About QXpander® QX2020

The **QXpander® QX2020** is an analog stereo enhancement processor. This device is part of the QX chip family offered by QSound Labs, and uses the patented **QXpander** technique to produce a spatial or widened stereo image from ordinary left and right channel inputs. QXpander™ is a stereo to 3D enhancement process and is a trademark of QSound Labs.

The **QX2020 processor** has a TTL-compatible QXpander / Bypass control to select between QXpander enhancement and normal stereo audio. Its audio enhancement is achieved using normal stereo signals and standard audio playback equipment including two ordinary speakers. It creates a stereo image with depth in three dimensions from ordinary left and right input channels.

QX2020 Applications

LCD TVs   Home Theatre   Stereos   Speakers   Computers   Portable Entertainment   Video Game Systems

Stereo Enhancement

In ordinary stereo systems, the stereo image is formed between the left and right speakers, and is confined by the speaker positions (i.e. the "sound stage" is located between the two speakers). The QXpander is designed to form the stereo image beyond the speakers, thus enlarging the "sound stage".

If the center channel is defined as the monaural or common component of the left and right channels, then the Figure below represents the spatial response of the QXpander versus the normal image width of stereo in bypass mode.
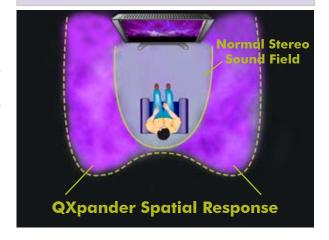
Normally, the QXpander is used in the preamplifier stage between the stereo source and the amplifier stages used to drive the speakers. The QXpander enhancements can be disabled using the bypass control allowing the unchanged stereo signal to pass through to the amplifier stages.

QSound's expert applications engineers can assist customers with integrating the QX2020 for specific product design requirements.

The QSound Competitive Edge

- Proven track record and established brand recognition
- Cost effective solution
- Few external components required
- Simple un-encoded input signals
- Simple output - no special equipment required

Normal Stereo Sound Field

QXpander Spatial Response

Contact Us

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