

### Specifications:

<b>Power Output:</b>	50 watts RMS x 2 into 8 ohm
<b>Total Harmonic Distortion:</b>	<0.01% @30W <5.0% @50W
<b>Minimum Speaker Impedance:</b>	6 ohm
<b>Signal-to-Noise Ratio:</b>	103 dB, A weighted
<b>Input Impedance:</b>	2 k ohm $\pm$ 5%
<b>Frequency Response:</b>	20-20,000 Hz
<b>Channel Separation:</b>	95 dB
<b>Efficiency:</b>	85%
<b>Dynamic Range:</b>	>100 dB
<b>Electrical Requirement:</b>	24VDC @ 5A center pin positive
<b>Dimensions:</b>	2" H x 3.375" W x 5.625" D
<b>Weight:</b>	1.0 lbs

**Note: Operating this unit with a 4 Ohm load may result in damage to the amplifier and void the warranty.**

### Package Contents:

- DTA-100a 100W Digital Class T Amplifier
- World compatible 24V@5A switch mode power supply
- 2 sets of screw-type banana plugs for speaker connection
- 3.5mm to 1/4" headphone adapter
- 3.5mm to 2 RCA "Y" cable
- 6" coiled 3.5mm audio input cable

### Important Safety Instructions

To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified personnel. To reduce the risk of fire and shock do not expose unit to rain or moisture. The unit should be connected to an earth grounded AC electrical socket. The unit should be operated in a well ventilated area. Minimum clearance is 2 inches from the ventilation openings.

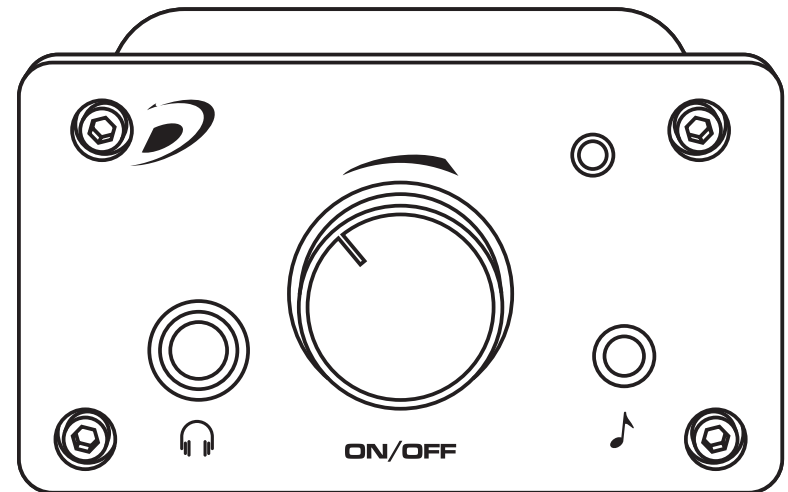


### Warranty

*The Dayton Audio DTA-100a is warranted free from defects in material and workmanship for one year from date of purchase. Warranty does not apply to misuse, abuse, neglect, accident, improper use, etc. Note: If an inappropriate power supply or 4 Ohm speakers are used and the unit is damaged, the warranty will be voided.*



# 100 Watt Class T Digital Audio Amplifier



**Model: DTA-100a**

# User Manual

[www.daytonaudio.com](http://www.daytonaudio.com)

**Thank you** for purchasing the Dayton Audio DTA-100a Class T Digital Audio Power Amplifier. This amplifier features the Tripath TK2050 chipset that provides 50W continuous power per channel (100W total) into an 8 ohm load. Class T amplifiers using Tripath's proprietary Digital Power Processing™ technology offer the audio fidelity of a Class AB amplifier while providing the power efficiency of a Class D.

#### Features:

- 50W per channel continuous (100W total) into an 8 ohm load
- Audiophile quality sound with less than 0.01% THD @ 30W
- ¼" Headphone jack allows the unit to double as a high fidelity headphone amplifier
- Convenient front mounted 3.5mm input for quick connection of portable audio devices
- Compact extruded aluminum housing with thick black anodized faceplate
- Rear mounted RCA-type input for permanent connection of larger audio devices
- Short circuit, thermal, and overload protection

#### Front Panel:

##### 1. Power LED

Blue power LED indicates the unit is receiving power and is fully operational.

##### 2. Power / Volume control

This control turns on the unit and adjusts the volume level of the amplifier. When the unit is turned on the power LED will become fully illuminated. To turn the unit off, turn the control fully counter clockwise until it "clicks" to the off position. It is normal for the power LED to slowly dim and then go completely out when the unit is first turned off.

##### 3. Headphone Jack

The DTA-100a also doubles as a high fidelity headphone amplifier that will drive any headphone easily and delivers colossal sound stage and effortless dynamic range. The ¼" stereo jack allows connection of larger home and studio-style headphones. An adapter is also provided so that smaller 3.5mm personnel style headphones can be used.

**Note:** When headphones are plugged into the headphone jack the speaker output connections are disconnected.

##### 4. 3.5mm Audio Input

The unit features a convenient front mounted 3.5mm stereo input for quick connection of iPods, MP3 players, and other portable audio devices. A 6" 3.5mm coiled cable that stretches to 12" is included.

**Note:** When a device is plugged into the 3.5mm audio input the rear mounted RCA input jacks are disconnected. This allows the user to permanently connect a device to the rear RCA audio inputs and switch to a portable device by simply plugging into the front mounted input.

#### Rear Panel:

##### 5. Power Connection

The DTA-100a operates on 24VDC and MUST be used with a power supply that can provide at least 5A. A world compatible (100V-240V) switch mode power supply is included with the unit and is supplied with a U.S.A. style cord. To operate in other countries an appropriate power cord will need to be purchased. The power connection on the unit is a 2.5mm x 5.5mm jack with center pin being positive. **Note:** If an inappropriate power supply is used and the unit is damaged, the warranty will be voided.

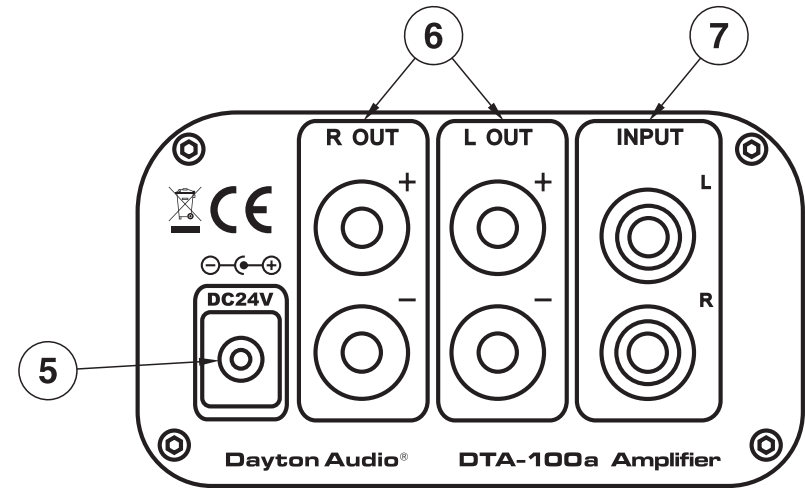
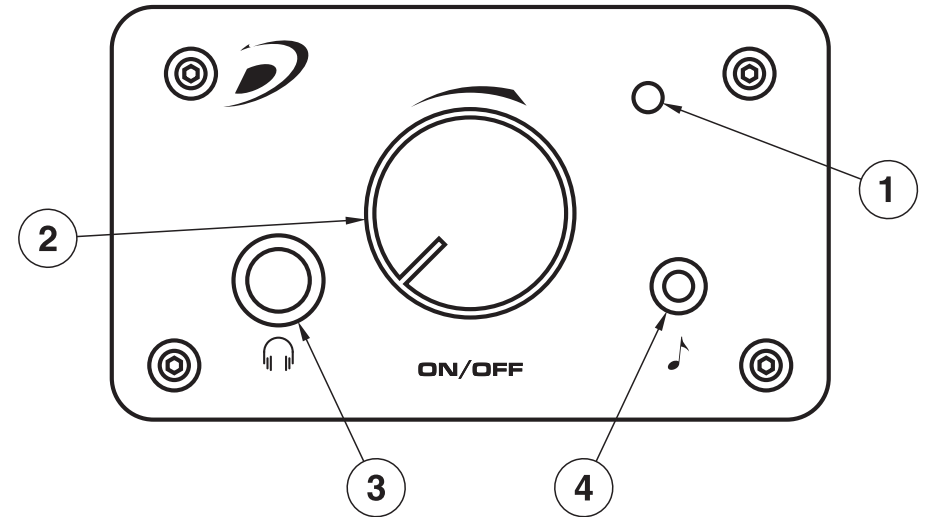
##### 6. Speaker Outputs

The speaker output connections utilize high current banana plug receptacles that are spaced on ¾" centers and are compatible with standard double banana plug connectors (sold separately). The connections are color coded for easy polarity identification. High quality screw-on banana plugs that will accept 10AWG-18AWG wire are included.

##### 7. RCA-Type Audio Input

RCA-type line level input for permanent connection of larger devices such as CD players, PCs, and DVD players. An RCA to 3.5mm adapter is also provided for added connection flexibility. **Note:** When a device is plugged into the front mounted 3.5mm input, the RCA input jacks are disconnected.

## Front Panel



## Rear Panel

### Connecting your loudspeakers to the DTA-100a

Ensure that the amplifier is powered down. Locate the banana plugs and remove the protective rubber boots. Loosen the set screws using a small straight blade screw driver.

Remove approximately 1/2" of the insulation from your speaker wire positive and negative conductors. Slide the appropriate colored (red for positive, black for negative) rubber boot over the speaker wire. Insert the conductors into the banana plugs and tighten the set screws and slide protective rubber boots back into place. While observing proper polarity insert banana plugs into the speaker output receptacles on the back of the DTA-100a.