## TECHNICAL SPECIFICATIONS

### VX150
- **Power output per channel at clip:** 80 watts into 4Ω, 50 watts into 8Ω
- **Bridged Mono Bal. output:** 35V line output, 160 watts
- **Power output per channel into 4Ω for 0.02% T.H.D. at 1kHz:** 75 watts
- **Rated power output per ch. into rated load of 8Ω:** 45 watts
- **T.H.D. at rated power output in the band 20Hz to 20kHz:** 0.03%
- **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.
- **Common Mode Rejection:** Greater than 60dB
- **Hum and Noise:** Greater than 100dB down ref. full output. 20Hz to 20kHz. (unbal. mod. selected)
- **Power Frequency Response:** +0, -1dB 10Hz to 50kHz
- **Output Slew Rate:** 70V/µS
- **Channel Separation:** Greater than 70dB at 1kHz
- **Output Rise Time:** 3µs or less (10% to 90%) of 1V at 1kHz
- **Input Connectors:** 1 x 3 Pin XLR & stereo jack per channel
- **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.
- **Protection:** Electronic protection against short circuit, open circuit and load mismatch conditions. Primary and secondary fuses. Thermal protection against heatsink over temperature (adequate ventilation).

### VX200
- **Power output per channel at clip:** 105 watts into 4Ω, 68 watts into 8Ω
- **Bridged Mono Bal. output:** 41V line output, 210 watts
- **Power output per channel into 4Ω for 0.02% T.H.D. at 1kHz:** 100 watts
- **Rated power output per ch. into rated load of 8Ω:** 60 watts
- **T.H.D. at rated power output in the band 20Hz to 20kHz:** 0.03%
- **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.
- **Common Mode Rejection:** Greater than 60dB
- **Hum and Noise:** Greater than 100dB down ref. full output. 20Hz to 20kHz. (unbal. mod. selected)
- **Power Frequency Response:** +0, -1dB 10Hz to 50kHz
- **Output Slew Rate:** 70V/µS
- **Channel Separation:** Greater than 70dB at 1kHz
- **Output Rise Time:** 3µs or less (10% to 90%) of 1V at 1kHz
- **Input Connectors:** 1 x 3 Pin XLR & stereo jack per channel
- **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.
- **Protection:** Electronic protection against short circuit, open circuit and load mismatch conditions. Primary and secondary fuses. Thermal protection against heatsink over temperature (adequate ventilation).

### V150L
- **Power output per channel at clip:** 150 watts into 4Ω
- **Bridged Mono Bal. output:** 41V line output, 210 watts
- **Power output per channel into 4Ω for 0.02% T.H.D. at 1kHz:** N/A
- **Rated power output per ch. into rated load of 8Ω:** N/A
- **T.H.D. at rated power output in the band 20Hz to 20kHz:** N/A
- **Intermodulation distortion at rated output power:** N/A
- **Input Sensitivity:** N/A
- **Input Impedance:** N/A
- **Input Options:** N/A
- **Common Mode Rejection:** N/A
- **Hum and Noise:** N/A
- **Power Frequency Response:** N/A
- **Output Slew Rate:** N/A
- **Channel Separation:** N/A
- **Output Rise Time:** N/A
- **Input Connectors:** N/A
- **Indicators:** N/A
- **Protection:** N/A

### 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)
- **Input impedance:** >10K ohms balanced
- **Noise:** -60dB, (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:** -20dBm programme
- **Max. input for rated distortion:** +20dBu
- **Amplitude/frequency response:** 20Hz-20KHz ±0.3dB
- **Reduced power output:** 220V ac 40W continuous into 4 ohms or 8 ohms
- **Battery:** 20W continuous into 4 ohms or 8 ohms
- **Power requirements:** mains emergency battery operation
- **Connectors:** mains input XLR-LNE, audio input PO Jack, battery input XLR male-3 pin, loudspeaker input XLR female-3 pin
- **Ambient temperature:** 0°C to 40°C
- **Dimensions:** 350x210x85mm
- **Weight:** 4.5kg

### AM8/12
- **Maximum power output:** 30W RMS into 15 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
- **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, 240V 50/60Hz
- **Connectors:** mains input XLR-LNE, audio input R40/40/40 (3 pole) J821/A0/F2 Painton 310036 Multicon 4 way output Painton 159F 11 pole socket
- **Ambient temperature:** up to 50°C without forced ventilation
- **Dimensions:** 247x155x89mm
- **Weight:** 4.1kg

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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 equalized pre-amplifier, 10k ohm balanced input transformer, Paintron 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 ¼" 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.

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.
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 ± 24V supplies. Switching to battery is automatic on loss of mains with no break in output.

Full detailed specifications on page 4.