

## Software Only Multimedia Videoconferencing



### Advantages of Conferencing with HD4000

- Provides TV-like video quality using advanced video standards.
- H.264 video support up to 4MB and ISDN up to 512 Kbps (4xBRI)
- Advanced data sharing capabilities with multiple user options
- Native 16:9 wide screen display support
- Dual monitor support
- CD-quality audio using 20 KHz ultra-wide band audio
- Call forward, call pickup, call transfer, ad-hoc conferencing (via MXM)
- Web-based management for easier control and administration
- H.239 and HD DualStream™ for simultaneously sending and receiving video and data streams
- Supports encrypted conferences using the H.235 encryption standard

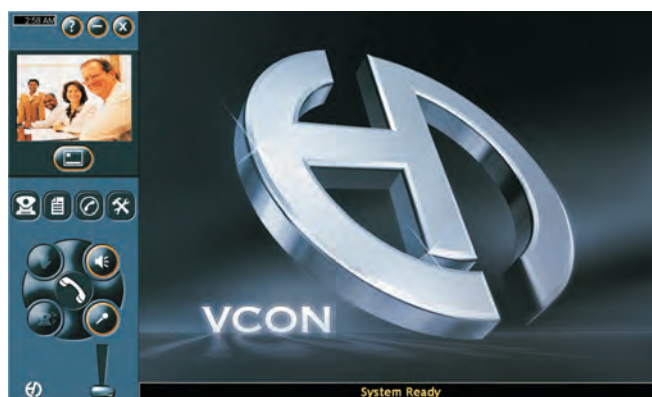
The HD4000 is Emblaze-VCON's software-only workgroup conferencing system that combines the versatility of a software-only platform with high-quality videoconferencing, transmitting up to 4CIF and receiving 720p resolution. Utilizing the H.264 video standard, and clear, crisp, audio, the HD4000 allows organizations to build a group videoconferencing system that is an exact fit for their needs and specifications. The HD4000 incorporates advanced data conferencing capabilities, allowing you to turn any videoconference into a fully interactive workgroup meeting with the click of a button. HD4000 can become an integral part of a training room, conference room or classroom using existing hardware. The HD4000 is part of Emblaze-VCON's total rich media conferencing solution, enabling seamless communication and collaboration using all forms of interactive media. Offering premium video and audio coupled with superior functionality, the HD4000 is the industry-leading business tool for workgroup conferencing. With unparalleled performance, HD4000 is an affordable way for organizations to enhance collaboration and gain a competitive advantage, while reducing costs.

### Multi-purpose Solution

In addition to providing value as an advanced videoconferencing solution, the HD4000 can also be used as a high-performance multimedia workstation. In a small conference room with a single monitor, or a large training room with dual plasma displays, the HD4000 can be accessed to perform multiple functions. During an offline meeting or training session, the HD4000 can be used to display presentations or VCR/DVD videos. The HD4000 can access network and local files, such as Office™, to share during a videoconference, or to display during an offline meeting. When connected to the Internet, the HD4000 can be used to join a web data conference or instant messaging session during a videoconference or offline.

### Flexible and Easy To Use

As a software product, the HD4000 provides flexibility for customers who want to use their own hardware, but are also looking for a complete videoconferencing application for their conference rooms, classrooms or training rooms. Customers can combine the HD4000 with their own PC, speakers, displays, podiums, carts and cameras to reduce costs and increase familiarity. With an easy-to-use interface, the HD4000 allows people to connect with the click of a single button. During a videoconference, the HD4000 system allows customers to access documents and applications located on the local PC or the network, the Internet, and movie/audio clips.



*Emblaze-VCON's HD4000 allows organizations to create workgroup conferencing systems that add multiple dimensions of communication to any boardroom, classroom or workgroup setting.*



## Minimum PC Requirements

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- Pentium D 3.0 GHz (or higher) PC
- 800 MHz BUS HyperThread CPU
- 1 GB 400 MHz RAM
- Windows XP Professional

- ATI x300 PCIx output  
AverMedia PCI capture input card
- Creative SoundBlaster Live 5.1  
(recommended)

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## Specifications

### Video Specifications

**Transmission Speed**  
H.323: 64 Kbps - 4Mbps  
ISDN 64Kbps - 512 Kbps (4xBRI)

**Video Standards**  
H.261, H.263, H.263+/+  
H.264 - up to 4Mbps

**Live Video Resolution**  
Up to 720p (1280 x 720 pixels) incoming only  
4CIF (704 x 576 pixels)  
VGA (640 x 480 pixels)  
CIF (352 x 288 pixels)  
SIF (352 x 240 pixels)  
QVGA (320 x 240 pixels)  
QCIF (176 x 144 pixels)

**Video Frame Rate**  
Up to 10 fps: 64 Kbps  
Up to 20 fps: 96 to 192 Kbps  
Up to 30 fps: 256 Kbps and higher

**Video Features**  
Video device discovery  
Automatic NTSC/PAL detection  
Unlimited number of video devices supported  
HD Simulcast™  
Chair or Participant in any Interactive Multicast session  
Integrated Broadcast Viewer  
Uses bandwidth-efficient IP multicast

### Audio Specifications

**Audio Features**  
Full duplex echo cancellation  
Automatic noise suppression (ANS)  
Automatic gain control (AGC)  
Audio device discovery  
Audio tuning wizard  
Unlimited number of audio devices supported  
Voice Activity Detection (VAD)

### Audio Standards

20 KHz: AAC-LD  
14 KHz: G.722.1 Annex C  
7 KHz: G.722, G.722.1  
3.4 KHz: G.711, G.723.1, G.728, G.729  
AMR (3G)

### Data Specifications

**Data Sharing Methods**  
Documents (MS Office, PDF, etc.)  
Video clips (AVI, MPEG, WMV, etc.)  
Audio clips (MP3)  
Graphic files (BMP, GIF, TIF, etc.)  
Internet  
Other (HTML, MS Project, etc.)  
VGA IN (via tabletop pod option)

### HD DualStream™

Sharing of file, window, browser, and Windows desktop  
H.239 support  
Tandberg DuoVideo support  
Sending and receiving capability  
1 live video source + 1 data source  
Resolutions supported:  
XGA, SVGA, 4CIF, VGA, CIF, QVGA, QCIF

### Networking Specifications

**Standards Supported**  
ITU-T: H.323 v4.2  
Annex Q (FECC)  
ISDN: H.320, H.221, H.242, H.230

### H.323 QoS Features

DiffServ  
IP Precedence  
Firewall port sync  
NAT IP address mask  
Port pinholing  
Adaptive Bandwidth Adjustment  
Packet loss recovery (FEC)  
Packet ordering  
Packet duplication control  
Jitter correction  
Lip sync correction  
Overhead prediction  
Max packet size adjustment

### Other Specifications

**Dialing Modes**  
Manual  
Speed dial  
Personal address book  
Online directory  
Multicast chair  
Broadcast viewer

### Security

Encryption using H.235 (AES)  
Using Emblaze-VCON SecureConnect  
DES, 3DES and AES support  
AES is NIST validated  
Supports Emblaze-VCON Frontier  
— Firewall traversal  
— Network address translation  
Supports restricted access users

### Control

International remote control (Option)  
Wireless keyboard (option)  
Embedded web-based control

### Directory Services

1000+ local number directory  
10,000+ global number directory  
H.350 support (MXM mode)  
LDAP online directory support  
- OpenLDAP  
- Microsoft ILS, SiteServer, Active Directory and Exchange  
- Sun iPlanet  
- Netscape Directory  
Search and filter queries

### Language Support

English, French, German, Italian, Spanish (Spain and Latin), Portuguese (Brazil), Chinese, Japanese, Turkish, Greek

