



## VSee Basic Requirements & Setup

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### Recommended Video Equipment

For Workstation/Personal Use:

- 1) Logitech C905 QuickCam Pro
- 2) Logitech Pro 9000
- 3) Microsoft LifeCam (most models)
- 4) Logitech Orbit (enabled with Pan/Tilt/Zoom ("PTZ"))
- 5) Sony EVI (D30, D70, D100) (PTZ enabled)

For Room Setup (PTZ required):

- 1) Logitech Orbit
- 2) Sony EVI (D30, D70, D100)

Recommended Against:

Any Hewlett-Packard or Creative cameras  
(Increases bandwidth and CPU usage)

### Recommended Audio Equipment

For Workstation/Personal Use:

- 1) Phoenix Duet USB Speakerphone (acoustic echo cancellation (“AEC”) included) (MT202 or Executive)
- 2) Any Headset (AEC not required)
- 3) Windows 7 or Vista equipped computers (provides AEC using microphones with speakers)

Desktops Only (when necessary)

- 4) Speakers

For Room Setup:

- 1) Phoenix Duet Executive USB Speakerphone
- 2) Phoenix Quattro2

Recommended Against:

Windows XP, unless used with headset or speakerphone

## Recommended System Requirements

Netbooks

1.6 GHz CPU or better, 1 GB RAM

Netbooks have only enough power for up to a three-way call. Depending on operating system and available bandwidth, video will likely have some stutter.

Laptops/Desktops

2 GHz CPU or better, 2 GB RAM

Operating Systems

Windows XP, Vista, and 7. 7 offers the best audio performance. XP may require headset, headphones, or speakerphone to avoid echo.

Mac OS support coming Summer 2010

## Minimum Setup for Laptops and Netbooks

Most currently available laptops have cameras and microphones built into them. The minimal setup for laptop computers is to download VSee from [www.vsee.com](http://www.vsee.com), and follow the prompts for installation.

## Minimum Setup for Desktop Systems

Most desktops require a web camera (“webcam”) and speakers. Most webcams come with built-in microphones (“mics”), and occasionally monitors are equipped with speakers. Plug any external webcam into the proper input (usually a USB jack) and install and update any drivers if prompted. If the monitor has built-in speakers, check that the audio cable, usually just a basic speaker cable with 3.5mm

(1/8") TRS connectors (like those on your basic headphones), is connected both to your monitor's input and the desktop's speaker/phones/line out jack.

Using either the Control Panel> Sounds, right-clicking the speaker icon in the system tray (lower right-hand corner of the screen), or any available keyboard volume controls, ensure that your speakers are not muted. If the speakers have their own volume controls or power, ensure the power is on and the volume has been turned up to a reasonable level.

When launched, VSee should default to use of this equipment.

## Preferred Setup for Laptops or Desktop Systems

Whether using a laptop or a desktop, the recommended setup is to use an external USB webcam. Our preference is the Logitech Pro 9000 or C905 QuickCam Pro. When launching VSee, you will usually be given a choice of cameras, with external cameras listed at the top. Select your preferred camera and select "Okay".

We also recommend using an external USB speakerphone—our preference is the Phoenix Duet MT202 or Executive—to ensure echo cancellation and appropriate levels of gain and volume. Once VSee is launched and the local video window opens, open the drop-down menu, select Audio> Settings and then choose the external audio device in both the Audio In and Audio Out fields.

## Notes for Running VSee with A/V Equipment

### Video

Only one software application may use a webcam at a time. Any application that is using the camera must be shut down—completely—before VSee is launched. If an app was closed and VSee launched without sufficient time to ensure the camera has been shut off, VSee may not launch with video. Exit VSee and relaunch.

Pay attention to lighting. Ideally, all lighting would be above or in front of you. Avoid being "backlit"—lit from behind. This will cause you to appear in a halo, while leaving your features in shadow. Please refer to these articles on VSee's blog for advice on lighting: [Don't Forget Lighting! part 1](#); [Don't Forget Lighting! part 2](#). Also, avoid having a window in your shot, and most especially, being backlit by an outdoor window. The light sensitivity in webcams will cause daylight to register as nearly white ("washed out") while leaving the remainder of your video shot in dark shadow.

### Audio

Occasionally an echo will be heard. This is usually due to one participant either using Windows XP, the microphone on a Logitech camera (which can be oversensitive), or the Audio In volume is turned too high, causing the microphone to pick up sound from the speakers. Once you've determined which participant's setup is causing the echo, first try turning the Audio In volume down at Audio> Settings.

Next, have that participant try plugging in headphones or a headset. Otherwise, they should consider either a USB speakerphone or using a Windows 7 system.

## Recommended Room Setup

There are options available for configuring a room setup. For example, either a laptop or a desktop computer may be used to host the meeting. These instructions assume the room setup is intended to be permanent, and therefore will cover using a desktop computer utilized as the room's VSee room system hub. However, in most cases, the same instructions will apply to a laptop (netbooks are not recommended as room-based system hubs).

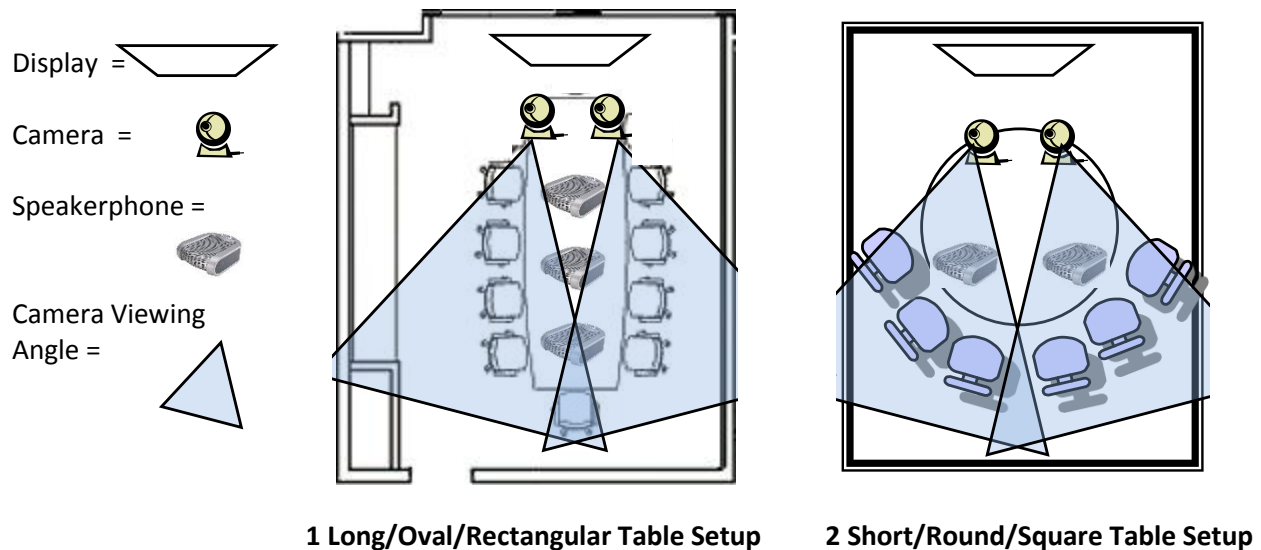
The initial setup is similar to [Preferred Setup for Laptops or Desktop Systems](#). Please use two external USB pan/tilt/zoom ("PTZ") enabled webcams. We recommend the Logitech Orbit or Sony EVI series cameras. When launching VSee, you will usually be given a choice of cameras, with external cameras listed at the top. Select your preferred camera and select "Okay". Once VSee is launched, in your drop-down menu, select Video> Start auxiliary camera.... You will again be given a choice of cameras, with external cameras listed at the top. Select the camera you would like for your secondary video source. Suggested camera placements will be made below.

We also recommend using an external USB speakerphone—our preference is the Phoenix Duet—to ensure echo cancellation and appropriate levels of gain and volume. Once VSee is launched and the local video window opens, open the drop-down menu, select Audio> Settings and then choose the external audio device in both the Audio In and Audio Out fields.

If you have a larger area to cover, we recommend purchasing multiple Phoenix Duet Executives (not the MT202) or the Phoenix Quattro2. The Quattro2 is designed for larger conference table use and may be daisy chained ("ganged"). The Duet Executives are also capable of ganging to allow multipoint placement throughout a room without creating interference or echoes. Please note the Duet MT202 does not have ganging capability. We will describe ganging the Duet Executive below.

## Suggested Room Layouts

There are several solutions for camera and display placement. For the standard conference room layout, we suggest the following:



On a long table, whether a rectangle or oval, if possible, place the cameras on one narrow end, positioning each camera to view just over half the table (1). Allowing for some overlap ensures remote participants can see all room participants. Do not place chairs next to or behind the cameras. Do not worry if the angle of view doesn't include everyone; the PTZ function of the cameras will allow the remote participants to scan the entire table. Place the display on the wall or the end of the table behind the cameras.

For square or circular tables, you will likely want the participants to line up on the opposite side of the table from the cameras (2). Depending on the size of the table, it may be important to place the cameras on a surface some distance from the table to ensure everyone is within the field of vision. Whatever you use for the display, wall, screen, monitor or HDTV, attempt to place the cameras beside or along the sightlines between the seats and the image. Move cameras to the display edges if using a projector on the table. This way the cameras will not cast shadows onto the screen or wall. Whenever possible, use projectors that are mounted to ceilings or high places so the cameras may be placed more directly along sightlines.

We recommend for a display either an HDTV monitor or a ceiling/wall-mounted projector with a screen. Most HDTVs come with VGA and HDMI inputs, to which most desktops and laptops may connect with. For the screen resolution on your computer, use 1360 x 768 pixels. This will allow the projector or HDTV to resolve the picture at either 720p or 1080p in 16:9 aspect mode.

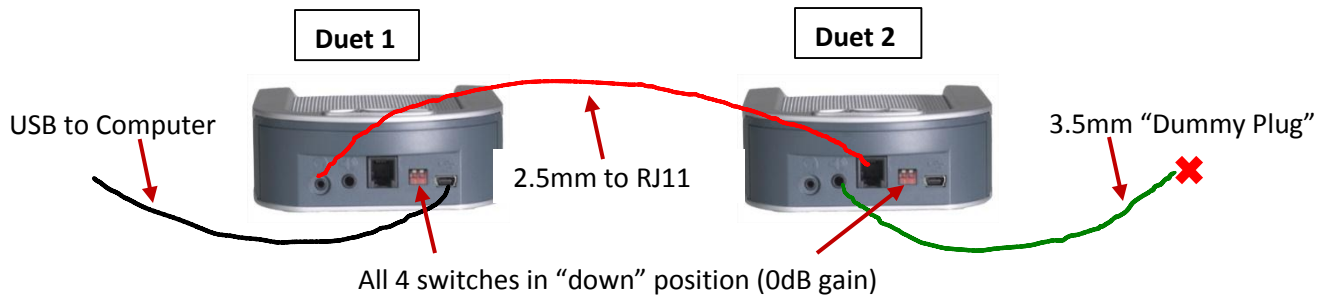
### Ganging the Duet Executive

The Duet Executives come with an RJ11-to-2.5mm (3/32") cable. RJ11 is a normal telephone plug, while the 2.5mm looks like the plug for headphones, but is smaller for use with cellular phones. They also come with a 3.5mm (1/8") plug (this is the "Dummy Plug"). You may use household headphones for the Dummy Plug.

1) Connect Duet 1 to the computer which will host the VSee conference via USB cable.

- 2) Take the RJ11-to-2.5mm cable and plug the 2.5mm plug into Duet #1 and the RJ11 plug into Duet 2.
- 3) Plug the Dummy Plug into Duet 1's 3.5mm jack.
- 4) Set the output gain switches to their lower position (0 dB gain).
- 5) Power Duet 2 using the supplied power adaptor (you can also power it from a USB port).

**Note:** Plugging in the Dummy Plug signals to the Duet that it is in Daisy Chain mode.



### Notes for Running VSee in a Conference Room

First and foremost, follow the same advice given in [Notes for Running VSee with A/V Equipment](#). Pay particular attention to lighting. You will want overhead lighting in the room, and, if possible, an additional light source behind the cameras to fill in any shadows left by the overhead lighting. If this is not possible, leave it be.

A common problem in conference rooms is that someone will sit below or in front of a window. Close all blinds and attempt to darken windows as much as possible. Many blinds are translucent rather than opaque. Do the best you can and attempt to situate room participants opposite windows whenever possible.

Please remember to close the conference room doors if you are in a noisy office. Also, consider testing the volume both of the microphones and the speakers (even on speakerphones) to ensure everyone will be heard properly in the meeting.

This concludes our Basic Requirements & Setup guide. We hope you have found it helpful. If you have any feedback about this document, please email [support@vsee.com](mailto:support@vsee.com). For additional aid, please see our [User Forums](#), [Blog](#), or [How To](#) page. If you are a commercial user, you may also phone us at 866-496-3306, or VSee with us at [support@vsee.com](mailto:support@vsee.com)

Please also refer to our *User's Manual* for aid in learning the major features of VSee or the *Basic Audio/Video Setup & Troubleshooting Guide* for handling basic issues.

Thank you for using VSee! We expect you'll enjoy the experience.