

NEW

SX-2000A Digital Cinema Server with Integrated Media Block

The stunning solution for both 2K and 4K digital cinema



Integrated Media Block



SX-2000A Digital Cinema Server

GDC Technology is proud to introduce the new **SX-2000A Digital Cinema Server with Integrated Media Block**, our fifth generation digital cinema playback server designed to fully comply with DCI specifications.

The SX-2000A can support both 2K and 4K resolutions that is future-proof based on Texas Instrument's Enhanced DLP Cinema® technology, retaining all of the attractive SA-2100A's features such as:

- 2K/4K DCI MXF JPEG2000 playback
- DCI approved forensic watermarking
- Ingest of Digital Cinema Packages (DCPs) via physical media, network and satellite
- DCI MXF JPEG2000 3D playback
- HDTV/ Live3D live streaming capabilities
- Highly stable Linux-based operating system
- MPEG2 MXF Interop playback

In addition, the SX-2000A offers increased storage capacity and flexibility with the following unique features.

GDC IMB is awarded industry's first FIPS Level 3 Certification meeting DCI security requirements

Supports Barco, Christie and NEC Series 2 Projectors

The SX-2000A seamlessly integrates with all Series 2 projectors including Barco, Christie and NEC to ensure highly reliable and secure content delivery.

Integrated 3D Live support

The SX-2000A comes integrated with SENSIO® Hi-Fi 3D* and RealD LIVE*, which makes receiving high-quality 3D broadcasts possible. The SX-2000A also features a built-in integrated 3D receiver-decoder (optional) to seamlessly support 3D Live broadcast without requiring additional receiver-decoder.

Supports All Approved 3D Systems

The SX-2000A seamlessly integrates with numerous studio-approved 3D systems such as RealD, MasterImage, Dolby 3D and active 3D systems.

Finest 3D Playback

The SX-2000A provides the highest quality 3D playback with 12-bit 4:4:4 output images (left and right), providing 500 times more color spectrum than legacy servers.

USB 3.0 Interface (Optional)

The SX-2000A features an optional USB 3.0 interface that increases content ingest speed by approximately 2 times faster than a USB 2.0 interface.

Supports Closed Captioning Devices

The SX-2000A supports various closed captioning devices such as USL Closed Captioning Device and WGBH Rear Window Captioning Device to enhance the hearing or visual impaired cinema patron's movie-going experience.



Up to 4TB of Redundant Hot Swappable Storage (Optional)

The SX-2000A comes with 3 hot swappable data drives that can easily be attached or detached. The SX-2000A is able to remain operational in the event of a single drive failure, thereby minimizing downtime.



Instant Playback from CRU Drive Sleds*

The SX-2000A allows for instant playback from the CRU drive sleds without requiring content ingest, which reduces time to screening in emergency situations.



Instant Playback from TMS Media Library

The SX-2000A allows for instant playback from the Theatre Management System's (TMS) content library to the server, providing greater flexibility for show management.



Remote Access of the Screen Management System

Cinema operators can remotely access GDC servers using Theatre Management System (TMS) and Screen Management System (SMS) from a Windows® PC, or mobile devices such as the Apple® iPhone™.

Model **SX-2000A**





GDC Technology Offices

USA (Los Angeles, CA)

3500 W Olive Ave., Suite 940,
Burbank, CA 91505
Tel: +1 877 743 2872 (Toll Free)
Fax: +1 877 643 2872

USA (Sterling, VA)

21155 Whitfield Place, Suite 207,
Sterling, VA 20165
Tel: +1 877 337 0868 (Toll Free)
Fax: +1 571 313 0468

Hong Kong

Unit 1-7, 20th Floor,
Kodak House II,
39 Healthy Street East,
North Point, Hong Kong
Tel: +852 2523 6851
Fax: +852 2579 1131

Japan (Tokyo)

7F Nishino Kinryo Bldg,
4-9-4, Hacchobori, Chuo-ku,
Tokyo 104-0032, Japan
Tel: +81 3 3523 2650
Fax: +81 3 3523 2651

Singapore

6 Changi South Street 2,
Fedex Building, Level 7,
Singapore 486349
Tel: +65 6222 1082
Fax: +65 6222 1089

China (Shenzhen)

5th Floor GDC Building,
No.9 Hi-tech Middle 3 Road,
Science & Technology Park,
Nanshan District,
Shenzhen, P.R. China 518057
Tel: +86 755 8611 0889
Fax: +86 755 8611 0899

China (Beijing)

Rm. 401, Building 102,
No.28 Xin Jie Kou Wai Street,
Xi Cheng District,
Beijing, P.R. China 100088
Tel: +86 10 6205 7040
Fax: +86 10 6205 7054

Email: info@gdc-tech.com

Website: www.gdc-tech.com

Copyright © 2011
GDC Technology Limited
All rights reserved.

All trademarks listed in this
brochure are properties of
their respective owners.

Specifications are subject
to change without notice
due to ongoing product
development and
improvement.

GDC manufacturing
facility is
ISO 9001: 2008 certified.



Cert. No. CN09/3221

PB-0030-1108-V6E

SX-2000A Digital Cinema Server Technical Specifications

Physical

Dimensions 482 (W) x 616 (D) x 177 (H) mm 4RU
Weight 25kg (55lbs)

Environmental

Operating temperature 5° to 40° C (41° to 104° F)
Operating humidity 20% to 90%, non-condensing
Operating altitude 10,000ft. above sea level

Power

Power requirement 100 to 240V, 60 to 50Hz, 6 to 3A
Max power consumption 320W
Redundant power supplies Redundant internal hot swappable x 2
Uninterrupted power supply (UPS) with surge protection (optional) 3-way, meets IEEE STD 587 Cat. A 6KV test

Video Specifications

JPEG 2000 4096 x 2160 - 24 (2D) (optional)
2048 x 1080 - 24 (2D), 48 (3D), 48 (2D) *
1920 x 1080 - 29.97 (2D), 30 (2D)
MPEG 2/MPEG 4 SD/HD
Packaging SMPTE Digital Cinema Package (DCP),
Interop DCP, DSR®

Audio Output

Digital uncompressed audio 16/24-bit AES/EBU,
16 channels, 48/96 KHz
D-sub 25-pin
Audio Offset +/- 500 frames

System Interfaces

Ethernet 2 x RJ-45
(1 x 10/100 BaseT, 1 x 1000 BaseT)
USB 2.0 6 x USB A-Type Female
USB 3.0 (optional) 2 x USB A-Type Female
8-port GPI/O D-sub 25-pin (16-port GPI/O is optional)
DVD-ROM drive * Read speed 8x
HDD sled * CRU-Dataport
DVB-ASI (optional) BNC, CENELEC EN 50083-9 standard
270Mbps
RS232 D-sub 9-pin
Modem Interface with remote access software

Storage

Redundant hot swappable 2000GB
(Upgradable to 4000GB)

Security

AES 128-bit encrypted data storage
Civolution (Thomson NexGuard®) forensic watermarking
FIPS 140-2 Level 3

Subtitles

Subtitle overlay on server
Projector Cinecanvas support

Reference Input

Analog Genlock

User Interface

External Panel Control (optional) Integrated Control of digital cinema servers
and DLP Cinema® Projectors
Windows® PC network control Remote access to the screen management
system (SMS) and server user interface

Language Options

English
Simplified Chinese
Traditional Chinese
Korean
Japanese
Spanish
French

Third-Party Integration Options

Cinedigm Theatre Command Center® v3
Library Management Server®
Theatre Management System (TMS)
EyeCab™
ADDE Theatre Management System (TMS)
EyeCab™
Dvidea Dvidea Cineasy™ Theatre Management
System (TMS)
RealD RealD 3D EQ
Dolby Dolby 3D
WGBH Rear Window Captioning Device
USL USL Closed Captioning Device
D-BOX Technologies D-BOX Motion Code™

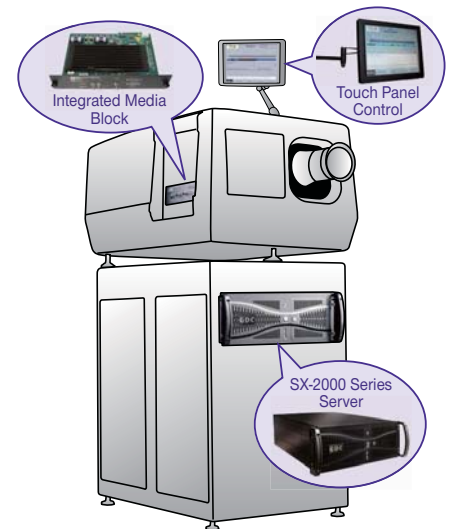
Integrated 3D Live Specifications

Video MPEG 2/ MPEG 4
Audio Dolby Digital (AC-3) * / MPEG 2 audio
3D Demuxing SENSIO® Hi-Fi 3D * / RealD LIVE * /
Side by side
Stream Format UDP Multicast of MPEG 2 Transport Stream

SX-2000 Series Digital Cinema Server

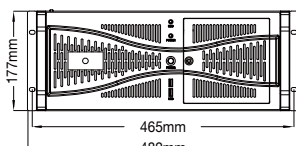
The SX-2000 Digital Cinema Server is available in various configurations to suit the differing needs of cinema owners. Cinemas that already utilize a theatre management system (TMS) will find the SX-2000T a cost efficient choice. Meanwhile, cinemas not using TMS can benefit from the increased ingest options available in the SX-2000A.

Model No.	SX-2000	SX-2000A	SX-2000T
Description	Basic Model	Advanced Model	Advanced Model for TMS Integration
DVD-ROM Drive		●	
HDD Sled		●	
Redundant Power Supply		●	●
GPI/O		●	●
Hot-Swappable HDD x 3 units		●	●

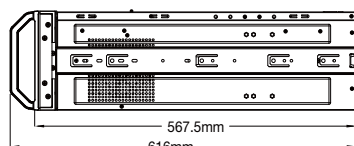


Series 2 DLP Cinema® projector with SX-2000 Series Server and Integrated Media Block

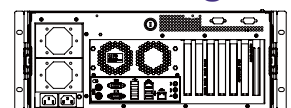
SX-2000 Series Digital Cinema Server Technical Drawings



Front View



Side View



Back View

- * Users must secure license directly from Sensio and RealD before activation of SENSIO® Hi-Fi 3D and RealD LIVE.
- * Only available in SX-2000A
- * Supports Dolby Digital (AC-3) in pass-through mode only, which requires external AC-3 decoder or sound processor for integration.
- * 2D playback at 48fps requires updated projector software.