

# **RAIDEK**

**SOUND INDUSTRIES PTY LIMITED**

**SOUND ENGINEERS / MANUFACTURERS  
to the CINEMA, TELEVISION & RECORDING INDUSTRIES**

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## **News Release**

### **Raidek installs new Rear Wall Surround Channel for DTS Digital playback at Avoca Beach Theatre.**

May 1995 - Raidek Sound Industries, manufacturer of renowned Panastereo cinema sound processors has installed what is believed to be the world's first 7 channel digital film replay system. At Avoca Beach Theatre, north of Sydney, a Panastereo CM224 matrix decoder card was connected to the stereo surround outputs of a Panastereo CSP3200 cinema processor to separate the left, right and centre information recorded on the stereo surround channels of DTS digital soundtracks. The centre output of the matrix card is fed to four speakers mounted on the back wall of the cinema, and the left and right outputs of the matrix are fed to the normal left wall and right wall surround speakers respectively.

The idea is an updated extension of the original Panastereo "SX" surround output previously available on older CSP3200 processors which generated a rear wall surround output from optical soundtracks. The SX surround output provided a rear wall surround channel which carried surround information whenever the surround channel sound was "steered" by the matrix to come only from the rear of the auditorium. Thus the left and right walls still contained the normal surround ambience information but the rear wall speakers would come on whenever deliberately encoded surround information was present.

The new digital replay system installed at Avoca Beach takes advantage of the fact that the DTS digital surround channels are stereo and can therefore be decoded into left, centre and right channels just like the front channels of an optical stereo soundtrack. The result is that sounds which are panned equally to the left and right surround channels (and hence to the middle of the auditorium) come from behind the listener rather than from the middle of the room. This has the big advantage that sounds which are intended to pan around behind the audience from one side of the auditorium to the other, like a helicopter for example, are reproduced from the correct perspective rather than moving across through the middle of the audience. Of course stereo ambience is still reproduced in stereo from the left and right walls but with the addition of centre (mono) fill from the rear wall.

#### **And the results?**

The results so far have been very well received by customers of the Avoca Beach Theatre who report a greater sense of dimension and realism whenever a DTS digital soundtrack is playing, particularly with action movies. The idea will work equally well with Dolby Digital soundtracks, as these also have stereo surround channels.

Please contact Raidek Sound Industries for further information.