# D C I Digital Cinema Initiatives, LLC

# REVISION TO DCI DIGITAL CINEMA SYSTEM SPECIFICATION COMPLIANCE TEST PLAN, VERSION 1.2

CTP Revision items continue to be evaluated and will be posted after agreement by the DCI membership that the specific CTP Revision needs to modify the DCI Digital Cinema System Specification, Compliance Test Plan, Version 1.2. Suggested CTP Revision issues may be emailed to dci.info@dcimovies.com. Please include "CTP Revision" in the subject line.

# **DCI DCSS CTP v1.2 REVISION**

24 APRIL 2020

Revision Date	Revision Stage Type	CTP v1.2 Page No.	Sections Affected	Problem Description	Revision Description
24 April 2020	1	270	6.6.1 Digital Audio Interfaces	The requirement to process 96 kHz audio is now optional per Errata 23 and 24.	Replace text as indicated below.

#### **Current CTP 1.2 Text – Section 6.6.1 – Objective:**

Verify that the Media Block has a digital audio output interface with the capacity for delivering 16 channels of digital audio at 24-bit 48 kHz or 96 kHz, and follows the [AES3-2003] recommended practice for serial transmission format for two-channel linearly represented digital audio data.

## Revised CTP 1.2 Text – Section 6.6.1 – Objective:

Verify that the Media Block has a digital audio output interface with the capacity for delivering 16 channels of digital audio at 24-bit 48 kHz or optionally 96 kHz, and follows the [AES3-2003] recommended practice for serial transmission format for two-channel linearly represented digital audio data.

Procedure (3) shall be verified only if the MB has been presented as supporting a 96 kHz sample rate.

Revision Date	Revision Stage Type	CTP v1.2 Page No.	Sections Affected	Problem Description	Revision Description
24 April 2020	1	272	6.6.2 Audio Sample Rate Conversion	The DCSS requirement for audio sample rate conversion was deleted in section 3.3.2 and this test was not addressed at the time.  The requirement to process 96 kHz audio is now optional per Errata 22-25 and audio sample rate conversion would only be needed if the device is capable of processing 96 kHz audio.  This revision also removes the pass/fail requirement and instead records the results.	Update per below

# **Current CTP 1.2 Text – Section 6.6.2 – Objective:**

Verify that the system has the capability of performing Sample Rate Conversion (SRC) when needed.

#### Revised CTP 1.2 Text – Section 6.6.2 – Objective:

The following procedure shall be verified only if the MB has been presented as supporting a 96 kHz sample rate.

Verify that the system has the capability of performing Sample Rate Conversion (SRC) when needed.

#### **Current CTP 1.2 Text – Section 6.6.2 – Supporting Materials:**

Reference Document Section(s) value = "3.3.2.3"

#### **Revised CTP 1.2 Text – Section 6.6.2 – Supporting Materials:**

Reference Document Section(s) value = "3.3.2.1"

## **Current CTP 1.2 Text – Section 6.6.2 – Procedures:**

1. Play back the DCP DCI NIST Frame with 1 kHz tone (-20 dB fs, 96kHz). Enable SRC on the system, select an output rate of 48kHz. With an AES analyzer, confirm that each of the AES-3 outputs are producing an AES signal with a 48kHz sample rate. Any other measured output sample rate is cause to fail this test.

2. Play back the DCP DCI NIST Frame with 1 kHz tone (-20 dB fs) . Enable SRC on the system, select an output rate of 96kHz. With an AES analyzer, confirm that each of the AES-3 outputs are producing an AES signal with a 96kHz sample rate. Any other measured output sample rate is cause to fail this test.

#### **Revised CTP 1.2 Text – Section 6.6.2 – Procedures:**

- 1. Play back the DCP DCI NIST Frame with 1 kHz tone (-20 dB fs, 96kHz). Enable SRC on the system, select an output rate of 48kHz. With an AES analyzer, confirm that each of the AES-3 outputs are producing an AES signal with a 48kHz sample rate. Record the result.
- 2. Play back the DCP DCI NIST Frame with 1 kHz tone (-20 dB fs) . Enable SRC on the system, select an output rate of 96kHz. With an AES analyzer, confirm that each of the AES-3 outputs are producing an AES signal with a 96kHz sample rate. Record the result.