

DA-250D (2x 250W @ 4 ohms)

The two-channel power amplifier shall use digital class-D circuit topology and shall be configurable to allow one or two channel operation. Power output in two-channel mode with both channels driven shall be: 250 watts per channel into 4 ohms and 170 watts per channel into 8 ohms. The two channels shall be bridgeable to produce 500 watts into 8 ohms. Total harmonic distortion (THD) shall be less than 0.1% at 1 kHz and less than 0.3% from 20 to 20,000 Hz. Frequency response shall be 20 to 20,000 Hz (+/- 1 dB). Hum and noise shall be 100 dB below rated output (A weighted). Crosstalk shall be better than 70 dB (A weighted). Input sensitivity shall be +4 or -10 dBv (jumper selectable) for rated output, where 0 dBv = 0.775 volts RMS. Input impedance shall be 10k ohms for each side of an electronically balanced input circuit.

Dual-channel or mono-bridged operation shall be selectable via a rear-panel switch. A rear-panel input mode switch shall allow the selection of parallel mode, whereby the signal feeding the channel 1 input terminals is simultaneously fed to both amplifier channels. Rear panel input connector shall be a 3-pin removeable terminal block for each channel. Rear panel output connector shall be a heavy-gauge M4 screw-terminal barrier strip suitable for spade lugs or up to #10 AWG bare wire. The front-panel attenuators shall be recessed to prevent accidental level changes and may be removed and replaced by included security covers once levels have been properly set.

The front panel shall have two sets of four LED indicators to indicate the following conditions for each channel: signal presence at input (greater than -20 dBv), signal presence at output (greater than 1 watt at 8 ohms), peak clipping, and protection circuit activation. The front panel shall also have removable air filters that may be cleaned and reinstalled without removing the amplifier from a rack. The amplifier shall be forced-air fan cooled with the air intake at the front and exhaust at the rear.

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 temperature over 167°F (110° C) via a relay for each channel. The relay shall also delay amplifier connection to the load during turn-on for 3 seconds while the protection circuitry analyzes the load. Power consumption shall be no more than 120 watts when both channels are driven with continuous pink noise at 1/8 full power into 4 ohms (UL/CSA standard), and no more than 650 watts when both channels are driven with continuous pink noise at full power into 4 ohms.

The amplifier shall use only one standard rack-space or 1.75" (44.5 mm) and its dimensions shall be 19" (482 mm) W x 15.8" (401 mm) D x 1.7" (44 mm) H. Front panel finish shall be black anodized aluminum and case finish shall be sheet steel. Weight shall be 11 lbs. (5 kg).

The amplifier shall be TOA model DA-250D.

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DA-250DH (2x 250W @ 70V)

The two-channel power amplifier shall use digital class-D circuit topology and shall be configurable to allow one or two channel operation. Power output in two-channel mode with both channels driven shall be: 250 watts per channel into 19.6 ohms (70.7 volts). The two channels shall be bridgeable to produce 500 watts into 39.2 ohms (140 volts). Total harmonic distortion (THD) shall be less than 0.1% at 1 kHz and less than 0.3% from 20 to 20,000 Hz. Frequency response shall be 20 to 20,000 Hz (+/- 1 dB). Hum and noise shall be 100 dB below rated output (A weighted). Crosstalk shall be better than 70 dB (A weighted). Input sensitivity shall be +4 or -10 dBv (jumper selectable) for rated output, where 0 dBv = 0.775 volts RMS. Input impedance shall be 10k ohms for each side of an electronically balanced input circuit.

Dual-channel or mono-bridged operation shall be selectable via a rear-panel

switch. A rear-panel input mode switch shall allow the selection of parallel mode, whereby the signal feeding the channel 1 input terminals is simultaneously fed to both amplifier channels. Rear panel input connector shall be a 3-pin removeable terminal block for each channel. Rear panel output connector shall be a heavy-gauge M4 screw-terminal barrier strip suitable for spade lugs or up to #10 AWG bare wire. The front-panel attenuators shall be recessed to prevent accidental level changes and may be removed and replaced by included security covers once levels have been properly set. An internal jumper for each channel shall allow independent on/off selection of a 50 Hz high pass filter for protection against excessive low frequency loading and saturation of speaker transformers.

The front panel shall have two sets of four LED indicators to indicate the following conditions for each channel: signal presence at input (greater than - 20 dBv), signal presence at output (greater than 1 watt at 8 ohms), peak clipping, and protection circuit activation. The front panel shall also have removable air filters that may be cleaned and reinstalled without removing the amplifier from a rack. The amplifier shall be forced-air fan cooled with the air intake at the front and exhaust at the rear.

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 temperature over 167°F (110° C) via a relay for each channel. The relay shall also delay amplifier connection to the load during turn-on for 3 seconds while the protection circuitry analyzes the load. Power consumption shall be no more than 120 watts when both channels are driven with continuous pink noise at 1/8 full power into 19.6 ohms (UL/CSA standard), and no more than 580 watts when both channels are driven with continuous pink noise at full rated power into 19.6 ohms.

The amplifier shall use only one standard rack-space or 1.75" (44.5 mm) and its dimensions shall be 19" (482 mm) W x 15.8" (401 mm) D x 1.7" (44 mm) H. Front panel finish shall be black anodized aluminum and case finish shall be sheet steel. Weight shall be 11 lbs. (5 kg).

The amplifier shall be TOA model DA-250DH.

The optional 1:1 line isolation transformer shall be TOA model MT-251H

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DA-250F (4x 250W @ 4 ohms)

The multi-channel power amplifier shall use digital class-D circuit topology and shall be configurable to allow two, three or four channel operation. Power output in four-channel mode with all channels driven shall be: 250 watts per channel into 4 ohms and 170 watts per channel into 8 ohms. Each pair of channels shall be independently bridgeable to produce 500 watts into 8 ohms. Total harmonic distortion (THD) shall be less than 0.1% at 1 kHz and less than 0.3% from 20 to 20,000 Hz. Frequency response shall be 20 to 20,000 Hz (+/- 1 dB). Hum and noise shall be 100 dB below rated output (A weighted). Crosstalk shall be better than 70 dB (A weighted). Input sensitivity shall be +4 or -10 dBv (jumper selectable) for rated output, where 0 dBv = 0.775 volts RMS. Input impedance shall be 10k ohms for each side of an electronically balanced input circuit.

Rear-panel switches shall allow selection of bridged operation for each pair of channels (1-2 and 3-4) independent of the status of the other pair of channels. The amplifier shall operate in 4-channel mode when both switches are deselected, in 3-channel mode when either switch is selected, and 2-channel mode when both switches are selected. A rear-panel input mode switch shall allow the selection of "channel 1 to all" mode, whereby the signal feeding the channel 1 input terminals is simultaneously fed to all other channels. Rear panel input connector shall be a 3-pin removeable terminal block for each channel. Rear panel output connector shall be a heavy-gauge M4 screw-terminal barrier strip suitable for spade lugs or up to #10 AWG bare wire. The front-panel attenuators shall be recessed to prevent accidental level changes and may be removed and

replaced by included security covers once levels have been properly set.

The front panel shall have four sets of four LED indicators to indicate the following conditions for each channel: signal presence at input (greater than -20 dBv), signal presence at output (greater than 1 watt at 8 ohms), peak clipping, and protection circuit activation. The front panel shall also have removable air filters that may be cleaned and reinstalled without removing the amplifier from a rack. The amplifier shall be forced-air fan cooled with the air intake at the front and exhaust at the rear.

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 temperature over 167°F (110° C) via a relay for each channel. The relay shall also delay amplifier connection to the load during turn-on for 3 seconds while the protection circuitry analyzes the load. Power consumption shall be no more than 200 watts when all channels are driven with continuous pink noise at 1/8 full power into 4 ohms (UL/CSA standard), and no more than 1,300 watts when all channels are driven with continuous pink noise at full rated power into 4 ohms.

The amplifier shall use only one standard rack-space or 1.75" (44.5 mm) and its dimensions shall be 19" (482 mm) W x 15.8" (401 mm) D x 1.7" (44 mm) H. Front panel finish shall be black anodized aluminum and case finish shall be sheet steel. Weight shall be 14.6 lbs. (6.6 kg).

The amplifier shall be TOA model DA-250F.

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DA-250FH (4x 250W @ 70V)

The multi-channel power amplifier shall use digital class-D circuit topology and shall be configurable to allow two, three or four channel operation. Power output in four-channel mode with all channels driven shall be: 250 watts per channel into 19.6 ohms (70.7 volts). Each pair of channels shall be independently bridgeable to produce 500 watts into 39.2 ohms (140 volts). Total harmonic distortion (THD) shall be less than 0.1% at 1 kHz and less than 0.3% from 20 to 20,000 Hz. Frequency response shall be 20 to 20,000 Hz (+/- 1 dB). Hum and noise shall be 100 dB below rated output (A weighted). Crosstalk shall be better than 70 dB (A weighted). Input sensitivity shall be +4 or -10 dBv (jumper selectable) for rated output, where 0 dBv = 0.775 volts RMS. Input impedance shall be 10k ohms for each side of an electronically balanced input circuit.

Rear-panel switches shall allow selection of bridged operation for each pair of channels (1-2 and 3-4) independent of the status of the other pair of channels. The amplifier shall operate in 4-channel mode when both switches are deselected, in 3-channel mode when either switch is selected, and 2-channel mode when both switches are selected. A rear-panel input mode switch shall allow the selection of "channel 1 to all" mode, whereby the signal feeding the channel 1 input terminals is simultaneously fed to all other channels. Rear panel input connector shall be a 3-pin removeable terminal block for each channel. Rear panel output connector shall be a heavy-gauge M4 screw-terminal barrier strip suitable for spade lugs or up to #10 AWG bare wire. The front-panel attenuators shall be recessed to prevent accidental level changes and may be removed and replaced by included security covers once levels have been properly set. An internal jumper for each channel shall allow independent on/off selection of a 50 Hz high pass filter for protection against excessive low frequency loading and saturation of speaker transformers.

The front panel shall have four sets of four LED indicators to indicate the following conditions for each channel: signal presence at input (greater than -20 dBv), signal presence at output (greater than 1 watt at 8 ohms), peak clipping, and protection circuit activation. The front panel shall also have removable air filters that may be cleaned and reinstalled without removing the amplifier from a rack. The amplifier shall be forced-air fan cooled with the air

intake at the front and exhaust at the rear.

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 temperature over 167°F (110° C) via a relay for each channel. The relay shall also delay amplifier connection to the load during turn-on for 3 seconds while the protection circuitry analyzes the load. Power consumption shall be no more than 200 watts when all channels are driven with continuous pink noise at 1/8 full power into 19.6 ohms (UL/CSA standard), and no more than 1,200 watts when all channels are driven with continuous pink noise at full rated power into 19.6 ohms.

The amplifier shall use only one standard rack-space or 1.75" (44.5 mm) and its dimensions shall be 19" (482 mm) W x 15.8" (401 mm) D x 1.7" (44 mm) H. Front panel finish shall be black anodized aluminum and case finish shall be sheet steel. Weight shall be 14.6 lbs. (6.6 kg).

The amplifier shall be TOA model DA-250FH.

The optional 1:1 line isolation transformer shall be TOA model MT-251H

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DA-500F-HL

The multi-channel power amplifier shall use digital class-D circuit topology and shall be configurable to allow two, three or four channel operation. Power output in four-channel mode with all channels driven shall be: 500 W at 70.7 V (9.8 ohms), 550 W at 8 ohms, and 100 W into 4 ohms per channel. Each pair of channels shall be independently bridgeable to produce 1000 W into 140 V (19.6 ohms), 1100 W at 16 ohms. Total harmonic distortion (THD) shall be less than 0.1% @ 1 kHz, 0.3 % (20 to 20,000 Hz) HPF OFF, and 0.3 % (100 to 20,000 Hz) HPF ON. The frequency response shall be 50 to 20,000 Hz (+1/-3 dB). The frequency response shall be 20 to 20,000 Hz (+1/-2 dB) HPF OFF. The signal to noise ratio shall be 100 dB (A-weighted). The crosstalk shall be 70 dB (A-weighted). The input impedance shall be 10k ohms for each input into an electronically balanced input circuit.

Rear panel switches shall allow selection of bridged operation for each pair of channel (1-2 and 3-4) independent of the status of the other pair of channels. A rear channel input mode switch shall allow the selection of "input 1 to all" mode, whereby the signal from input 1 is simultaneously fed to all other channels. Each input shall feature a 3 pin phoenix block and XLR connector. Rear panel output connector shall be a heavy-gauge M4 screw-terminal barrier strip suitable for use with spade lugs or up to #10 AWG bare wires. The front panel attenuators shall be recessed to prevent accidental level changes and may be removed and replaced by included security covers once levels have been properly set. A dip switch on the rear of the unit shall allow independent on/off selection of a 50 Hz (-6 dB/Oct) high-pass filter (HPF) cut-off for protection against excessive low frequency loading and saturation of speaker transformers.

The front panel shall have four sets of four LED indicators to indicate the following conditions: signal presence at input (greater than -20 dB), signal presence at output (greater than 1 W @ 9.8 ohms load), peak clipping, and protection circuit activation. The front panel shall also have four removable air filters that may be removed for cleaning without removing the amplifier from the rack. The amplifier shall be forced-air fan cooled with the air intake at the front and exhaust at the rear.

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 temperature at power amp heat sink over 212° F (100° C) or excessive operating temperature at power supply heat sink over 176° F (80° C) via a relay for each channel. The relay shall also delay amplifier connection to the load during turn-on for about 2 seconds while the protection circuitry analyzes the load. Power consumption shall be 480 W (based

on UL/CSA standards) and 2600 W (rated output 8 ohms x 4 channels). Each channel shall be equipped with control/monitor terminals to permit power on/off control of each channel, status monitoring of power on/off, protection and fan operation for each channel. The control panel and monitor display shall be a custom made non-TOA piece. The control/monitor connection shall be made via two RJ-45 connectors.

The amplifier shall use two standard rack-spaces or 3.48" (88.4 mm) and its dimensions shall be 18.98" (482 mm) W x 15.91" (404.2 mm) D x 3.48" (88.4 mm) H. Front panel finish shall be black anodized aluminum and case finish shall be sheet steel. Weight shall be 19.4 lbs (8.8 kg).

The amplifier shall be a TOA model DA-500F-HL.
The optional 1:1 line isolation transformer shall be TOA model MT-251H

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DA-550F

The multi-channel power amplifier shall use digital class-D circuit topology and shall be configurable to allow two, three or four channel operation. Power output in four-channel mode with all channels driven shall be: 550 W at 4 ohms and 350 W at 8 ohms. Each pair of channels shall be independently bridgeable to produce 1100 W at 8 ohms. Total harmonic distortion (THD) shall be less than 0.1% @ 1 kHz, 0.15 % (20 to 20,000 Hz). The frequency response shall be 20 to 20,000 Hz (-2/+1 dB). The signal to noise ratio shall be 100 dB (A-weighted). The crosstalk shall be 70 dB (A-weighted). The input impedance shall be 10k ohms for each input into an electronically balanced input circuit.

Rear panel switches shall allow selection of bridged operation for each pair of channel (1-2 and 3-4) independent of the status of the other pair of channels. A rear channel input mode switch shall allow the selection of "input 1 to all" mode, whereby the signal from input 1 is simultaneously fed to all other channels. Each input shall feature a 3 pin phoenix block and XLR connector. Rear panel output connector shall be a heavy-gauge M4 screw-terminal barrier strip suitable for use with spade lugs or up to #10 AWG bare wires. The front panel attenuators shall be recessed to prevent accidental level changes and may be removed and replaced by included security covers once levels have been properly set.

The front panel shall have four sets of four LED indicators to indicate the following conditions: signal presence at input (greater than -20 dB), signal presence at output (greater than 1 W @ 8 ohms load), peak clipping and protection circuit activation. The front panel shall also have four removable air filters that may be removed for cleaning without removing the amplifier from the rack. The amplifier shall be forced-air fan cooled with the air intake at the front and exhaust at the rear.

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 temperature at power amp heat sink over 212° F (100° C), or excessive operating temperature at power supply heat sink over 176° F (80° C) via a relay for each channel. The relay shall also delay amplifier connection to the load during turn-on for about 2 seconds while the protection circuitry analyzes the load. Power consumption shall be 480 W (based on UL/CSA standards) and 2800 W (rated output 4 ohms x 4 channels), and 1650 W (rated output at 8 ohms x 4 channels). Each channel shall be equipped with control/monitor terminals to permit power on/off control of each channel, status monitoring of power on/off, protection and fan operation for each channel. The control panel and monitor display shall be a custom made non-TOA piece. The control/monitor connection shall be made via two RJ-45 connectors.

The amplifier shall use two standard rack-spaces or 3.48" (88.4 mm) and its dimensions shall be 18.98" (482 mm) W x 15.91" (404.2 mm) D x 3.48" (88.4 mm) H. Front panel finish shall be black anodized aluminum and case finish shall be sheet steel. Weight shall be 19.4 lbs (8.8 kg).

The amplifier shall be a TOA model DA-550F.