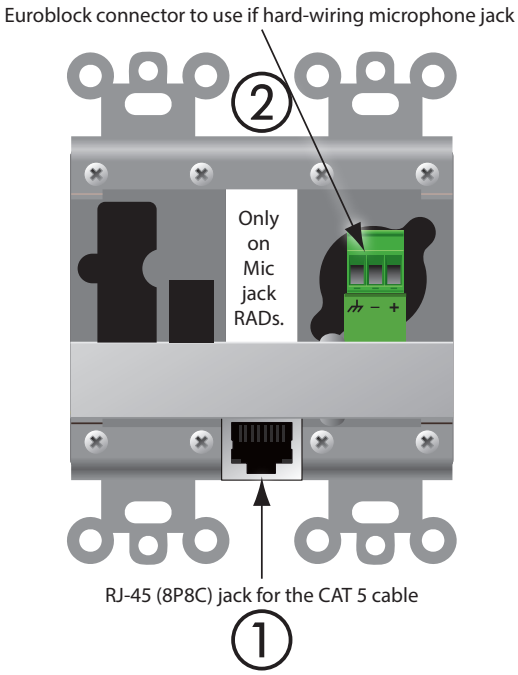
General RAD Description

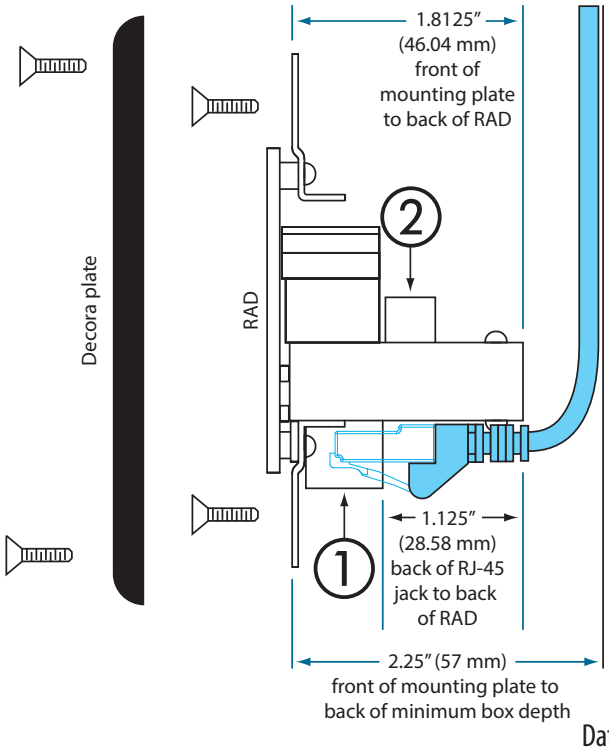
The entire family of RAD models interface with HAL or Mongoose, for digital conversion at the wall. Each converts analog audio to and/or from 24-bit, 48 kHz digital audio. Shielded CAT 5e (or better) cable and termination transport four digital audio channels – two channels each direction – as well as 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.

RAD2

A RAD2 provides one professional quality microphone input on an XLR connector, and one consumer line input on 3.5 mm TRS and RCA connectors (all line inputs are summed together). 24 V phantom power can be activated for the microphone in software. A Euroblock connection on the back of the RAD allow hard-wiring to the mic input.

The RAD2 mounts in a standard 2-gang US electrical box. It is available in white, ivory, or black, with a matched Decora™ plate cover included. Order model RAD2W for white, RAD2I for ivory, and RAD2B for black.





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 (Both XLR & Euro jacks)				
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
Unbalanced Line-Level Input Specs				
Input Impedance, Mono	20 k	1%	Ω	(**RAD2**, **RAD11** & **RAD14**)
Max. Input Level, Mono	6	min.	Vrms	<1% THD (**RAD2**, **RAD11** & **RAD14**)
Dynamic Range	96	typ.	dB	re: 0 dBFS, 20 kHz BW, A-weighted
Frequency Response	10 to 22k	typ.	Hz	+0, -3dB
THD+Noise	0.005	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
Size	4.1″H x 3.1″W x 2.1″D			10.4 x 7.9 x 5.4 cm
...Weight	4.7 oz			133 g
.....Shipping	11 oz			312 g