



## ARCHITECTS' & ENGINEERS' SPECIFICATIONS

### Power Amplifier **TX6n**

#### ► 120V TX6n

The YAMAHA TX6n shall be a two-channel power amplifier. This amplifier shall draw 1800W or less at 1/8 rated power into 2 ohm loads. The power amplifier shall be capable of operation from a 120 V, 60 Hz line. Dual power supply transformers are employed. The amplifier shall meet the following performance criteria. Power output with both channels driven shall be a minimum of 2750W per channel with a 2 ohm load, 3000W per channel with a 4 ohm load, 1800W with an 8 ohm load, 6000 W mono bridged into an 8 ohm load, and 5500 W mono bridged into a 4 ohm load. Burst peak output with both channels driven shall be a minimum of 4100W per channel with a 2 ohm load. Total harmonic distortion (THD+N) shall be less than 0.2% at 10Hz-20kHz, half power. Intermodulation distortion (IMD) shall be less than 0.25% using the SMPTE standard of 60 Hz and 7kHz in a 4:1 ratio respectively at half power. Frequency response shall be from 20Hz to 20kHz (Max +0.5dB, TYP +0 dB, Min -0.5 dB) at 8 ohms, Po=1W. Residual noise at 20Hz-20kHz shall be less than -65dBu. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be configurable in 0.1dB steps between 19.8dB to 43.8dB. Maximum input voltage shall be 24dBu. The unweighted signal to noise ratio over the range of 20Hz-20kHz shall exceed 108dB, 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 excessive operating temperatures exceeding 100° C. The relay shall also delay amplifier connection to the load during turn-on for nine seconds. 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, two MUTE buttons, four Function buttons, a HOME button, an ENTER button, two encoders and LED indicators. The LED indicators shall indicate IDENTIFY, NETWORK, PROTECTION, BRIDGE, PARALLEL, POWER and STANDBY conditions. Front panel indicators shall include an LCD screen to control the amplifier's setup and operation. Rear panel input connectors shall be a 3-pin XLR connector for each channel and available input connectors via the Mini-YGDAI card. The XLR input shall be wired with pin 2 hot. Rear panel output connectors shall be 5-way binding posts, SPEAKON connectors, XLR Thru outputs and available connectors via the Mini-YGDAI card. The RJ45 Data Port connector shall allow remote control and monitoring via Ethernet connection to the Amp Editor application network. The Fault Output connector shall provide relay contacts rated for a load of 30V DC, 1A to indicate abnormality in the amplifier operation. The amplifier shall include an onboard 32-bit DSP with 24-bit A/D and D/A conversions. The amplifier shall employ patented EEEngine technology including MOSFET based independent high speed current and voltage buffers without delay circuits to improve slew rate. Efficiency @ 1/8 duty cycle shall be 50%. Isolation components shall be provided and output devices shall be mounted by individual screws to minimize sonic degradation caused by vibration. The power cable shall use a 30A twist lock connector, NEMA L5-30P. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. The amplifier shall be certified to meet Underwriters Laboratories Inc.'s safety requirement UL60065 and Intertek ETL SEMKO standard EM60065:2002 at 2 ohms. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 461mm D x 88mm H (18-7/8" x 18-1/8" x 3-7/16"). Weight shall be 16 kg (35.3lbs). The amplifier shall be YAMAHA TX6n.

#### ► 230V TX6n

The YAMAHA TX6n shall be a two-channel power amplifier. This amplifier shall draw 1800W or less at 1/8 rated power into 2 ohm loads. The power amplifier shall be capable of operation from a 220-240V, 50/60 Hz line. Dual power supply transformers are employed. The amplifier shall meet the following performance criteria. Power output with both channels driven shall be a minimum of 2750W per channel with a 2 ohm load, 3000W per channel with a 4 ohm load, 1800W with an 8 ohm load, 6000 W mono bridged into an 8 ohm load, and 5500 W mono bridged into a 4 ohm load. Burst peak output with both channels driven shall be a minimum of 4120W per channel with a 2 ohm load. Total harmonic distortion (THD+N) shall be less than 0.2% at 10Hz-20kHz, half power. Intermodulation distortion (IMD) shall be less than 0.25% using the SMPTE standard of 60 Hz and 7k Hz in a 4:1 ratio respectively at half power. Frequency response shall be from 20Hz to 20kHz (Max +0.5dB, TYP +0 dB, Min -0.5 dB) at 8 ohms, Po=1W. Residual noise at 20Hz-20kHz shall be less than -65dBu. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be configurable in 0.1dB steps between 19.8dB to 43.8dB. Maximum input voltage shall be 24dBu. The unweighted signal to noise ratio over the range of 20Hz-20kHz shall exceed 108dB, 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 excessive operating temperatures exceeding 100° C. The relay shall also delay amplifier connection to the load during turn-on for nine seconds. 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, two MUTE buttons, four Function buttons, a HOME button, an ENTER button, two encoders and LED indicators. The LED indicators shall indicate IDENTIFY, NETWORK, PROTECTION, BRIDGE, PARALLEL, POWER, STANDBY, MUTE, ALERT, CLIP and SIGNAL conditions. Front panel indicators shall include an LCD screen to control the amplifier's setup and operation. Rear panel input connectors shall be a 3-pin XLR connector for each channel and available input connectors via the Mini-YGDAI card. The XLR input shall be wired with pin 2 hot. Rear panel output connectors shall be 5-way binding posts, SPEAKON connectors, XLR Thru outputs and available connectors via the Mini-YGDAI card. The RJ45 Data Port connector shall allow remote control and monitoring via Ethernet connection to the Amp Editor application network. The Fault Output connector shall provide relay contacts rated for a load of 30V DC, 1A to indicate abnormality in the amplifier operation. The amplifier shall include an onboard 32-bit DSP with 24-bit A/D and D/A conversions. The amplifier shall employ patented EEEngine technology including MOSFET based independent high speed current and voltage buffers without delay circuits to improve slew rate. Efficiency @ 1/8 duty cycle shall be 50%. Isolation components shall be provided and output devices shall be mounted by individual screws to minimize sonic degradation caused by vibration. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. The amplifier shall be certified to meet Underwriters Laboratories Inc.'s safety requirement UL60065 and Intertek ETL SEMKO standard EM60065:2002 at 2 ohms. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 461mm D x 88mm H. Weight shall be 16 kg. The amplifier shall be YAMAHA TX6n.



## ARCHITECTS' & ENGINEERS' SPECIFICATIONS

### Power Amplifier **TX5n**

#### ► 120V TX5n

The YAMAHA TX5n shall be a two-channel power amplifier. This amplifier shall draw 1600W or less at 1/8 rated power into 2 ohm loads. The power amplifier shall be capable of operation from a 120 V, 60Hz line. Dual power supply transformers are employed. The amplifier shall meet the following performance criteria. Power output with both channels driven shall be a minimum of 2500W per channel with a 2 ohm load, 2200W per channel with a 4 ohm load, 1300W with an 8 ohm load, 4400 W mono bridged into an 8 ohm load and 5000 W mono bridged into a 4 ohm load. Burst peak output with both channels driven shall be a minimum of 3480W per channel with a 2 ohm load. Total harmonic distortion (THD+N) shall be less than 0.2% at 10Hz-20kHz, half power. Intermodulation distortion (IMD) shall be less than 0.25% using the SMPTE standard of 60 Hz and 7kHz in a 4:1 ratio respectively at half power. Frequency response shall be from 20Hz to 20kHz (Max +0.5dB, TYP +0 dB, Min -0.5 dB) at 8 ohms, Po=1W. Residual noise at 20Hz-20kHz shall be less than -65dBu. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be configurable in 0.1dB steps between 19.8dB to 43.8dB. Maximum input voltage shall be 24dBu. The unweighted signal to noise ratio over the range of 20Hz-20kHz shall exceed 107dB, 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 excessive operating temperatures exceeding 100° C. The relay shall also delay amplifier connection to the load during turn-on for nine seconds. 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, two MUTE buttons, four Function buttons, a HOME button, an ENTER button, two encoders and LED indicators. The LED indicators shall indicate IDENTIFY, NETWORK, PROTECTION, BRIDGE, PARALLEL, POWER and STANDBY conditions. Front panel indicators shall include an LCD screen to control the amplifier's setup and operation. Rear panel input connectors shall be a 3-pin XLR connector for each channel and available input connectors via the Mini-YGDAI card. The XLR input shall be wired with pin 2 hot. Rear panel output connectors shall be 5-way binding posts, SPEAKON connectors, XLR Thru outputs and available connectors via the Mini-YGDAI card. The RJ45 Data Port connector shall allow remote control and monitoring via Ethernet connection to the Amp Editor application network. The Fault Output connector shall provide relay contacts rated for a load of 30V DC, 1A to indicate abnormality in the amplifier operation. The amplifier shall include an onboard 32-bit DSP with 24-bit A/D and D/A conversions. The amplifier shall employ patented EEEngine technology including MOSFET based independent high speed current and voltage buffers without delay circuits to improve slew rate. Efficiency @ 1/8 duty cycle shall be 50%. Isolation components shall be provided and output devices shall be mounted by individual screws to minimize sonic degradation caused by vibration. The power cable shall use a 30A twist lock connector, NEMA L5-30P. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. The amplifier shall be certified to meet Underwriters Laboratories Inc.'s safety requirement UL60065 and Intertek ETL SEMKO standard EM60065:2002 at 2 ohms. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 461mm D x 88mm H (18-7/8" x 18-1/8" x 3-7/16"). Weight shall be 16 kg (35.3lbs). The amplifier shall be YAMAHA TX5n.

#### ► 230V TX5n

The YAMAHA TX5n shall be a two-channel power amplifier. This amplifier shall draw 1600W or less at 1/8 rated power into 2 ohm loads. The power amplifier shall be capable of operation from a 220-240V, 50/60 Hz line. Dual power supply transformers are employed. The amplifier shall meet the following performance criteria. Power output with both channels driven shall be a minimum of 2500W per channel with a 2 ohm load, 2300W per channel with a 4 ohm load, 1300W with an 8 ohm load, 4600 W mono bridged into an 8 ohm load and 5000 W mono bridged into a 4 ohm load. Burst peak output with both channels driven shall be a minimum of 3600W per channel with a 2 ohm load. Total harmonic distortion (THD+N) shall be less than 0.2% at 10Hz-20kHz, half power. Intermodulation distortion (IMD) shall be less than 0.25% using the SMPTE standard of 60 Hz and 7kHz in a 4:1 ratio respectively at half power. Frequency response shall be from 20Hz to 20kHz (Max +0.5dB, TYP +0 dB, Min -0.5 dB) at 8 ohms, Po=1W. Residual noise at 20Hz-20kHz shall be less than -65dBu. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be configurable in 0.1dB steps between 19.8dB to 43.8dB. Maximum input voltage shall be 24dBu. The unweighted signal to noise ratio over the range of 20Hz-20kHz shall exceed 107dB, 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 excessive operating temperatures exceeding 100° C. The relay shall also delay amplifier connection to the load during turn-on for nine seconds. 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, two MUTE buttons, four Function buttons, a HOME button, an ENTER button, two encoders and LED indicators. The LED indicators shall indicate IDENTIFY, NETWORK, PROTECTION, BRIDGE, PARALLEL, POWER, STANDBY, MUTE, ALERT, CLIP and SIGNAL conditions. Front panel indicators shall include an LCD screen to control the amplifier's setup and operation. Rear panel input connectors shall be a 3-pin XLR connector for each channel and available input connectors via the Mini-YGDAI card. The XLR input shall be wired with pin 2 hot. Rear panel output connectors shall be 5-way binding posts, SPEAKON connectors, XLR Thru outputs and available connectors via the Mini-YGDAI card. The RJ45 Data Port connector shall allow remote control and monitoring via Ethernet connection to the Amp Editor application network. The Fault Output connector shall provide relay contacts rated for a load of 30V DC, 1A to indicate abnormality in the amplifier operation. The amplifier shall include an onboard 32-bit DSP with 24-bit A/D and D/A conversions. The amplifier shall employ patented EEEngine technology including MOSFET based independent high speed current and voltage buffers without delay circuits to improve slew rate. Efficiency @ 1/8 duty cycle shall be 50%. Isolation components shall be provided and output devices shall be mounted by individual screws to minimize sonic degradation caused by vibration. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. The amplifier shall be certified to meet Underwriters Laboratories Inc.'s safety requirement UL60065 and Intertek ETL SEMKO standard EM60065:2002 at 2 ohms. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 461mm D x 88mm H. Weight shall be 16 kg. The amplifier shall be YAMAHA TX5n.



## ARCHITECTS' & ENGINEERS' SPECIFICATIONS

### Power Amplifier **TX4n**

#### ► 120V TX4n

The YAMAHA TX4n shall be a two-channel power amplifier. This amplifier shall draw 1500W or less at 1/8 rated power into 2 ohm loads. The power amplifier shall be capable of operation from a 120 V, 60 Hz line. Dual power supply transformers are employed. The amplifier shall meet the following performance criteria. Power output with both channels driven shall be a minimum of 2200W per channel with a 2 ohm load, 1900W per channel with a 4 ohm load, 1100W with an 8 ohm load, 3800 W mono bridged into an 8 ohm load and 4400 W mono bridged into a 4 ohm load. Burst peak output with both channels driven shall be a minimum of 2990W per channel with a 2 ohm load. Total harmonic distortion (THD+N) shall be less than 0.2% at 10Hz-20kHz, half power. Intermodulation distortion (IMD) shall be less than 0.25% using the SMPTE standard of 60 Hz and 7kHz in a 4:1 ratio respectively at half power. Frequency response shall be from 20Hz to 20kHz (Max +0.5dB, TYP +0 dB, Min -0.5 dB) at 8 ohms, Po=1W. Residual noise at 20Hz-20kHz shall be less than -65dBu. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be configurable in 0.1dB steps between 19.8dB to 43.8dB. Maximum input voltage shall be 24dBu. The unweighted signal to noise ratio over the range of 20Hz-20kHz shall exceed 106dB, 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 excessive operating temperatures exceeding 100° C. The relay shall also delay amplifier connection to the load during turn-on for nine seconds. 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, two MUTE buttons, four Function buttons, a HOME button, an ENTER button, two encoders and LED indicators. The LED indicators shall indicate IDENTIFY, NETWORK, PROTECTION, BRIDGE, PARALLEL, POWER and STANDBY conditions. Front panel indicators shall include an LCD screen to control the amplifier's setup and operation. Rear panel input connectors shall be a 3-pin XLR connector for each channel and available input connectors via the Mini-YGDAI card. The XLR input shall be wired with pin 2 hot. Rear panel output connectors shall be 5-way binding posts, SPEAKON connectors, XLR Thru outputs and available connectors via the Mini-YGDAI card. The RJ45 Data Port connector shall allow remote control and monitoring via Ethernet connection to the Amp Editor application network. The Fault Output connector shall provide relay contacts rated for a load of 30V DC, 1A to indicate abnormality in the amplifier operation. The amplifier shall include an onboard 32-bit DSP with 24-bit A/D and D/A conversions. The amplifier shall employ patented EEEngine technology including MOSFET based independent high speed current and voltage buffers without delay circuits to improve slew rate. Efficiency @ 1/8 duty cycle shall be 50%. Isolation components shall be provided and output devices shall be mounted by individual screws to minimize sonic degradation caused by vibration. The power cable shall use a 30A twist lock connector, NEMA L5-30P. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. The amplifier shall be certified to meet Underwriters Laboratories Inc.'s safety requirement UL60065 and Intertek ETL SEMKO standard EM60065:2002 at 2 ohms. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 461mm D x 88mm H (18-7/8" x 18-1/8" x 3-7/16"). Weight shall be 16 kg (35.3lbs). The amplifier shall be YAMAHA TX4n.

#### ► 230V TX4n

The YAMAHA TX4n shall be a two-channel power amplifier. This amplifier shall draw 1500W or less at 1/8 rated power into 2 ohm loads. The power amplifier shall be capable of operation from a 220-240V, 50/60 Hz line. Dual power supply transformers are employed. The amplifier shall meet the following performance criteria. Power output with both channels driven shall be a minimum of 2200W per channel with a 2 ohm load, 2000W per channel with a 4 ohm load, 1100W with an 8 ohm load, 4000 W mono bridged into an 8 ohm load and 4400 W mono bridged into a 4 ohm load. Burst peak output with both channels driven shall be a minimum of 3050W per channel with a 2 ohm load. Total harmonic distortion (THD+N) shall be less than 0.2% at 10Hz-20kHz, half power. Intermodulation distortion (IMD) shall be less than 0.25% using the SMPTE standard of 60Hz and 7kHz in a 4:1 ratio respectively at half power. Frequency response shall be from 20Hz to 20k Hz (Max +0.5dB, TYP +0 dB, Min -0.5 dB) at 8 ohms, Po=1W. Residual noise at 20Hz-20kHz shall be less than -65dBu. Input shall be electronically balanced, with a minimum impedance of 20k ohm balanced and 10k ohm unbalanced. The voltage gain shall be configurable in 0.1dB steps between 19.8dB to 43.8dB. Maximum input voltage shall be 24dBu. The unweighted signal to noise ratio over the range of 20Hz-20kHz shall exceed 106dB, 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 excessive operating temperatures exceeding 100° C. The relay shall also delay amplifier connection to the load during turn-on for nine seconds. 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, two MUTE buttons, four Function buttons, a HOME button, an ENTER button, two encoders and LED indicators. The LED indicators shall indicate IDENTIFY, NETWORK, PROTECTION, BRIDGE, PARALLEL, POWER, STANDBY, MUTE, ALERT, CLIP and SIGNAL conditions. Front panel indicators shall include an LCD screen to control the amplifier's setup and operation. Rear panel input connectors shall be a 3-pin XLR connector for each channel and available input connectors via the Mini-YGDAI card. The XLR input shall be wired with pin 2 hot. Rear panel output connectors shall be 5-way binding posts, SPEAKON connectors, XLR Thru outputs and available connectors via the Mini-YGDAI card. The RJ45 Data Port connector shall allow remote control and monitoring via Ethernet connection to the Amp Editor application network. The Fault Output connector shall provide relay contacts rated for a load of 30V DC, 1A to indicate abnormality in the amplifier operation. The amplifier shall include an onboard 32-bit DSP with 24-bit A/D and D/A conversions. The amplifier shall employ patented EEEngine technology including MOSFET based independent high speed current and voltage buffers without delay circuits to improve slew rate. Efficiency @ 1/8 duty cycle shall be 50%. Isolation components shall be provided and output devices shall be mounted by individual screws to minimize sonic degradation caused by vibration. The amplifier shall conform to the latest EU RoHS hazardous substances and WEEE directives. The amplifier shall be certified to meet Underwriters Laboratories Inc.'s safety requirement UL60065 and Intertek ETL SEMKO standard EM60065:2002 at 2 ohms. It shall use only two standard rack-spaces and its dimensions shall be 480mm W x 461mm D x 88mm H. Weight shall be 16 kg. The amplifier shall be YAMAHA TX4n.