

20W TABLETOP MIXER-AMPLIFIER 70V/100V

Model: DA20T

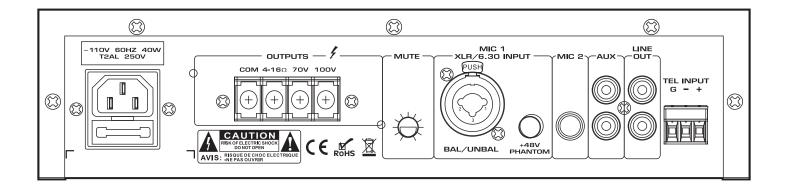


Description: The DA20T provides 20 watts of power for speakers which can be 70V, 100V, or 4 - 16 ohm speakers. Four inputs allow for two microphones, line level (BGM), and telephone paging with level controls for each input on the front panel. Bass, treble, and master volume controls are present so you can tailor the response to suit your specific needs.

Priority muting temporarily "ducks" your background music (BGM) or other material when the MIC 1 input or the telephone input receives signal. For MIC 1, the level of reduction is adjustable from 0 - 20 dB. The MIC 1 input also offers +48V phantom power, which may be engaged or disengaged as needed. Line output is delivered via RCA jacks to feed signal to outboard equipment such as a recorder or additional zone amplifier.

Features:

- · Rated Power: 20W
- 100V, 70V constant voltage outputs and 4~16 ohms constant resistance output.
- Commercial grade toroidal transformers produce high performance audio on a wide range of frequencies with minimum noise and high fidelity even at high volume.
- Protection against overload, short circuit and power fluctuation for optimum reliability.
- VOX feature mutes AUX inputs when input is detected on MIC 1. Time fade adjustment control allows resumption of music to be quick or gradual.
- Phantom power available on MIC 1 input for condenser type microphones.
- TEL priority: TEL input will override AUX 1-2 and MIC 1-2.



Technical Specifications:

Model	DA20T
Rated power output	20W
Speaker output	4~16 ohms, 70V, 100V
S/N	MIC: 66 dB; AUX: 80 dB
Frequency response (@ 1 kHz half-power output, -3 dB)	80 - 16,000 Hz
Tone control (Bass:100 Hz, Treble:10 kHz)	± 10 dB
Input sensitivity/impedance	MIC 1, 2: 5mV/1,000 ohms
	AUX: 350mV/10,000 ohms
	TEL: 350mV/10,000 ohms
Line out	1,000mV/470 ohms
Total harmonic distortion	Less than 0.5%
Muting function	TEL takes precedence over all the audio input
	MIC 1 prior to the other audio input (except TEL)
Channel crosstalk (separation)	50 dB
Cooling mode	Air cooling
Power source	~110V, 60 Hz
Power consumption	40W
Weight	7.94 lbs.
Dimensions	10.87" W x 9.65" D x 2.76" H
MIC 1~2 input section (CH1~2 in @ 1 kHz, preamp out)	
Input sensitivity/impedance	5mV/1,000 ohms
AUX 1 input section (AUX in @ 1 kHz, preamp out)	
Input sensitivity/impedance	350mV/10,000 ohms
TEL input section (TEL in @ 1 kHz, preamp out)	
Input sensitivity/impedance	350mV/10,000 ohms
Phantom power	+48 VDC

Architect & Engineer Specifications:

The amplifier shall be the Dayton Audio DA20T, a 70V/100V constant voltage or 4-16 ohms constant resistance output contractor amplifier with 20 watt output power. The amplifier shall provide a frequency response of 80 - 16,000 Hz at 1 kHz half-power output, -3 dB.

The amplifier shall provide $1 \times LR 1/4$ " combo MIC input as well as a front mounted 1/4" jack, 11/4" MIC 2 input, Phoenix style telephone input, and 1 stereo RCA AUX inputs. Phantom power (+48V) shall be optional via a rear mounted button on MIC 1 input. MIC input sensitivity shall be 5mV, 1,000 ohms at 1 kHz. AUX input sensitivity shall be 350mV, 10,000 ohms at 1 kHz. TEL input sensitivity shall be 350mV, 10,000 ohms at 1 kHz. Each input on the amplifier shall have a continuously adjustable input level control mounted on the front of the amplifier. The amplifier shall also feature a continuously adjustable master volume control.

The front of the amplifier shall feature a power on/off toggle switch with a LED power indicator that reflects the current power status of the amplifier. The front of the amplifier shall also provide LED feedback for signal output indicators and protection mode status (LED will illuminate when amplifier is in protection mode due to overheating or overload). The amplifier shall provide an alarm sound when powered on if the amplifier is overloaded, short circuiting, or the input voltage is not stable, too high or too low.

The amplifier shall provide speaker terminals for either 70V, 100V, or 4-16 ohm operation. The amplifier shall drive ether the 70V, 100V, or 4-16 ohm output at a single time. If 70V/100V voltage is used the speakers must use a transformer. The total power wattage of the speakers must be 15% less than the power wattage of the amplifier. The total load impedance of the speaker system shall be 245 ohms in 70V configuration and 500 ohms in 100V configuration. The amplifier shall also feature a stereo RCA line output for connecting to other amplifiers. The amplifier shall have a line level output impedance of 1,000mV, 470 ohms.

The front panel shall provide adjustable bass and treble controls for the output of the amplifier. The bass control shall provide an adjustable boost or cut of 10 dB at 100 Hz, the treble control shall provide an adjustable boost or cut of 10 dB at 10,000 Hz.

The amplifier shall provide a priority mute function where TEL has priority over all other inputs. MIC1 is secondary priority, adjusting the mute level shall override all other input signals except for the TEL input. The amplifier shall provide a continuously adjustable mute level from 0-20 dB during signal override of all channels by MIC1 input. The amplifier shall feature a VOX function that mutes AUX inputs when input on MIC1 is detected. A time adjust control allows for a desired fade in time when MIC1 signal is complete.

The amplifier's internal circuity shall feature overload, short circuit, and power fluctuation protection. The amplifier shall be constructed with commercial-grade toroidal transformers that provide a large frequency range with minimal noise, even at high volumes. The amplifier shall also feature an air cooling configuration to minimize heat build-up.

 $The amplifier shall operate on 110 \ VAC, 60 \ Hz. \ The amplifier shall consume 40 \ watts of power while in operation.$

The amplifier shall have dimensions of 10.87" W x 9.65" D x 2.76" H. The amplifier shall have a weight of 7.94 lbs.



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