

Overview

The RY16-DA is a 16-channel analog output card for RIVAGE PM systems. Maximum output level is switch selectable: +15dBu, +18dBu, or +24dBu. The factory setting is +24dBu.



Features

- 16-channel analog output
- Dimensions (W x H x D): 405 x 42 x 258 mm
- Net Weight: 1.5 kg

Specifications

General Specifications

Measured with an RPi0622

Frequency Response

Fs=44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz @ 20 Hz – 20 kHz, reference to the nominal output level (-20dBFS) @ 1 kHz

Input	Output	RL	Conditions	Min.	Typ.	Max.	Unit
DIGITAL IN	CH1-16	600Ω	-	-0.8	-	0.5	dB

Total Harmonic Distortion

Fs=44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz

Input	Output	RL	Conditions	Min.	Typ.	Max.	Unit
DIGITAL IN	CH1-16	600Ω	Full scale output @ 1 kHz	-	-	0.006	%
			+4dBu output @ 20 Hz – 20 kHz	-	-	0.02	%

Total Harmonic Distortion is measured with an 18dB/octave filter @ 80 kHz.

Hum & Noise

Fs=44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz

Input	Output	RL	Conditions	Min.	Typ.	Max.	Unit
DIGITAL IN	CH1-16	600Ω	-	-	-92	-	dBu

Hum & Noise is measured with an IHF-A filter.

Dynamic Range

Fs=44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz

Input	Output	RL	Conditions	Min.	Typ.	Max.	Unit
DIGITAL IN	CH1-16	600Ω	-	-	116	-	dB

Dynamic range is measured with an IHF-A filter.

Crosstalk

@1 kHz Fs=44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz

Input	Output	RL	Conditions	Min.	Typ.	Max.	Unit
CH N	CH (N-1) or (N+1)	600Ω	Adjacent outputs	-	-	-100	dB

•Reference level is 23dBu.

•Crosstalk is measured with a 30dB/octave filter @ 22 kHz.

Sampling Frequency

Conditions	Min.	Typ.	Max.	Unit	
Frequency Range	Fs=44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz	-1000	-	+1000	ppm

Temperature Range

Conditions	Min.	Typ.	Max.	Unit	
Temperature Range	Operating Temperature Range	0	-	40	°C
	Storage Temperature Range	-20	-	60	°C

Analog Output Characteristics

Input Terminals	Actual Source Impedance	For Use with Nominal	Max. Output Level Select SW *4	Input Level		Connector
				Nominal (-20dBFS)	Max (0dBFS)	
CH1-16	75Ω	600 Ω Lines	+24dBu (default)	+4dBu (1.23V)	+24dBu (12.3 V)	XLR-3-32 type(Balanced) *2
			+18dBu	-2dBu (0.616 V)	+18dBu (6.16 V)	
			+15dBu	-5dBu (0.436 V)	+15dBu (4.36 V)	

*1 0dBu is referenced to 0.775 Vrms.

*2 1=GND, 2=HOT, 3=COLD

*3 All DA converters are 24 bit linear, 128 times oversampling. (Fs=44.1 kHz, 48 kHz) / 64 times oversampling. (Fs=88.2 kHz, 96 kHz)

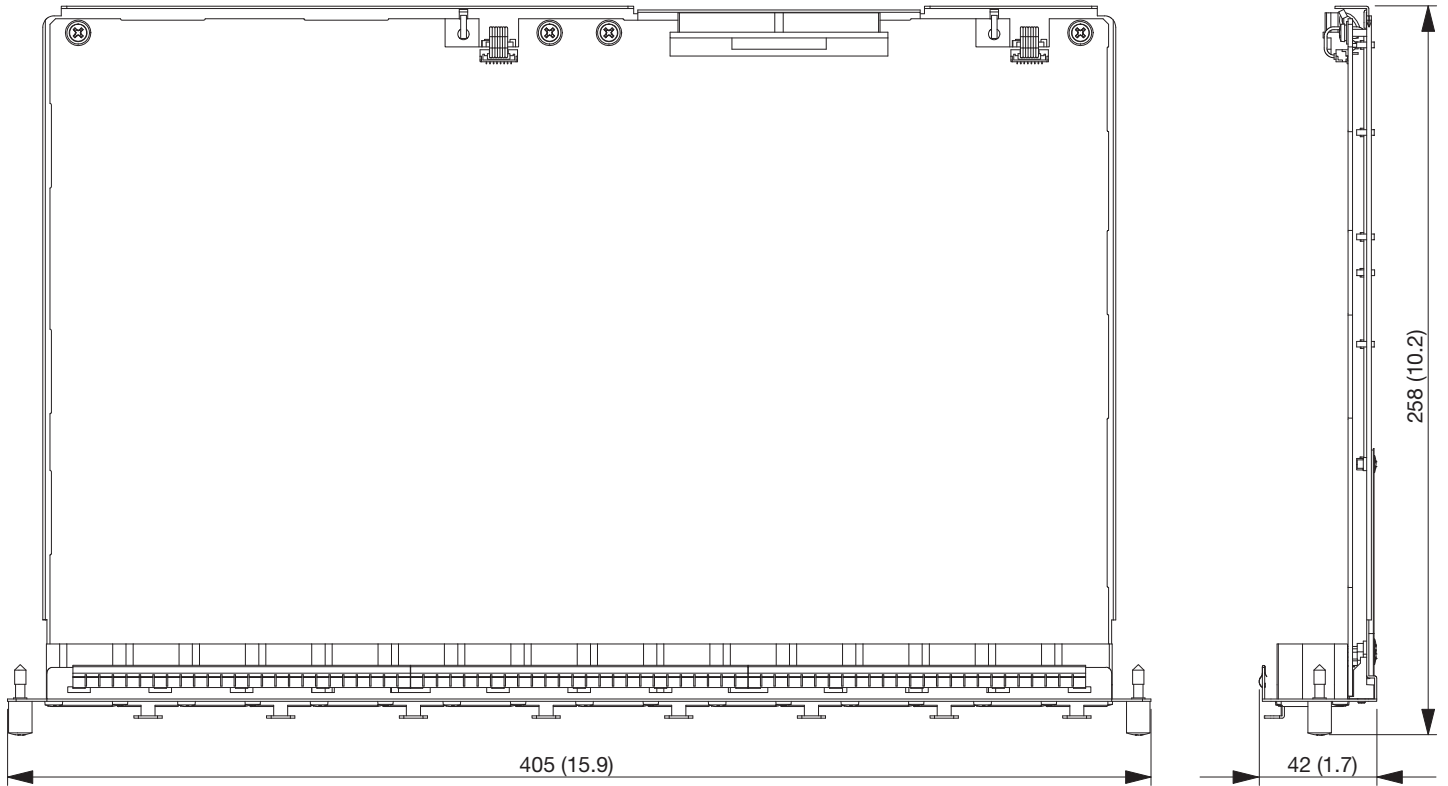
*4 +20dBu output level is also available by hardware modification. Please contact the Yamaha representative or authorized distributor in your region.

Others

Dimensions (W x H x D), Weight	405mm x 42mm x 258mm (16" x 1.7" x 10.2"), 1.5kg (3.3lbs)
Accessories	Owner's Manual

Dimensions

Unit: mm (inch)



Architectural and Engineering Specifications

The Yamaha RY16-DA shall be an Audio Interface Card for use with the Yamaha RIVAGE PM Digital Mixing System. The RY16-DA shall have 16 channels output. Dimensions shall be 405 (W) x 42 (H) x 258 (D) mm. Weight shall be 1.5 kg.

*All information subject to change without notice.

*All trademarks and registered trademarks are property of their respective owners.

Created in March, 2020

YAMAHA CORPORATION
P.O.BOX 1, Hamamatsu Japan
www.yamaha.com/proaudio/