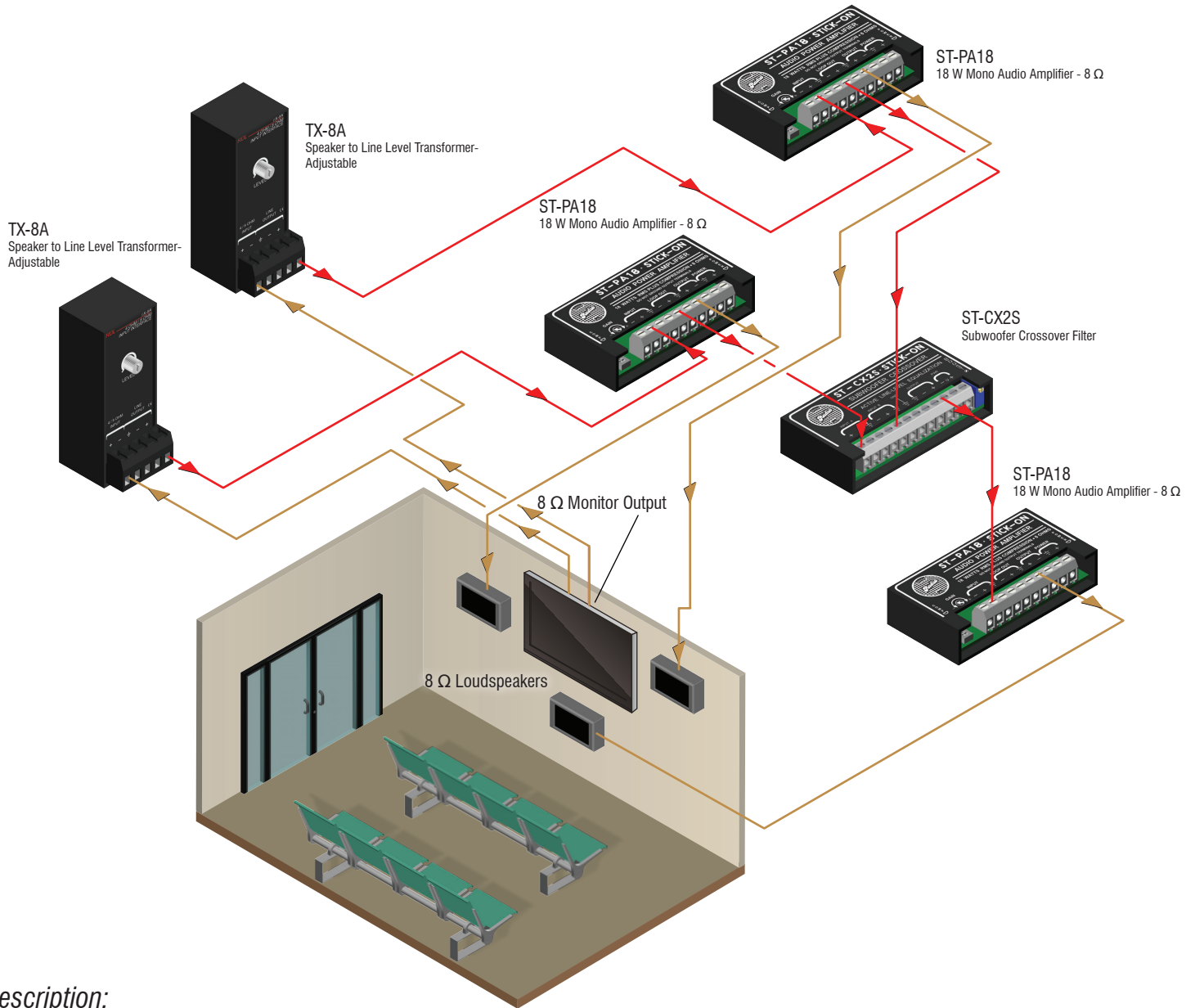


# AUDIO FOR DIGITAL SIGNAGE

Conversion of Speaker Circuits to Line Level for High Fidelity Amplification



## Description:

Video monitors in public spaces often include speakers with insufficient fidelity and/or volume. Such flat panels typically offer *only* speaker level outputs. This application couples good quality speakers with RDL modules to fill the space with full fidelity audio.

The only audio outputs on the flat screen are speaker-level outputs. Each output channel is fed to the input of an RDL TX-8A Adjustable Line Transformer which attenuates the signal to a standard balanced (or unbalanced) line level. The line-level signals are amplified by a pair of ST-PA18 18 W RMS Power Amplifiers to drive quality loudspeakers. The loop out of each ST-PA18 is fed to one of the summing inputs on the ST-CX2S Subwoofer Filter. The ST-CX2S combines the left/right channels and applies the subwoofer low-pass crossover. The ST-CX2S output feeds an ST-PA18 which is used to drive a subwoofer.

This application is often installed on flat panels that have audio amplifier power ratings that should be sufficient for the space if they applied to each channel and were usable RMS power. The ST-PA18 modules employ integral aurally transparent compression to deliver more of the modules' average power to the speakers, often producing astounding fidelity when compared against the amplifier/speaker combination in the source flat panel.

Parts List	
Product	QTY
ST-CX2S	1
ST-PA18A	3
TX-8A	2

Recommended Pwr. Supplies	
Product	QTY
PS-24KS 24 Vdc 1000 mA	1 (Sub. filter and amp.)
PS-24V2A 24 Vdc 2 A	1 (L and R ST-PA18s)

Line Color Key	
<span style="color: red;">—</span>	Line Level Audio Signal
<span style="color: brown;">—</span>	Loudspeaker Level
<span style="color: purple;">—</span>	Control Signal
<span style="color: yellow;">—</span>	Video
<span style="color: blue;">—</span>	Mic Level Audio Signal
<span style="color: green;">—</span>	Ground
<span style="color: black;">—</span>	Power
<span style="color: orange;">—</span>	Miscellaneous