

SQTM STEREO ENHANCEMENT

An SQ "stereo-to-quad enhancement system" can be used to give excellent quadraphonic sound from conventional stereo records. An additional MC1312 matrix IC to transform the stereo signals into SQ-enhanced signals is needed.¹ The enhanced signals then are decoded with an SQ decoder in the usual manner.

While various amounts of SQ-enhancement can be provided, two degrees are particularly effective: 180° enhancement and 270° enhancement. The original stereo stage is mapped into a surround, spanning the above angular intervals. Any antiphase (reverberant, etc.) sounds emerge predominantly from the back loudspeakers, providing effective and pleasing quadraphonic reproduction.

The transformation from stereo to quadraphonic sound may be described as follows:

For 180° enhancement, the stereo left channel is transformed into SQ center-left coded signals; the stereo right channel is

SQ is a trademark of CBS Inc.

¹ Benjamin B. Bauer, "Quadraphonic Enhancement of Stereo Records in FM Broadcasting," to be published in BM/E (Broadcast Management/Engineering) Jan. 1975.