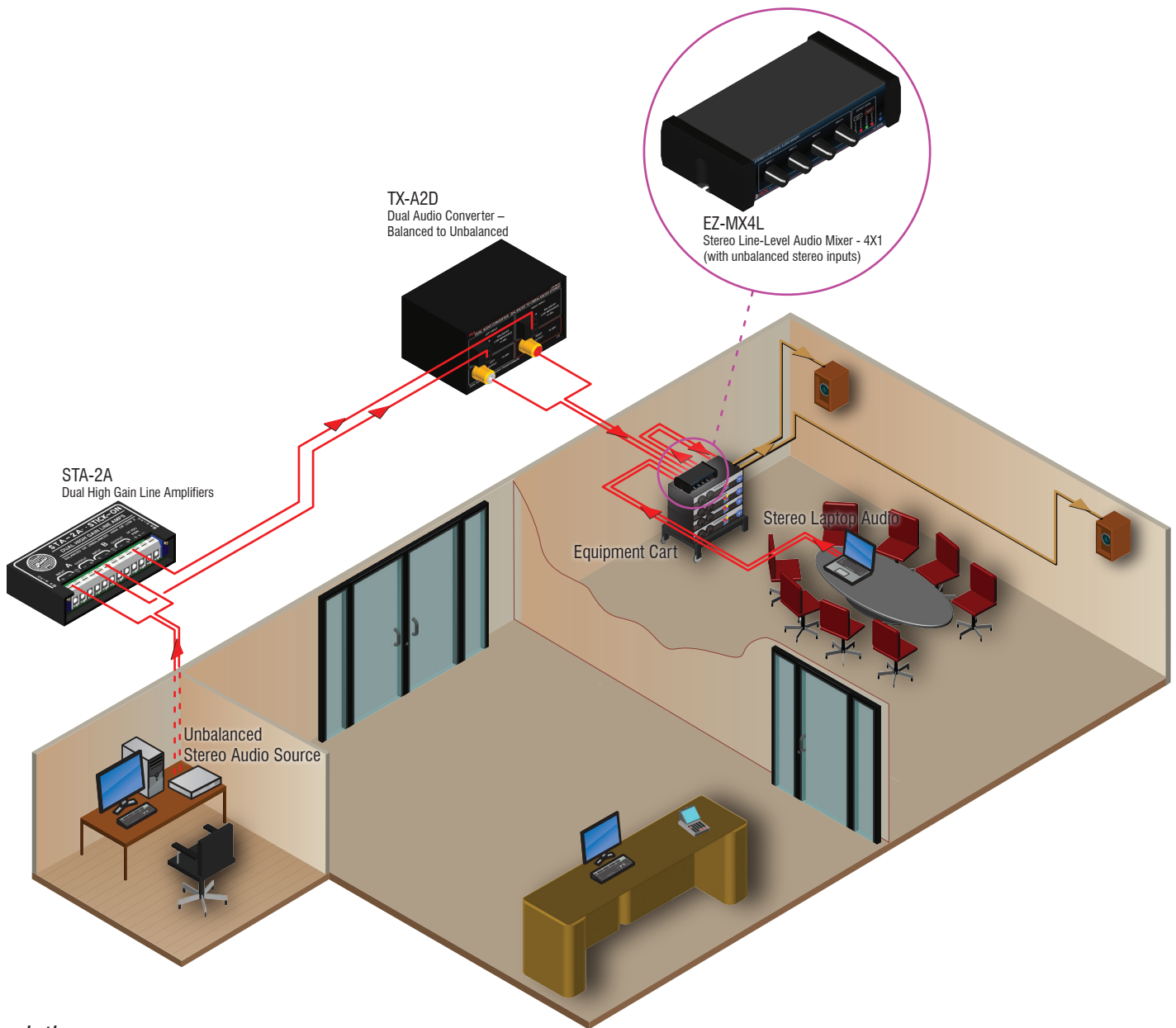


SEND UNBALANCED AUDIO OVER A LONG DISTANCE

Balanced Audio Connections Between Stereo Unbalanced Devices



Description:

Unbalanced audio is not suited to long distance transmission due to susceptibility to hum and ground loops. This problem is avoided by balancing the audio source prior to transmission and by isolating the received signals with effective common mode (hum) rejection.

This application uses an RDL STA-2A Dual Line Amplifier to boost the unbalanced stereo source up to the standard +4 dBu level to drive a pair of balanced lines. The balanced lines may be shielded or unshielded (UTP) and may be up to several hundred feet long.

An RDL TX-A2D Dual Audio Converter receives the balanced audio, converts it to unbalanced and attenuates it to a standard -10 dBV level feeding RCA output jacks. Studio quality audio transformers in the TX-A2D provide very high common-mode hum rejection and galvanic isolation from the balanced lines.

The received remote source is connected to one of the stereo unbalanced inputs of an RDL EZ-MX4L stereo audio mixer that feeds the conference room amplifiers and speakers.

Parts List	
Product	QTY
EZ-MX4L	1
STA-2A	1
TX-A2D	1

Recommended Pwr. Supplies	
Product	QTY
EZ Power Supply	1, included
PS-24AS 24 Vdc 500 mA	1

Line Color Key	
—	Line Level Audio Signal
—	Loudspeaker Level
—	Control Signal
—	Video
—	Mic Level Audio Signal
—	Ground
—	Power
—	Miscellaneous