Multi-Track Reproducer Specification

The unit shall provide solid state playback of up to thirty-two tracks of 16-Bit or 24-Bit Digital Audio in a 3U rack mount enclosure. Each pair of stereo audio tracks should optionally be capable of also outputting MPEG-2 digital video. The unit will be powered by a CE compliant power supply.

Each track must be capable of storing at least 500 individual programs using Compact Flash media.

Audio should be capable of being both recorded in stereo, in place, using an AES/EBU interface, and also being produced on a digital audio work station and then written to FAT-32 compatible media.

The unit must respond to Ethernet, Parallel, Serial, MIDI and SMPTE triggers for any and all programs. All programs must playback in absolute sample sync, and must be in absolute frame sync with both SMPTE and NTSC or PAL video sync. The unit must also be capable of generating SMPTE time code locked to NTSC or PAL video sync.

Minimum playback time capability must be at least one hour per track.

The programming environment shall use the Windows operating system. The programming must allow assignment of independent start, stop and loop times for each track and all possible groups of tracks.

Once programmed, the unit must retain its configuration in non-volatile memory.

A front panel, backlit LCD shall provide status.

Sample rates of 44.1, 48 KHz and 96 KHz must be supported for audio tracks.

Video tracks should support aggregate video bit rates up to 15 Mbits/sec including 44.1 KHz or 48 KHz audio. Video outputs should include composite, RGBHV, YUV and SDI.

The unit shall support Cobranet.

Audio Performance: Audio output level should be user-selectable. Full Scale Unbalanced audio must be at least +2 volts into a 20K ohm load. Full Scale Balanced audio must be at least +4 volts into 150 ohms (+20 dBm). The outputs should be DC Coupled, with an impedance of less than 10 ohms. Frequency Response must be 20-20,000 Hz +/- 0.5 dB. Signal-to-Noise ratio should be 120 dB Below Full Scale when Muted. THD+N must be at least –97dB.