

SPECIAL REPORT

Xstream Builds on Family Fame

By Johnnie Dymock

LONDON Since the name Zephyr has almost become a generic term in broadcasting, its successor, the Zephyr Xstream, kept the family title.

However, the Zephyr Xstream a completely new product with the chassis, internal components and user interface redesigned from scratch.

The trusty Zephyr owed its popularity to the fact that it was flexible, compatible with many other codecs and exceptionally easy to use. It was also the first to use the ISO/MPEG Layer III algorithm.

Winning criteria

Telos has built on these winning criteria, adding the latest MPEG coding algorithms and a host of new features to the Xstream, while retaining the intuitive, operational simplicity that lets someone use it without reaching for the manual.

The Xstream is available rackmount or portable versions, with or without a built-in four-channel digital mixer. Like the Zephyr, the Xstream supports ISO/MPEG Layer II, Layer III and G.722. In addition, Telos has implemented MPEG2-AAC and MPEG4-AAC Low Delay. MPEG Advanced Audio Coding (AAC) has approximately 100 percent more coding power than ISO/MPEG Layer II and 30 percent more than ISO/MPEG Layer III.

One B channel

With the Xstream, it is possible to transmit and receive in stereo using just one B channel, to transmit the same stereo audio to two separate locations, or one stereo feed at 128 kbps can be used for enhanced fidelity.

The unique low-delay mode is very

desirable amongst broadcasters, including the BBC, which is specifically requesting Xstreams for more and more events.

According to Graham McHutchon, senior sound supervisor at BBC News, the Xstream is "in a class of its own, the only codec really worth having for main broadcast ISDN."



The Telos Zephyr Xstream

"It works in the United States," said McHutchon, "and the mixer version has versatile input and monitoring facilities, making it the only thing needed on many jobs."

He said that the Xstream is already at the heart of News Sound Operations for BBC Radio 5 Live and increasingly so in other areas of the BBC. Here at Wired For Sound, we both rent Xstreams and use them for our own projects. We often use one codec to transmit independent audio to two separate locations, using ISO/MPEG Layer III mono to send and G.722 as a 7 kHz cue return.

This is useful when the send, but not the receive, needs to be 15 kHz — for example, when two radio stations are broadcasting from the same location.

With the Xstream, however, it is also possible to receive 15 kHz audio from two separate locations — particularly useful when contributions are needed from several outside sources.

The Xstream incorporates advanced features including MP3 audio streaming via TCP/IP, remote control via LAN/WAN, software updating direct from the Telos ftp site and selectable audio processing by Omnia.

Other, more "basic" improvements add to the desirability of the Xstream: its ability to both receive and make POTS calls, the lack of a cooling fan, the integral power supply in the portable versions and — my favorite — the clever flip-down stand that angles the unit up toward the operator.

"One-stop box"

"We find it really, really useful — a 'one-stop' box," said Alex Lakey, chief engineer at Virgin Radio, which used Xstreams for its coverage of the 2002 FIFA World Cup.

"We sent stereo music and two presenter microphones into the MXP and applied basic limiting using the built-in processor — the mixer is very flexible and easily configurable, making it simple to set up in the field."

Lakey described the choice of algorithms available with the Xstream as "superb," and said that even ISO/MPEG Layer II sounds better than on the Zephyr.

"The network port is great," he said, "and we are now looking into the possibilities of streaming from it."



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