

 REALmagic™

# NETSTREAM 2000

Deliver Broadcast-Quality Video to your Network

## KEY FEATURES:

- Progressive DVD output
- 24-bit true color VGA and broadcast-quality video output to TV monitors
- DirectShow support for streaming video over Ethernet and ATM
- Component YUV, RGB, S-Video, & Composite TV outputs
- Outstanding support for interactive MPEG and DVD-Video applications.

The REALmagic NetStream 2000 is a high performance MPEG-2/DVD decoder that plays flawless quality streaming video from your computer network. Improving upon the award-winning video playback technology of the REALmagic Hollywood Plus, NetStream 2000 is ideally suited for interactive MPEG video, Video on Demand (VOD), IP and ATM Multicast applications.

NetStream 2000 provides the smooth, razor sharp video quality found only in high-end hardware solutions such as the Hollywood Plus. Employing optimized hardware decompression, motion compensation, filtering, deinterlacing and MPEG-2 scaling. NetStream 2000 offers better playback quality than either VHS or laser disc. Because NetStream 2000 looks every bit as good as television video, you can create a true television broadcast network on your LAN.

NetStream 2000's integrated hardware design minimizes CPU utilization in order to provide the most dependable and versatile operation. Rock solid software drivers are engineered for maximum stability, delivering reliable, worry-free streaming video through networked video kiosks, ATM machines, hotel and cruise ship entertainment systems and analog video servers. In fact, Sigma Designs, Inc. is the single-source developer of the decoder and overlay chips, decoder microcode, board design and device driver software used in the NetStream 2000, providing an incomparable level of support capabilities for mission-critical deployments.

 REALmagic™ DVD

[www.sigmadesigns.com](http://www.sigmadesigns.com)

## FEATURES AND SPECIFICATIONS

### Video:

- Sigma EM8400 single-chip MP@ML MPEG-2 decoder with full compliance to ISO 13818-2 MPEG-2 standard
- Sigma EM9010 analog overlay technology for superior DVD picture quality on computer monitor and compatibility with all VGA cards
- Supports up to 20 Mbps sustained input channel data rate
- Displays non-interlaced full motion video at full-screen or in a resizable window from 16x16 up to 1600 x 1200 on a capable VGA monitor
- Plays DVD-video, MPEG-2, and MPEG-1 interactive titles
- Support for VideoCD 1.0 and 2.0
- Full screen NTSC/PALTV output
- Frame rate conversion of DVD titles can play NTSC titles on PAL TV's, and PAL titles on NTSC TV's
- Brightness, contrast, and color saturation control for VGA and TV display

### Audio:

- Dolby Digital 5.1 channels via S/PDIF
- Dolby Digital with ProLogic downmix via Stereo output
- DTS Surround Sound via S/PDIF
- MPEG Layers I and II via S/PDIF or Stereo output
- PCM audio via S/PDIF or Stereo output

### System Requirements:

- Pentium or AMD-based PC with 133 MHz or higher CPU
- Microsoft Windows 95, 98, NT or 2000
- PCI 2.1 compliant expansion slot
- Plug and Play BIOS support
- 32 MB RAM and 2 MB free hard disk space
- SVGA card
- DVD-ROM drive (for DVD-Video Playback)
- Amplified stereo speakers (Dolby AC-3 or Dolby ProLogic amplifier and speakers required for surround sound)

### Connectors:

- Mini stereo jack (audio output)
- 15-pin VGA Out
- 9-pin DIN VGA In (from VGA card)
- YUV, RGB, S-Video and Composite (RCA) TV Out
- S/P DIF (Dolby Digital and DTS Surround Sound) Out

### Special Hardware Features:

- Hardware decoding of both audio and video
- PCI Bus Mastering minimizes CPU and interrupt overhead
- Low latency decoding modes for sub-second channel changes of multicast and on-demand video
- Hardware sync of audio and video
- Hardware VCXO for streaming audio and video clock recovery
- Frame accurate decoder architecture
- 256 color, full-screen On-Screen Display (OSD) controller, with 4-bit alpha blending
- 4:2:2 Component YUV and Component RGB TV output, plus S-Video and Composite (RCA) TV output
- Direct RGB output of Progressive DVD video in 480p and 720p modes

### Special Software Features:

- Supports Windows 95, 98, NT and 2000
- Extensive DirectShow support for interactive local and streaming video
- Special Splitter Filter for DirectShow offers specialized streaming video and advanced Transport Stream support
- Frame-accurate seeking
- Support for Transport Streams and Multi-Program Transport Streams via DirectShow
- Trick Play Modes with DVD's and compatible video servers: Fast Play, Slow Play and Backward Play.
- Includes DVD Station software for playing and navigating DVD-Video discs

### MPEG Formats Supported

- Plays MPEG-1 audio and video System streams
- Plays MPEG-2 PES, Program, Transport and Multi-Program Transport streams
- Supports SIF, Half-D1, 2/3 D1 and Full CCIR 601 resolution streams
- Supports MPEG in NTSC and PALformats

### SUPPORTED BY THESE FINE PRODUCTS



VCache and VCaster

DirectPC Enterprise Edition

QuickVideo Suite

VNP Encoder



MediaCube Family



NAC Multicaster



Oracle Video Server



MediaCluster Video Server



SGI MediaBase



IP Multicast Client



VideoClick



Windows Media Player

## SIGMA DESIGNS®

Sigma Designs, Inc.  
Hong Kong Office  
Tel: 852-2401-7388  
Fax: 852-2610-2177

Sigma Designs, Inc.  
Headquarters  
355 Fairview Way  
Milpitas, CA 95035-3024  
Tel: (408) 262-9003  
Fax: (408) 957-9740  
www.sigmadesigns.com

Sigma Designs, Inc.  
Taiwan Office  
Tel: 886-22-698-2066  
Fax: 886-22-698-2099

### Disclaimer:

This document is preliminary, and is provided as general information for our customers. Sigma Designs reserves the right to modify the information in this document as necessary. Sigma Designs makes no warranty for the use of its products and bears no responsibility for any errors that may appear in this document.