

**WALT DISNEY STUDIOS MOTION PICTURES
DIGITAL CINEMA APPROVED EQUIPMENT LIST
APPROVAL PROCEDURE**

Dear Digital Equipment Provider,

The Walt Disney Company prides itself for its quality and attention to detail. Theatrically, Walt Disney Studios Motion Pictures (“WDSMP”) maintains those same high standards in the quality of the presentation of its movies. A significant part of that achievement is the equipment that supports this endeavor. While Digital Cinema Initiatives (DCI) was in the process of developing the DCI System Specification and associated Compliance Test Plan and before DCI-compliant systems were available, WDSMP decided to create an Approved Equipment List (“AEL”) to identify equipment that met minimum security and performance requirements, which applies to all systems worldwide. Testing is required for all 3D systems including hardware, firmware, software and 3D glasses before inclusion on the AEL. Equipment which is not included on the AEL or listed on the DCI Compliant Equipment page will neither be booked nor will it receive VPFs through digital cinema deployment agreements.

Thank you for supporting this process. We have listed the testing criteria for servers in Schedule 1. These will be referred to as the Disney Inter-Op Tests. We have also included our current Approved Equipment List.

As of November 25, 2014, this document will list only ***non-DCI-compliant*** equipment that meets Disney’s interim JPEG Inter-Op and Stereoscopic requirements. A list of fully DCI-compliant equipment is available at www.dcimovies.com. It will also list 3D systems that have been tested and approved for presentation of Disney content.

It is the responsibility of the vendor to contact WDSMP to arrange for their equipment to reside on the Studio’s lot in Burbank for testing. The contacts for the WDSMP Approved Equipment List are:

Chris Witham, Director, Digital Cinema Technology
Phone: (818) 560-1748
Email: chris.witham@disney.com

**WALT DISNEY STUDIOS MOTION PICTURES
DIGITAL CINEMA APPROVED EQUIPMENT LIST
AS OF January 16, 2018**

The Walt Disney Studios (“Disney”) is committed to the goal of presenting its digital content in theatres solely on DCI-compliant digital cinema equipment. The initial step toward the availability of fully DCI-Compliant equipment was DCI’s publication of its “DCI Compliance Test Plan” (CTP) on October 17, 2007. The CTP has since been updated; the latest revision was published on October 10, 2012. This Test Plan provides for “licensed facilities to perform tests detailed by the Compliance Plan” and provides “guidance to manufacturers, integrators and exhibitors on the details required for testing and compliance.” **No projector or server is DCI-compliant until it passes the Compliance Test.**

While manufacturers developed DCI-compliant digital cinema equipment, Disney encouraged deployment of digital cinema systems by licensing digital content for presentation, but only on digital cinema systems that meet or exceed Disney’s JPEG Inter-Op requirements and, for 3D content, only on 3D systems that also meet Disney’s Stereoscopic (3D) requirements. Both of these requirements are generally consistent with the DCI Specification. Please see our Approved Digital Equipment Lists A and B below.

Please note that Disney is not making any representation or warranty as to the quality of the equipment or its general fitness for any purpose other than that the equipment has passed the Compliance Test and is permitted to exhibit Disney content in this interim period. Further, if content security or material presentation problems arise in approved equipment, Disney is in no way liable and, as appropriate, may suspend delivery of content to such systems until the equipment supplier resolves such problems. Disney, at its discretion, may from time to time remove equipment from the list.

Message to Exhibitors:

- Disney intends to begin delivering SMPTE compliant content to theaters soon. There is a strong possibility that this content will not ingest and play correctly on non-DCI-compliant equipment, including systems that meet only Disney’s interim JPEG Inter-Op and Stereoscopic requirements. Disney is not responsible or liable for any such occurrences. Exhibitors are strongly urged consult with deployment entities, integrators and manufacturers to ensure that their equipment is DCI-compliant and to perform the necessary software and firmware upgrades as soon as possible.
- Your installation of Disney-approved equipment does not guarantee that Disney will license a movie to your theatre. We will continue to negotiate each exhibition license on an engagement-by-engagement basis.

Message to Deployment Entities, Integrators and Manufacturers:

- Please contact Chris Witham for information on testing of your equipment for possible inclusion on our approved list. The cost for the testing will be the responsibility of the Deployment Entity, Integrator or Manufacturer.

DISNEY APPROVED EQUIPMENT

A. Approved equipment for Disney 2D and 3D [1] content and for inclusion in Disney supported deployments:

-Servers-

Manufacturer	Model	Version
CHRISTIE	IMB TEMP	Pre-DCI-compliant versions that support Disney's content security and 2D/3D playback capabilities as outlined in Schedule 1
DATASAT/DTS	DC-20	
DIGITAL CINEMA SYSTEMS CORP	FILMSTORE	
DOLBY	DSP100	
DOLBY	DSS 200 (AKA CAT862)	
DOLBY	IMB (AKA CAT745)	
DOREMI	DCP-2000	
DOREMI	DCP-2K4	
DOREMI	MONTAGE CDCS-2000	
DOREMI	IMB-2K (2K INTEGRATED MEDIA BLOCK)	
GDC	SA 1000	
GDC	SA 2000	
GDC	SX 2000	
GDC	SX 2000A	
GDC	SX 2000T	
GDC	SX 2001A	
GDC	SX 2001AQ	
GDC	SX 2001Q	
GDC	SX 2001T	
GDC	SX 2001TQ	
GDC	SA 2100AQ	
GDC	SA 2100Q	
GDC	SA 2100T	
GDC	SA 2100TQ	
GDC	SA2100 (2D & 3D)	
GDC	SA2100A	
KODAK	JMN 3000	
KODAK	SMS	
KODAK	SMS 3000	
MEDIA BROADCAST (FKA TSYSTEMS)	DCFF	
ORISTAR	AQ10	
QU VIS	CINEMA PLAYER	
QUBE	XP-D	
SONY	LMT 200	
SONY	LMT 300	
SONY	SMS (LSM-100)	
SONY	SRX R210 LMT100	
SONY	SRX R220 LMT100	
XDC	CINESTORE SOLO G3	

-Projectors-

Manufacturer	Model	Version
BARCO	DP 100	Pre-DCI-compliant versions that support Disney's content security and 2D/3D playback capabilities as outlined in Schedule 1
BARCO	DP 100E	
BARCO	DP 1200	
BARCO	DP 1500	
BARCO	DP 2000	
BARCO	DP 3000	
BARCO	DP 90	
BARCO	DPC 80	
BARCO	DP2K-12C	
BARCO	DP2K-15C	
BARCO	DP2K-19B	
BARCO	DP2K-20C	
BARCO	DP2K-23B	
BARCO	DP2K-23B	
BARCO	DP2K-32B	
BARCO	DP4K-23B	
CHRISTIE	CP2000	
CHRISTIE	CP2000H	
CHRISTIE	CP2000I	
CHRISTIE	CP2000M	
CHRISTIE	CP2000S	
CHRISTIE	CP2000SB	
CHRISTIE	CP2000X	
CHRISTIE	CP2000XB	
CHRISTIE	CP 2330	
CHRISTIE	CP2000ZX	
CHRISTIE	CP2210	
CHRISTIE	CP2220	
CHRISTIE	CP2230	
CHRISTIE	CP4220	
CINEMECCAN	CMC 65 D24	
CINEMECCAN	CMC D2	
CINEMECCAN	CMC/BARCO DP2K-20	
CINEMECCAN	CMC3 D2	
CINEMECCAN	CMC4 D2	
CINEMECCAN	DPC 80	
KINOTON	DCP 30 MX II	
KINOTON	DCP30	
KINOTON	DCP30L	
KINOTON	DCP30LX	
KINOTON	DCP30S	
KINOTON	DCP30SX	
KINOTON	DCP70	
KINOTON	DCP70L	
KINOTON	DCP70S	
NEC	3240S	
NEC	NC 1200C	
NEC	NC 1600CA	
NEC	NC 2000	
NEC	NC 2000C	
NEC	NC 3200	
NEC	NC 3200S	
NEC	NC1500C	

-Projectors-

Manufacturer	Model	Version
NEC	NC1600C	Pre-DCI-compliant versions that support Disney's content security and 2D/3D playback capabilities as outlined in Schedule 1
NEC	NC2500S	
NEC	NC800	
NEC	NC800C	
NEC	NEC 1200C+	
NEC	NEC 2000C+	
SONY	SRX R210 LSM 100	
SONY	SRX R220 LSM100	
SONY	SRX R320	

-3D Systems-

Manufacturer
3D Tech
3DGE by VOLFONI
3Din
5-Star by WOVELEC
Be Media Be3 (Passive)
Be Media Be3 (Active)
Beijing Aigexinda
Best View
DepthQ
DOLBY
Dyon 3D (Passive)
Espedeo 3D
Espedos 3D
Etoniq
Eyes3Shut
FOCUX 3D
FREDEEO
Future Cinema 3D (Passive)
GETD 3D (Active)
GetD 3D (Passive)
HCBL P5000 (Passive)
Hi-Shock
Honortech 3D (Passive)
HONY3D (Passive)
IMAX 3D
iVision Passive Polarization
Jokine 3D
Kinoprokat
Leonis 3D XL Filer
Le-Vision
LnR3D
MagicWin3D
MASTER IMAGE
MASTER IMAGE MI-HORIZON
MBO 3D by Shenzhen MaxLight Technology
NESTRI
Oristar (Passive)
Panastereo
Panavision Digital 3D System
REAL D
Real Films Passive 1
SmartCrystal Cinema by Volfoni
Sony Digital Cinema 3D
Unipolar (Passive)
X-Mirror 3D
XpanD
XpanD Passive 3D

- (1) In order to receive Disney 3D content exhibitors must also use a Disney approved 3D Display system
- (2) Panavision is approved for the Digital 3D system. It does not include the film-based system.

B. Approved equipment for Disney 2D only (not 3D); no VPF payments:

Servers

Manufacturer	Model	Version
DTS	FILMSTRORE_MD10H17400	2.0.0.54(2D ONLY)
GDC	SA 2000(2D ONLY)	SA2K1.3A(2D ONLY)
MEDIA BROADCAST	(FKA TSYSTEMS)	DCFF 4.0 (2D ONLY)
SONY	LMT 200	1.02 (2D ONLY)
SONY	SRX R210 LMT100	V1.28 (2D ONLY)
SONY	SRX R220 LMT100	V.1.28 (2D ONLY)
XDC	SOLO G3	5.1.1.25(2D ONLY)

Projectors

Manufacturer	Model	Version
NEC	IS15(2D ONLY)	11.1.33 (2D ONLY)
NEC	IS8(2D ONLY)	11.1.33(2D ONLY)
SONY	SRX R210 LSM100	V1.30 (2D ONLY)
SONY	SRX R220 LSM100	1.04 (2D ONLY)
SONY	SRX R220 LSM100	V1.30 (2D ONLY)

Integrated Projector/Servers

(3) Version number listed refers to the T.I version, not the manufactures number

(4) Old models are supported only in the 2D mode. Modifications to older projectors are needed to support 3D at “triple flash” (144Hz) – such upgraded projectors may be approved for Disney 3D content.

Manufacturer	System Model	Media Block Model	Media Block Version	SMS Model	SMS Version
Sony	SRX R-210, 220	LMT100	V1,28	LSM100	V1.30

If and when manufacturers upgrade systems on List B to meet Disney’s Stereoscopic (3D) requirements, such models will be moved to List A. As Disney approves new systems Disney will post updates on the website <http://digitalcinema.disney.com/>

Contact information:

- Exhibitors in U.S. and Canada: Martin Sansing (Martin.Sansing@Disney.com) or Chris Witham (chris.witham@disney.com)
- International Exhibitors contact Paul Holliman (Paul.Holliman@Disney.com) or Chris Witham (chris.witham@disney.com)
- Equipment Manufacturers and Integrators contact Martin Sansing (Martin.Sansing@Disney.com), Chris Witham (chris.witham@disney.com), or Paul Holliman (Paul.Holliman@Disney.com).

SCHEDULE 1

Server "Interop" Evaluation Procedures

Server Test Procedures

CTP Section ^[1]	Description	Notes
5.1.1	SPB Digital Certificate	steps 1 and 2 only
6.2.4	IMB Link Encryption	steps 1-4 only
6.4.2	Granularity of FM Control	
6.5.2	Decoder Requirements	steps 1-3 only
6.6.1	Digital Audio Interfaces	steps 1 and 2 only
6.7.2	Timed Text Synchronization	
6.7.3	Support for Multiple Captions	
8.1.1	Storage System Ingest Interface	also requires USB+Ext3
8.1.2	Storage System Capacity	steps 1 and 2 only
8.1.3	Storage System Redundancy	steps 1-6 only
8.1.4	Storage System Performance	
8.2.4	KDM Validity Checks	
8.2.6	Interrupt Free Playback	
8.2.7	Artifact Free Playback of Image Content	
8.2.8	Restarting Playback	
N/A	Six Hour Holdover Behavior ^[2]	

Manufacturer Assertions

10.4.2	Theater System Storage Security
10.4.43	FM Insertion Requirements
10.4.48	FM Control Instance

Notes:

- (1) All procedures to be performed with "JPEG Interop" DCP and, where applicable, SMPTE 430-1-2006 KDM
- (2) SMPTE 430-1-2006 KDM shall contain a single value in the DeviceInfoList. The value shall be the certificate thumbprint of the target SM.

^[1] DCI Compliance Test Plan (CTP) 1.0 is available at http://www.dcimovies.com/DCI_CTP_v1_0.pdf

^[2] The Device is required to continue a playout begun before KDM expiration up to six (6) hours past the expiration time.