



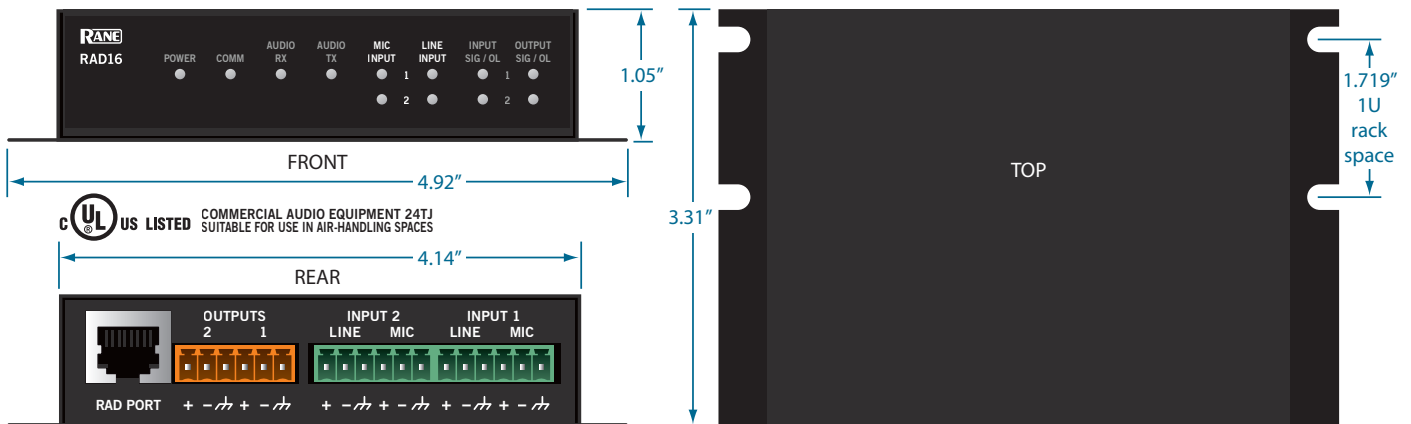
General RAD Description

The entire family of RAD models interface with HAL or Mongoose, for digital conversion at the wall. Each converts analog audio to and/or from 24-bit, 48 kHz digital audio. Shielded CAT 5e (or better) cable and termination transport four digital audio channels – two channels each direction – as well as power, ground and a communications channel, with status indicators at each RAD, HAL, EXP or Mongoose unit, and in Halogen or Tracker software. The host HAL or Mongoose auto-checks the CAT 5 crimp and verifies audio. All RADs are both “location-aware” and hot-swappable with 500-foot homerun connections (66% farther than Ethernet). Light sensors dim the RAD indicators in dark rooms. Labels can be made and printed from Halogen or Tracker software.

RAD16

A RAD16 provides an alternative to standard switchboxes for areas in which a switchbox is impractical. Its form factor is a rugged metal box with flexible mounting options. It contains two balanced mic / line inputs on Euroblock connectors, and two balanced line outputs on Euroblock connectors. The inputs are individually software switchable to mic or line, and 24 V phantom power or none. LEDs indicate Mic or Line level for each input. The Euro connections accept wire between 30 AWG minimum and 14 AWG maximum.

The RAD16 is only available in black. Mountable to any flat surface, it measures 4.92" x 3.31" x 1.05" (12.5 x 8.4 x 2.7 cm). The RAD16 is plenum rated UL 2043.





RAD Specifications

Parameter	Specification	Limit	Units	Conditions/Comments
Cable Length	500 feet / 153 meters			Shielded CAT 5e or better.
Signal Indicator	-50	typ.	dBFS	Unbalanced / balanced output, green LED, peak-reading
Overload Indicators	-0.5	typ.	dBFS	Unbalanced / balanced output, red LED, peak-reading
Microphone Input Specs (level set in software)				
Input Impedance	2.16 k	1%	Ω	Balanced, 1.08 k + 1.08 k
Max. Input Level	-17	min.	dBu	Balanced, Gain = 26 dB, <1% THD
Equivalent Input Noise	-121	typ.	dBu	20 kHz BW, Rs = 150 Ω, Gain = 26 dB
Dynamic Range	98	typ.	dB	re: 0 dBFS, 20 kHz BW, A-weighted, Gain = 26 dB
CMRR	-70	typ.	dB	Rs = 150 Ω, 1 kHz, Gain = 26 dB
Frequency Response	30 to 20k	typ.	Hz	+0, -3dB, At All Gain Settings
THD+Noise	0.010% typ.	@ 1 kHz, 20 kHz BW, Rs = 150 Ω, Output = -6 dBFS, Gain = 26 dB		
Gain Range	26 to 60	typ.	dB	In 1 dB Steps
Phantom Power	+24	4%	V	15 mA Max.
Impedance	1.21 k	1%	Ω	Each Leg
Balanced Line-Level Output Specs (Active Balanced)				
Output Impedance	600	1%	Ω	Each Leg
Max. Output Level	18	min.	dBu	<1% THD, Load = 10 kΩ
Dynamic Range	103	typ.	dB	re: 0 dBFS, 20 kHz BW, A-weighted
Frequency Response	10 to 22k	typ.	Hz	+0, -3dB
THD+Noise	0.017	typ.	%	@ 1 kHz, 20 kHz BW, Output = -6 dBFS
Balanced Line-Level Input Specs				
Input Impedance	22.18 k	1%	Ω	1.09 kΩ + 11.09 kΩ
Max. Input Level	23	min.	dBu	<1% THD
Dynamic Range	102	typ.	dB	re: 0 dBFS, 20 kHz BW, A-weighted
CMRR	-56	typ.	dB	Rs = 150 Ω, 1 kHz
Frequency Response	10 to 22k	typ.	Hz	+0, -3dB
THD+Noise	0.004	typ.	%	@ 1 kHz, 20 kHz BW, Rs = 150 Ω, Output = -6 dBFS
Unit				
Conformity: EMC	2004/108/EC, 2002/96/EC, 2002/95/EC. EN55103-1:1996, EN55103-2:1996			
...FCC	Part 15B	Class B Device		
...UL	UL 2043	File number: E193164 (plenum rated)		
Size	4.92"W x 3.31"D x 1.05"H	12.5 x 8.4 x 2.7 cm		
...Weight	11.6 oz	329 g		
.....Shipping	15 oz	426 g		