ANSI E1.33 (RDMnet)

Message Transport and Management for ANSI E1.20 (RDM) compatible and similar devices over IP Networks

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Interest category codes:

CP = custom-market producer	DE = designer
DR = dealer rental company	G = general interest
MP = mass-market producer	U = user

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1 Introduction

Document Overview

This standard defines a method for carrying E1.20 (RDM) messages over IP networks. It also defines a scalable architecture for RDM message transmission that allows multi-controller environments with tens of thousands of RDM Responders. Additionally, a minimal protocol is defined for carrying non-RDM data over the same architecture.

Section 1 provides an introduction and covers the scope of this standard.

Section 2 covers the applicability of existing standards.

Section 3 covers the various addressing identifiers used in this standard.

Section 4 describes the ACN packet structure and its use in this standard.

Section 5 defines the Low Level Recovery Protocol (LLRP), including functional requirements, network transport and packet format.

Section 6 defines the Broker Protocol, which provides a scalable network architecture for discovery and message transport.

Section 7 defines the RDM Packet Transport (RPT) protocol, including topology, functional requirements for Controllers and Devices, packet format, and additional RDM parameter messages for configuring Components.

Section 8 defines the Extensible Packet Transport (EPT) protocol, including functional requirements and packet format.

Section 9 defines the functional requirements for Broker implementations.

1.1 Components

Each distinct entity transmitting or receiving protocol messages defined in this standard is called a *Component.* Each Component has a unique number associated with it termed a CID, or Component Identifier.

There is no limit to the number of Components which may run on the same host, nor are there relationships implied between Components running on the same host (e.g.: disabling one Component should not affect another).

A single Component may implement multiple protocols defined in this standard, subject to the requirements of each protocol, and may also implement additional ACN protocols that are outside the scope of this standard. Note that individual protocols may place further restrictions on the role of a Component. Throughout this document, Components that implement a specific protocol are referred to by putting the protocol name in front of the term Component (i.e. LLRP Component, RPT Component).