EMBLAZE VCON

Videoconferencing Systems

Video Made Easy

HD4000

Software-only Multimedia
Videoconferencing
Version 3.5

Getting Started Guide

DOC00007 Rev. 3.0 06.06

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About this Installation & Setup Guide

This guide explains how to set up the Emblaze-VCON HD4000 series videoconferencing system.

The following chapter summary briefly describes this guide's contents:

Chapter 1 — **Welcome to HD4000**
Introduction to this Installation & Setup Guide.

Chapter 2 — **Connecting Hardware Components**
Procedures for connecting the standard equipment and accessories to the HD4000 system.

Chapter 3 — **Enabling MXM Management of the HD4000**
Instructions for adding Media Xchange Manager® (MXM) management to your new HD4000.

Chapter 4 — **Starting HD4000**
Procedures for starting HD4000.

Chapter 5 — **Setting Up the HD4000 Configuration**
Instructions for accessing and defining the various configuration settings of your HD4000.

Chapter 6 — **Troubleshooting**
Help in solving possible problems that you may encounter with the HD4000 system.

Appendix A — **The Remote Control**
Description and layout of the remote control unit.

Emblaze-VCON Technical Support

This Installation & Setup Guide was designed to help you set up the HD4000 system easily so that you can enjoy its many features.

If a situation occurs that is not covered by the supplied documentation, contact your local Emblaze-VCON distributor, and request assistance from their Emblaze-VCON-trained technical support department. Please describe the problem, device, and PC operating system (if applicable), and any other relevant details.

Also, you may access the Technical Support section of the Emblaze-VCON website (http://www.Emblaze-VCON.com/support/index.shtml) in order to check its knowledge base or initiate other customer support processes:

Page	Type of support
Support Notes	Troubleshoot or receive technical information about specific Emblaze-VCON products.
Downloads	Download a new software release or a free product evaluation.
Demo Numbers	Test your videoconferencing system.
License Key Requests	Request a permanent license key for your organization's MXM(s).

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1 WELCOME TO HD4000

Emblaze-VCON's HD4000 is a workgroup application that combines the versatility of a PC-based solution with high-quality videoconferencing. Utilizing the newest H.264 video standard, and clear, crisp audio, the HD4000 brings users face-to-face with other people and organizations.

The HD4000 incorporates advanced data conferencing capabilities, allowing you to turn any videoconference into a fully interactive workgroup meeting easily.

In addition to conferencing, the HD4000 is 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 may perform multiple functions. For example, the HD4000 can display presentations, DVDs/video clips, or share applications. The HD4000's Internet access allows users to join a web data conference or instant messaging session.

As a software product, the HD4000 may be set up with your own computer, speakers, monitors, cameras, carts and podiums.

1.1 Package Contents

When you open the HD4000 system shipping package for the first time, check that the following items are included. If any of the items (according to your Customer Order) are missing or damaged, contact your Emblaze-VCON distributor immediately.

- HD4000 installation CD
- Software protection key
- Getting Started Guide

A range of optional accessories can also be provided to enhance the abilities of HD4000:

- Pan/Tilt/Zoom (PTZ) camera
- Infrared wireless keyboard and receiver
- Remote control unit
- Tabletop microphone
- XGA monitor
- TV monitor
- Cart
- Emblaze-VCON VoiceFinder
- Document camera
- Multimedia speakers

1.2 Minimum System Requirements

To run HD4000, your computer requires the following configuration:

- Pentium IV (or equivalent) 3 GHz, 800 MHz bus
- Microsoft® Windows XP Professional operating system
- 256 MB RAM 400 MHz
- ATI Radeon ALL-IN-WONDER® 9800SE or 9800Pro
- Creative SoundBlaster Live 5.1 (recommended)

1.3 Optional Accessories Supplied by Emblaze-VCON

The following optional accessories can be connected to the HD4000:

Pan/Tilt/Zoom Camera

The Pan/Tilt/Zoom (PTZ) camera is controlled by the wireless keyboard through the system software. You can pan, tilt and zoom the camera in a wide range of directions during videoconferences.

Up to six pre-set positions can be set for instant recall through the HD4000 application.

Connectors located on the rear of the Camera Unit enable connectivity through the system cables to the main computer.

PTZ Camera

Wireless Keyboard, Remote Control and Receiver

The infrared wireless keyboard and remote control provide remote control of the HD4000 system. They work in conjunction with an infrared receiver, which must be located close to or on the XGA monitor.

When you use the keyboard or remote control, point it at the keyboard receiver from a distance of up to 6 meters.

For more details about the remote control and its functions, see "The Remote Control" on page 41.

Wireless Keyboard

Keyboard Receiver

Tabletop Microphone

The HD4000 includes a portable tabletop microphone specifically designed for videoconferencing in a conference room or training room environment.

The supplied tabletop microphone is a high-performance audio input device. Its working range covers more than 6 meters (20 feet) at 360°. The microphone transfers the full range of speaker audio.

The microphone is equipped with a 20-foot (6.1 m) cable which provides greater flexibility for placement within the room.

Tabletop Microphone

VoiceFinder

During a group discussion, the VoiceFinder locates voices, then positions and focuses the camera on the person currently speaking. Its streamlined structure contains four high-quality microphones and advanced technology for intelligent tracking.

VoiceFinder

XGA monitor For viewing remote and local video in single display mode, or viewing the application and data applications in dual display mode.

CRT, LCD, and Plasma monitors may be used with the HD4000.

TV monitor(s) For viewing remote and local video in dual monitor configurations.

Cart As an option, the HD4000 may be supplied with an elegant mobile wooden cabinet that is specially designed to house the system components. A monitor sits on top of the cart, and two shelves are provided for the computer and other accessories.

Document camera	Increases the video capabilities of the HD4000. A document camera can show a placed document on the monitor during a videoconference session to both the local and remote users.
Multimedia Speakers	A three-piece computer audio system that delivers a high level of power and accuracy. The system consists of two speakers and a subwoofer.

2 CONNECTING HARDWARE COMPONENTS

This chapter contains instructions for setting up various hardware components for use with HD4000

2.1 Video Card Connections

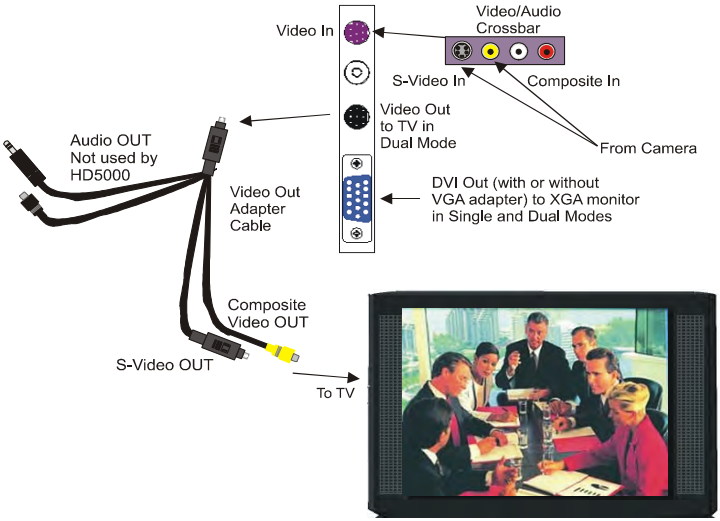
Emblaze-VCON recommends using ATI Radeon ALL-IN-WONDER® 9800SE or 9800Pro as your video card. Connect the following Video Card ports (or their equivalent) to peripheral equipment as follows:

Video In — Receives video from the primary camera.

You can connect the video/audio crossbar between the Video In connector and the camera. This device works as a video adapter, sending S-Video or Composite video to the Video Card.

Video Out — In a Dual Display Mode configuration, you can connect the Video Out Adapter cable between the Video In connector and the S-video or Composite video connection to the TV monitor.

DVI Out — In a Single Display Mode configuration, connect to the XGA monitor.



Connecting the Wireless Keyboard

CAUTION Make sure that the computer is turned off.

1. Locate the box containing the Wireless Keyboard and take out the following two items:
   - — Infrared (IR) Receiver
   - — Wireless Keyboard
2. Place the IR receiver on top of your XGA monitor, while enabling direct-line view with the wireless keyboard and the remote control.
3. Connect the two cables to the PS/2 mini-DIN mouse port and the keyboard connector on the computer's rear panel. Place the Wireless Keyboard on your conference table, preferably at an operating distance of no more than 6 meters away from the keyboard receiver.

Connecting an XGA Monitor in Single Monitor Mode

CAUTION Make sure that the computer and the XGA monitor are turned off.

If you are using a plasma/LCD monitor, DO NOT disable the Windows Display Screen Saver (preset to ON). Plasma monitors are extremely susceptible to screen burn, which is permanent and cannot be removed.

➤ To connect an XGA monitor for use with HD4000

❑ Connect a VGA cable between the DVI Out connector (or equivalent) of the Video Card and the DVI input on the rear of the XGA Monitor. If the monitor does not support DVI input, attach the VGA adapter to the Video Card DVI output connector.

Connecting XGA and TV Monitors in Dual Monitor Mode

Dual Monitor mode comprises one XGA monitor (for connection instructions, see "Connecting an XGA Monitor in Single Monitor Mode" on page 9) and one TV monitor.

CAUTION Make sure that the computer and the TV monitor are turned off.

If you are using a plasma/LCD monitor, DO NOT disable the Windows Display Screen Saver (preset to ON). Plasma monitors are extremely susceptible to screen burn, which is permanent and cannot be removed.

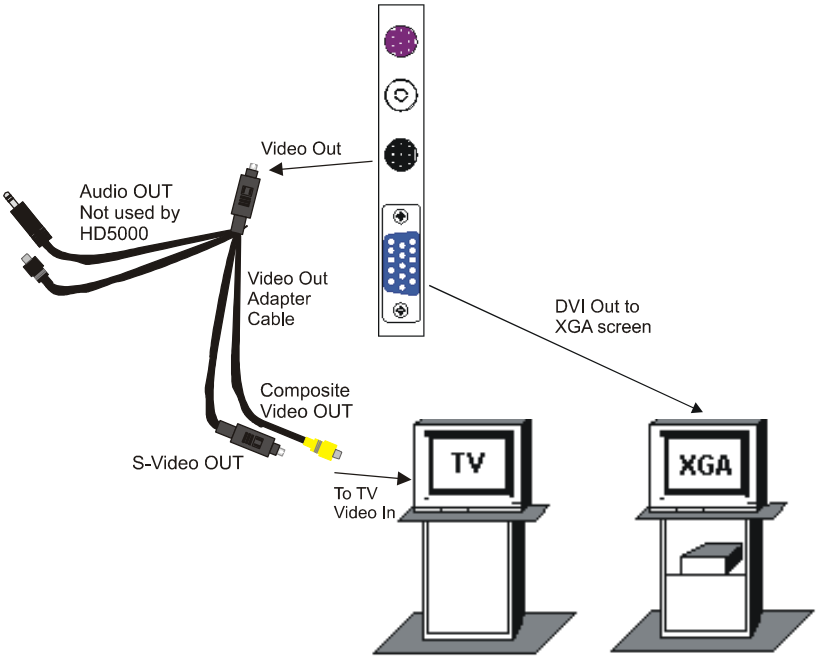
➤ To connect the XGA and TV monitors for use with HD4000 in Dual Monitor mode

1. Connect the Video Out Adapter cable between the TV's Video In connector and the video card's Video Out connector.

If the TV monitor supports both S-Video and Composite Video, we recommend that you connect the S-Video because it displays higher quality video.

2. Connect a VGA cable between the DVI Out connector (or equivalent) of the Video Card and the DVI input on the rear of the XGA Monitor. If the monitor does not support DVI input, attach the VGA adapter to the Video Card DVI output connector.

See the illustration on the following page.



Connecting a TV Monitor in Dual Monitor Mode

3 ENABLING MXM MANAGEMENT OF THE HD4000

If you want your HD4000 system to be managed by an Emblaze-VCON Media Xchange Manager® (MXM) installed within your organization, run the MXM Enable utility that's included with the system.

Likewise, you can disable MXM management with this tool.

➤ To enable or disable MXM management

1. In the Windows Desktop, click **Start** and then **Run**.
2. Browse to the *Program Files/HD4000* folder and then double-click *MXM_Enable.exe*.
3. In the Run dialog box, click **OK** to run the program.
4. The question, "**Will your system be managed by an Emblaze-VCON Media Xchange Manager® (MXM)?**" appears. Click **Yes** to enable or **No** to disable the MXM management.

4 STARTING HD4000

HD4000's Start procedure varies, depending on its installation mode:

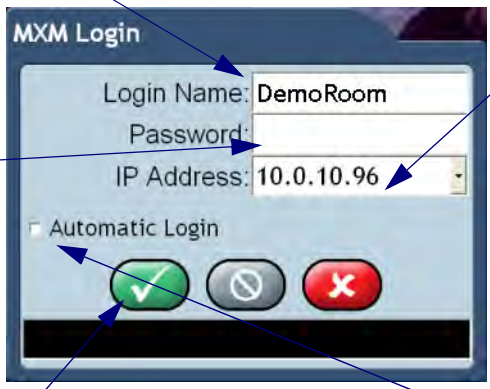
- Media Xchange Manager® (MXM) managed
- Stand-alone or registered with another gatekeeper.

4.1 Media Xchange Manager® (MXM) Managed

If the HD4000 system is managed by Emblaze-VCON's Media Xchange Manager® (MXM), you have to log in when you start your system. You can make this login process automatic.

During the HD4000 startup, the MXM Login dialog box appears.

➤ To log in to an MXM



1. Enter the name of your computer as listed in the MXM database and the MXM Administrator.

2. Enter the password required to log in. If you do not supply this password, the login request is rejected.

3. Enter the IP address of the MXM. If you do not know it, ask your system administrator.

4. Select if you want to log into the same MXM with the same login name and password every time you run HD4000.

5. Click to complete the login.

- ❑ If the MXM automatically registers your computer, the HD4000 application opens.
- ❑ If a message appears stating that startup cannot proceed until login is granted, contact your system administrator and wait to receive permission.

After login is granted, the HD4000 application opens.

4.2 Stand-alone or Registered with Another Gatekeeper

If your HD4000 is registered with a non-Emblaze-VCON Gatekeeper or not registered with any management system, the videoconferencing application's main screen opens several seconds after the Windows startup.

5 SETTING UP THE HD4000 CONFIGURATION

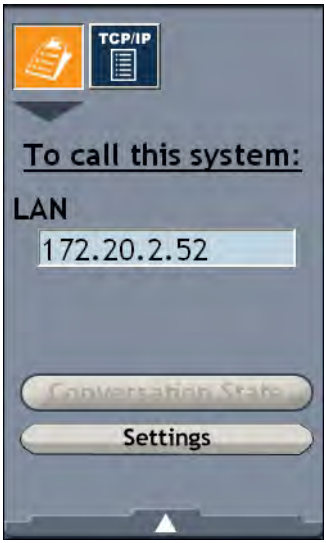
After installing HD4000, you have to set up the system configuration, according to your particular specifications, in the system's Settings dialog boxes. The **Settings** button provides access to these dialog boxes.

5.1 Accessing the System Settings

You can change and view the system's Settings after installation or at a later opportunity:

➤ **To open the Settings dialog boxes**

1. In the Main View, click the Settings button.
2. In the Settings pull-down, click **Settings**.



3. Click the relevant tab.
4. Change the required information or options. For definitions, see "Settings Definitions" in the next section.
5. Click **Apply** to implement changes. To exit, click **Close**.

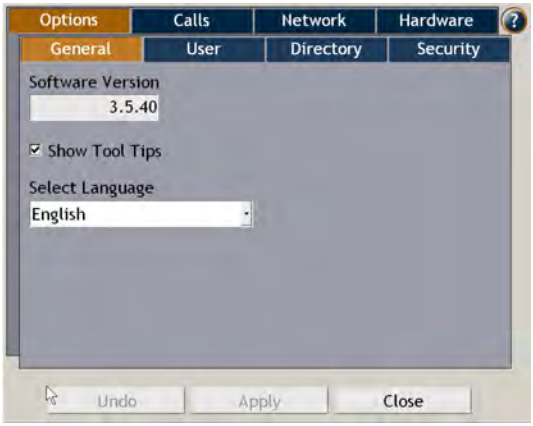
5.2 Settings Definitions

The system's Settings include properties and options for the following:

General Options	Settings for accepting incoming calls and other system preferences. See page 19.
User	Identification of the HD4000 end point. See page 20.
Directory	Configuration of the HD4000's registration in an online directory. See page 21.
Security	Enabling access to management of the HD4000 from a remote location through a web browser. See page 22.
Broadcast	Default configuration for transmitting broadcasts to Participants and public viewers. See page 25.
Forward	Set destinations for forwarding incoming calls. See page 27.
LAN Basic	Identification configuration of the HD4000 on the local network. See page 29.
LAN Advanced	Enabling the use of H.323 mechanisms and other advanced IP features. See page 30.
Login	User Name and password for logging into an MXM. See page 31.
Audio	Audio hardware and software configuration of the HD4000. See page 32.
Camera	Pan/Tilt/Zoom (PTZ) camera configuration of the HD4000 (if applicable). See page 33.
Video	Configuration for displaying video on the HD4000. See page 34.

General

The **General Options** settings contains options for accepting incoming calls and other system preferences. Set them according to your configuration requirements.



Software Version — Version number of this HD4000 application.

Show Tool Tips — Select to display tool tips when the pointer pauses over a command icon.

Select Language — Select the language of the HD4000 application on your computer.

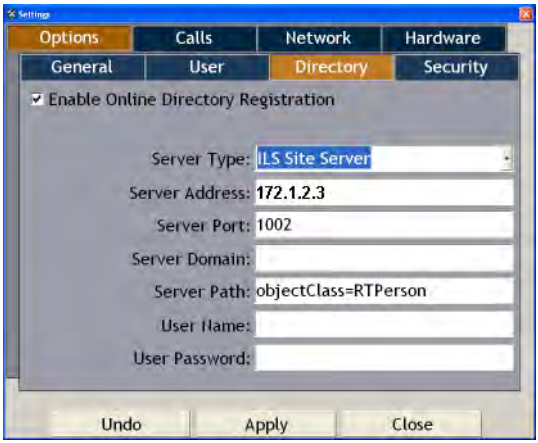
User

The **User** settings provides identification of the HD4000 end point. This includes the following information:

- First Name
- Last Name
- Company or organization
- E-mail address

Directory

The **Directory** settings contains the configuration of the HD4000's registration in an online directory. An online directory is a list of other videoconferencing users who may be called if they are online. To dial a user, select the name and click the Dial command.



Enable Online Directory Registration — Select to enable the HD4000 to register with the online directory specified in this dialog box.

- ❑ If the HD4000 is registered in a Emblaze-VCON Media Xchange Manager® (MXM), the HD4000 receives its online directory configuration from the MXM.
- ❑ If the HD4000 operates as a stand-alone unit, you must fill in the configuration. Consult with your system administrator for the configuration details.

Server Type — From the supported directory server types from the list, choose the one used by your organization.

Server Address — Enter the IP address of the directory server.

Server Port — Enter the port through which the HD4000 is connected to the directory server.

Server Domain — Enter the domain in which the directory server resides.

Server Path — The folder in the directory server in which this end point is listed.

User Name — The user name for this HD4000 that's listed in the directory server.

User Password Password required to access the online directory listings, if applicable.

Security

HD4000 contains an embedded web server, which provides powerful management capabilities from remote locations. You can access the HD4000 server from any PC through an Internet Explorer browser.

For any remote access management operation to succeed, you must set the HD4000 to accept the remote modifications, and the remote PC must be able to run the web server screens.

Enable Web Application Select to make remote management available.

Web Application Password Type a password to restrict access to the remote management.

Enable Password for Advanced Configuration Select to restrict access to advanced system properties by requiring a password.

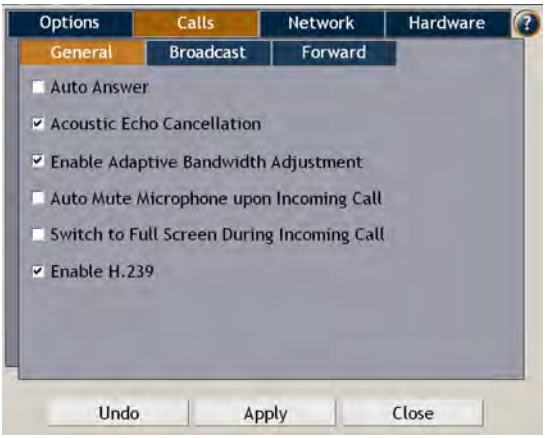
Encryption Mode

Choose the mode of encryption for this HD4000's conferences.

- **No Encryption** - Select to allow unsecured calls.
- **Automatic** - Enables the HD4000 to encrypt a call if the remote side has also enabled encryption. If the remote side has not enabled encryption, an outgoing call will be unsecured.
- **AES** (Advanced Encryption Standard) - A standard encoding method for encrypting data transmissions in commercial and government sectors of the USA and its use is growing worldwide.
  Select this option to encrypt all of this HD4000's calls. If the remote side has not also enabled encryption, the call attempt will be unsuccessful.

Calls General

In the **Calls General** Settings, enable the use of any of the following parameters during your HD4000 conferences.



Auto Answer — Select to accept calls automatically. If the system is idle when a videoconferencing call arrives, the session starts automatically.

Acoustic Echo Cancellation — Select to cancel the echo created when your system's microphone picks up audio from the system's speakers.

Enable Adaptive Bandwidth Adjustment — Enables videoconferences to precede at reduced bandwidth if the network is congested. Deselecting this option maintains a constant quality to the session, but it may cause network problems.

Auto Mute Microphone Upon Incoming Call — Select to mute the microphone automatically whenever the HD4000 accepts an incoming call. After the conference begins, you may turn the audio back on.

Switch to Full Screen During Incoming Call — Select to view video on a full monitor display after accepting an incoming call.

Enable H.239 — Select to enable the H.239 standard. The H.239 standard enables the HD4000 to convert data into a separate media stream and transmit it parallel to the video stream. Video systems supporting H.239 display shared data and live video in separate windows. Systems not supporting H.239 display only the shared data in a single window.

Broadcast

The **Broadcast** settings contain the default configuration for sending video and audio to Interactive Broadcast Participants and public viewers. These settings are only applicable for sessions chaired by this HD4000.

The default Broadcast settings are recommended for most Broadcast conditions. Change them ONLY after consultation with your system administrator.

Broadcast IP Address — The destination IP address for the Interactive Broadcast. All participants in the session transmit and receive from this common IP address. This address must be a class D address in the range of **224.0.0.0** to **239.255.255.255**.

Maximum Participants — The maximum number of participants that may participate in a Broadcast session initiated by the HD4000.

Bandwidth — The maximum bandwidth for Interactive Broadcasts. The actual bandwidth will depend on the amount of available bandwidth during the session.

Time to Live — The maximum number of routers that the Session's packets may pass through.

Video Format

The video coding standard that all parties in the Broadcast are capable of using - **H.261**, **H.263** and **H.264**.

H.264 is a new standard which provides better video quality, compression efficiency, and more resilience against packet and data loss, than earlier standards.

Since it is new, some video systems do not support H.264. If at least one Participant's system does not support H.264, or you are not sure, select **H.263** or **H.261**.

Audio Format

The audio standard that all parties in the Broadcast are capable of using.

G.711 U-law/A-law
This standard gives the lowest quality results, but it must be selected if you want public viewers to be able to view a broadcast session. Select **G.711 U-law** if you're in the U.S. or Japan, or **G.711 A-law** if you're in Europe. For other regions, consult with your system administrator or your local Emblaze-VCON technical support representative.

G.722
This standard gives the best quality. Select it if you know that the remote parties support it and if you think that the connection will be over high bandwidths.

G.723
This is a standard for transmitting audio at faster bit rates, which reduces bandwidth usage.

G.728
This standard gives the best possible quality with the smallest possible bandwidth cost. Select this standard if you know that the remote parties support it and if you think that the connection will be over low bandwidths.

If you select either **G.728**, **G.723**, or **G.722**, and a remote party's system does not support it, that party will not be able to participate in the session.

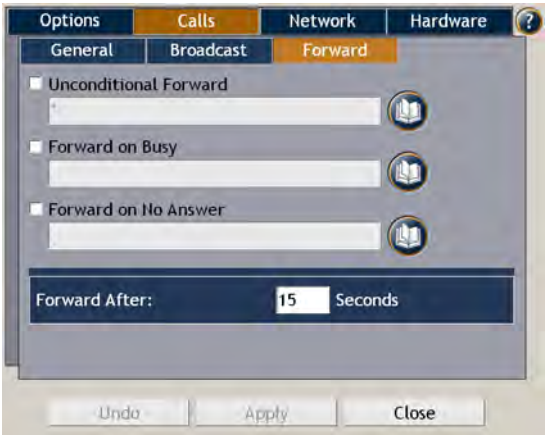
Video Port	The ID of the port used for the video connection.
Audio Port	The ID of the port used for the audio connection.
	Participants must use the same video, audio and control ports. Make sure that the ports you choose are available for every Participant.
Announcement Rate	The interval between announcements of your Broadcast in the public viewer's schedule.
Refresh Video Rate	The maximum number of seconds required until the video broadcast is synchronized for all viewers. If the refresh value is low, the quality is lowered. If the refresh value is high, it will take a longer time to see the video display when the viewers connect. Use the default setting as a guide.

Forward

The Forward settings are available if your HD4000 system is registered and managed by an MXM.

In the **Forward** settings, set alternate destinations for the routing of incoming calls. Call forwarding may occur:

- ❑ At all times (unconditionally)
- ❑ If the node is busy in another videoconference
- ❑ If the call is not answered by the node.



Set forwarding numbers for the following conditions:

Unconditional Forward

Select this option to set an alternate destination for every call to this HD4000. Type a User Number or choose another destination by clicking the Destination List button and choosing an entry.

The forwarding will then occur unconditionally whenever an incoming call comes.

If this option is selected, the **Busy** and **No Answer** options are not available.

Forward on Busy

Select this option to set an alternate destination for a call if this end point is engaged in another call at the same time. Type a User Number or choose another destination by clicking the Destination List button and choosing an entry.

Forward on No Answer

Select this option to set an alternate destination for a call if this node does not answer after a specified time. Type a User Number or choose another destination by clicking the Destination List button and choosing an entry.

Forward after

Type the number of seconds before the system forwards unanswered calls.

A “*” entry indicates that the particular forwarding setting is not active.

LAN Basic

The **LAN Basic** settings contain the HD4000's identification configuration on the local network.

IP Address — The HD4000's IP address.

DNS Name — The HD4000's name if it's located in a network that employs a DNS server

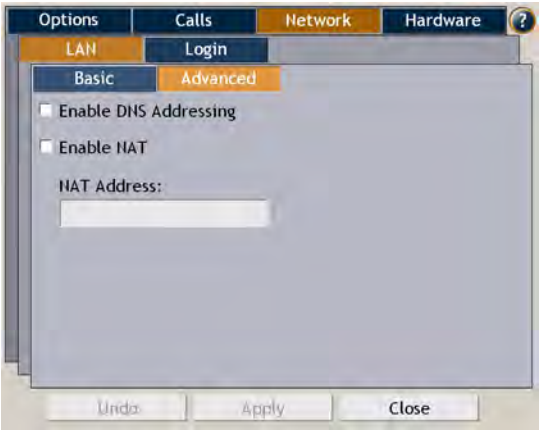
User Name/ Number — Name and Number of the HD4000 as listed in the MXM or gatekeeper that it's registered in (if applicable). Videoconferencing contacts registered with the same MXM or other gatekeepers will be able to call you by dialing your User Number.

Gatekeeper Address — IP address of the MXM or gatekeeper to which the HD4000 is registered.

In MXM management mode, it is only possible to edit the **User Number**.

LAN Advanced

In the **LAN Advanced** settings, select options for communicating over the connected IP network.



Enable DNS Addressing — Allows the use of the Domain Naming System (DNS) for contacting other parties by a defined computer name.

Enable NAT — If your organization uses Network Address Translation (NAT) when communicating with parties in another LAN or WAN, type the external address for your videoconferencing device.

NAT is a protocol in which a LAN uses one set of IP addresses for internal communication (within an organization's private LAN) and a different, single address for communication with a public network, such as the Internet. In this way, a NAT helps protect a LAN from exposure to unwanted traffic.

To hide a LAN's users from other networks, the NAT maps the private addresses to the public address. The public address is then used to identify the local users to remote contacts. Therefore, remote contacts use this public address to call the local users, without knowing their actual local addresses.

NAT Address — Enter the public address of the HD4000.

Login

In the **Login** settings, define how the HD4000 logs into a Media Xchange Manager (MXM) to receive management and telephony services.

Automatic Login	Select to log in automatically to the MXM during the HD4000's startup using the current User Name and Password.
Change MXM Password	Click this button to change the HD4000's password for logging into the MXM. The following items appear in the dialog box.
User Name	User name of this HD4000. This name indicates your HD4000 in the MXM Administrator application.
New Password	Password that replaces the current one.
Verify Password	Confirmation of the new password.

If the Password boxes are blank, the current password remains valid.

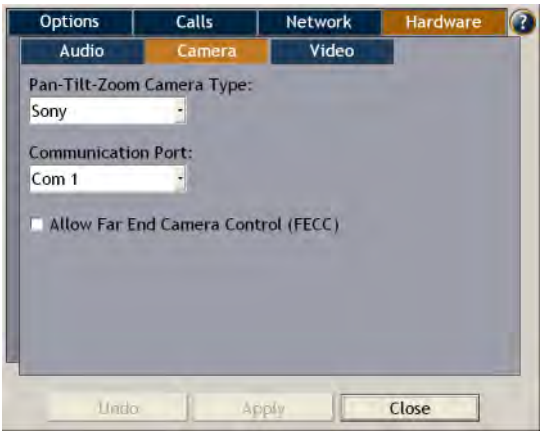
Audio

In the **Audio** settings, you can define the audio configuration to be used during conferences.

Audio Inputs/ Outputs	Select the types of audio hardware installed in or connected to the HD4000's computer.
Microphone Boost	Select to significantly raise the volume range of the microphone or deselect to lower the range.
Line In	Select to enable audio input through the Line In connector from an external audio source, such as DVD or VCR.
Microphone Level	Drag the slider to the right to raise the microphone volume or to the left to lower it.
Lip Synchronization	Drag the slider towards Delay Video if you hear the audio after the video movement, or towards Delay Audio if you see the appropriate video movement only after you hear the audio. Click **Default** to return to the default setting.

Camera

In the **Camera** settings, set the type of Pan/Tilt/Zoom (PTZ) camera that is connected to the system and the communications port through which it can be controlled.



Camera Type — Select the manufacturer and/or model of the connected PTZ camera (if applicable).
If you are using a non-controllable camera, select **None**.

Communication Port — Select the name of the computer port to which the PTZ camera is connected.

Allow Far End Camera Control (FECC) — Select to permit a remote participant in a conference to control the positioning of your PTZ camera. If a PTZ camera is not used, this option is not applicable.

Video

The **Video** settings contain the configuration for displaying video.

Video Input Device — Name of the HD4000's video source.

Video Input Type — Type of video source.

- **Fixed** - Non-adjustable analog camera.
- **Pan-Tilt-Zoom** - PTZ controllable camera.
- **Document** - Document camera.

Display Mode

- Select **Single Mode** to display video and the HD4000 application on one monitor.
- Select **Dual Mode** to display remote video on one monitor, local video and the HD4000 application on a second monitor.

Display Ratio — Aspect ratio, or rectangular shape of the displayed video.

- **4:3** is the aspect ratio used by standard TV.
- **16:9** is wider than 4:3 and is the standard aspect ratio for high definition television (HDTV).

Display Format — Select the video format that is compatible with your camera and/or monitor.

- **NTSC** is widely used throughout the Western Hemisphere, Japan and South Korea.
- **PAL** is used in many countries in Western Europe, Asia, Africa, as well as Australia.

6 TROUBLESHOOTING

This chapter may help you resolve certain conditions that may occur while operating the HD4000 application.

If you are unable to find a solution to your problem, please request help from our Technical Support channels.

Access the Technical Support section of the Emblaze-VCON website (http://www.Emblaze-VCON.com/support/index.shtml) in order to check its knowledge base or initiate other customer support processes:

Page	Type of support
Support Notes	Troubleshoot or receive technical information about specific Emblaze-VCON products.
Downloads	Download a new software release or a free product evaluation.
Demo Numbers	Test your videoconferencing system.
License Key Requests	Request a permanent license key for your organization's MXM(s).

Keyboard Problems	Solution
When you work with the keyboard, the system does not respond.	**1** Make sure that you are directing the keyboard directly at the receiver unit with no obstructions between them. **2** Check that the receiver is connected correctly and that the receiver LEDs are ON. **3** Optimal distance for using the keyboard is 6 meters (19.5 feet). Use of the keyboard over a long period of time without replacing its batteries will reduce this optimal distance. **4** Check that the batteries are inserted correctly in the keyboard. If necessary, replace the batteries. **5** If the problem still remains, contact your local Emblaze-VCON distributor for further instructions.

Camera Problems	Solution
The camera does not respond to movement requests.	**1** Open the **Settings**>**Hardware**>**Camera** dialog box and make sure that the correct camera model and port are defined. **2** Make sure that you are directing the keyboard directly at the receiver unit with no obstructions between them. **3** Verify that the Camera unit is connected correctly to the video card. **4** Open the **Settings**>**Hardware**>**Video** dialog box and make sure that the correct video device and type are defined. **5** Verify that the camera control cable is connected between the camera's serial IN connector and the serial communication port on the rear panel of the computer. **6** If your camera is Sony EVI-D100, check that the IR Select switch on the rear of the camera is set to: — **1** if you're using an S-Video connection — **2** if you're using a Composite Video connection. **7** If your camera is Sony EVI-D100, check the settings of the DIP switches on the bottom of the camera. **IR OUT** must be set to OFF and **MODE** must be set to ON.
The Far End (remote) camera does not respond.	**1** Verify that a controllable PTZ camera is connected to the remote user's computer. **2** Verify that the remote user allows you to establish control the remote camera. **3** Open the **Settings**>**Hardware**>**Camera** dialog box and make sure that **Allow Far End Camera Control (FECC)** is selected.

Video Problems	Solution
The system is switched ON but the local Video Image is blank.	**1** Verify that the Camera is switched ON. **2** Verify that all connections from the computer to the Camera unit are correct. **3** Open the **Settings**>**Hardware**>**Video** dialog box and make sure that the correct video device is selected. **4** If the problem still remains, contact your local Emblaze-VCON distributor for further instructions.
The local Video Image is the Emblaze-VCON logo.	**1** If you have only the XGA monitor, open the **Settings**>**Hardware**>**Video** dialog box and make sure that **Single Mode** is selected as the display. **2** If you have a TV and an XGA monitor, verify that **Dual Mode** is selected as the display, and that the TV is tuned into the correct channel.

Audio Problems	Solution
When connected in a video-conferencing session, you cannot hear any sounds from the remote user.	**1** Verify that the system's volume is not turned down or muted. **2** Verify that the monitor volume is not muted. **3** Verify that all audio connections from the computer to the XGA monitor are correct. **4** Verify that the remote participant has not muted audio transmission from the remote side. **5** If you started the videoconference, then disconnect and redial to verify whether the problem remains. If the remote user started the videoconference, advise the remote user to disconnect and redial to verify whether the problem remains. **6** Open the **Settings**>**Hardware**>**Audio** dialog box and make sure that the correct audio device is selected. **7** If the problem still remains, contact your local Emblaze-VCON distributor for further instructions.
Audio from your system is not being received by the remote user.	**1** Verify that you have not turned the audio transmitted from your microphone off – muting audio being transmitted from your system to the remote user. **2** Open the **Settings**>**Hardware**>**Audio** dialog box and make sure that the correct audio device is selected. **3** Verify that the connection from the microphone to the computer is correct. **4** Instruct the remote participant to examine the remote system as indicated in the previous section for received audio. **5** If the problem still remains, contact your local Emblaze-VCON distributor for further instructions.

Connectivity Problems	Solution
When trying to start or receive a call, the connection fails.	1 Verify that the LAN cable is connected and not loose. 2 Verify that the TCP/IP settings (Windows **Control Panel**>**Network**>**Configuration** tab) are correct.
When trying to start or receive a call through the Gatekeeper, the connection fails.	1 Open the **Settings**>**Network**>**LAN Basic** dialog box and make sure that the Gatekeeper IP Address is entered correctly. 2 Verify that your system's E.164 name or alias name is entered correctly in the **User Name** box of the **LAN Basic** dialog box.

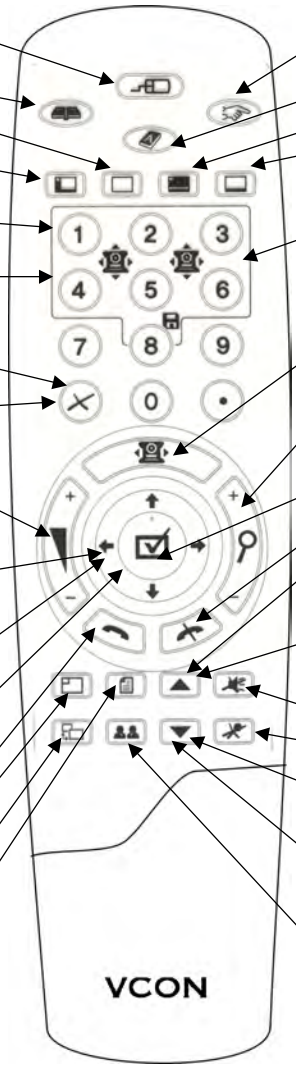
A THE REMOTE CONTROL

In addition to the wireless keyboard, Emblaze-VCON offers a remote control unit as an option for controlling the cameras, dialing, and additional functions. To use it, point it at the keyboard receiver from a distance of up to 6 meters (see "Wireless Keyboard, Remote Control and Receiver" on page 3).

See the next page for an explanation of the remote control buttons.

HD4000 Remote Control

The HD4000's optional remote control unit controls the camera, dialing, and additional functions. The illustration below is a guide to the remote control's functions.



Use arrows and **SELECT** button as a Mouse

Open/Close Online Directory Dialer

Display in Full Screen Mode

Display in Main Screen Mode

If Speed Dial is set up, press **1 – 6** to dial

If Manual Dialer is open, **1 - 9, 0, (dot)** is a dialpad for entering numerical addresses

Close open dialog box

In Manual Dialer

Delete the previous character

Press + to increase volume and – to decrease volume

Camera Control

Press arrows to move the camera view in the selected direction

If Dialer is Open

Press left and right arrows to navigate among dialer settings

Press up and down arrows to scroll among values in dialer settings list boxes

Open the Dialer and start a conference

Open/Close PIP Viewing mode

Switch between local and remote video

Switch to Data Sharing Mode

Open/Close Manual Dialer

Open/Close Personal Address Book

Display in PC Mode

Display Dashboard

Camera Control

Press **8** to set a preset position and then **1 – 6** as its number. To move to a preset position, press its number

Open the Camera Controller

Press + to zoom in and – to move out

SELECT option or item in dialog box or list

Hang up a conference

If Dialer is Open

Scroll up among the various dialers

Data Sharing Mode

Go up one page or screen

Turn Speaker On/Off

Turn Microphone On/Off

If Dialer is Open

Scroll down among the various dialers

Data Sharing Mode

Go down one page or screen

Data Sharing Mode

Resume Live Video mode