D C I Digital Cinema Initiatives, LLC

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

DCI SPECIFICATION ERRATA LISTING

02 DECEMBER 2011

Erratum Number	Spec 1.2 Page	Section(s) Affected	Description
77	98	Section 9.4.1	The following sentence is added at the end of the last paragraph of this section:
			Additionally, for so called "special auditorium situations," an auditorium equipment suite may enable the use of more than one projection system associated to a single screen in a given auditorium, multiple Link Encryption stages and/or an LD/LE SPB image processing device (see Section 9.4.4.1 "Special Auditorium Situations").
78	98	Section 9.4.1.1	The second bulleted item of this section is replaced with:
			SPB type 1 protection required – Image Media Block (IMB), Link Decryptor Block (LDB) and LD/LE SPB Devices
79	101	Section 9.4.2.2	This sentence is added as the last sentence of the first bulleted item (Secure Processing Block type 1):
			Additionally (and not shown in Figure 15) the LD/LE SPB Device shall be contained within a type 1 SPB.
80	112	Section 9.4.3.5	Item 16 of this section is replaced with:
			Support suite playback such that no more than one projection system is enabled, except for content owner-approved special auditorium situations per the requirements of Section 9.4.4.1 "Special Auditorium Situations"
81	113	Section 9.4.3.6	A fourth bullet is added to the bulleted list of this section:
			LD/LE Device Secure Processing Block (SPB)
82	115	Section 9.4.3.6.2.1	In the opening sentence of this section change "a special purpose SPB" to "an SPB".
			The following sentence is added at the end of item # 1:
			Subject to the constraints of Section 9.4.4.1 "Special Auditorium Situations", multiple link encryption output ports may be implemented.

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Erratum	Spec 1.2	Section(s)	Description
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83	116	Section 9.4.3.6.3	Item # 3 of this section is replaced with:
			When the IMB is integrated with the projector (i.e., is the projector's companion SPB), at the time of installation (mechanical connection to the projector and electrical initiation) the IMB shall perform and thereafter support electrical and logical marriage with the projector SPB per Section 9.4.3.6.1 "Normative Requirements: Projector Secure Processing Block". Electrical connection integrity shall be monitored 24/7, and should the integrity of the connection be broken the IMB shall log the event and require a re-installation process before becoming active again. Breaking of the IMB/projector SPB marriage shall not zero the IMBs long-term identity keys (RSA private keys).
84	116	Section 9.4.3.6.3	Erratum 49 is deprecated, and replaced with this erratum. Item #4 of this section is replaced with:
			Figure 15 ("Digital Cinema Auditorium Security Implementations") of Section 9.4.1 presents the two fundamental security system architectures as auditoriums 1 and 2: an integrated projection system architecture (no link encryption), and a link encryption architecture, respectively. In the first instance the Integrated Media Block (IMB) outputs clear text content. An IMB intended to operate with an integrated projection system shall be designed such that it does not perform any composition decryption functions until integrated and married to a projector SPB. An IMB intended for non- integrated operation shall be designed to not be reconfigurable to operate with an integrated projection system.
85	116	Section	Item # 6 of this section is replaced with:
		9.4.3.6.3	After image decryption and Forensic Marking (and other non-security plain text functions as appropriate by design), pass the image signal to the projector SPB or link encryption function, as appropriate. In the latter case the image signal shall undergo link encryption per Section 9.4.4 "Link Encryption." Subject to the constraints of Section 9.4.4.1 "Special Auditorium Situations," multiple link encryption output ports may be implemented.
86	117	Section 9.4.3.6.6	The last parenthesized sentence of the second paragraph of this section is replaced with:
			For dual certificate implementations this shall be the Security Manager Certificate (see Section 9.5.1 Digital Certificates).

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87	119	Section 9.4.4.1	The title of this section is changed to "Special Auditorium Situations", and the entire section is replaced with:
			"Special Auditorium Situations" are defined to allow the Image Media Block (IMB) to operate with more than a single projector. Special Auditorium Situations shall be enabled by the following methods:
			IMB with Multiple Link Encryption means the use of (i) more than one remote LDB/projector pair with a single IMB, or (ii) an LD/LE image processor SPB inserted between the IMB and one or more remote LDB/projector pair(s).
			Integrated IMB with Link Encryption means the use of an integrated and married IMB/projector pair, where the IMB also outputs a Link Encrypted image signal to one or more remote LDB/projector pair(s). The IMB shall simultaneously meet all requirements for both integrated and non-integrated projector system implementations.
			The use of more than one remote LDB/projector pair shall be simultaneously an instance of Integrated IMB with Link Encryption and IMB with Multiple Link Encryption.
			SMs shall enable Special Auditorium Situations to operate only when the SM receives a KDM whose Trusted Device List (TDL) contains only the identities of the SPBs it is enabling for playback. For IMB with Multiple Link Encryption operation these shall be the remote SPBs identified during TLS authentication (see details below). For Integrated IMB with Link Encryption this additionally includes the identity of the projector to which the IMB is married. This matching is an indication to the SM that Special Auditorium Situations operation has been approved by the content owner.
			IMB with Multiple Link Encryption operation shall follow all normal (single) Link Encryption requirements of this section, with the following additional requirements:
			a.SM behavior shall be designed to identify a Special Auditorium Situation during the auditorium security network TLS session establishment. The digital certificate exchange with remote SPBs shall return the associated certificate roles for each SPB in the auditorium.
			b.The SM shall independently authenticate each remote SPB against the TDL using a dedicated TLS session.
			c. The SM shall independently key each remote SPB for Link Encryption operation using standardized Intra-Theater (security) Messaging per Section 9.4.5.
			d.The SM shall not support the use of more than one LD/LE image processor SPB for any given projector.
			e.The Link Encryption stages of the LD/LE image processor configuration may use the same LE key(s). Similarly, the SM may key the multiple LDB/projector configuration using the same LE key for each LDB/projector system.