



ARCHITECTS' & ENGINEERS' SPECIFICATIONS

Power Amplifier IPA8200

► 120 V model

The YAMAHA IPA8200 shall be an eight-channel power amplifier. This amplifier shall draw 350W or less at 1/8 rated power into 4 ohm loads. The power amplifier shall be capable of operation from a 120V, 60Hz line. The amplifier shall meet the following performance criteria. Power output with all channels driven shall be a minimum of 200W per channel with a 4 ohm load, 100W with an 8 ohm load and 400W bridged into an 8 ohm load. Total harmonic distortion (THD+N) shall be less than 0.5% at 1kHz, half power. Frequency response shall be from 20Hz to 20kHz (MAX and TYP +0dB, MIN -1.5dB) at 8 ohms, $P_o=1W$. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be switchable to 32dB/26dB/4dBu, and the input sensitivity also shall be switchable to +0.8dBu/+5.2dBu/+4dBu. Maximum input voltage shall be 24dBu. The A-weighted signal to noise ratio shall exceed 100dB, referenced to full output. Built-in protection circuitry shall monitor voltage and current levels to minimize potential damage from overloads, and disable output during shorts, DC offset, or operating temperatures exceeding 95°C. In-rush current limiting shall minimize turn-on current surges when multiple units are powered-up remotely to prevent AC breaker overload. The amplifier shall employ forced-air cooling with dual temperature-controlled fans, variable in speed for minimum acoustic noise. Air flow shall be from front to rear. The front panel shall have a recessed AC power switch, LED indicators, attenuators and mute buttons. The LED indicators shall indicate POWER, PROTECT, CLIP, SIGNAL MUTE, PARALLEL and BRIDGE. The front-panel shall have eight attenuators (one per ch). Four rear-panel mode switches shall provide three modes of input operation, Stereo, Bridge and Parallel for every pair of channels. In Parallel input mode, each channel's level shall be independently adjustable. The rear-panel shall have a HPF switch ($f_c=20Hz$ or 50Hz) and a gain switch (32dB/26dB/+4dBu). Rear panel input connectors shall be a 3-pin detachable terminal block for each channel. Rear panel output connectors shall be a barrier strip. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 406.5mm D x 88mm H (18-7/8" x 16" x 3-7/16"). Weight shall be 10.5 kg (23.15 lbs). The amplifier shall be YAMAHA IPA8200.

► 230 V model

The YAMAHA IPA8200 shall be an eight-channel power amplifier. This amplifier shall draw 350W or less at 1/8 rated power into 4 ohm loads. The power amplifier shall be capable of operation from a 220V-240V, 50Hz line. The amplifier shall meet the following performance criteria. Power output with all channels driven shall be a minimum of 200W per channel with a 4 ohm load, 100W with an 8 ohm load and 400W bridged into an 8 ohm load. Total harmonic distortion (THD+N) shall be less than 0.5% at 1kHz, half power. Frequency response shall be from 20Hz to 20kHz (MAX and TYP +0dB, MIN -1.5dB) at 8 ohms, $P_o=1W$. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be switchable to 32dB/26dB/4dBu, and the input sensitivity also shall be switchable to +0.8dBu/+5.2dBu/+4dBu. Maximum input voltage shall be 24dBu. The A-weighted signal to noise ratio shall exceed 100dB, referenced to full output. Built-in protection circuitry shall monitor voltage and current levels to minimize potential damage from overloads, and disable output during shorts, DC offset, or operating temperatures exceeding 95°C. In-rush current limiting shall minimize turn-on current surges when multiple units are powered-up remotely to prevent AC breaker overload. The amplifier shall employ forced-air cooling with dual temperature-controlled fans, variable in speed for minimum acoustic noise. Air flow shall be from front to rear. The front panel shall have a recessed AC power switch, LED indicators, attenuators and mute buttons. The LED indicators shall indicate POWER, PROTECT, CLIP, SIGNAL MUTE, PARALLEL and BRIDGE. The front-panel shall have eight attenuators (one per ch). Four rear-panel mode switches shall provide three modes of input operation, Stereo, Bridge and Parallel for every pair of channels. In Parallel input mode, each channel's level shall be independently adjustable. The rear-panel shall have a HPF switch ($f_c=20Hz$ or 50Hz) and a gain switch (32dB/26dB/+4dBu). Rear panel input connectors shall be a 3-pin detachable terminal block for each channel. Rear panel output connectors shall be a barrier strip. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 406.5mm D x 88mm H. Weight shall be 10.5 kg. The amplifier shall be YAMAHA IPA8200.