



### General RAD Description

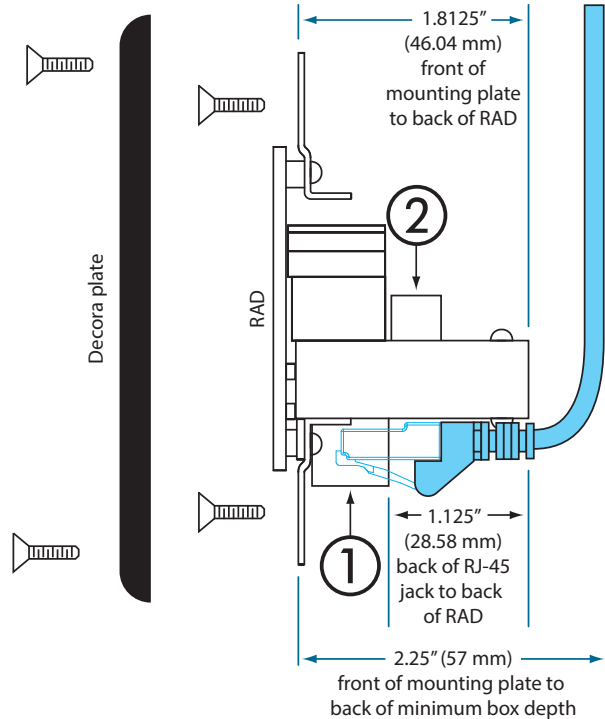
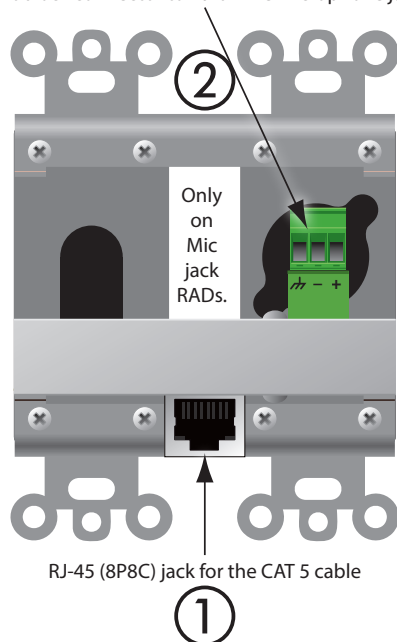
The entire family of RAD models interface with HAL or Mongoose, for digital conversion at the wall. Each converts analog audio to and/or from 24-bit, 48 kHz digital audio. Shielded CAT 5e (or better) cable and termination transport four digital audio channels – two channels each direction – as well as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

### RAD18

A RAD18 provides one microphone input on an XLR connector, and one balanced line-level input on a 1/4" TRS connector. 24 V phantom power can be activated for the microphone in software. A Euroblock connection on the back of the RAD allows a hard-wired mic input.

The RAD18 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 RAD18W for white, RAD18I for ivory, and RAD18B for black.

Euroblock connector to hard-wire microphone jack





**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
<b>Microphone Input Specs (Both XLR &amp; Euro jacks)</b>				
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	+21	1%	V	10 mA Maximum Per Mic
Impedance	1.21 k	1%	Ω	Each Leg
<b>Balanced Line-Level Input Specs</b>				
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
<b>Unit</b>				
Conformity	CE, FCC			
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 Size	9.6" x 6" x 3.2"			24.4 x 15.2 x 8.1 cm
...Weight	12 oz			345 g