

Circle Surround 5-Channel Soundfield Generator

SSM2005

FEATURES

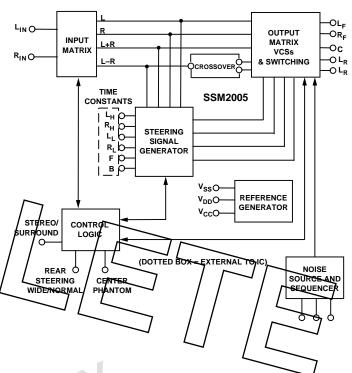
Generates True 5-Channel Soundfield
No Pre-Encoding Required—Only Stereo L and R
Excellent Surround Image At All Positions
Superior Sound in Automobiles
Distinct Left Rear vs. Right Rear, Full Bass Response
No Delay Required—Natural Ambiance Preserved
4 or 5 Speaker Operation
Full Bandwidth on All Channels
Optimized for Music Reproduction
Superior Decoding of Dolby* Surround Material
Excellent Decoding of "Pre-Encoded" Sources
Usable in Home Theater and Video Games
+7 Vto +20/V Operation

GENERAL DESCRIPTION

The SSM2005 Circle Surround 5-Channel Soundfield Generator produces a true 5-channel surround soundfield using only standard unencoded left/right stereo sources. Left front, right front, center, and differentiated left and right rear channels are generated providing a realistic ambiance effect with either 4 or 5 speaker configurations. Unlike previous designs, Circle Surround is optimized for music reproduction with full bandwidth on all channels and proper separation of the front channels. The differentiated rear channels provide excellent imaging, especially in automotive applications. Listener position is not critical; well-balanced sound is obtained anywhere within the soundfield.

The Circle Surround process does not require the audio signal to be encoded, as it uses the ambiance and directional information already present in the original media to generate the multidimensional effects. Circle Surround does not add any ar-

CIRCLE SURROUND SYSTEM BLOCK DIAGRAM



tificial ambiance or reverberation, nor does it require any delay generators. The fully differentiated rear channels provide rear stereo separation for enhanced spacial perception while maintaining full bass response, especially important in automotive applications.

*Dolby is a registered trademark of Dolby Laboratories, Inc. †Circle Surround is a registered trademark of Rocktron Corporation and is protected by patents granted and applied for.

This information applies to a product under development. Its characteristics and specifications are subject to change without notice. Analog Devices assumes no obligation regarding future manufacture unless otherwise agreed to in writing.

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