

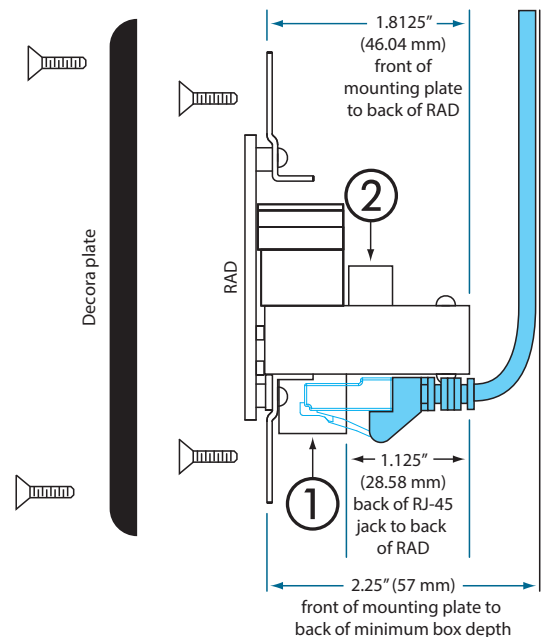
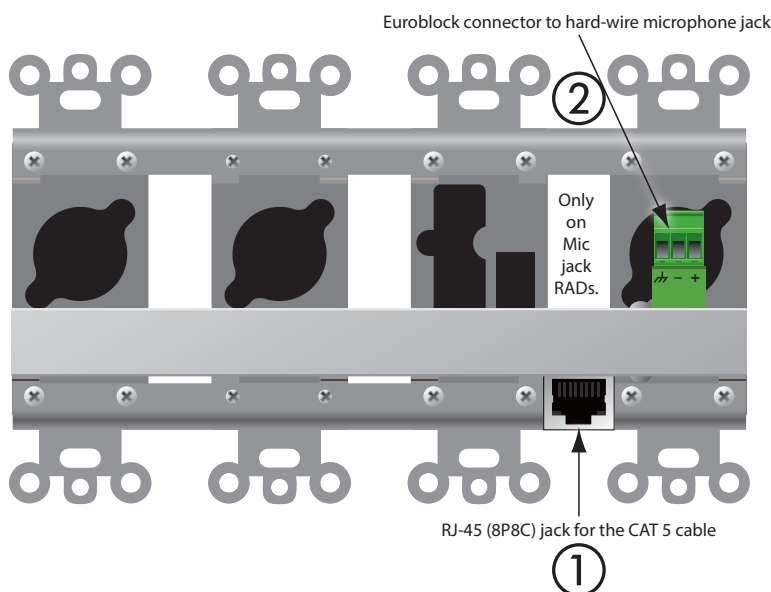
### General RAD Description

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.

### RAD14

A RAD14 provides one microphone input on an XLR connector, one consumer line input on 3.5 mm TRS and RCA connectors (all line inputs are summed together), and two balanced line outputs on XLR connectors. 24 V phantom power can be activated for the microphone input in software. A Euroblock connection on the back of the RAD allows a hard-wired mic input.

The RAD14 mounts in a standard 4-gang US electrical box. It is available in white, ivory, or black, with a matched Decora™ plate cover included. Order model RAD14W for white, RAD14I for ivory, and RAD14B 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       |
| <b>Microphone Input Specs (Both XLR &amp; Euro jacks)</b> |                       |          |                                 |   |
| Input Impedance   | 2.16 k                | 1%       | $\Omega$                        | 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, $R_s = 150 \Omega$ , Gain = 26 dB              |
| Dynamic Range   | 98                    | typ.     | dB                              | re: 0 dBFS, 20 kHz BW, A-weighted, Gain = 26 dB           |
| CMRR  | -70                   | typ.     | dB                              | $R_s = 150 \Omega$ , 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, $R_s = 150 \Omega$ , | 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%       | $\Omega$                        | Each Leg  |
| <b>Balanced Line-Level Output Specs (Active Balanced)</b> |                       |          |                                 |   |
| Output Impedance  | 600                   | 1%       | $\Omega$                        | Each Leg  |
| Max. Output Level   | 18                    | min.     | dBu                             | <1% THD, Load = 10 k $\Omega$                             |
| 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                      |
| <b>Unbalanced Line-Level Input Specs</b>                  |                       |          |                                 |   |
| Input Impedance, Mono                                     | 20 k                  | 1%       | $\Omega$                        | <b>(RAD2, RAD11 &amp; RAD14)</b>                          |
| Max. Input Level, Mono                                    | 6                     | min.     | V <sub>rms</sub>                | <1% THD <b>(RAD2, RAD11 &amp; RAD14)</b>                  |
| 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, $R_s = 150 \Omega$ , Output = -6 dBFS |
| <b>Unit</b>   |                       |          |                                 |   |
| Conformity  | CE, FCC               |          |                                 |   |
| Size  | 4.1"H x 6.7"W x 2.1"D |          |                                 | 10.4 x 17.0 x 5.4 cm                                      |
| ...Weight   | 8.7 oz                |          |                                 | 247 g   |
| Shipping Size   | 9.6" x 6" x 3.2"      |          |                                 | 24.4 x 15.2 x 8.1 cm                                      |
| ...Weight   | 1 lb 1 oz (17.3 oz)   |          |                                 | 489 g   |