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Audio and Music Data Transmission

Protocol

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Sponsored by:

Audio/Video Working Group of the 1394 Trade Association

Approved for Release by:

1394 Trade Association Steering Committee

Abstract: This specification defines a protocol for the transmission of audio and music data over IEEE Std. 1394-1395. Currently this includes the transport of IEC 60958 digital format, raw audio samples, and MIDI data.

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CONSUMER AUDIO/VIDEO EQUIPMENT — DIGITAL INTERFACE —

Part 6: Audio and music data transmission protocol

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Introduction

Scope of the Audio and Music Data Transmission Protocol

This document defines the audio and music data transmission protocol as an instance of a real-time data transmission protocol standardized in IEC 61883-1. The audio and music data transmission protocol (hereafter referred to as the A/M protocol) can be applied to all modules or devices which have any kind of audio and/or music data processing, generation and conversion function blocks.

This specification deals only with the transmission of audio and music data; the control, status and machine readable description of these modules or devices should be defined outside of this specification according to each application area.

All modules or devices which implement this A/M protocol should have the capability of "arbitrated short bus reset" defined in IEEE P1394a in order to prevent the interruption of audio and music data transmission when a bus reset occurs.

References

This document assumes that the reader is familiar with the content of the reference material noted here; it does not attempt to provide introductory or background information which can be found elsewhere. For a complete understanding of the Audio and Music Data Transmission Protocol, the following documents will be helpful:

IEEE 1394 — 1995, Standard for a High Performance Serial Rus

ISO/IEC 13213 — 1994, Control and Status Register (CSR) Architecture for Microcomputer Buses

IEC 61883-1 Digital Interface for consumer electronics audio/video equipment - Part 1: General

IEC 60958 Digital audio interface

MIDI 1.0 Detailed Specification, Version 4.1 January 1989

IEEE 754 1985, Standard for Binary Floating-Point Arithmetic

