

SX-2001A Digital Cinema Server

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



Touch Panel Control (optional)



SX-2001A Digital Cinema Server

GDC Technology is proud to introduce the new **SX-2001A Digital Cinema Server with built-in Media Block**, our fifth generation digital cinema playback server designed to fully comply with DCI specifications. The SX-2001A ships with a FIPS 140-2 Level 3 Certified Media Block providing the highest level of security recommended by DCI.

The SX-2001A can playback both 2K and 4K DCP on Texas Instrument's DLP Cinema® Series 1 and 2 projectors, retaining all of the attractive SA-2100A's features, such as:

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

In addition, the SX-2001A offers increased storage capacity and flexibility with the following unique features.

Unique Features

Supports Barco, Christie and NEC Series 2 Projectors

The SX-2001A 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-2001A comes integrated with RealD LIVE*, which makes receiving high-quality 3D broadcasts possible. The SX-2001A 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-2001A seamlessly integrates with numerous studio-approved 3D systems such as RealD, MasterImage, Dolby 3D and active 3D systems.

Finest 3D Playback

The SX-2001A 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.

Supports Closed Captioning Devices

The SX-2001A 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-2001A comes with 3 hot swappable data drives that can easily be attached or detached. The SX-2001A is able to remain operational in the event of a single drive failure, thereby minimizing downtime.



Instant Playback from CRU Drive Sleds*

The SX-2001A 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-2001A 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™.

Optional Feature



Quad Link Option (SX-2001AQ)

The SX-2001A can also be upgraded to the SX-2001AQ which features four HD-SDI outputs. This option enables the SX-2001AQ to be used for highest quality 3D playback with dual stream 12-bit 4:4:4 output images to two projectors simultaneously.

Model **SX-2001A**





GDC Technology Offices

Hong Kong (Headquarters)

Unit 1-7, 20th Floor,
Kodak House II,
39 Healthy Street East,
North Point, Hong Kong
Tel : +852 2507 9555

China (Beijing)

Rm. 609-618, Office Building,
20# Xinde Street, Xicheng District,
Beijing, P.R. China 100088
Tel : +86 10 6205 7040

China (Shenzhen)

Room A701, 7/F,
Languang Technology Building,
No.7 Xinxu Road, North Zone,
Hi-Tech Park, Nanshan District,
Shenzhen, P.R. China
Tel : +86 755 8608 6000

Spain (Barcelona)

Edificio Mercurio,
Via Augusta, 59, desp. 607,
08006 Barcelona, Spain
Tel : +34 93 159 51 75

Peru (Lima)

Calle Rey Bahamonde N°111,
Santiago de Surco,
Lima 33 - Peru
Tel : +51 1 677 6708

USA (Los Angeles)

1016 West Magnolia Boulevard,
Burbank, CA 91506, USA,
Tel : +1 818 972 4370 /
+1 877 743 2872 (Toll Free)

Singapore

10 Ubi Crescent, Ubi Tech Park,
Lobby B, #06-25,
Singapore 408564
Tel : +65 6222 1082

Indonesia (Jakarta)

Total Building Lantai 4 Suite 0401,
Jl. Letjen S. Parman Kav. 106A,
Kel. Tomang,
Kec. Grogol Petamburan,
Jakarta Barat 11440

Japan (Tokyo)

3F, Kyobashi-Chuo Bldg,
1-14-7 Kyobashi Chuo-ku,
Tokyo 104-0031, Japan
Tel : +81 3 5524 3607

India (Mumbai)

Office No. B-207/208,
Everest Chamber, Andheri Kurla Road,
Marol, Andheri (East),
Mumbai, 400059, India
Tel : +91 22 4044 0500

Mexico (Mexico City)

Ave. Santa Fe 94, Torre A Piso 8,
Col. Zedec Santa Fe, Alvaro Obregon,
Mexico, D.F., C.P. 01210 Mexico
Tel : +52 55 8851 1198 /
+52 55 8851 1165

Email : info@gdc-tech.com
Website : www.gdc-tech.com

Copyright © 2015
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.

ISO 9001 QMS



Cert. No. CN09/32221

PB-0031-1406-V2E

SX-2001A Digital Cinema Server Technical Specifications

Physical

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

Environmental

Operating temperature 5°C 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) 3-way, meets IEEE STD 587 Cat. A
with surge protection (optional) 6KV test

Video Specifications

JPEG 2000 2048 x 1080 - 24 (2D), 48 (3D)
1920 x 1080 - 29.97 (2D), 30 (2D)
SD/HD
Packaging SMPTE Digital Cinema Package (DCP),
Interop DCP

Video Output

Single link HD-SDI SMPTE 292M 10-bit 4:2:2
Dual link HD-SDI SMPTE 372M 12-bit 4:4:4,
Dual SMPTE 292M 10-bit 4:2:2
(for 3D playback)
Dual SMPTE 372M 12-bit 4:4:4,
(for 3D or dual 2D playback)

Audio Output

Digital uncompressed audio 16/24-bit AES/EBU,
16 channels, 48/96 KHz
D-sub 26-pin

System Interfaces

Ethernet 2 x RJ-45
(1x10/100 BaseT, 1 x 1000 BaseT)
USB 2.0 6 x USB A-Type Female
8-port GPI/O D-sub 37-pin
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

Storage

Redundant hot swappable 2000GB (Upgradable to 4000GB)

Security

AES 128-bit encrypted data storage
CineLink II™ link encryption
Civolution (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 Integrated Control of digital cinema
servers and DLP Cinema® Projectors

Language Options

English
Simplified Chinese
Traditional Chinese
Korean
Japanese
Spanish
French

Third-Party Integration Options

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

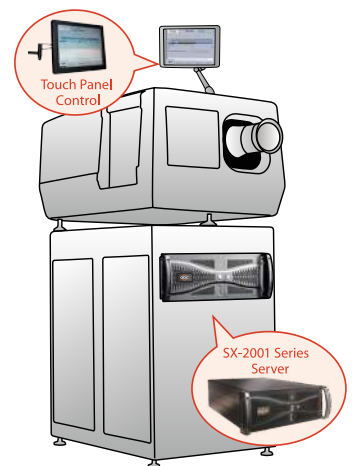
Integrated 3D Live Specifications

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

SX-2001 Series Digital Cinema Server

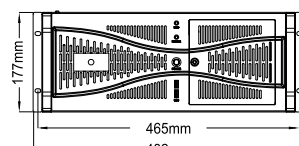
The SX-2001 series Digital Cinema Server is available in various configurations to suit the differing needs of cinema owners. Cinemas that already utilize a theatre management system (TMS) will find the SX-2001T and SX-2001TQ a cost efficient choice. Meanwhile, cinemas not using TMS can benefit from the increased ingest options available in both the SX-2001A and SX-2001AQ.

Model No.	SX-2001T	SX-2001TQ	SX-2001A	SX-2001AQ
Description	Advanced Model for TMS Integration	Advanced Model with Quad-Link for TMS Integration	Advanced Model	Advanced Model with Quad-Link
DVD-ROM Drive			•	•
HDD Sled			•	•
Redundant Power Supply	•	•	•	•
GPI/O	•	•	•	•
Hot swappable HDD x 3 units	•	•	•	•
Quad-Link HD-SDI		•		•

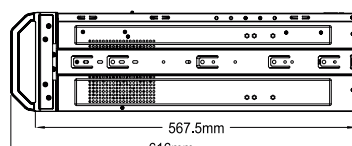


Series 2 DLP Cinema® projector with SX-2001 Series server

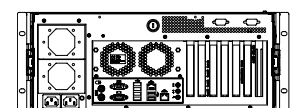
SX-2001 Series Digital Cinema Server Technical Drawings



Front View



Side View



Back View

* Users must secure license directly from RealD before activation of RealD LIVE.

* Only available in SX-2001A and SX-2001AQ

* Supports Dolby Digital (AC-3) in pass-through mode only, which requires external AC-3 decoder or sound processor for integration.