

Balanced / Unbalanced Line Audio Interface Amplifiers

FEATURES

- User configurable.
- Unbalanced to balanced;
or
- Balanced to unbalanced.
- High common mode rejection.
- Wide gain range.
- High packaging density.

GENERAL

The AAA-3780 Eurocard audio interface amplifier module contains four separate amplifiers designed to provide level matching and to interface balanced 600 Ω and unbalanced high impedance audio signals.

The AAA-3780 is a standard IRT Eurocard module and is compatible with our other Eurocard products.

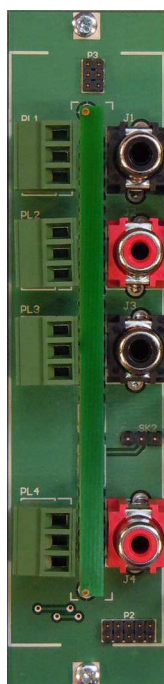
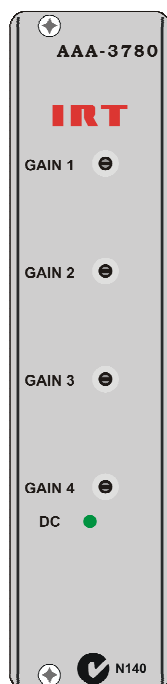
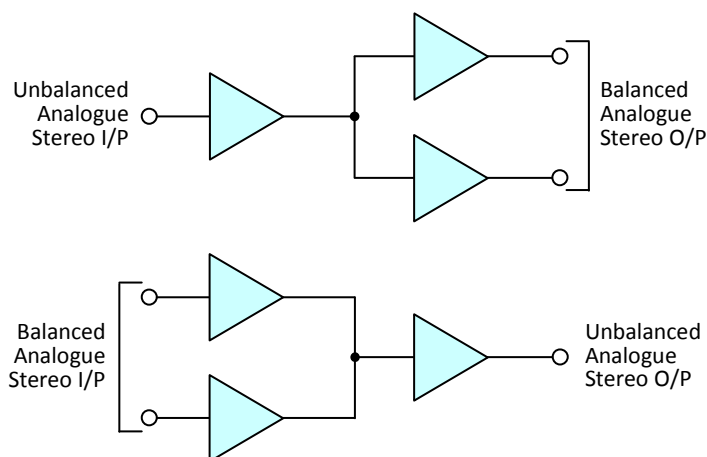
Gain controls are accessible on the front panel.

Each of the four channels can be individually configured as either balanced to unbalanced or unbalanced to balanced.

Uses for the AAA-3780 include:

- Gain matching of multiple unbalanced signals to balanced audio signals at a central location.
- Matching balanced signals to unbalanced lines.
- Using hi-fi components such as CD players in a professional studio chain.
- Matching studio signals to unbalanced recorders.
- Matching transducers to instrumentation recorders.

BLOCK DIAGRAM AAA-3780 SIGNAL PATH



TECHNICAL SPECIFICATIONS

Inputs:

Type	Transformerless, choice of balanced or unbalanced.
Number	1 per amplifier.
Impedance	> 10 k Ω .
Maximum input level	24 dBu.
Input CMR	> 45 dB 20 Hz to 20 kHz.

Outputs:

Type	Transformerless, choice of balanced or unbalanced.
Number	1 per amplifier.
Impedance	Balanced < 40 Ω . Unbalanced < 60 Ω .
Maximum output level	24 dBu.
DC on Output	< \pm 20 mV.

Performance:

Overall gain	Set by front panel control. Adjustable from no output to a maximum of +10 dB.
Frequency response	\pm 0.5 dB (20 Hz to 20 kHz).
Total harmonic distortion	< 0.01% (measured @ +10 dBm input) (20 Hz to 20 kHz).
Phase difference between channels	< 0.1 $^{\circ}$ (20 Hz to 15 kHz).
Noise	< -75 dBm unweighted.
Crosstalk ratio	> 80 dB.

Connectors:

Balanced	Pluggable screw block connectors.
Unbalanced	RCA phono.

Power Requirements:

Voltage	28 Vac CT (14-0-14) or \pm 16 Vdc.
Power consumption	< 2 VA (55mA, no signal).

Other:

Temperature range	0 - 50 $^{\circ}$ C ambient.
Mechanical	For mounting in IRT 19" rack chassis with input, output and power connections on the rear panel.
Finish	Front panel Grey background, black lettering & red IRT logo. Rear assembly Detachable silk-screened PCB with direct mount connectors to Eurocard and external signals.
Dimensions	6 HP x 3 U x 220 mm IRT Eurocard.