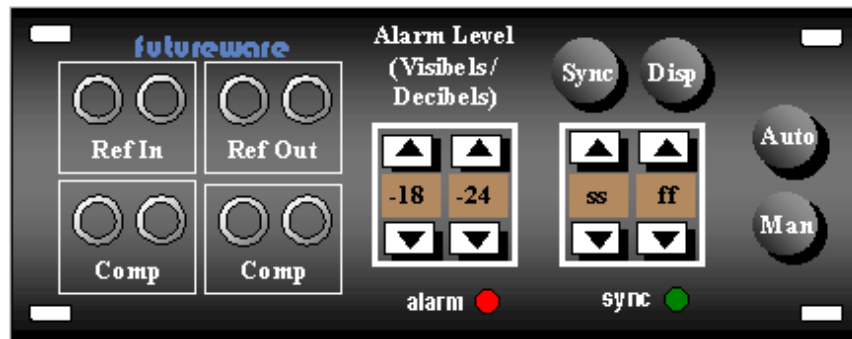


Products Planned for 2003 Release

- ▶ **HD, SD Format Conversion**
- ▶ **Subjective Quality Monitor**
- ▶ **Time Compression**
- ▶ **Video Compression**

SUBJECTIVE MONITORING

Futureware's Subjective Quality Monitor silently and uncomplainingly monitors the visual quality of a broadcast transmission (or other compressed data stream), 24X7. When objectionable artifacts occur, the Monitor notifies the engineer and presents a visual record of the offending segment. The Monitor embeds Futureware's Human Visual Model, a next-generation model that detects artifacts as a function of pixel resolution, frame rate, and viewing distance. The maximum allowable distortion may be specified in visibels™, the logarithmic measure of visible distortion, and/or decibels, the logarithmic measure of Mean Square Error.

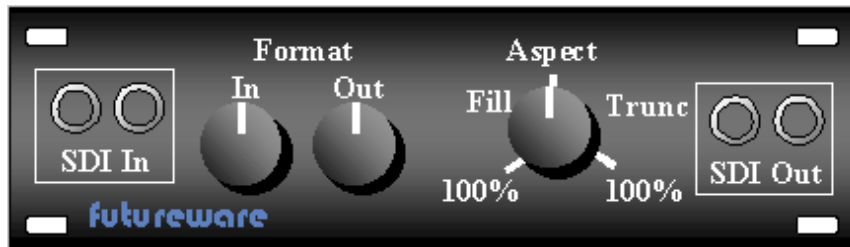
FEATURES:

- ◆ Supports all common ATSC television formats (SD, 720p, 1080i, 50fps, 60fps, 60/1.001fps, many others)
- ◆ Automatically synchronizes between compressed and reference inputs (manual synchronization is also supported).
- ◆ TCP/IP-based remote monitor, alarm and control.
- ◆ SDI Interface.

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FORMAT CONVERSION

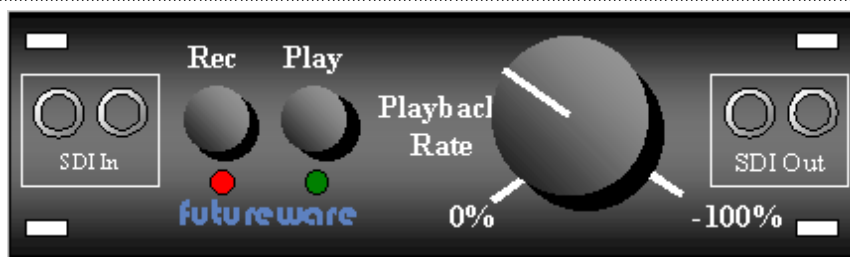


Futureware's Format Converter is a multi-protocol multi-format conversion product for professional broadcast and editing applications. The Format Conversion product is based upon Futureware's Markov-Predictive™ technology, which creates a statistical model of the video sequence then samples the model at the desired resolution, generating the theoretically optimal conversion.

FEATURES:

- ◆ Supports all common ATSC television formats (SD, 720p, 1080i, 50fps, 60fps, 60/1.001fps, many others)
- ◆ Transcodes between any two supported formats in real time.
- ◆ Preserves aspect ratio or introduces any desired amount of horizontal or vertical stretch factor.
- ◆ Resequences timestamps and embedded audio.
- ◆ Preserves embedded captioning and other VANC/HANC data streams.
- ◆ Supports all common electrical interfaces (SDI, Composite, Component, DVI).

TIME COMPRESSION



Futureware's Time Compressor is a multi-protocol multi-format digital SD/HD recorder primarily intended for editing applications (syndication). Content is recorded to hard disk, then played back at the desired acceleration rate. The Time Compressor is based upon Futureware's Markov-Predictive™ technology, which continuously interpolates the input frames to create smoothly continuous motion. Similar transform techniques are used to resequence and pitch-correct the audio, thereby retaining the original feel of the content while supporting injection of additional commercial segments.

FEATURES:

- ◆ Real-time compression on playback.
- ◆ Supports all common ATSC television formats (SD, 720p, 1080i, 50fps, 60fps, 60/1.001fps, many others)
- ◆ Resequences timestamps and embedded audio.
- ◆ Preserves embedded captioning and other VANC/HANC data streams.
- ◆ Supports all common electrical interfaces (SDI, Composite, Component, DVI).