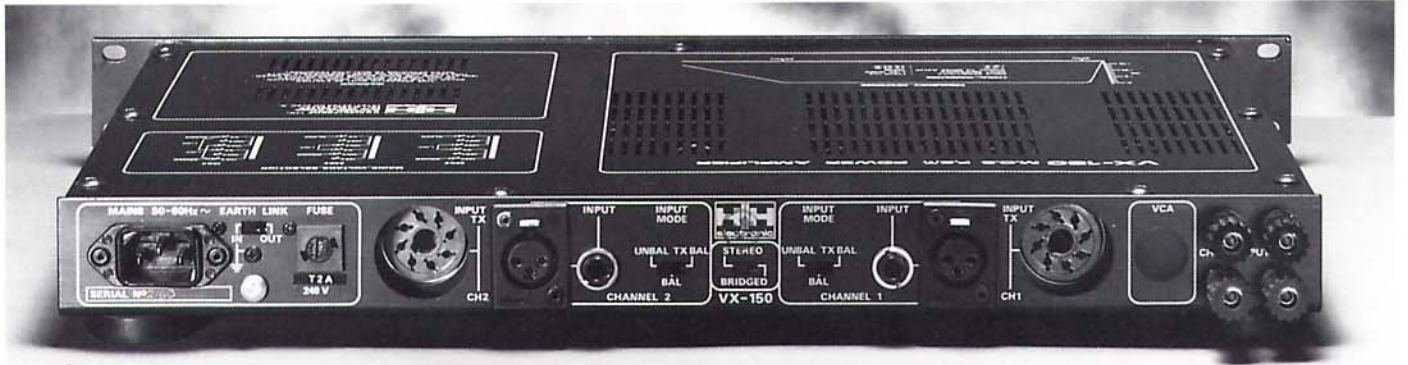
The V150L is 19" rack mountable (2U high) and comes with a comprehensive range of facilities which include LED information indicators, optional plug-in balanced input transformer provision,

dual professional input facilities (XLR and 1/4" jack), continuously rated toroidal mains power supply and separate circuit chassis grounding on the rear panel barrier strip.

Full detailed specifications on page 4.



# THE VX150 AND VX200

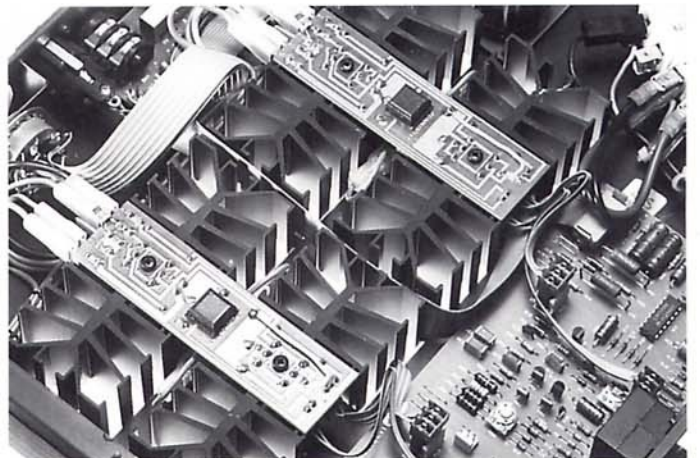


## VX150

### Two channel MOS-FET power amplifier

Designed to drive near or mid-field monitors in quality studio applications and for use in stereo broadcast, the VX150's MOS-FET technology ensures a clear, clean, neutral sound quality with no audible mechanical or electrical distortion. The VX150 features a comprehensive list of features and facilities including comprehensive inputs and outputs, multiple protection circuits, LED information indicators, surge free turn-on, external selection of input modes and stereo/mono operation, plug-in module facility and earth link switch. The amplifier has an elegant, low profile (1U) front panel and is 19" rack mountable. Robustly constructed, the amplifier chassis is made from heavy gauge aluminium for strength and rigidity.

Full detailed specifications on page 4.



VX150 HEAT SINK ARRANGEMENT



600 OHM AND 10K: 10K MATCHING TRANSFORMERS AVAILABLE FOR VX RANGE

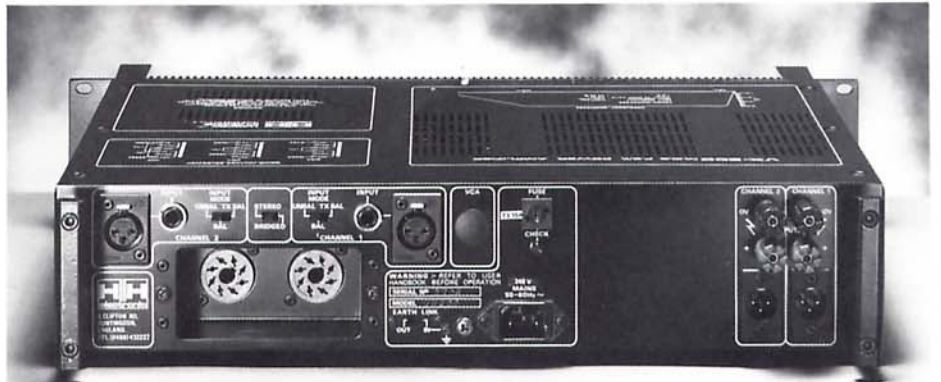
## VX200

### Two channel MOS-FET power amplifier

With a similar range of facilities to the VX150, the VX200 has a higher power rating and is 2U high. Purpose designed for studio monitoring and stereo broadcast, audible distortion has been eliminated by sensible circuit design and a heat sink arrangement

which negates the need for fan cooling, giving a very clean sound across the frequency range. The robust construction is supplemented by aluminium alloy carrying handles on the front and rear panels. Conversion to transformer balanced inputs is achieved simply by plugging the optional transformer modules into the rear panel octal sockets. An external 3-way switch makes selection easy.

Full detailed specifications on page 4.



# BROADCAST AND STUDIO AMPLIFICATION PRODUCTS



AM8/17 • AM8/12 • V150L • VX150 • VX200

## AM8/17

### Broadcast studio amplifier

Once again HH's expertise in the manufacture of professional amplification products for the highest quality applications has been rewarded by the receipt of the only licence to be issued for the manufacture of the new AM8/17 amplifier for the BBC. The AM8/17 is a high performance single channel, 50 watt power amplifier with very low distortion. Designed for use with 8 ohm loudspeaker systems, the AM8/17 is primarily used with the LS5/9 studio loudspeaker. It can also be used with 4 ohm loudspeaker systems and other BBC coded loudspeaker assemblies incorporating passive crossover units.

The AM8/17 has been designed for either horizontal or vertical mounting, facilitating assembly to the back of a loudspeaker cabinet, as with the LS5/9Z, or installation, two side by side, in a 19" rack of height 2U.

The unit is normally mains powered but has provision for battery operation from external  $\pm 24V$  supplies. Switching to battery is automatic on loss of mains with no break in output.

Full detailed specifications on page 4.

