

## Overview

The DA824 is 8-channel 24-bit DA Converter Compatible with a Range of Digital Audio Formats.





Rear Panel

### **Features**

- 2U size.
- 8-channel 24-bit digital-to-analog converters.
- Balanced XLR and 1/4" phone jack output connectors.
- Maximum +4, +15, +18, or +24 dBm output level individually selectable for each channel.
- Expansion slot supports optional Mini-YGDAI cards for AES/EBU, ADAT and TASCAM digital formta.
- Word clock input and thru connectors.
- Signal, nominal, and peak LED indicators.



# **Specifications**

#### **General Specifications**

Sampling Rate	MY8-AE, MY8-TD	39.69–50.88 kHz		
ouniphing hato	MY8-AT	41.013–50.88 kHz		
DA Conversion Resolution		24-bit linear, 128-times oversampling		
Frequency Response		-3, +1 dB, 20 Hz-20 kHz		
Dynamic Range*1		110 dB (typical)		
Gain Error		±1 dB @ 1 kHz		
THD*2		0.05%, 20 Hz–20 kHz		
		0.01% full scale output @ 1 kHz		
Hum & Noise Level*1		-92 dBu (typical)		
Crosstalk		-70 dB between adjacent channels @ 1 kHz		
Signal Delay		0.57 ms (digital input to analog output, $fs = 48$ kHz)		
	PEAK	3 dB below full scale		
	NOMINAL	14 dB below full scale		
Indicators	SIGNAL	34 dB below full scale		
	LOCK	Wordclock lock		
	POWER	Power on/off		
Power Requirements		U.S.A. & Canada 120 V AC, 60 Hz Europe 230 V AC, 50 Hz		
Power Consumpt	ion	40 W		
Dimensions (W ×	H × D)	480mm × 97.5mm × 366.8mm (18.9" x 3.84" x 14.44")		
Net Weight		7.5 kg (16.53 lbs)		
Free-air Operating Temperature		10° C to 35° C (50° F to 95° F)		
Storage Temperature		-20° C to 60° C (-4° F to 140° F)		
Power Cord Length		1.9 m		
Supplied Accessories		Owner's Manual		

\*1 Measured with a 6 dB/octave filter at 12.7 kHz; equivalent to a 20 kHz filter with infinite dB/octave attenuation.

\*2 6 dB/octave filter @ 80 kHz.

\*\* Where dB represents a specific voltage, 0 dB is referenced to 0.775 V rms, 0 dBV is referenced to 1.00 V rms.

### **Analog Output**

		Actual	For Use with	Output Level		
Connection	GAIN SW	Source Impedance	Nominal		Max. before Clip	Connector
0UTPUT 1-8*1	+24 dB	- 150 Ω lines	600 Ω lines	+10 dB (2.45 V)	+24 dB (12.28 V)	XLR-3-32 type (balanced) <sup>2</sup> & TRS phone jack (balanced) <sup>3</sup>
	+18 dB			+4 dB (1.23 V)	+18 dB (6.16 V)	
	+15 dB			+1 dB (0.87 V)	+15 dB (4.36 V)	
	+4 dBV			-10 dBV (0.316 V)	+4 dBV (1.58 V)	

\*1 24-bit 128-times oversampling D/A converters.

\*2 XLR-type connectors are electronically balanced (pin 1 = ground, pin 2 = hot, pin 3 = cold).

\*3 TRS phone jacks are electronically balanced (tip = hot, ring = cold, sleeve = ground).

\*\* Where dB represents a specific voltage, 0 dB is referenced to 0.775 V rms, 0 dBV is referenced to 1.00 V rms.

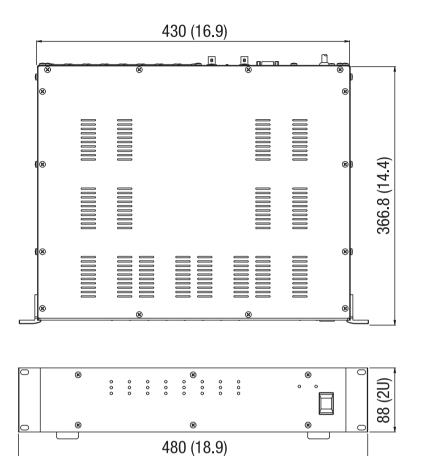
### Digital I/O

Connection	Format	Level/Impedance	Connector
COM	—	RS232C	9-pin D-sub (male)
WORD CLOCK IN	_	TTL, 75Ω (ON/OFF)	BNC
WORD CLOCK THRU	—	TTL, 75Ω	BNC
SLOT	mini YGDAI	—	_



Unit: mm (inch)

## Dimensions





# **Architectural and Engineering Specifications**

The Yamaha DA824 shall be a 2U-size 8-channel digital-to-analog converter. The DA824 shall have precision 24-bit DA conversion in order to provide high conversion and sonic quality. The following control I/O and expansion facilities shall be provided: an AES/EBU I/O terminal, an ADAT terminal, an MY slot that allows TASCAM format support, a COM port, and word clock IN and THRU terminals. Dimensions shall be 480 (W) x 97.5 (H) x 366.8 (D) mm. Weight shall be 7.5 kg.

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