

Overview

The RY16-ML-SILK is a 16-channel mic/line input card for the RIVAGE PM series that features high-performance analog mic preamplifiers with digitally modeled SILK processing from Rupert Neve Designs on all channels.



Features

- 16-channel mic/line input
- SILK digital processing technology that has been co-developed by Rupert Neve Designs and Yamaha
- Dimensions (W x H x D): 405 x 42 x 258 mm
- Net Weight: 1.6 kg

Specifications

General Specifications

Measured with an RPi0622

DIGITAL OUT refers to the AES/EBU OUT of an RY16-AE inserted in another slot of the RPi0622.

Output impedance of signal generator: 150 ohms

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	Conditions	Min.	Typ.	Max.	Unit
CH1-16	DIGITAL OUT	GAIN: +66 dB	-0.5	-	0.5	dB
		GAIN: -6 dB	-0.5	-	0.5	dB

Total Harmonic Distortion

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

Input	Output	Conditions	Min.	Typ.	Max.	Unit
CH1-16	DIGITAL OUT	-1dBFS output @ 1 kHz, GAIN: +66dB	-	-	0.05	%
		-1dBFS output @ 1 kHz, GAIN: -6dB	-	-	0.05	%

Total Harmonic Distortion is measured with an IHF-A filter.

Hum & Noise

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

Input	Output	Conditions	Min.	Typ.	Max.	Unit
CH1-16	DIGITAL OUT	Rs=150Ω, GAIN: +66 dB	-	-86	-	dB
		Rs=150Ω, GAIN: -6 dB	-	-116	-	dB

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

Crosstalk

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

Input	Output	Conditions	Min.	Typ.	Max.	Unit
CH N	CH (N-1) or (N+1)	Adjacent inputs, GAIN: -6dB	-	-	-90	dB

- Reference level is -1dBFS (N).
- Crosstalk is measured with an IHF-A filter.

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	Gain	Actual Load Impedance	For Use with Nominal	Input Level		Connector
				Nominal Unbalanced (-20dBFS)	Max (0dBFS)	
CH1-16	+66dB	10 kΩ	50 – 600 Ω Mics & 600 Ω Lines	-62dBu (616 uV)	-42dBu (6.16 mV)	XLR-3-31 type (Balanced) ^{*2}
	-6dB			+10dBu (2.45 V)	+30dBu (24.5 V)	

*1 In these specifications, when dBu represents specific voltage values, 0dBu is referenced to 0.775 Vrms.

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

*3 CH1 – 16 AD converters are 24 bit linear.

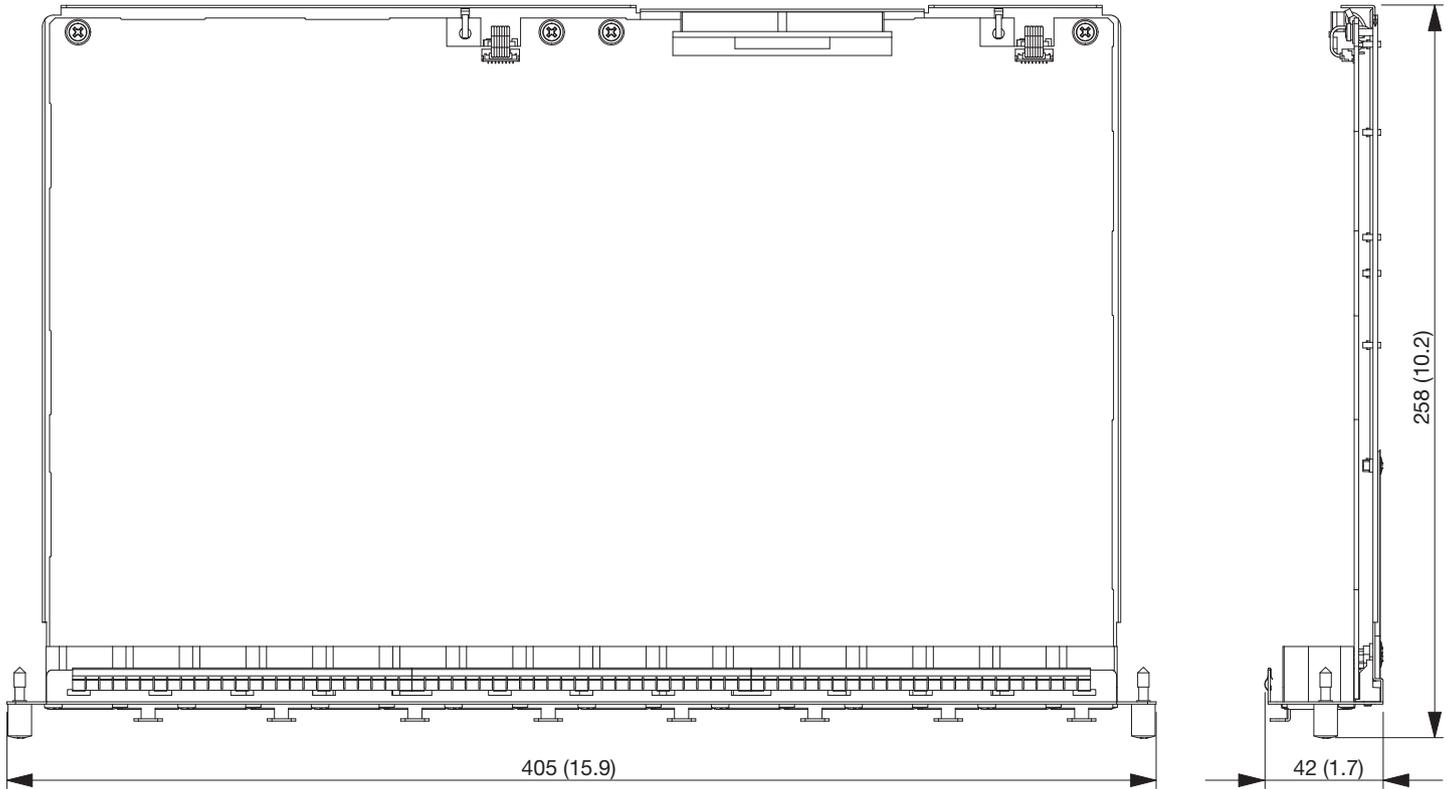
*4 +48V DC (phantom power) is individually supplied to CH1 – 16 XLR connectors via each individual software controlled switch.

Others

Dimensions (W x H x D), Weight	405mm x 42mm x 258mm (16" x 1.7" x 10.2"), 1.6kg (3.5lbs)
Accessories	Owner's Manual

Dimensions

Unit: mm (inch)



Architectural and Engineering Specifications

The Yamaha RY16-ML-SILK shall be an Audio Interface Card for use with the Yamaha RIVAGE PM Digital Mixing System. The RY16-ML-SILK shall have 16 channels mic/line input and mic preamplifiers shall be digitally modeled SILK processing form Rupert Neve Designs on all channels. Dimensions shall be 405 (W) x 42 (H) x 258 (D) mm. Weight shall be 1.6 kg.

*All information subject to change without notice.

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