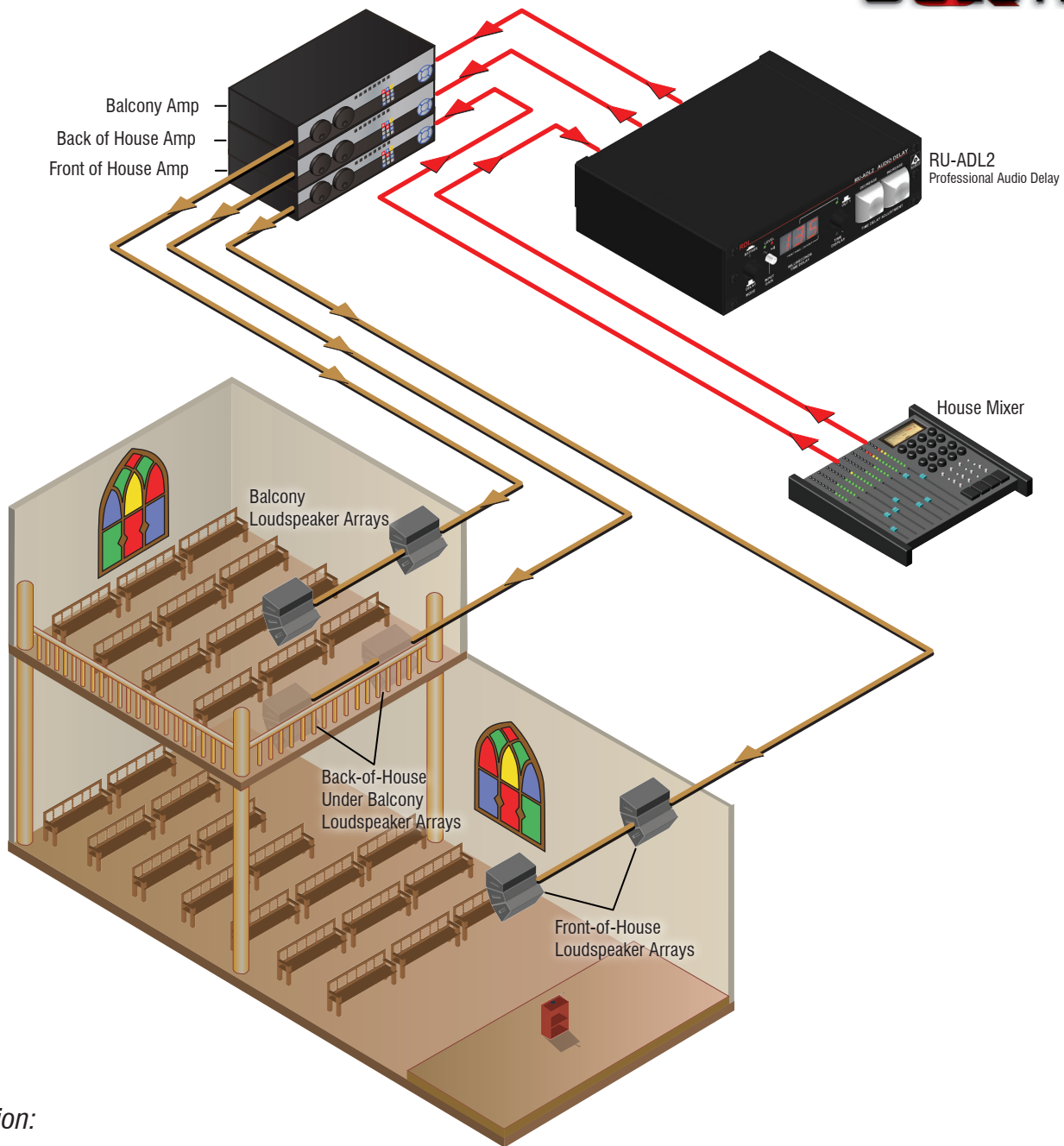


# DISTRIBUTED SOUND TIME ALIGNMENT

Delay for Church Back-of-House and Balcony Speakers



## Description:

The RDL RU-ADL2 Professional Audio Delay is used in this church sanctuary to time align the sound heard in seating areas served by the two sets of rear speakers. Prior to installing the RU-ADL2, people seated in the balcony or in the rear portion of the main seating area will hear amplified sound, in real time, from the nearby rear speakers. They will also hear delayed sound from the front speakers. The acoustic delay is caused by the time required for the sound to reach the rear of the sanctuary from the front-of-house speakers. The effect is similar to an echo, muddying the sound of music from the system and making speech harder to understand. The reverberant acoustics in many houses of worship further reduce intelligibility in areas where sounds are heard from multiple speakers at different times. The RU-ADL2 allows the time delay for speaker signals to be aligned so worshipers hear the amplified sound from all the speakers at the same time.

The RU-ADL2 provides two independent time-delayed audio outputs. Each is set to equal the acoustic delay caused by the distance from the front speakers to each set of rear speakers (balcony and back-of-house). With these delays added, the sound arriving from the front and rear speakers is time aligned for those seated in the rear seats and balcony. This is an economical and reliable way to insure crisp, intelligible sound in the rear seating areas of worship spaces of all sizes.

Parts List	
Product	QTY
RU-ADL2	1

Recommended Pwr. Supplies	
Product	QTY
PS-24AS 24 Vdc 500 mA	1

Line Color Key	
<span style="color: red;">—</span>	Line Level Audio Signal
<span style="color: gold;">—</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: brown;">—</span>	Power
<span style="color: orange;">—</span>	Miscellaneous