RP 183-2004
Revision of RP 183-1995

SMPTE RECOMMENDED PRACTICE

Monitoring and Diagnostics Processors

1 Scope

This practice defines the type-specific messages which enable the transport of status monitoring and diagnostics protocol (SMDP) data as defined in SMPTE 273M bi-directionally over ESbus and ESlan. It defines the diagnostics processor as a distinct virtual machine type. It is intended for use when it is desired to pipe (transport) SMDP information over ESbus or ESlan as an alternative to the use of the dedicated SMDP transport mechanism.

2 General

2.1 Virtual machine type

Monitoring and diagnostics processors operating under SMPTE status monitoring and diagnostics protocol (SMDP [SMPTE 273M]) shall be identified as virtual machines of a type which is uniquely coded as "07" expressed as an 8-bit word in hexadecimal form.

2.2 Notation

This practice describes the coding of keywords in the form shown below.

<NNh> KEYWORD
[The coding NN represents the assigned keyword in hexadecimal format.]

Format: <COMMAND>
<PARAMETER NAME 0> [Parameter description; parameter value coding, scale, or range; parameter definitions and explanations.]
|
|
|
<PARAMETER NAME n>

In the SMPTE Recommended Practices listed in annex A, keywords are listed numerically in hexadecimal notation. Keywords are reserved as follows:

– Keywords 00_h – $1F_h$: System service subset
– Keywords 20_h – $3F_h$: Common message subset
– Keywords 40_h – FF_h: Virtual machine type-specific subset

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3 Keyword

$<41_h>$ PIPE (PIPE)

This command enables the transport of monitoring and diagnostics data, contained within the SMDP DATA information field, between SMDP virtual machines.

Format: <PIPE>
<SMDP DATA>

4 Information field

This information field contains the SMDP data to be transferred over the ESbus or ESlan network.

$<41_h>$ SMDP DATA (SMDP)

Format: <SMDP DATA>

<BYTE COUNT>	8-bit binary unsigned number. Specifies the length of the raw data message to follow.
<RAW DATA>	The monitoring and diagnostics protocol raw data message.

Annex A (informative)
Bibliography

ANSI/SMPTE 207M-1997 (R2003), Television — Digital Control Interface — Electrical and Mechanical Characteristics

SMPTE 273M-2003, Television — Status Monitoring and Diagnostics Protocol

SMPTE 275M-1995, Television and Audio Equipment — ESlan-1 Remote Control System

SMPTE RP 113-1996, Supervisory Protocol for Digital Control Interface

SMPTE RP 138-1996, Control Message Architecture for Digital Control Interface

SMPTE RP 139-1997, Tributary Interconnection for Digital Control Interface

SMPTE RP 163-1992, Television — System Service Messages

SMPTE EG 29-1993, Remote Control of Television Equipment

SMPTE EG 30-1995, Implementation of ESlan Standards