



Xpoint

Executive Videoconferencing Room System

Installation and Setup Manual

© 2004 - 2007 Emblaze-VCON Ltd. All Rights Reserved.

Information in this document is subject to change without notice. No part of this document can be reproduced or transmitted in any form or by any means - electronic or mechanical - for any purpose without written permission from Emblaze-VCON Ltd.

VCON and Media Exchange Manager are registered trademarks of Emblaze-VCON Ltd.

Microsoft is a registered trademark of Microsoft Corporation.

All other trademarks are the trademarks of their respective companies.

Caution! To comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules, all cables used to connect the system and peripherals must be shielded and grounded. Operation with non-shielded cables may result in interference to radio or television reception.



Safety Information

Caution! Do not open the xPoint unit. There are no user-serviceable parts inside.



Opening the unit voids the warranty and can also cause injury. Please refer servicing to Emblaze VCON-trained service personnel.

When you use an xPoint system, observe the following safety guidelines:

Danger! The internal areas of the unit and auxiliary equipment are sources of voltage that, if not handled properly, constitute danger of bodily harm.



DO NOT operate the unit with any of its covers (including main cover, bezels, filler brackets, front-panel inserts, and so on) removed.

INCORRECT replacement of the Remote Control battery can cause an explosion. Replace only with the same or equivalent-type of battery recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

1. Make sure that the power is turned off and all equipment is disconnected from the power supply before making any equipment connections.
2. Make sure the monitor and attached accessories (PTZ camera, VCR, document camera, and so on) are electrically rated to operate with the AC power available in your location.
3. To help avoid possible damage to the system cards, wait 5 seconds after turning off the system before disconnecting a device from the computer.
4. To help prevent electric shock, plug the unit and accessories' power cables into properly grounded power sources. These cables are equipped with three-prong plugs to help ensure proper grounding. Do not use adapter plugs or remove the grounding prong from a cable. If you must use an extension cable, use a three-wire cable with properly grounded plugs.
5. Make sure that nothing rests on the unit system's cables and that the cables are not located where they can be stepped on or tripped over.
6. Do not install this equipment near water, or in an otherwise wet or damp environment.
7. Do not run the equipment in an environment with ambient temperature higher than 35°C or lower than 10°C.

-
8. Keep food and liquids away from the system or accessories.
 9. Keep the unit away from radiators and heat sources. Also, do not block cooling vents. Avoid placing loose papers underneath the unit, and do not place the computer in a closed-in wall unit or on a bed, sofa, or rug.
 10. Do not install or operate this equipment if chemical gas leakage is expected in the area.

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC rules.

The FCC Wants You to Know

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Table of Contents

	SAFETY INFORMATION	3
	TABLE OF CONTENTS	5
	<i>Table of Figures</i>	6
1	OVERVIEW	7
	XPOINT MODEL CONFIGURATIONS.....	7
	<i>xPoint Basic</i>	7
	<i>xPoint Data Option</i>	8
	<i>xPoint ISDN Option</i>	8
	<i>Additional Accessories</i>	8
2	UNPACKING AND CONNECTING THE SYSTEM.....	9
	UNPACKING	9
	POSITIONING	9
	CONNECTING.....	9
3	REMOTE CONTROL	11
4	SYSTEM CONFIGURATION.....	13
	STARTING THE SYSTEM	13
	MONITOR CONFIGURATIONS	13
	DISPLAY SETTINGS.....	14
	<i>Display Device Settings</i>	14
	NETWORK	15
	<i>System Settings (IP)</i>	15
	<i>Link Type</i>	16
	<i>H.323 Settings</i>	16
	<i>ISDN Settings</i>	18
	CAMERA.....	21
	<i>Main Camera</i>	22
	<i>Picture adjustment</i>	22
	AUDIO	23
5	BASIC OPERATION.....	24
	INITIATING CALLS	24
	<i>Manual Dialer</i>	24
	<i>Address Book</i>	25
	ACCEPTING A CALL	27

Table of Figures

Figure 1: Quick Start Guide Illustration.....	9
Figure 2: Remote Control Layout.....	12
Figure 3: Display Settings Screen	14
Figure 4: System setup Screen	15
Figure 5: H.323 setup Screen.....	17
Figure 6: ISDN Configuration Screen	19
Figure 7: ISDN Lines Configuration Screen.....	20
Figure 8: ISDN SPID Configuration Screen.....	21
Figure 9: Camera setup screen	22
Figure 10: Audio settings screen	23
Figure 11: Address book.....	25
Figure 12: Initiating a Call	26
Figure 13: Incoming Call.....	27

1 OVERVIEW

Emblaze VCON's xPoint is a room system conferencing system that offers high-quality videoconferencing capabilities. Utilizing the newest H.264 video standard and clear, crisp audio, the xPoint brings users face-to-face with other people and organizations.

The xPoint incorporates advanced data conferencing capabilities, allowing you to turn any videoconference into a fully interactive meeting easily. It can display presentations or DVD videos on a large monitor, connect external laptop for data sharing and open various document types stored on a USB key.

xPoint Model Configurations

The xPoint series includes the following model configurations:

xPoint Basic

This includes the basic system including the codec and all required accessories, including:

- xPoint Main Unit
- Pan/Tilt/Zoom (PTZ) camera
- Remote control unit And receiver
- Tabletop microphone
- Power Supply
- Cables

xPoint Data Option

The Data kit enables sharing an external VGA source such as laptop or a PC for presentations or application sharing.

- Table Top pod (A microphone, USB and VGA input extensions).
- xPoint DataPoint™ VGA input adapter.
- Tabletop Microphone (2 meters)
- VGA input cable (male to male)

xPoint ISDN Option

The ISDN option enables connecting to ISDN based networks, using up to 4 ISDN BRI lines, reaching connection bandwidth of up to 512Kbps. The kit includes:

- xPoint ISDN 4 BRI adapter
- Power Supply
- ISDN and xPoint connection cables

Additional Accessories

Various additional accessories for enhancing the system are available:

- Multimedia speakers
- Document camera
- Second PTZ camera

Note: components are subject to change. A component may look different than its illustrated counterpart.

2 UNPACKING AND CONNECTING THE SYSTEM

Unpacking

When you open the xPoint system shipping package(s) for the first time, please check that all items purchased according to the model (see specification above), are included in accordance with the supplied product. If any of the items (according to your customer order) are missing or damaged, contact your Emblaze VCON distributor immediately.

Positioning

Please place the system on a steady surface, desirably ventilated and not exposed to extreme temperatures. Make sure there is enough space for connecting the cables in the back of the unit, and that the cables are not stretched between the main units the accessories. Please do not place any items on top of the unit.

Connecting

Connecting the cables and peripherals is done using the supplied **quick start guide** which visually presents all required connections.



Figure 1: Quick Start Guide Illustration

In order to connect the xPoint to its peripherals, follow the schematic diagram (located on the back side of the guide) going from the left side.

You can identify each peripheral by matching the number on the cable with the numbered picture on the front of the document.

The diagram contains the optional modules in addition to the basic option. If you did not purchase any of the optional modules, please ignore those sections.

To connect the optional modules, after assembling the main unit, assemble the optional module and finally connect it to the main unit.

NOTE: Connect the unit to the electricity only after all peripherals are connected

3 REMOTE CONTROL

The remote control device is used to control all aspects of the system. The system is equipped with highly intuitive on screen graphical user interface which is used for navigation and operation.

The remote control is transmitting an infra-red light to the receiver connected to the main unit, and the actions are reflected on the screen.

The remote control is divided to 3 logical parts: command buttons, keypad and Navigation joystick

Command buttons - The command buttons are used to send a specific command to the system such as "Call Information", "Mute Microphone" etc.

Keypad - The keypad has 3 modes:

- ♦ **Number Mode:** In number mode, the numbers 0-9 are used when pressing the digits 0-0 on the keypad. In addition, the dot (.) sign is used when pressing the asterisk (*) sign on the keypad
- ♦ **Text Mode:** In letter mode, each letter sends 1 or more letters. The letters are printed on the body of the remote control. For example, pressing once number 2 on the keypad in text mode will produce the letter "A". Pressing twice on the number 2 will product the letter "B", etc. Moving from upper case to lower case is done by pressing the volume up and down button while in a text box.
- ***Special characters*** (located under the '*' button) are:
'.' (dot), ',' (comma), '@' (at sign), '\'' (apostrophe), '*' (star), '=' (equal), '\$' (dollar), '_' (underscore).
- ♦ **DTMF Mode:** When in a call, the number on the keypad will send the corresponding DTMF tone to the remote side (this is usually used for IVR systems input). The asterisk (*) and pound (#) sign will send that DTMF tone accordingly.

Navigation Joystick – The navigation joystick has a four directional movement capability and a down press capability. Use the arrows to navigate to either side and the press capability for "Menu" or "OK" action where required by the graphical user interface

Figure 2: Remote Control Layout



	1	Status	Display the call status
	2	Data	Initiate data sharing
	3	Address Book	Open address book
	4	Help	Open the system help
	5	Far End	Control the position (PTZ) of the camera at the far end
	6	Camera Control	Configure the camera settings
	7	Preset - Recall	Recall a camera PTZ preset position
	8	Preset - Set	Set a camera PTZ preset position

Joystick (#17) Back (#18) Menu/OK (#19)

Up In

Volume Zoom

Down Out

(#20) (#21)

Make call (#22) End call (#23)

	9	PIP	Toggle the position of the PIP (5 positions)
	10	Speed Dial	Display the speed dial screen
	11	Call Log	Display the current call log
	12	Mute Mic.	Mute the microphone
	13	Display	Toggle the local and remote displays
	14	Settings	Open the settings menu
	15	Mute Video	Temporarily disable the video camera
	16	Mute Speaker	Mute speaker

4 SYSTEM CONFIGURATION

Starting the system

Once the system is properly wired, connect it to the electricity and power it up using the power switch on the back. When system fully loads, you will see the view from the camera on the entire screen.

The xPoint system is capable of using one or two displays. According to the devices you physically connected to the system, configure the appropriate settings using the system configuration options.

In order to access the configuration screens, press on the "Menu/OK" button on the remote control. A menu will open with various options. Select the "Settings" option and press the "Menu/OK" button on the remote, or use the right arrow to expand this menu option.

Monitor Configurations

The xPoint display configuration ranges from single monitor to dual monitor. When using single monitor, both the local video and remote video are displayed on the same display, whereas when using dual displays, each video stream is displayed on a separate display.

The video output signal is can be connected using various output interfaces:

- DVI: The DVI (Digital Visual Interface) interface is common in LCD and flat panel displays.
- XGA: The XGA (Extended Graphics Array) interface is common in monitors and projectors.
- S-Video: (Separate video) interface in common in TV's and playback devices, and also in digital video displays such as LCD and projectors.

When connecting your system, please follow the attached quick reference sheet for using the connector which is appropriate to your system. Once the displays are connected, use the system user interface to configure the display settings.

Display Settings

Select Settings→Display from the main menu.

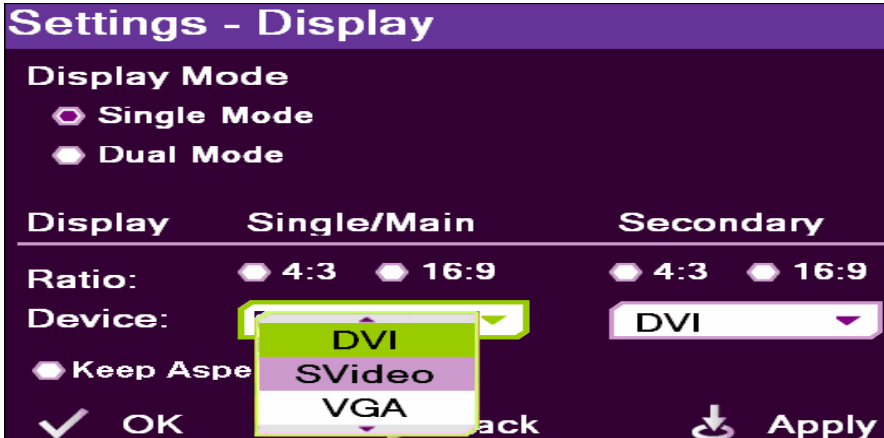


Figure 3: Display Settings Screen

- **Single mode** – Both video conference parties are displayed on a single display.
- **Dual mode** – Each video conference party is displayed on a different display. This option is only available when using multiple monitors

Display Device Settings

- **Ratio** – select the device screen display ratio whether it is 4:3 (standard) screen aspect ratio or 16:9 (wide) screen aspect ratio.
- **Device** – Select the device output type. The list depends on the connected devices, and can be composed of a combination of DVI, S-Video (TV), and VGA
- **Keep Aspect Ratio** – Keep the selected display ratio in order to force the aspect ratio on screens with different ratio
- **Display Remote on Main:** When using multiple monitors, display the remote side on the main display. Uncheck to display the remote on the secondary monitor

Network

The xPoint system is a communication device that relies on various networks and protocols. Before you can use the system, you must configure its network settings according to the network you intend to use.

System Settings (IP)

Select Settings→Network→IP→System from the program main menu.

Settings -

Obtain address from DHCP server

IP Address 172.20.1.33

Subnet Mask 255.255.0.0

Default Gateway 172.20.0.254

Obtain DNS automatically

DNS Server 172.20.0.115

Domain Name XPOINT.CO

System Name EVC-XPOINT

Ethernet Speed

Auto Detect

✓ OK ↶ Back ⬇ Apply

Figure 4: System setup Screen

Obtain address from DHCP server – Obtain a DNS server automatically. You can select this option if the xPoint system is connected to a network with a DHCP server. If you select this option, the other DNS server fields are disabled.

If you do not select *Obtain address from DHCP server*, fill in the following fields:

- ♦ **IP Address** – The address by which the xPoint system connects to the server.
- ♦ **Subnet mask** – the network address plus the bits reserved for identifying the sub-network

-
- ◆ **Default gateway** – the server's IP address.
 - ◆ **DNS server** – the DNS server used for domain name resolving.
 - ◆ **Domain Name** – the DNS name used to identify this system on the DNS server

Link Type

Select the desired link type from the dropdown list*:

- ◆ Auto Detect – the link type is detected automatically.
- ◆ 100MB Full Duplex – Set the link to 100MB full duplex.
- ◆ 100MB Half Duplex – Set the link to 100MB half duplex
- ◆ 10MB Full Duplex – Set the link to 10MB full duplex.
- ◆ 10MB Half Duplex – Set the link to 10MB half duplex

*Modify these settings only if they are required in your network

H.323 Settings

H 323 is a TCP/IP video conference protocol used by videoconference endpoints.

1. Select Settings→→Network→→IP→→H.323 from the main menu.
2. In the H.323 settings screen, select the management server to which the xPoint system is registered, if not working in standalone mode.
 - ◆ **None** – The system is in stand-alone communication mode and is not registered to a management server. This mode is typically used when connecting through ISDN.
 - ◆ **MXM** – Media exchange Manager®. Select this option to register the system to an Emblaze-VCON MXM server installed within your organization.
 - ◆ **Gatekeeper** – Register the xPoint to a gatekeeper

Settings - H.323

None **MXM** **Gatekeeper**

Server Address:

User Name:

User Number:

Password:

Enable DNS Address

Enable NAT

NAT Address:

OK

Figure 5: H.323 setup Screen

3. In the H.323 settings screen, select the management server to which the xPoint system is registered, if not working in standalone mode.
 - ♦ **None** – The system is in stand-alone communication mode and is not registered to a management server. This mode is typically used when connecting through ISDN.
 - ♦ **MXM** – Media exchange Manager®. Select this option to register the system to an Emblaze-VCON MXM server installed within your organization.
 - ♦ **Gatekeeper** – Register the xPoint to a gatekeeper.
4. If you selected either the MXM or the Gatekeeper option, enter the server login parameters as follows (consult your system administrator):
 - ♦ **Server Address** – The server IP address

-
- ♦ **User name** – Enter a user name of your choice to be used when connecting to the MXM or gatekeeper to which the system is registered (if applicable). Videoconferencing contacts registered in the same MXM or other gatekeepers will be able to call you by dialing your User Name.
 - ♦ **User number** – Enter a user number of your choice. Videoconferencing contacts registered in the same MXM or other gatekeepers will be able to call you by dialing your User Number.
 - ♦ **Password** (only required for MXM) - Enter a password of your choice.
 - ♦ **Enable DNS Addressing** – Select this option to allow you to call other parties by their DNS address (predefined computer name).
 - ♦ **Enable NAT** - NAT (Network Address Translation) is a protocol that allows LAN (Local-Area Network) to use 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, NAT helps protect a LAN from exposure to unwanted traffic. To hide 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.
 - If you enable NAT, enter the external (public) address for your videoconferencing device, (consult your administrator)
5. When you are done, click *Apply* to save the changes without leaving this screen, *OK* to save the changes and close the screen, or *Back* to move back to the previous screen without saving changes.

ISDN Settings

ISDN (Integrated Services Digital Network) is a protocol that provides video conferencing capabilities over telephone lines. It must be configured if the system is connected through the ISDN infrastructure. You must purchase the option including the peripherals and license code in order to use this functionality.

Note: skip this subject if you did not purchase this option and do not use ISDN networking.

1. Select Settings→Network→ISDN from the main menu.

The ISDN configuration is composed of two or three stages (depending on the switch type used, which is country dependant)

The ISDN configuration is done in a wizard like manner where all information needs to be supplied in order to complete the full configuration.

The configuration wizard will guide you through the steps depending on your selection of device and switch types.

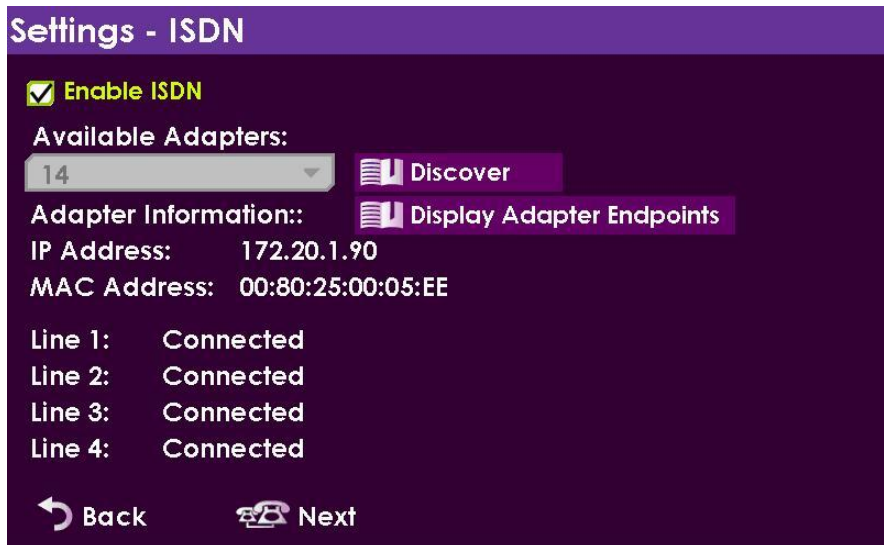


Figure 6: ISDN Configuration Screen

2. Select to *Enable ISDN*.
 - ♦ **Available adapters** – Click on *Discover* to populate the *Available Adapters* list, and select the desired adapter from the list. Once you select an adapter, the Adapter Information, IP Address an MAC Address of the adapter will be displayed

- ♦ **Display Adapter Endpoints** – Click this button if your ISDN adapter is not connected directly to the ISDN port (via cable) in your system. If your ISDN adapter is a shared device, clicking this button will display a list of other systems using the ISDN adapter chosen.
- ♦ **Line indications** - After connecting the lines status is indicated.

3. Select to *Next*

Line	Phone Number 1	Phone Number 2
Line 1	7455354	7455354
Line 2	7455360	7455360
Line 3	7437654	7437654
Line 4	7437141	7437141

Figure 7: ISDN Lines Configuration Screen

The phone number configuration for in displayed. Enter the appropriate number for each field. Please consult you system administrator for further information.

Depending on the switch type you selected, an additional step might be required. If the button at the bottom is finish, select it to finalize the ISDN configuration. If it is "Next", select next and continue with an additional step.

4. SPID numbers setting [Optional]

For 5ESS Switch Types, an additional step is required for the SPID numbers. When you select this switch type, an additional step is required. Press next. Otherwise, press Finish to finalize the ISDN configuration

	SPID 1	SPID 2
Line 1	12345678	12345678
Line 2	13456789	13456789
Line 3	14567890	14567890
Line 4	15678901	15678901

Back Finish

Figure 8: ISDN SPID Configuration Screen

Camera

The camera attached to the system can be configured for various parameters, select Settings→→Camera from the main menu to access the camera configuration screen

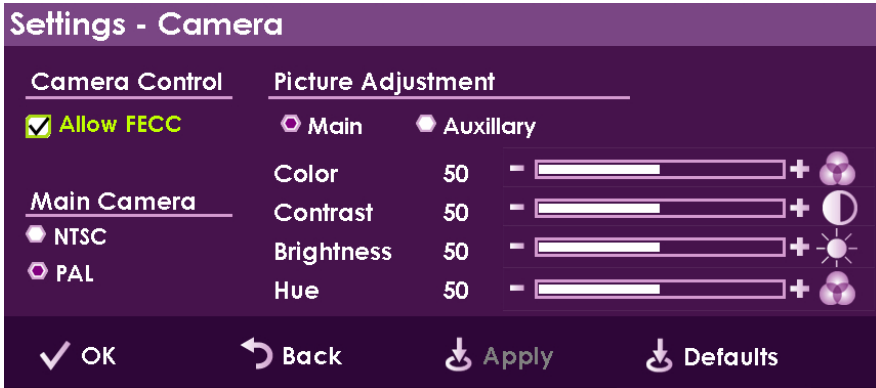


Figure 9: Camera setup screen

Main Camera

Allow FECC (Far End Camera Controls) – Allow the remote side to control this system's camera position, tilt and zoom.

Select the video format, NTSC or PAL, according to your camera.

Picture adjustment

If two cameras are connected to your system, select the camera that you want to adjust: Main camera or the auxiliary (second) camera.

When you are done, click *Apply* to save the changes without leaving this screen, *OK* to save the changes and close the screen, or *Back* to move back to the previous screen without saving changes.

Audio

Select Settings→Audio from the main menu.

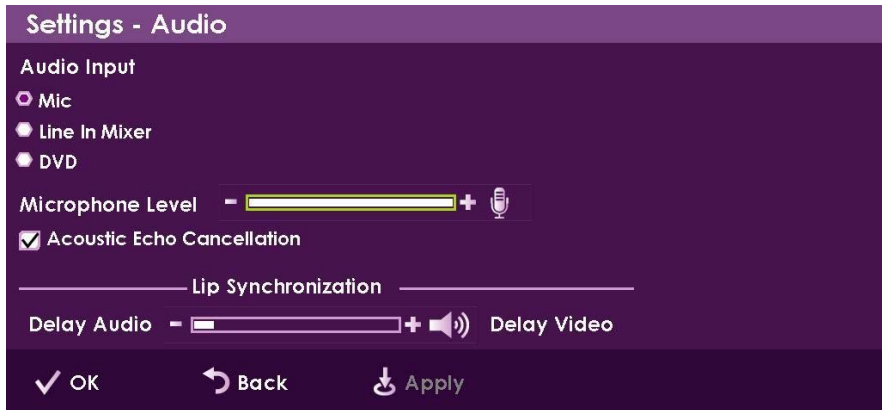


Figure 10: Audio settings screen

1. Select the **audio input** device.
 - ♦ **Mic** – A microphone is connected to the system via the microphone input.
 - ♦ **Line In Mixer** – An amplified device is connected to the system via the line-in audio input
 - ♦ **DVD** – An external multimedia device is connected to the system as an additional input device, both for video and audio. Can be any of DVD, VCR or other players.
2. **Microphone level:** Adjust the microphone sensitivity level.
3. **Acoustic Echo Cancellation:** Prevent echo when the microphone and speaker are in the same room.
4. **Lip Synchronization** - if the voice you hear is not synchronized with the lip movement in the video display, move the slider as follows: towards *Delay Video* if voice is heard after the lip movement, or towards *Delay Audio* if you see the appropriate lip movement after you hear the voice.

5 BASIC OPERATION

Initiating calls

Calls can be initiated in several ways:

- From the Manual Dialer
- From the Address book
- From the Online Dialer
- From the Speed Dial

Manual Dialer

1. Select the "Menu" button on the remote control. A list of actions available is displayed.



2. Select **New Call** from the system menu
3. Enter the address of the remote party:
 - ♦ LAN: IP address, Alias, E.164 number or DNS address.
 - ♦ ISDN: Phone Number.
4. Select the type of call:
 - ♦ H.323 – To initiate a call through the connected local network.
 - ♦ ISDN - To initiate a call through ISDN line(s). The ISDN system must be configured beforehand via the settings pages.
5. Select the maximum bandwidth for the call. If you are not sure, use the default on the screen.
6. Press "Dial" to initiate the call.

Address Book

The address book enables calling via the following methods:

- ◆ Personal address book – Addresses stored on the local system
 - ◆ Call Log – Select from previously carried out calls.
 - ◆ Directory – Select a contact from the online directory
 - ◆ Speed Dial – Use predefined short cut numbers for quick dialing.
1. Select the "Menu" button on the remote control. A list of actions available is displayed.



2. Select **New Call** from the system menu
3. Select the "Address book" option by moving to the right with the arrow keys on the remote control.
4. The address book form is displayed

Address book

	Name	Address	Bandwidth	Call Type
Personal	CHINA OFFICE	213.8.49.145	512	H.323
Calling Log	UK OFFICE	205.158.94.100	768	H.323
Directory	LARGE CONF	7718496	512	ISDN
Speed Dial	SHARON	213.8.49.12	1024	H.323
	DANA A	7627800	128	ISDN
	JOHN@EMBLAZ	172.20.2.28	768	H.323
	MICHAEL	544822769	512	ISDN
	ADI SCHWARTZ	209.85.135.103	2048	H.323
	MARKETING	8542216	256	ISDN
	DAVID B	172.20.1.116	768	H.323

New Call

123 Type a Number / Name Call type Bandwidth

ABC Address Book H.323 1024

Call Back LAN: 172.20.1.72 ISDN: N/A

Figure 11: Address book

-
5. Scroll using the up and down arrow keys. You can also use the numeric keypad to enter a letter (the letters are printed on the remote control) to jump to a specific name. To move to different categories, move to the left and then scroll between the 4 options (personal, call log, directory and speed dial).
 6. Press the "Ok" button on the remote.
 7. The address of the contact is copied to the number field.
 8. Press the dial button on the remote or select the "Call" option on the screen when you are ready to initiate the call

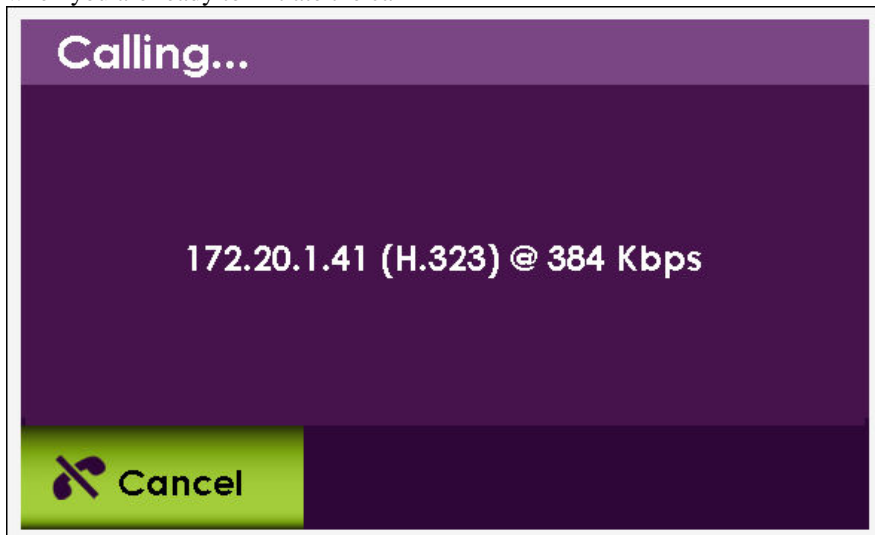


Figure 12: Initiating a Call

9. When the call is initiated, indicators will appear on the screen.
10. After the destination accepts the call, the video of the remote party appears. If open, the "Local Video" screen displays the image from your local camera, and the audio of the remote site is now heard from your speakers.

Accepting a call

When an incoming call is initiated, a message is displayed on the screen. The details of the calling party is displayed on the screen (if available), you can accept or reject the call using the buttons on the remote control or on the message on the screen.

The ability to auto answer all calls is available via the "calls" settings screen

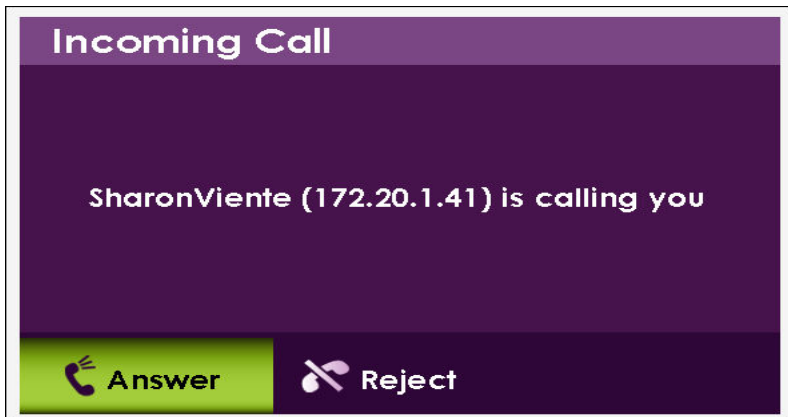


Figure 13: Incoming Call



xpoint
EXECUTIVE VIRTUALIZING-CONNECTION SYSTEM

www.emblaze-vcon.com