



Xten[®]
eyeBeam 1.1.1[®] User's Guide

Operations and Configuration Guide to eyeBeam

Xten's Full-Featured Video Softphone

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1 Introduction

1.1 What is eyeBeam?

eyeBeam is a software telephone. It has all of the features of a traditional business telephone, including hold, transfer, and conferencing. It also has video and messaging capabilities.

The following is a partial list of features included in the eyeBeam softphone.

- Instant Messaging with Presence
- Call Record
- Acoustic echo cancellation
- Message waiting indicator
- Audio & video tuning wizard
- Touch tones
- Call forwarding
- 10 party audio & video conferencing
- Speakerphone
- Caller ID
- Call timer
- Mute
- Direct IP calling
- Speed dial
- Hold
- Transfer
- Do not disturb
- Call ignore
- Send to voicemail
- Redial
- Login with up to 10 VoIP service providers
- 6 lines
- Advanced contact list
- List of received, missed and dialed calls
- Keyboard shortcuts for most major functions
- SIP Compliant
- STUN & ICE NAT traversal
- X-Tunnels firewall traversal client*
- eyeBeam supports the following audio codecs: G.711u, G.711a, GSM, G.729, G.723, iLBC, G.722.2, SPEEX, DVI4, EVRC, L16
- eyeBeam supports the following video codecs: H.263, H.263+, H.264

* Requires access to X-Tunnels NAT Traversal service – contact your service provider for details

1.2 How does it Work?

Instead of making calls over the regular telephone network, calls are made over computer networks, either through your internet service provider's connection or through your local network. This is called Voice over Internet Protocol – VoIP.

Calls made to another internet telephone, anywhere in the world, are generally free, while calls made to a regular telephone are generally much cheaper than traditional long-distance telephone calls. Additionally, the voice quality of voice conversations using VoIP technologies can greatly exceed traditional telephone services. **Xten Networks, Inc. does not provide a telephone service, only the software to use such services.** Please refer to the following section for information on VoIP service providers.

eyeBeam uses open standards. Open standards permits inter-operability between products from all vendors in the industry. Open standards also give the customer a choice, rather than being locked to one vendor. Xten Networks will continue to use open standards in its VoIP products



and hope that you will recognize Xten's commitment open standards and excellence in high-quality VoIP softphones.

eyeBeam uses the Session Initiation Protocol (SIP) for session signaling, ITU codec standards for voice and video (G.711, G.723, G.729, H.263, H.264), and the SIMPLE standard for instant messaging and presence.



2 Installation and Setup

2.1 Before You Install

This section covers some important information which is required before you install the eyeBeam softphone.

2.1.1 Finding a Service Provider

If you received your version of eyeBeam as part of a VoIP service package, then this section will not apply to you. Please refer to the documentation supplied by your service provider.

The first step is to choose a service provider. There are many VoIP service providers available. You can find a list of providers at <http://www.sipindex.com/>. This list does not imply recommendation, nor endorsement of any provider.

It is up to you to decide which service provider is best for you.

2.1.2 Getting the Necessary Information from Your Provider

After choosing a VoIP service provider, you will need the following information regarding your account:

User Name	_____
Password	_____
Authorization User Name*	_____
Domain	_____
Proxy address and port*	_____
STUN server address and port*	_____
X-Tunnels server address and port*	_____

* these values are not used by all providers

2.2 Minimum System Requirements

The following section outlines the hardware and software requirements for an installation of eyeBeam.

2.2.1 eyeBeam for Windows

Processor:	Pentium II 300 (or equivalent)
Memory:	128 MB RAM
Operating System:	Windows 2000, XP, 2003 Server, or higher
Connection:	IP network connection (broadband, dialup, local, wireless)
Sound Adapter:	Full-duplex, 16-bit
Other:	Speakers and microphone, or headset

2.2.2 eyeBeam for Macintosh

Hardware:	Suggested configuration* for Mac OS X version 10.2
Operating System:	Mac OS X version 10.2 or later

*Contact apple.com for details



2.3 Multi-media Device Requirements

Since eyeBeam is a software telephone application, you will require both speakers and a microphone to make calls. Any of the following configurations are acceptable:

- External speakers and microphone
- Dual-jack multimedia headset
- Built-in microphone and speakers
- USB multimedia headset
- USB phone

eyeBeam can work without a video camera, but you need one in order for another party to see your image. eyeBeam will work with most modern USB video cameras.

2.4 Installing eyeBeam

Installing eyeBeam is straightforward and follows familiar software installation procedure.

2.4.1 Windows Installation

Follow the instructions below for installation of eyeBeam on a Windows machine:

1. Exit any software applications that use sound such as CD and media players.
2. Run the setup executable file. This will typically be called *eyebeam-Xten-Win32-[build number].exe* or similar. *Note: If you have a version of eyeBeam already running you will be asked to shut it down.*
3. Follow the prompts offered by the install wizard. *Note: You must accept the license agreement to install eyeBeam.*
4. Select *Launch eyeBeam* at the final step of the wizard to start using the softphone.
5. Click **Finish** to complete the installation.

2.4.2 Macintosh Installation

Follow the instructions below for a Macintosh installation of eyeBeam:

1. The download file is an internet-enabled disk image; therefore most browsers should mount it automatically. However, if this is not the case, locate the *.dmg* file after download and double-click on it.
1. Read the license agreement and click "Agree" to proceed. *Note that you must agree to the terms of the license agreement to install eyeBeam for Macintosh.*
2. Simply drag the application icon to the folder in which you wish to install. *This will normally be your Applications folder. If you do not have permission to install to the Applications folder you will most likely want to install to your home folder instead.*

2.5 Uninstalling eyeBeam

If for some reason you need to uninstall your version of eyeBeam at some point, follow the steps given below:

2.5.1 Uninstalling the Windows Version

1. Launch the Windows *Control Panel*
2. Select *Add or Remove Programs*
3. Select your version of eyeBeam and click **Change/Remove** (or **Add/Remove**)



2.5.2 Uninstalling the Macintosh Version

1. Click on the eyeBeam icon and hold it down
2. Drag the icon to the Trash.

2.6 Starting eyeBeam

You can start eyeBeam in the familiar ways for Windows and Macintosh as described below.

2.6.1 Starting eyeBeam for Windows

1. Click the *Start* button.
2. Select *Programs (All Programs on some systems)*
3. Select the eyeBeam folder (or the folder specified upon install).
4. Click the eyeBeam icon.

You can also launch eyeBeam by double-clicking on the short-cut icon on your desktop.

2.6.2 Starting eyeBeam for Macintosh

1. Open the folder where you installed your version of eyeBeam.
2. Double-click the eyeBeam icon.

2.6.3 License Key

eyeBeam will ask you for your license key when you start the program. Copy and paste the license key from the vendor into the field labeled *License Key*.

2.7 The Tuning Wizard

The eyeBeam softphone includes a Tuning Wizard that allows you to select available audio and video devices to be used for calling. For example, if you have a USB web cam connected to your computer, the Tuning Wizard will help you select this device to use for your calls.

The Tuning Wizard will automatically appear the first time you run eyeBeam. It is strongly advised that you complete the wizard to make sure that your devices are working properly and are set at the right level. Follow the steps below to complete the Tuning Wizard:

1. Click *Next* to begin the wizard.
2. Choose which type of device you would like to configure.
3. Choose the correct audio devices and mixers to use. Click *Next* to advance.
4. Adjust the speaker volume to a comfortable level. Click *Next* to advance.
5. Adjust the microphone volume; listen to the playback of the recorded sample and make changes if necessary. Click *Next* to advance.
6. Choose your video device, if applicable. Click *Next* to advance.
7. Choose your video quality, if applicable. Click *Next* to advance.
8. Click *Finish* to complete the wizard.

Note: The Tuning Wizard will automatically appear the first time you start eyeBeam. You will have to launch the wizard manually each time after that. Details on how to do this are included in Section 3.9 later on in the guide.

3 Using the Softphone

3.1 The Dial Pad

The eyeBeam softphone provides an easy-to-use dial pad as the main user interface, which allows for quick access to both basic and advanced calling features.

Refer to Figure 1 below for an illustration of the eyeBeam user interface.

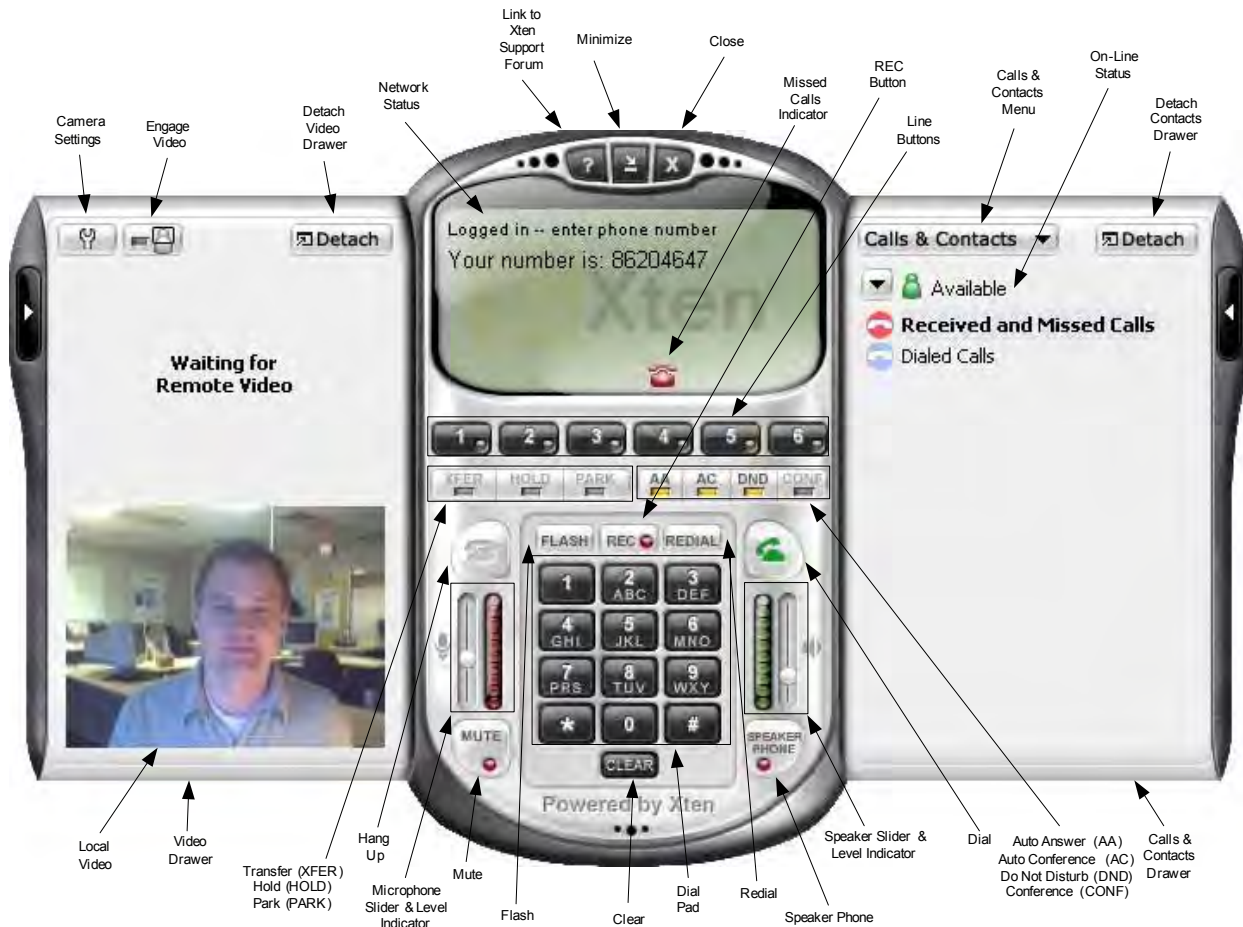


Figure 1 - The eyeBeam User Interface

3.2 Before You Can Call

3.2.1 Things to Keep in Mind

Making calls with eyeBeam is simple; however, there are some differences between using a softphone and a traditional telephone that you should be aware of.

1. A softphone is a computer application so it must be running for you to make or receive calls.
2. The softphone must login to the network before you can make or receive a call. This will typically require a few seconds as the softphone contacts your provider's network. The



call status will read *Logged in – Enter Phone Number* to indicate that you are ready to make a call.

3. Since calls are transmitted over the Internet, service quality may drop due to network congestion. Although eyeBeam includes advanced signal processing features to mask the effect of network congestion, poor voice quality may be noticeable during poor network conditions. Typically a broadband connection will provide adequate bandwidth needed for high-quality voice & video. If you are experiencing poor quality, please refer to *Appendix A: eyeBeam Troubleshooting*.

3.2.2 Logging in to Your Provider

Upon start-up, when the dial pad first appears you should see *Initializing, Performing DNS Lookup*, then *Discovering Firewall...* in the call status. This is normal behavior and indicates that the softphone is discovering your network environment.

After this, you may see the message *Awaiting proxy login information*. This indicates that you have to enter your VoIP service provider information (mentioned in section 2.1.2 earlier) so that the softphone can login to the network.

eyeBeam allows you to configure the softphone to use more than one provider. Setting up the softphone for multiple providers is covered in section **Error! Reference source not found.**

Shown below is the eyeBeam settings dialog, which allows you to enter and/or edit the settings for your softphone. The dialog can be launched at any time by right-clicking on the main display window, and choosing Settings. The dialog is arranged as a tree, similar to Windows Explorer. Click the plus (+) sign beside an item to expand a branch. When finished entering a group of settings, click OK to save them, and close the dialog.

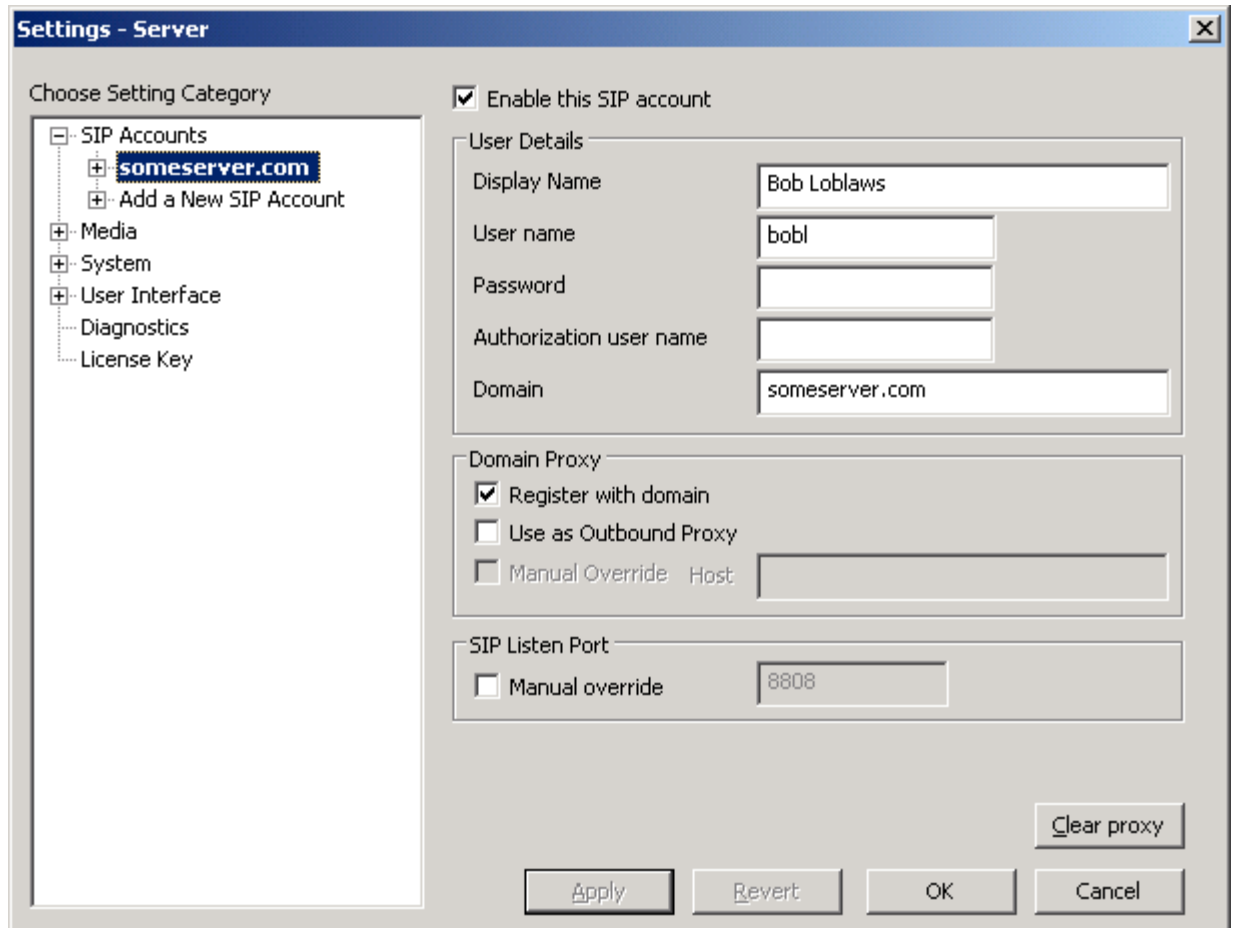


Figure 2 - VoIP Service Provider Information

Fill in the following items needed to login to your provider's network. *As noted, not all of the items are required, depending on your service provider.*

- Enable this SIP account ▶ Checked
- Display Name ▶ *Your name. This field is required.*
- User name ▶ [from your VoIP Provider] (*often your "phone number"*)
- Authorization User name ▶ [from your VoIP Provider]*
- Password ▶ [from your VoIP Provider]
- Domain ▶ [from your VoIP Provider]

* this value is not used by all providers

The remaining fields are generally not required by services providers, but may be used depending on your local network configuration. See you friendly network administrator if there fields are required.

When finished entering all of the information, click OK to save the settings. If you have entered the required information, the softphone will attempt to login to the provider's network. This will be indicated by a *Logging in ...* message in the call status.



Important: When you see the message *Logged in – Enter Phone Number* in the call status then you are ready to make and receive calls. If you see the message *Login failed! Contact Network Admin* then you have not logged in successfully and will not be able to make a call. If this is the case refer to Appendix A which includes troubleshooting tips for problems like this and various other issues.

Some versions of eyeBeam come provisioned with your service provider's network information. For these versions, you may see a login dialog upon start-up that will prompt you for your *user name* (or *phone number*) and *password*.

The login dialog included with some versions of eyeBeam allows you to login to your provider's network by entering your username (or phone number) and password.

Click the Remember check boxes so that you do not have to re-enter the information each time that you start eyeBeam.

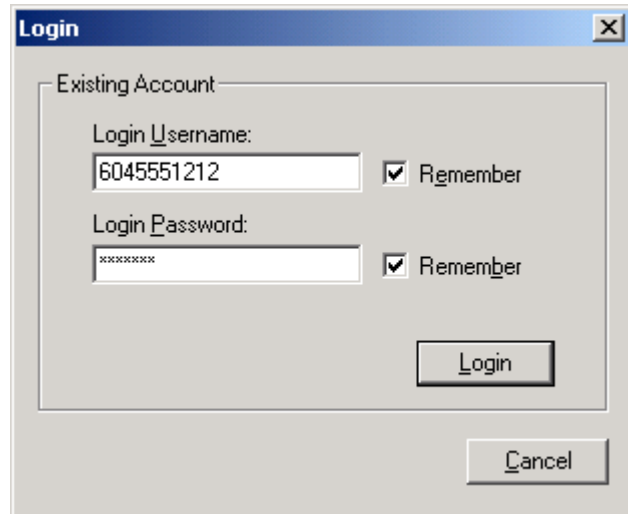


Figure 3 - Login Dialog

3.3 Placing a Call

As mentioned in the previous section, once you see the message *Logged in – Enter Phone Number*, you are ready to make or receive calls.

There are a couple of different ways to enter a number in eyeBeam. You can either click on the digits of eyeBeam's numeric keypad or you can enter the numbers (or letters) directly from your computer keyboard.

Notice that as you begin entering a number, line 1 is automatically selected as the line for that call as shown in Figure 4 to the right.

*If at any point you enter an erroneous digit, click the **Clear** button on the dial pad or press **Backspace** on your keyboard.*

*Note that as you enter a number you may see a suggested completion for that number (as seen in Figure 4). To enter the rest of the number as suggested, simply hit the **Tab** key on your keyboard to automatically fill in the remaining digits.*



Figure 4 - Dialing a Number

When finished entering your number, click the green **Dial** button on the dial pad or press **Enter** on your keyboard.

Like a traditional telephone, you will hear a ringing tone as you try the remote party. You will also see the message “Ringing” in the call status. When the remote party answers, you will see the message “Call Established” in the call status.

You can also dial a number by clicking on an available line button and dialing the number. *Conference calling will be covered in section 4.1.*

Important: When you place a call by simply dialing the number of the other party you will most likely be using your default service provider for the call. eyeBeam allows you to have multiple service providers configured so that you can call place a call over a variety of networks.

If you would like to place a call via a provider other than the default, you would have to choose the provider (also called the *proxy*) before entering the number. Calling using multiple providers is covered in section **Error! Reference source not found.**

You can also dial a number by entering the SIP URL in the form of *username@domain.x*

3.4 Ending a Call

As with traditional phones, a call is brought to a close when you or the other party hangs up the call.

You can end an active call by clicking on the **Hangup** button on the dial pad. When the call has ended you will see the message *Hung up* in the call status.

After the call has ended, the details of the call (such as the length of the call and the caller ID) will remain in the call display. To clear the display, click on the **Clear** button.

3.5 Redial

To redial a number, simply click on the **Redial** button on the dial pad.

3.6 Answering a Call

You must have eyeBeam running to answer an incoming call. As you receive the call, you will hear ringing in your configured speaker device.

You will normally hear the phone ringing in the device (i.e. headset/USB phone) that you configured in as your speakers from the Tuning Wizard.

If the softphone is hidden behind another window or minimized to the system tray, the application will come into focus as the incoming call arrives.

The incoming call will be indicated in the call display as shown in Figure 5 to the right.

The call will come in on Line 1 by default. This is indicated by the flashing light on the line button.

You can choose to ignore the call by clicking on the "Ignore" found below the caller ID of the incoming call.



Figure 5 - Incoming Call

As the call arrives simply click on the **Dial** button (or press Enter) to answer it. You can also click on the appropriate line button to answer the call.



3.7 Placing a Call on Hold

While you're on a call in progress, you can place that call on hold by either clicking on the corresponding line button or by selecting another line. The appropriate line button will "flash" to indicate that its corresponding call has been placed on hold. To resume a call that is on hold, simply select its line again (by clicking on its line button).

3.8 Dial Pad Controls

The eyeBeam dial pad includes several controls, which allow you to make adjustments to customize your calling experience.

3.8.1 Microphone and Speaker Adjustment

The eyeBeam dial pad includes microphone and speaker sliders as shown in Figure 1. Simply click on the slider and drag it up or down to increase or decrease the level.

You may also mute your softphone so that the other party cannot hear you. Press the **MUTE** button at the bottom-left of the dial pad to mute the phone. Press the button once more to take it off mute.

3.8.2 Codec Selection

eyeBeam allows you to select which audio codec(s) you would like to use for calling. Audio codecs describe the format in which the audio stream is compressed for transmission over the network. Some codecs require less bandwidth than others, however, usually with less bandwidth comes lower voice quality.

You can enable codecs or change their properties by navigating to Media -> Audio -> Advanced -> Codecs in the Settings Menu.

If you have only one codec enabled, this will ensure that the calls you make will use that audio compression format. The G.729 codec consumes the lowest bandwidth whereas the G.722.2 codec requires the most bandwidth but provides the best voice quality.

3.9 Context Menu

eyeBeam includes a context menu which allows you quick access to the following features:

- Tuning Wizard
- Privacy Management
- Settings Dialog
- Sip Account Status
- Diagnostic Log
- About Dialog



To launch the dial pad context menu, simply right-click (or Control-click for Mac users) anywhere over the dial pad.

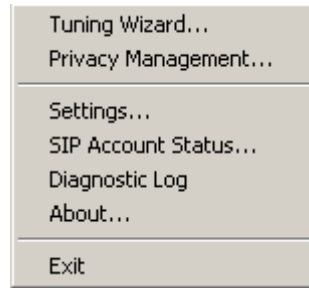


Figure 6 - Dial Pad Context Menu

The *Diagnostic Log* contains important network and protocol information that may be useful for troubleshooting a variety of issues. For more on this see *Appendix A: eyeBeam Troubleshooting*.

3.9.1 The Privacy Management Window

The Privacy Management window allows you to customize the way in which your contacts can reach you. Right-click the main eyeBeam window and choose Privacy Management.

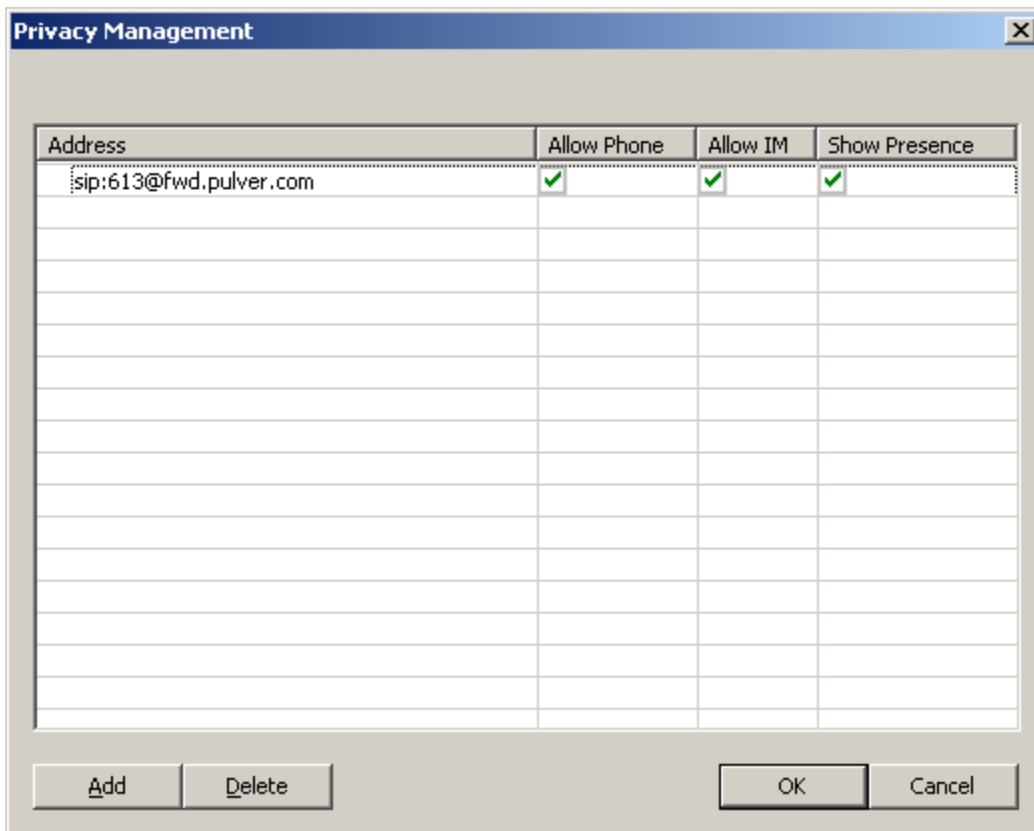


Figure 7 - The Privacy Management Window



Click the Add button to add a contact's address. By default all actions will be allowed for the contact. If you do not want a particular contact to be able to reach you in a certain way, uncheck the box in the corresponding column. For example, if you want a contact to be able to phone you, but not see whether you are online or not, check *Allow Phone*, and uncheck *Show Presence*.

3.9.2 SIP Account Status

Right-click the main eyeBeam window and choose SIP Account Status to view your status for your SIP accounts. It will show the account name, status, your user name, the number of new and saved messages, the date you last logged in, and the dialing prefix.

3.9.3 The About Window

Right-click the main eyeBeam window and choose About. This will show what version of eyeBeam that you are running, and allow you quick access to your provider's website.

3.10 Window Controls

At the top of the dial pad are the help, minimize, and close buttons (see Figure 1). Depending on the version you are running, the behavior of these buttons will vary.

3.10.1 Window Controls for eyeBeam for Windows

As expected, the minimize button will send the application to the Windows system tray. You will still be able to receive calls when the phone is minimized to the system tray.

The close button will shut down the application. You will not be able to receive calls after closing the application. Note that this behavior is different from previous versions of our softphones.

3.10.2 Window Controls for eyeBeam for Mac

As with other Mac OS X applications, the minimize button will send the phone to the Dock. Like the Windows version, the close button shuts down the application in one step.

To hide the Mac version of eyeBeam, select *Hide eyeBeam* from the Application menu item (labeled *eyeBeam*) found in the familiar Mac OS X menu bar. eyeBeam and all of its windows will become invisible although its icon will remain in the Dock. Click on the icon in the dock to reveal eyeBeam once again.

Note: When the phone is hidden, the Dock icon will “bounce” with the caption “RING!” superimposed to signal an incoming call.

3.11 Help

A click on the help button found at the top of the dial pad will bring you to the Xten Softphone Support Forum. Here you will be able to post an issue regarding the use of the softphone and receive useful help from other users and members of Xten support.



Note that co-branded versions of eyeBeam may link to the provider's help site.



4 Extended Calling Features

Along with basic calling functionality, eyeBeam also includes many advanced calling features normally found in business phones. Among these include call transfer and call conferencing which will be covered in the sections to follow.

4.1 Call Conferencing

eyeBeam allows you to establish a conference call which will let you talk with more than one party at once. Each party in the conference will be able to hear and speak to every other party.

4.1.1 Starting a Conference Call

You may host a conference by calling the other parties involved, or you may allow them to call you. For example, you can create a simple three-way call by following the steps below:

1. With an active call on one of the lines, place the call on hold by either
 - a) selecting another line and dialing a third party, or
 - b) accepting an incoming call from a third party by clicking on the line that they arrive on.

Either operation places the original party on hold.

2. After informing the third party of the three-way call, click the **CONF** (see Figure 1) button to include all parties in the conversation.
3. To end the three-way call, simply click the **CONF** button again to place both parties on hold. *At this point you can speak to neither party and neither party can speak to one another.*
4. You can then talk to each party individually by selecting its respective line.

4.1.2 Adding another Party to the Conference

To add another party to an existing conference perform the following:

1. Place conference on hold by clicking the **CONF** button.
2. Invite another party to the conference by
 - a) selecting the line of an incoming call, or
 - b) selecting an available line to initiate a call to an outside party.

You will now be speaking to the outside party while the conference is on hold.
3. After advising the outside party that they will soon be part of the conference, click the **CONF** button once more to re-establish the conference.

4.1.3 Removing a Party from the Conference

To remove a party from an existing conference, perform the following:

1. Place conference on hold by clicking the **CONF** button.
2. Select the line of the party who wishes to leave the conference.
3. Say goodbye to the party and click the **Hangup** button.
4. Click the **CONF** button once more to re-establish the conference.

Note that a party may leave the conference on their own by simply hanging-up. Their line will then be indicated as inactive and the rest of the conference will be unaffected.



4.1.4 Multiple Conference Hosts

A conference may include up to 7 individuals – the conference host plus a participant on each of the 6 lines. If you would like to increase the number of parties in a conference you may do so by having more than one conference host.

For example, one person may host 6 other parties (to occupy all of its available lines) with one of those parties being a conference of their own containing 6 other parties. This would bring the total number in the conference to 12.

In theory this would allow for any number of parties in the conference, however, in a real situation, the number of participants would be limited by bandwidth constraints at each of the conference host's machines causing audio quality to degrade. For this reason, conference participants would be advised to select a lower bandwidth codec such as G.729 to preserve audio quality in such situations.

4.1.5 Adding a party to the conference from the Contact Drawer

You can also add a person in your Contact list to a conference by right-clicking their name in the Contact drawer, and selecting *Conference in [party's name]*

4.2 Call Transfer

The eyeBeam softphone allows you to transfer an active call to a third party. The softphone allows for two different types of call transfer, attended and unattended.

4.2.1 Unattended Call Transfer

Also called *blind* call transfer, this occurs when you initiate a transfer without informing the third party that you are sending a call their way. Follow the steps below to perform an unattended call transfer:

1. With an active call in progress, inform the other party that you are going to transfer them to a third party and click the ***XFER*** (see Figure 1) button.
2. Dial the number you wish to transfer the call to.
3. Click the ***XFER*** button again to send the original party to the third party.

When the transfer is complete, the other two parties will be speaking to each other and both of them will have automatically ended their call with you. Both lines corresponding to the other two parties will now be free.

4.2.2 Attended Call Transfer

Also known as *supervised* call transfer, this occurs when you call and inform the third party that you are sending a call their way before actually making the transfer. Follow the steps below to perform an attended call transfer:

1. With an active call in progress, select an available line and call the third party.
2. Inform the third party that you are about to send a call their way and press the ***XFER*** button.
3. Select the line associated with the original party.



4.3 Do Not Disturb

eyeBeam allows you to set your softphone to a *Do Not Disturb* mode. When the softphone is set to this all incoming calls will be sent to voicemail or given a “busy” indication. *How this feature reacts is dependent upon your provider network.*

Do Not Disturb is enabled by clicking on the **DND** button. To disable the feature simply click on the indicator once more.

4.4 Auto-Answer

eyeBeam also allows you to set your softphone to *Auto-Answer* mode. When the softphone is set to this mode eyeBeam immediately answers the call. This wait time can be changed from the System item found in the Settings menu.

Clicking on the **AA** button sets this feature. Clicking on the **AA** button once more turns off auto-Answer.

This feature can be combined with the *Auto-Conference* feature as discussed below.

4.5 Auto-Conference

eyeBeam includes an Auto-Conference feature which can be enabled or disabled by clicking on the **AC** button. Combined with the Auto-Answer feature discussed above, these two features can control the way participants are added to a conference. The different levels of control for managing a conference are shown in Table 1 below.

Table 1 - Conference Management

Level of Control	Conference Process
<i>AA off / AC off</i> Manual conference	Conference Host manually accepts calls and adds each to conference - <i>see section 4.1.2</i>
<i>AA on / AC off</i> Auto-answer, manual add to conference	eyeBeam automatically answers calls and the conference host manually adds each to conference
<i>AA off / AC on</i> Individual answer, auto add to conference	Conference host answers each call and each is automatically added to conference
<i>AA on / AC on</i> Conference Server Mode	eyeBeam acts as a fully automated conference server automatically answering each incoming call and adding them to the conference

4.6 Flash

The Flash button on eyeBeam works the same way as flash on a traditional telephone. Clicking the hang-up button quickly on a traditional telephone performs the same task. It is often used to transfer calls or initiate 3-way calling. This functionality depends on your provider. To flash, click the **Flash** button on the dial pad.

- If you are in an active call, and click **Flash**, you will get a new line



- If you click **Flash** when you are receiving a call it will pick up
- If another line is on hold, click **Flash** to go to their line and take them off hold

4.7 Speakerphone

eyeBeam can work as a speakerphone as well. If you normally use eyeBeam with a headset, you will require a second sound device (such as sound card or USB device) to use eyeBeam as a speakerphone. Run the tuning wizard again to set up your speakerphone sound device.

To activate the speakerphone, click the **Speakerphone** button. To de-activate the speakerphone, click **Speakerphone** again.

4.8 Call Record

eyeBeam can record your calls. Do the following to set the folder to store your recorded calls.

- Open the settings dialog
- Choose the Media branch
- Under Folder for Media Files, click the Choose Directory button
- Choose the directory and click OK

To record a call, click the **REC** button at any time during the call. Click the button again to stop recording. Files will be saved as an AVI type file.



5 The Drawers & Settings Menu

Similar to a cell phone, eyeBeam allows you to store a list of contacts in a phone book. The softphone also includes a settings dialog, which provides access to a variety of settings.

5.1 The Contact Drawer

To bring up the eyeBeam Contact Drawer click on the black button to the extreme right of the phone.

To add a new contact, click the **Calls & Contacts** menu, and choose **Add A New Contact**. Enter the name, phone number or SIP URL, and contact group.

Contacts can be grouped together. To create a new group, click the **Calls & Contacts** menu, and choose **Add a New Group**. This will create a new item in the contact list, which you can rename. To rename a group later, right-click the group, and choose **Rename Group**.

To move a contact to a group, simply drag the contact to the group.

To dial a contact's phone directly from the Contact Drawer, right-click the contact's name and choose **Place a Call**. If you have supplied more than one number for this contact, you will be shown a list of numbers to choose from.

To close the Contact Drawer, click the same button used to open it. You can detach the Contact Drawer from the phone by clicking **Detach**. Click **Reattach** to reattach the Contact Drawer to the phone.

- Right-click a contact to dial them, or add them to a conference
- You can drag a contact to another group
- You can drag a contact to a Line or to the main display window to call them
- Click a group name and wait one second to rename it
- Click **X** to close the Contact Drawer and reattach it to the Dial Pad.
- Drag a contact to an in-use Line to add them to a conference





5.1.1 Recent Calls

As you make and receive phone calls, eyeBeam stores them in a list of recent calls. Click the *Received Calls* item in the contact drawer to view your recently received calls.

Click the Dialed Calls or Received Calls item in the Contact Drawer. This will display a list of calls.

Right-click any item to show the context menu. Using the contact menu, you can choose to do the following:

- Phone the contact back
- Mark the call as unanswered
- Delete the call from the list
- Add the caller to your contact list

5.1.2 Importing Contacts

Select this option to import a list of contacts from another Xten client into the eyeBeam phone book.

Click the *Calls & Contacts* menu of the Contact Drawer, and choose *Import Contacts*. Find the CSV file on your computer, and click OK

Note: *You must first export your list of contacts from your Xten client to a CSV (Comma Separated Value) file. Please refer to your other Xten client documentation on how to do this.*

5.1.3 Exporting Contacts

You may also export all of the contacts stored in your eyeBeam phone book into a CSV file which can be later imported into your e-mail client.

To do this, choose the *Export Contacts* menu item from the Calls & Contacts menu in the Contacts Drawer. After this you will be prompted to specify the filename and location of the CSV file containing your list of contacts.

Note: Refer to your e-mail client documentation for instructions on how to import a CSV file containing a list of contacts.

5.2 Instant Messaging

To send an instant message to a contact, right-click the contact, and choose Send an Instant Message.



Figure 8 - The Instant Message Window

Type your message in the bottom text area. Click the **Send** button to send your message. Click the blue phone icon to call the person. Click the icon with the red circle to ban this person. Once you ban someone, you will not be able to receive any phone calls or instant messages from them, and they will not be able to see if you are online or not. You can un-ban them using the Privacy Management window. Click the green icon to add them to the contact manager. Click the X icon to close the Instant Message Window.

5.3 The Video Drawer

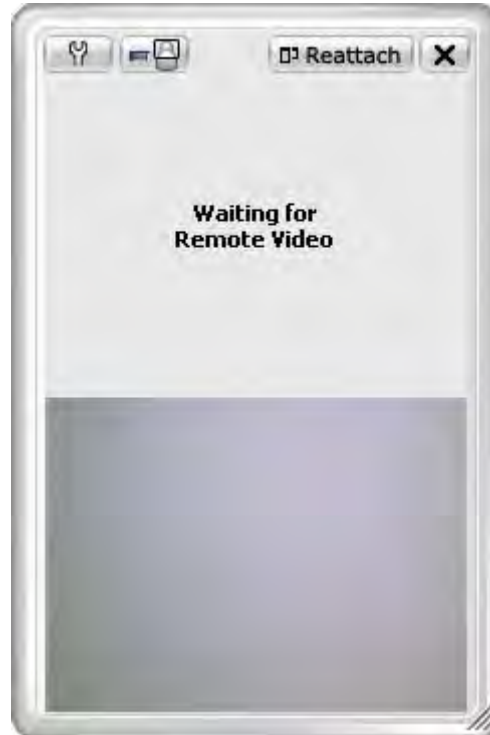
To bring up the eyeBeam Video Drawer click on the black button to the extreme left of the phone.

To start video, click the **Start Video** button at the top. Not all VoIP service providers allow video.

You will see your image at the bottom and the image of the other party, or parties if in a conference, at the top.

To configure your video camera, click the **Video Tools** button. The options you will see depend on the type of camera you are using. Please see your camera documentation for help.

You can close, attach, and detach the Video Drawer in the same manner as the Contacts Drawer.



5.4 The Settings Dialog

5.4.1 SIP Accounts

Click “Add a new SIP Account” to add a new account

Enable this SIP account	Check this box to enable this SIP account.
Display Name	This is the value that will show on the call display window of many phones.
User name	This value is assigned to you by your VoIP service provider. It is required.
Password	Assigned to you by your VoIP service provider
Authorization user name	May be required by your provider. Is often blank, or the same as your user name.
Domain	The domain name for your service provider.
Domain Proxy Host	The fully-qualified domain name or IP address of the SIP proxy.
Use as Outbound Proxy	Check this box to use your domain proxy host as



- an outbound proxy. An outbound proxy is often used for call accounting and may be used to traverse firewalls
- Register with domain Check this box if you must register with your SIP proxy to receive inbound calls.
- SIP Listen Port Set this value if you want to specify the UDP port on which to listen for SIP messages
- Clear Proxy button Click this button to clear any information in this dialog

5.4.2 Firewall/NAT

- Send internal IP Some firewall proxies require your internal IP address.
- STUN server Set this value to enable eyeBeam to override the STUN host. The STUN protocol is the preferred protocol for detecting firewall and NAT status.
- Firewall Proxy Set the DNS name or IP address of the firewall proxy of your local network.
- Enable ICE Check this box to enable ICE. ICE is a protocol for detecting the shortest network path during a voice conversation and can overcome some problems which endpoints behind the same firewall.

5.4.3 Server-side Storage

Use this dialog to indicate where to store your contact information. Use Local, or the information provided by your VoIP service provider.

5.4.4 Presence

Presence allows other users to see your online status, and for you to see theirs.

Use the information provided by your VoIP service provider.

5.4.5 XTunnels

X-Tunnels is a protocol to tunnel voice packets across firewalls.

- Use XTunnels Set to Never to disable XTunnels. Set to Default or Always to enable XTunnels
- Use SIP Credentials Check this box to use the same username and password as your SIP account
- Username Enter your XTunnels username if different from your SIP account



Password	Enter your XTunnels password if different from your SIP account
XTunnels server	Enter the DNS name or IP address of your XTunnels server (if required)
Protocol Version	Check this value with your service provider
Enable data encryption	Check this box to encrypt the voice and data traffic
Enable message authentication	Check this box to ensure messages come from the expected source

5.4.6 Media

Use this menu to configure your headset, speaker phone, and USB devices

Folder for Media Files	Set the location to save AVI files for recorded conversations
Vertically flip AVI video	Check this box if your video is appearing upside-down

5.4.7 Media – Audio

Internal Sampling Rate	Change this value if your sound card uses a different sampling rate
Enable PLC	Packet Loss Concealment (PLC) will improve audio quality during audio packet loss. Check this box to enable.
Automatic Gain Control	Automatic Gain Control (AGC) allows eyeBeam to adjust the sound volume for optimal audio listening quality. Check this box to allow this.
Device Name ►	Select the audio device to use as your headset, speakerphone, or USB
Force sampling rate to X Hz ►	Try different values if you are having difficulties with your sound card
Voice Activity Detection	Voice Activity Detection (VAD) allows eyeBeam to detect speech activity. Change these values to alter the sensitivity.

5.4.8 Media - Advanced Audio - Codecs

Move codecs to or from the enabled window using the arrow buttons.

The other settings should not be changed



5.4.9 Advanced Audio – Panic

These settings should not be changed

5.4.10 Video

Use this dialog to change your video settings. You may have to set your video settings to the minimum value and move your way up to determine the best video settings for your system.

5.4.11 System Settings

Use this dialog to change voicemail, auto answer, and auto dial settings.

Auto Dial Enabled

Check this box to enable auto dialing after a certain time span. If you are not able to dial the number before eyeBeam starts dialing it, uncheck this box.

Product Information

Technical Support may ask you for this value to identify your softphone version.

5.4.12 Network Settings

Auto-detect IP address

Uncheck this box and enter your local and NAT IP addresses, if eyeBeam is having difficulty getting the correct values. This is often useful when you are on a VPN.

5.4.13 User Interface

Always on top

Check this box to force the user interface on top of all windows

Launch when Windows starts

Check this box to allow eyebeam to start when you login to Windows

Letters to digits mode

Check this box to allow you to dial by letter such as 1-800-EYE-BEAM to call 1-800-393-2326

Message:

Change the message that other users will see when you are away from your computer

5.4.14 Diagnostics

Set advanced diagnostics options here. Press F9 to view your diagnostic log. Your technical support representative may ask you to adjust values on this dialog.



5.4.15 License Key

Enter your license key here. Your provider or reseller will provide this to you.



6 Application Hot Keys

eyeBeam includes a number of keyboard shortcuts available for many of its functions. A list of these is shown in Table 2 below:

Table 2 - Application Hot Keys

Function	Keyboard Shortcut
Select Line 1	F1 or Ctrl + 1
Select Line 2	F2 or Ctrl + 2
Select Line 3	F3 or Ctrl + 3
Select Line 4	F4 or Ctrl + 4
Select Line 5	F5 or Ctrl + 5
Select Line 6	F6 or Ctrl + 6
Mute	F11 or Ctrl + u (Space bar for Mac)
Default SIP Proxy Settings	F8 or Ctrl + 8
Diagnostic Window	F9 or Ctrl + 9 (Command-D for Mac)
Tuning Wizard	F7 or Ctrl + 7
Transfer	Ctrl + t
Conference	Ctrl + f
Phone book	Ctrl + b
Menu	Ctrl + m
Dial	Enter
Hang up	Ctrl + h
Help	Ctrl + F1
Clear	Backspace
Auto complete (number to dial)	Tab
Do Not Disturb (DND)	Ctrl + d
Auto-Answer (AA)	Ctrl + a
Auto-Conference (AC)	Ctrl + f (with no lines active)
Call Ignore	Ctrl + i
Default-Letters-to-Digits	Space bar (Windows only)
Inc/Dec Speaker Volume	Up/Down Arrows
Inc/Dec Microphone Volume	Right/Left Arrows



Appendix A: eyeBeam Troubleshooting

The following is a guide to troubleshooting various issues that may arise when using the eyeBeam softphone. You may find that the problem you are experiencing is explained within.

Networking Problems

Note: This guide assumes that your Internet connection is working normally. If this is not the case, please contact your internet service provider.

Login Timeout

If you are getting a “Login Timed Out” error message, you may have entered your username or password incorrectly. Double-check these values with your VoIP service provider. You also may have problems contacting your SIP proxy server. Make sure you can ping the following computers listed in Table 3 below. If you cannot contact any one of these computers, you may experience difficulties.

Table 3 - Relevant Network Hosts

Computer
SIP Proxy
Outbound SIP Proxy (if applicable)
STUN Server
DNS Server
X-Tunnels Server (if applicable)

Ping is network utility used to determine if your computer can reach another machine and if the remote machine is alive.

How to Ping A Computer (Windows):

1. Click the **Start** button
2. Click **Run...**
3. Type `command`
4. Click the **OK** button
5. The Windows Command Prompt will open
6. Type `ping computer address`, where *computer address* is the domain name or IP address of one of the computers in the above table.
7. If the result is “could not find host”, or “request timeout”, that computer is not available. Please contact your VoIP service provider for assistance.

How to Ping a Computer (Mac OS X):

1. Launch the *Network Utility* found in your *Applications/Utilities* folder.
2. Click on *Ping* from the list at the top.
3. Enter the address of the computer and click *Ping*.



Firewall and NAT Issues

If your computer is behind a firewall, certain ports must be open for eyeBeam to be able to communicate with your VoIP service provider. The required ports are listed below in Table 4. Please see your firewall documentation for help on opening ports.

Table 4 - Standard Ports

Port Type and Number	Service
UDP 3478	STUN
UDP 5060	SIP
UDP 8000	RTP
UDP 8001	RTCP

Two additional ports after 8001 are required for each additional line used. For example, if using a second line, UDP ports 8002-3 will be used.

If you are behind a firewall for which it is impossible to open such ports, contact your VoIP service provider regarding firewall traversal solutions, such as X-Tunnels.

Note: If your firewall restricts incoming connections, you may have to use an Outbound Proxy to properly receive audio. Ask your VoIP service provider for the Outbound Proxy address and port number, and enter it into eyeBeam in the following location:

Settings Menu -> Proxies -> [Your SIP Proxy] -> <Outbound Proxy>:<Port>

You must also set the *Use Outbound Proxy* field (found with the above setting) to *Always*.

Port forwarding is not required on your NAT.

Multiple IP Addresses on the Same Computer

If your computer has more than one IP address eyeBeam may have difficulty choosing the correct one. To manually set the correct IP address, configure the following settings as instructed below:

Settings Menu -> System -> Network -> Auto-Detect IP Address: Unchecked
 Local IP Address: [Your Computer's IP Address]
 NAT Firewall IP Address: [The IP Address of your NAT or firewall]

Another solution is to temporarily disable all but one network adapter before eyeBeam starts.

RPort Attribute

Some VoIP providers do not support the "rport" signaling attribute. Check with your provider. To turn off "rport" configure the following setting as instructed below:

Settings Menu -> Proxies -> [Your Proxy] -> Advanced Options -> Use rport: unchecked

Audio Problems



This guide assumes your computer's sound and video system is working normally, and that you have run the Tuning Wizard. To run the Tuning Wizard, right-click over the dial pad, and select *Tuning Wizard*.

There are several factors that may affect sound quality when using eyeBeam. These include the quality of the network connection, network device quality, and headset model. Some of the problems you may experience are given below along with some useful tips on how to minimize their effect.

Audio Contains Pops at Loud Points in Voice

Popping sound is a symptom of over-modulation. Ask the other party to decrease the microphone slider and/or adjust the microphone gain.

Audio Contains Bothersome Background Noise

Significant background noise can be due to the level of the silence threshold. Have the other party adjust their silence threshold. They can do so by running the Tuning Wizard covered in Section 2.7 earlier.

Audio Sounds Choppy in a Conference

Poor conference audio may be caused by upload bandwidth limitations. For example, some sites have 1 Mbps download bandwidth, but only 128 kbps upload bandwidth. In these conditions, try multiple hosts for the conference, or have all participants disconnect and switch to a lesser bandwidth audio compression codec such as G.729.

Poor Sound

Poor or scratchy sound is a symptom of a problem with your network connection, or network card. The following issues could contribute to poor sound quality:

- There may be packet loss on the IP network. Check the network performance, latency, and throughput. A 200 millisecond round trip latency as determined from a ping should deliver good quality audio.
- Network devices may have performance problems. Make sure you are using the latest driver.

Audio Contains an Echo

The following tips may be useful for reducing echo heard during the conversation:

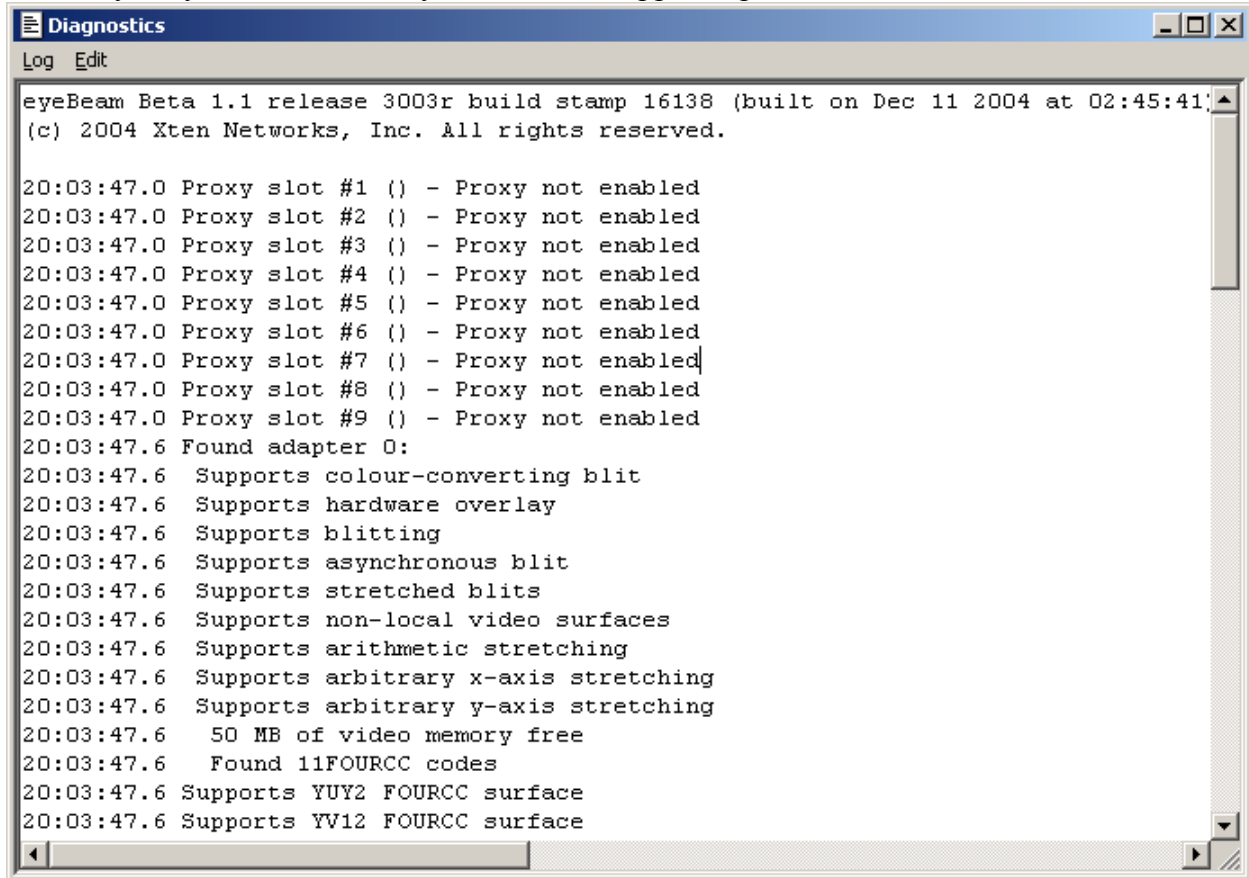
- Try using a headset with your sound card. Another suggestion is to use a USB-enabled headset, which bypasses system sounds as it acts as its own sound device.
- Are you using a boom type headset? It has been noted that some boom headsets that sit on the ear can create feedback between the boom microphone and the headset.
- The microphone balance is not muted in the playback section of Windows audio controls. When you are configuring sound, you may need to examine the volume control setting.
- You will hear echo if your microphone can pick up your speaker sounds, such as when not using a headset.
- Microphone level may be too high or amplifier is turned on in the generic Windows audio controls.

One-Way Audio

Also, if your firewall restricts incoming connections, you may get one-way audio. Configure eyeBeam to use your provider's Outbound Proxy (if available) as explained under *Firewall and NAT Issues* earlier in this appendix.

Diagnostic Log

eyeBeam writes diagnostic information to a log file. You can view this log file by pressing F9 on your keyboard. It is rather cryptic, but if you are having difficulties with eyeBeam it may be necessary for you to e-mail it to your technical support representative.



```
Diagnosics
Log Edit
eyeBeam Beta 1.1 release 3003r build stamp 16138 (built on Dec 11 2004 at 02:45:41)
(c) 2004 Xten Networks, Inc. All rights reserved.

20:03:47.0 Proxy slot #1 () - Proxy not enabled
20:03:47.0 Proxy slot #2 () - Proxy not enabled
20:03:47.0 Proxy slot #3 () - Proxy not enabled
20:03:47.0 Proxy slot #4 () - Proxy not enabled
20:03:47.0 Proxy slot #5 () - Proxy not enabled
20:03:47.0 Proxy slot #6 () - Proxy not enabled
20:03:47.0 Proxy slot #7 () - Proxy not enabled
20:03:47.0 Proxy slot #8 () - Proxy not enabled
20:03:47.0 Proxy slot #9 () - Proxy not enabled
20:03:47.6 Found adapter 0:
20:03:47.6 Supports colour-converting blit
20:03:47.6 Supports hardware overlay
20:03:47.6 Supports blitting
20:03:47.6 Supports asynchronous blit
20:03:47.6 Supports stretched blits
20:03:47.6 Supports non-local video surfaces
20:03:47.6 Supports arithmetic stretching
20:03:47.6 Supports arbitrary x-axis stretching
20:03:47.6 Supports arbitrary y-axis stretching
20:03:47.6 50 MB of video memory free
20:03:47.6 Found 11FOURCC codes
20:03:47.6 Supports YUY2 FOURCC surface
20:03:47.6 Supports YV12 FOURCC surface
```

Figure 9 - The Diagnostic Log