

# DSR™ Cineplex Central Server

The ultimate jukebox offering central control & real-time streaming of content for digital cinema multiplexes

Model GB1000



GDC Technology is proud to be the first to come up with a D-Cinema multiplex solution - the **GB1000 DSR™ Cineplex Central Server**, which offers central control, real-time streaming and simultaneous access to digital content in a network storage environment.

The GB1000 offers the multiplex operators the realm of Movie-on-Demand. Operators have the freedom to stream digital content in real-time to any screen depending on the demand. This flexibility improves revenues and optimizes profits from each screening,

With the GB1000, operators can control the entire multiplex operation from one central location and realize multifold increase in operation efficiency - saving up to 8x the time and efforts needed for the content download in a fully equipped 8-screen multiplex.

Multiple subtitle tracks and sound tracks of a digital print can be stored in the GB1000 and different subtitled versions of the content can be created at real-time before the actual screenings to suit the diverse audience.

The system leverages on standard IT hardware such as RAID storage and Gigabit switches which are scalable in multiple dimensions, capacity, performance and functionality. To date\*, the GB1000 DSR™ Cineplex Central Server remains the only product that offers real-time, high bit-rate and secure streaming of multi-format digital content to multiple screens with single frame accuracy.

\* As of Mar 2005.

## Maximized storage

The system comes with 2 TB or more of RAID-1\*\* storage. 2 TB is sufficient for 30+ hours of multi-format contents including 2k (2048x1080), HD and SD contents. Redundancy is built-in to cope with complete failure of the main storage system.

\*\* RAID-1 provides 100% data redundancy, which means minimal downtime and no data loss in case of a disk failure.

## Flexibility & High performance payout

The system can support up to 8 concurrent payouts in any combinations - ranging from 'staggered payout of a single print to 8 different screens' to '8 simultaneous payouts of 8 different prints to 8 different screens'. The system is able to sustain high bandwidth to multiple sites with high precision. Frame accuracy and synchronized playbacks can be achieved.

## Easy access and management

Operators can control and monitor operations like theater automation, scheduling and playlist composition in all screening halls from one single remote location.

## Hollywood-approved central ingest system

The system is a single ingest station for all digital screens. All contents are stored and streamed in encrypted form to all the individual screens. The system supports strict security features like decryption, re-encryption, watermarking and conditional access in a D-Cinema multiplex environment and also supports synchronized payouts to multiple screens with single frame accuracy.

## A variety of fast distribution options

Content can be rapidly downloaded via physical media (DSR™ Data Cartridge), satellite (DVB-ASI/DVB-IP) or network.

## Live contents

The system can receive and record multi-channel HDTV & SDTV signals.

## Easy accessibility and user friendly

The system comes with a mouse point-and-click control panel. All screens can be remotely controlled from the system's User Interface. User interface is available in different languages.



DSR™ Cineplex Central Server



Total control from a central console

Stream live pre-show content to upto 8 screens;  
Extensible depending on application



2 TB of rock-solid mirrored disk storage;  
Multi-format



### DSR™ Cineplex Central Server | Model: GB1000

#### Physical

##### Dimensions & Mass

1. Display and Control Console:  
600 mm (L) x 440 mm (W) x 44 mm (H) 1 RU  
10 kg
2. Gigabit Switch:  
173 mm (L) x 440 mm (W) x 44 mm (H) 1 RU  
1.87 kg
3. RAID-1 Storage:  
508 mm (L) x 445 mm (W) x 133 mm (H) 3 RU  
29.5 kg
4. Control Server:  
506.5 mm (L) x 482.6 mm (W) x 132 mm (H) 3 RU  
15 kg

#### Display and Control Console

Viewable Size image	17" TFT Active Matrix
Active Display Area (viewable area measured diagonally)	337.92mm (H) x 270.34mm (V)
Brightness	250 cd/m <sup>2</sup>
Contrast Ratio	350 : 1
Viewing Angle	150°(H), 125°(V)

#### Storage

RAID-1	From 33 hours @ 70 Mbps onwards
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#### Security

Encrypted data storage  
DSR™ Conditional Access System

#### Environmental

Operating Temperature	5 °C to 40 °C (41°F to 104°F)
Operating Humidity	20% to 90%, non-condensing
Operating Altitude above sea level	10,000 ft. max.

#### Power

Power Requirement	100 V to 240 V AC ± 10%, 50/60 Hz (15A max.)
Power Consumption	1351 W

#### System Interfaces

IEEE1394 Firewire®	IEEE-1394 6-pin male x 3, up to 400 Mbps
Ethernet	RJ-45 x 1, 10/100 Mbps
Gigabit	RJ-45 x 1, 10/100/1000 Mbps
USB	USB A-Type male x 3
RS232 (optional)	D-sub 9-pin x 2
SCSI (optional)	Ultra SCSI 320

