

「Asia-Pacific Medical Network Project in  
Kyushu University Hospital」 TEMDEC  
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## 3. New Instruments and Technical Tips

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### 3.1. VidyoDesktop technical tips

#### 3.1.1. Audio setup guide

## VidyoDesktop Audio Setup Guide : For version2



Vidyo™

### Audio Best Practice – Before Meeting



- Use recommended speaker and microphone devices to prevent echo and other audio issues. (Please see recommended peripherals list)
- Use USB speakerphone or USB headset than built-in microphone for a better audio experience.
- Plug each audio device directly into one of your computer's USB ports whenever possible rather than a USB hub.
- Make sure you have the latest audio drivers for the audio devices you use during your VidyoConference.



- Use the best connection possible – wired is better than wireless.



- Close all applications except those necessary for your VidyoConference to free-up your CPU.
- If your computer has a Power Plan (all Windows and Mac laptops do) choose "high performance". If you're using a laptop, avoid running on battery – it can reduce performance and quality if the power settings are set to conserve power.



- Remove background noise from your location.
- Remove any obstacle around the audio device.

### VidyoDesktop Recommended Configurations



OS : Windows 8/7/XP, Mac OSX 10.6以上  
CPU : Core2Duo 2GHz 以上  
RAM : 2GB


※ Windows 8.1, Mac OSX 10.9.1 later will be supported in future version

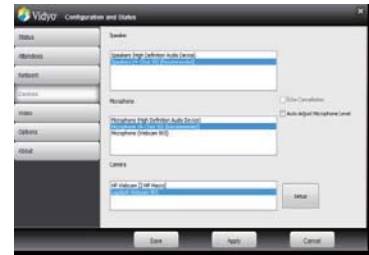
## VidyoDesktop Audio Setup Guide : For version2



Vidyo™

### Selecting Your Audio Device for Use

- The first time you join a meeting, the Device window will automatically appear to enable you to select your audio device.
- You can also select  on the VidyoDesktop to access the Device settings. This tab shows the speaker and microphone devices available on your computer.
- Disable echo cancellation when you are using devices which have built-in echo cancellation (headset or speakerphone). It appears grayed out when you use a Vidyo recommended device.
- After making a change to a setting, click Save.



Echo Cancellation

### Adjust Microphone Level



- Use the drop down arrow ▼ to change the volume level.
- If you find that your voice volume is not changing, clear the Auto Adjust Microphone checkbox to disable automatic gain control of microphone.
- Click the Microphone button to mute or unmute the microphone. The button turns red when you mite yourself.

Auto Adjust Microphone Level



Local Mute  
You can unmute by yourself



Room owner Mute  
You can not unmute by yourself

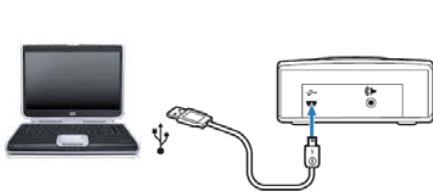
Please mute your microphone  
when you're not actively speaking



## Plantronics Calisto420 (For multiple participants)



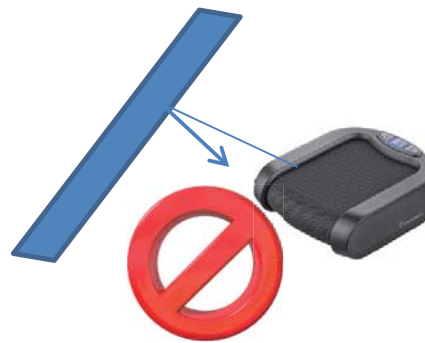
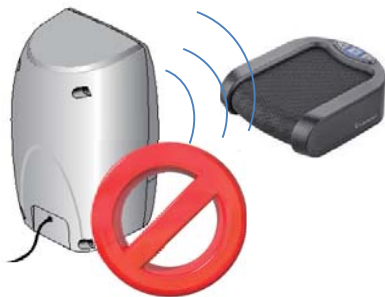
- Plantronics Calisto420 is available for multiple participants as it is equipped with a 3.5mm external speaker connector.



1. Connect the USB cable to the USB port on your computer.

2. Connect the 3.5 mm cable of the external speaker to the connector on Calisto420.

- Don't put external speaker in front of the speakerphone.
- Remove any obstacle around the audio device.



## 3.1.2. Peripheral devices

## VidyoDesktop Peripheral Devices : Speakerphone (1)

MANUFACTURER	MODEL	PLATFORM TESTED	DRIVER OR FIRMWARE VERSION TESTED	DEVICE DESCRIPTION
<b>RECOMMENDED</b>				
ClearOne	Chat 60	Windows, Mac, Linux	6.1.7601.17514	Personal speakerphone that provides full-duplex audio.
Konftel	Konftel 300	Windows	Firmware version: 1.25	Conference phone with microphone, two additional microphones, and PA system interface box.
Logitech	BCC950 ConferenceCam	Windows	13.40.840.0	All-in-one webcam and speakerphone.
Phoenix	Duet PCS MT202	Windows, Mac OS, Linux	6.1.7601.17514	USB desktop speakerphone. <b>Notes:</b> <ul style="list-style-type: none"> <li>•In order for the audio and volume controls to operate properly when using this speakerphone with a Mac, go to System Preferences &gt; Audio and select <b>Phnx MT202pcs</b> as the device for Audio Output and Audio Input.</li> <li>•If you need an extender with this speakerphone, Vidyo recommends the APC USB extender, which supports up to 55 feet.</li> </ul>
Phoenix	Quattro3 MT304	Windows	6.1.7601.17514	USB and power daisy-chain speakerphone. <b>Notes:</b> <ul style="list-style-type: none"> <li>•If you choose to daisy chain, each speakerphone can be powered individually using the supplied power adapters, or if you want to power all the speakerphones using PoE, you can purchase the Daisy Chain Power Kit from Phoenix Audio Technologies.</li> <li>•If you need an extender with this speakerphone, Vidyo recommends the APC USB extender, which supports up to 55 feet.</li> </ul>
Plantronics	Calisto 420	Windows	6.1.7601.17514	USB, echo-canceling speakerphone.
Plantronics	Calisto P820	Windows	Firmware version: V01.27.00.00	Multi-device speakerphone system.
Plantronics	MCD100	Windows, Mac OS, Linux	6.1.7601.17514	USB speakerphone for small to medium-sized work areas.

## VidyoDesktop Peripheral Devices : Speakerphone (2)

MANUFACTURER	MODEL	PLATFORM TESTED	DRIVER OR FIRMWARE VERSION TESTED	DEVICE DESCRIPTION
<b>SUPPORTED</b>				
Apple	iMac, Macbook Pro, Macbook Air, and Thunderbolt Display Built-in Speaker	Mac OS		Apple devices.
ClearOne	Chat 50	Windows, Mac OS, Linux	6.1.7601.17514	Personal echo-canceling speakerphone.
ClearOne	Chat 150	Windows, Linux	6.1.7601.17514	USB-based, echo-canceling speakerphone.
Jabra	Jabra SPEAK 410	Windows, Mac OS, Linux	Firmware version: 1.5.0	Personal echo-canceling speakerphone.
Yamaha	PJP-20UR	Windows, Mac OS, Linux	Firmware version: 1.07	Web conference microphone speaker with built-in echo canceller. Recommended cables: <ul style="list-style-type: none"> <li>•10 feet: Fontel USB 2.0 Type A-to-Mini B cable (part number GCUSBM10)</li> <li>•15 feet: Fontel USB 2.0 Type A-to-Mini B cable (part number GCUSBM1)</li> </ul>
Yamaha	PJP-25UR	Windows, Mac OS, Linux	Firmware version: 1.1.0.9	Conference speakerphone with movable microphone arms.

## VidyoDesktop Peripheral Devices : Headsets

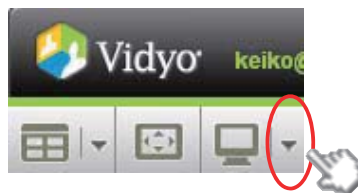
MANUFACTURER	MODEL	PLATFORM TESTED	DEVICE DESCRIPTION
<b>RECOMMENDED</b>			
Microsoft	Lifecchat LX-3000	Windows, Linux	Headset with noise-canceling microphone and in-line volume controls.
Plantronics	Blackwire C520-M	Windows, Mac OS	Headset with USB audio and noise-control cancelling microphone
Plantronics	SAVI-740 (wireless)	Windows, Mac OS	Multi-device wireless headset system.
Plantronics	Voyager Pro UC v2 (wireless)	Windows, Mac OS	Bluetooth headset system with dual-mic AudioIQ2 DSP for noise cancellation.
<b>SUPPORTED</b>			
Apple	Thunderbolt Display Built-In Microphone	Mac OS	Built-in display microphone
Cyber Acoustics	AC-840	Windows, Linux	USB mono headset with boom microphone.
Cyber Acoustics	AC-850	Windows, Linux	USB stereo headset with boom microphone.
Jabra	UC 750 Mono	Windows	Headset with USB audio and noise-cancelling microphone
Logitech	B530 USB Headset	Windows, Mac OS	Headset with laser-tuned drivers and a built-in equalizer.
Logitech	ClearChat Comfort USB	Windows, Linux	Headset with USB audio and noise-canceling microphone.
Logitech	USB Headset H330	Windows, Linux	Headset with USB audio and noise-canceling microphone.
Logitech	USB Headset H390	Windows	Headset with USB audio, noise-canceling microphone, and padded headband.
Plantronics	Blackwire C435-M	Windows, Mac OS	Headset with noise-canceling microphone and in-line volume controls.
Plantronics	C420	Windows, Mac OS	Digitally enhanced foldable headset.
Plantronics	DSP-400	Windows, Mac OS	Digitally enhanced foldable headsets.
Plantronics	Plantronics Headset with Plantronics USB Adapter 01	Windows, Linux	Analog headset to be used with USB adapter.
Plantronics	Savi W740 Wireless Headset	Windows, Mac OS	Wireless headset



3.1.3. How to share PowerPoint

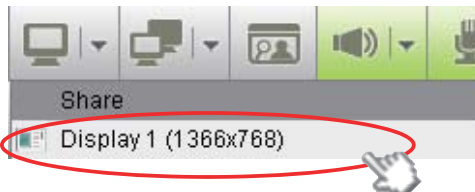
## How to share Power point

1. Click the drop-down arrow of share button.



2. Select "Display 1" from the list.

When you are sharing, icon is colored green.



3. Start slide show on Power point.

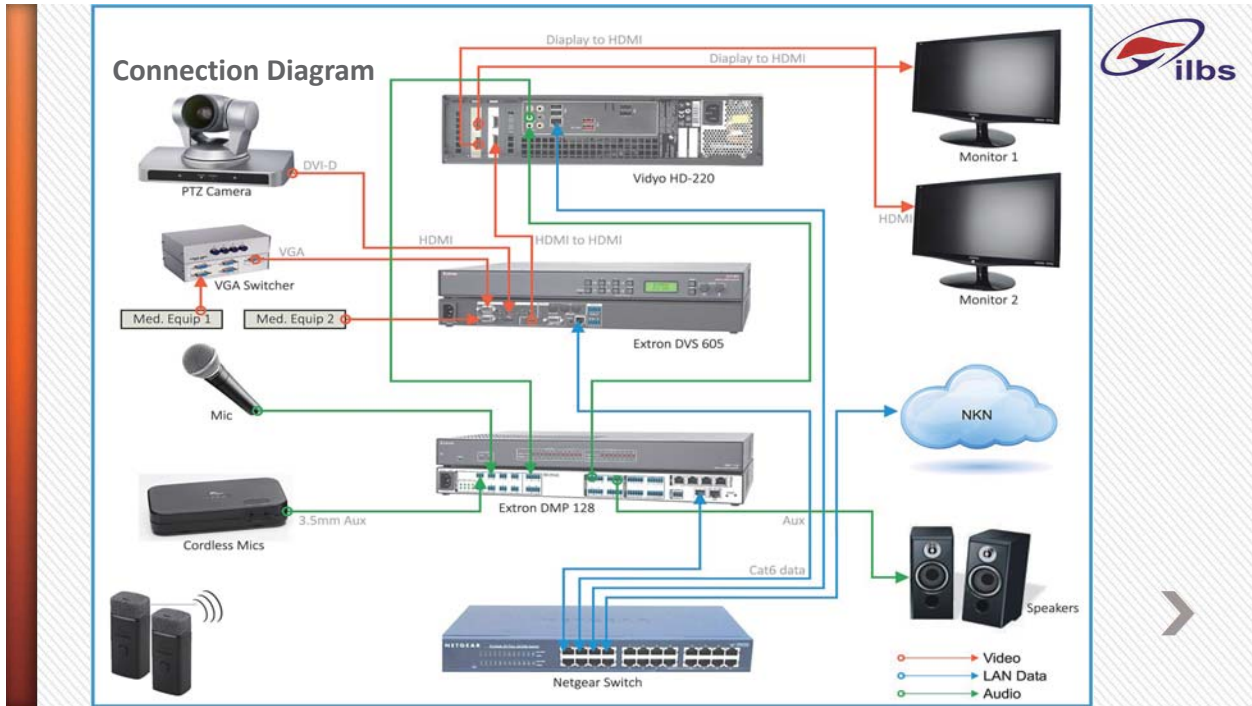


4. Click share button again to stop sharing.



### 3.2. Configuration detail for each institute

#### 3.2.1. The Institute of Liver and Biliary Sciences (India)

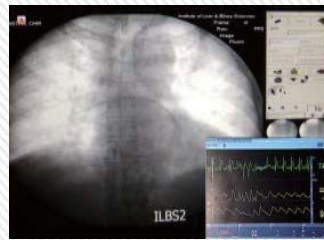


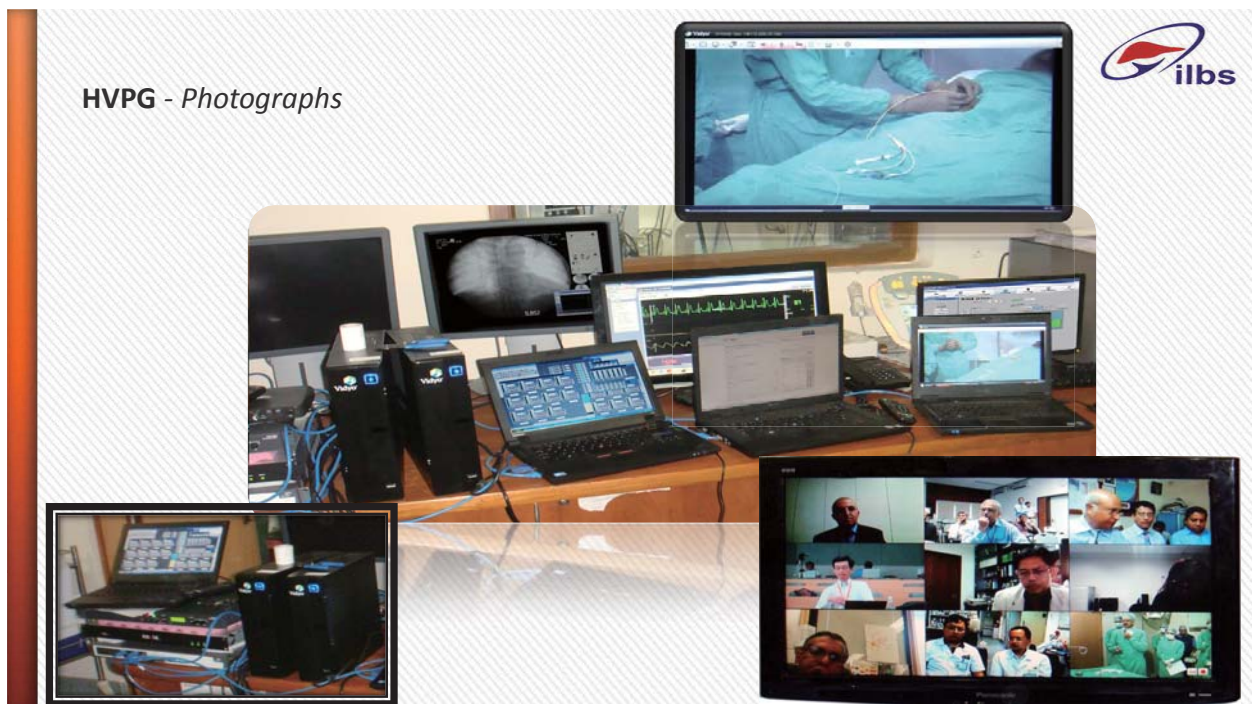
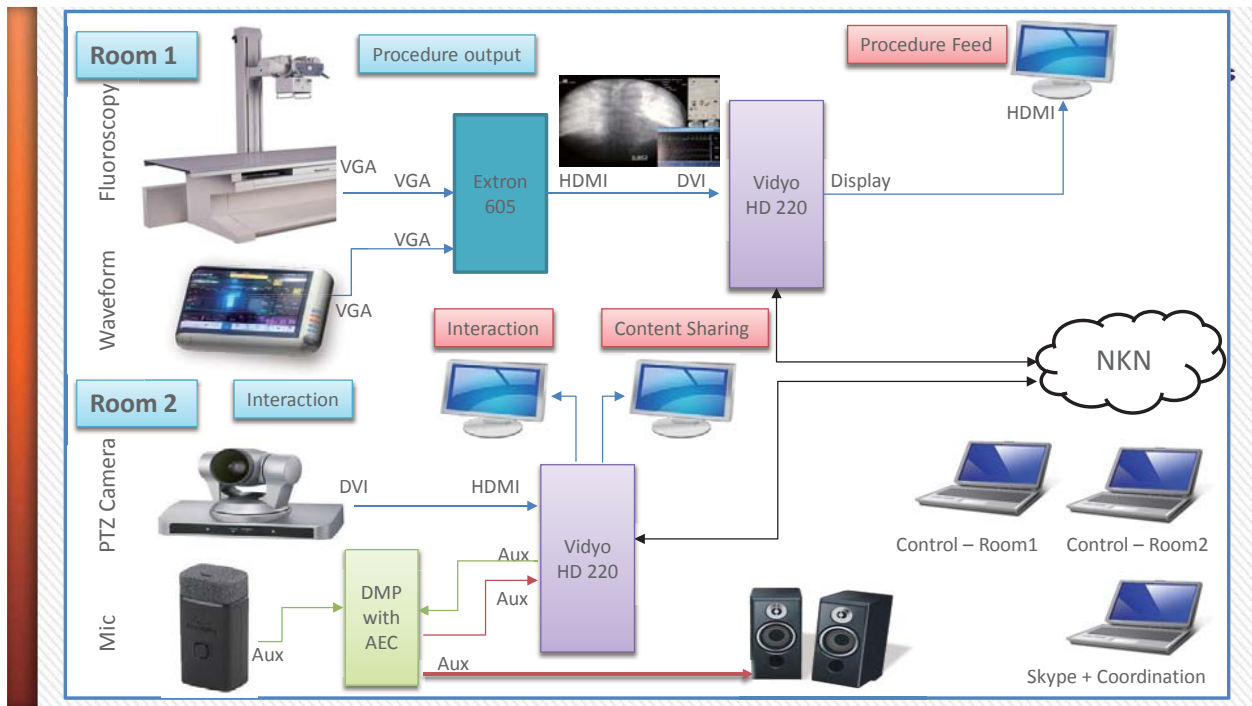
#### HVPG - Solution

2 Vidyo Rooms were created for this conference:

**Room 1:** For showing Fluoroscopy image along with Vitals Monitor. This was shown continuously throughout the session.

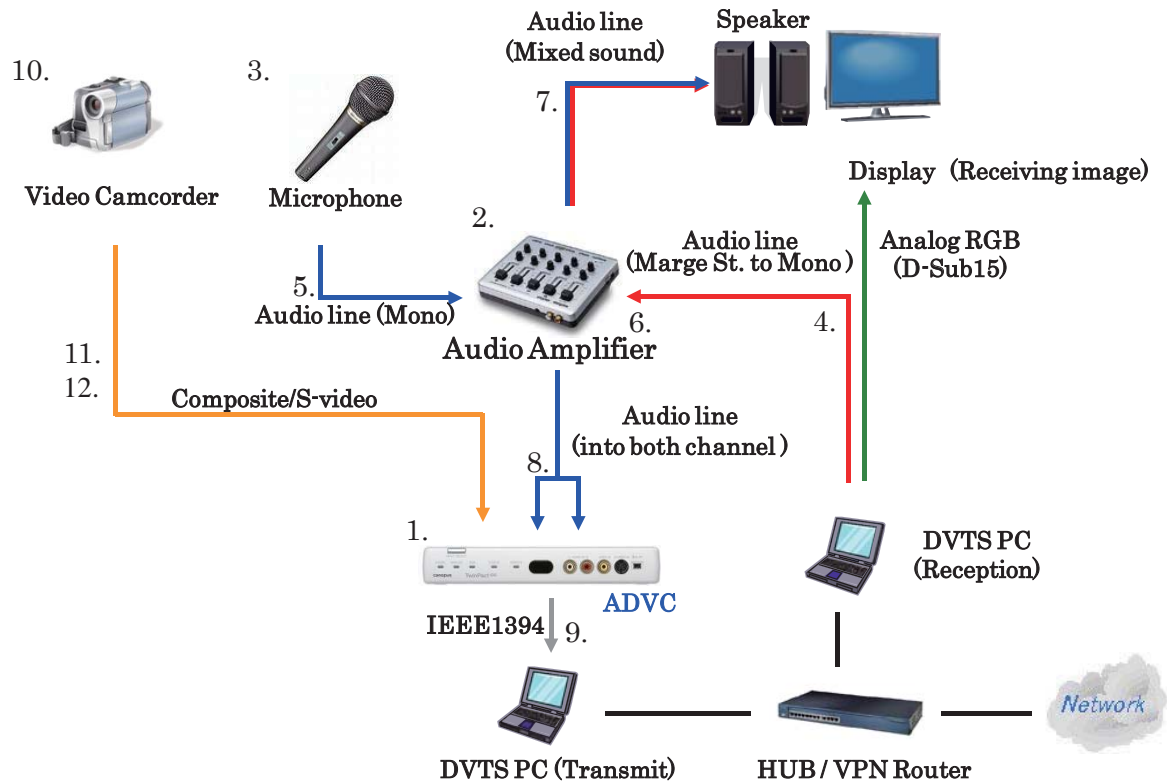
**Room 2:** For showing faculty, procedure interaction and content.



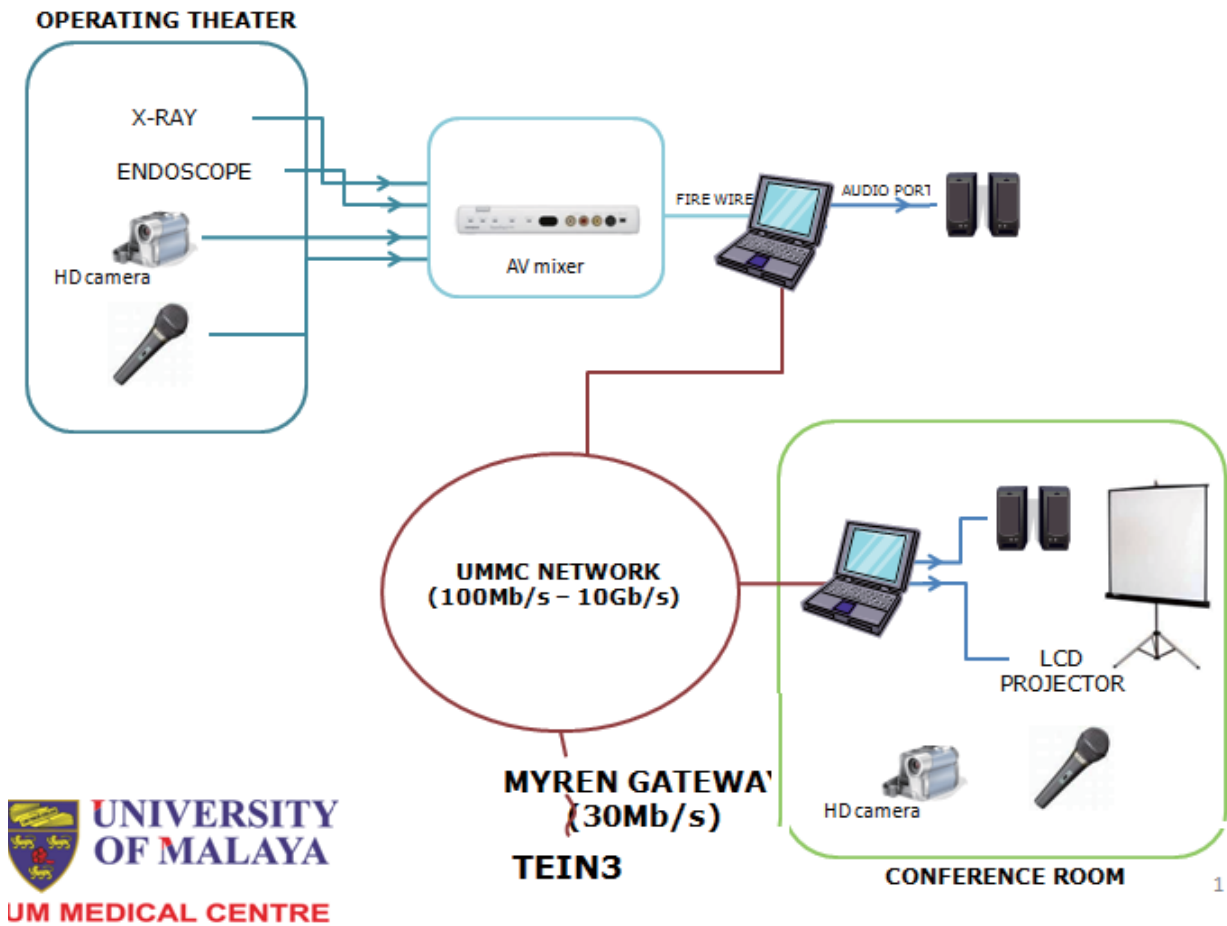


## 3.2.2. University of Malaya (Malaysia)

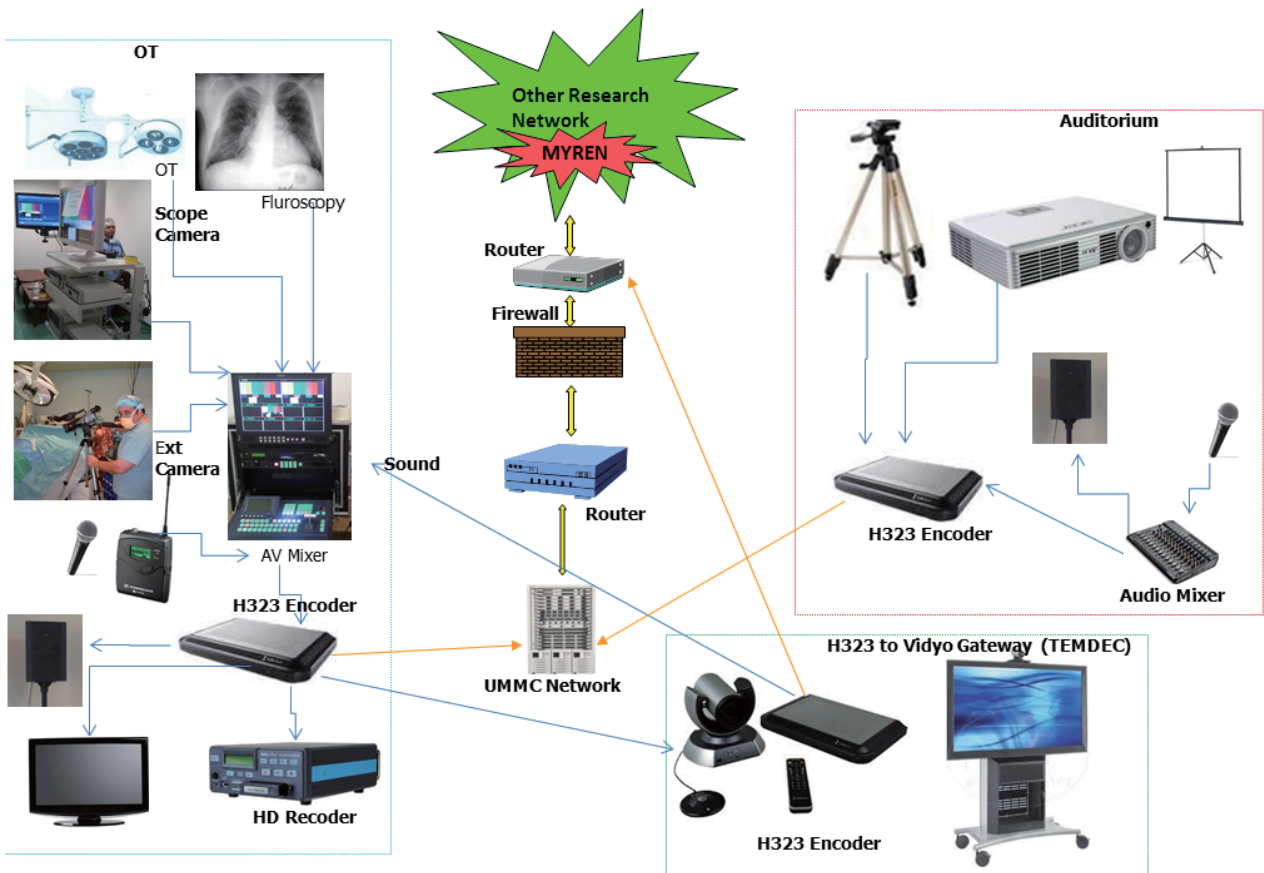
## University Of Malaya DVTS Setup



No		Company	Product	
1	Analog-digital video converter	Thomson Canopus	TwinPact100(RC)	1
2	Audio Mixer	audio-technica	Portable Multi Mixer AT-PMX5P	1
3	Microphone	audio-technica	Dynamic Vorcal Microphone PRO-100	1
4	Cable	JVC	CN-207A ( $\phi 3.5$ -St $\rightarrow$ $\phi 3.5$ -Mono 1.5m)	1
5	Cable	JVC	CN-230A ( $\phi 6.3$ mono extension 5m )	2
6	Cable	JVC	AP-100A ( $\phi 3.5$ -Mono $\rightarrow$ $\phi 6.3$ mono exchange plug)	1
7	Cable	JVC	CN-186G (RCA $\times 1$ $\rightarrow$ RCA $\times 2$ 3M)	1
8	Cable	JVC	CN-166G (RCA $\times 1$ $\rightarrow$ RCA $\times 2$ 1.5M)	1
9	Cable		IEEE1394 4PIN-4PIN, 4PIN-6PIN	2
10	Video camera	Hitachi	Video camera DZ-HS803 (NTSC)	1
11	Cable	JVC	VX-130E ( Composite extension cable )	1
12	Cable	JVC	VZ-97(RCA extension plug)	1
13	Other Items:	Elecom	EHP-TVAP120SV	1



## H323 SETUP



## 3.2.3. University of Hong Kong (China)

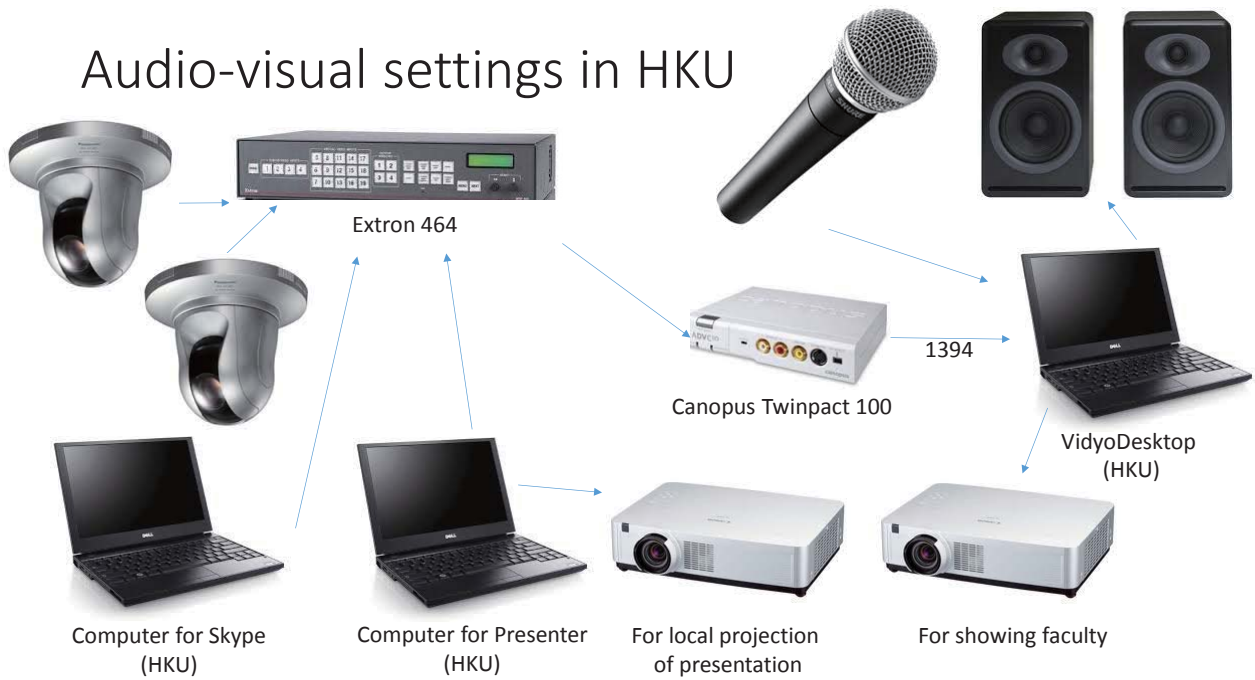
Set up for the 4<sup>th</sup> fetus session

Vidyo was used for the 4<sup>th</sup> fetus session at 36<sup>th</sup> APAN conference. A VidyoPortal server was set up in the University of Hong Kong to support this event. The session was streamed out to other universities and hospitals from the Vidyo streaming server in Japan.

- VidyoRoom HD220 was set up for the chairman
- VidyoDesktop was set up for showing faculty
- VidyoDesktop was used by other sites



## Audio-visual settings in HKU



## The 4<sup>th</sup> fetus session at 36<sup>th</sup> APAN conference



## 3.2.4. Gifu University (Japan)

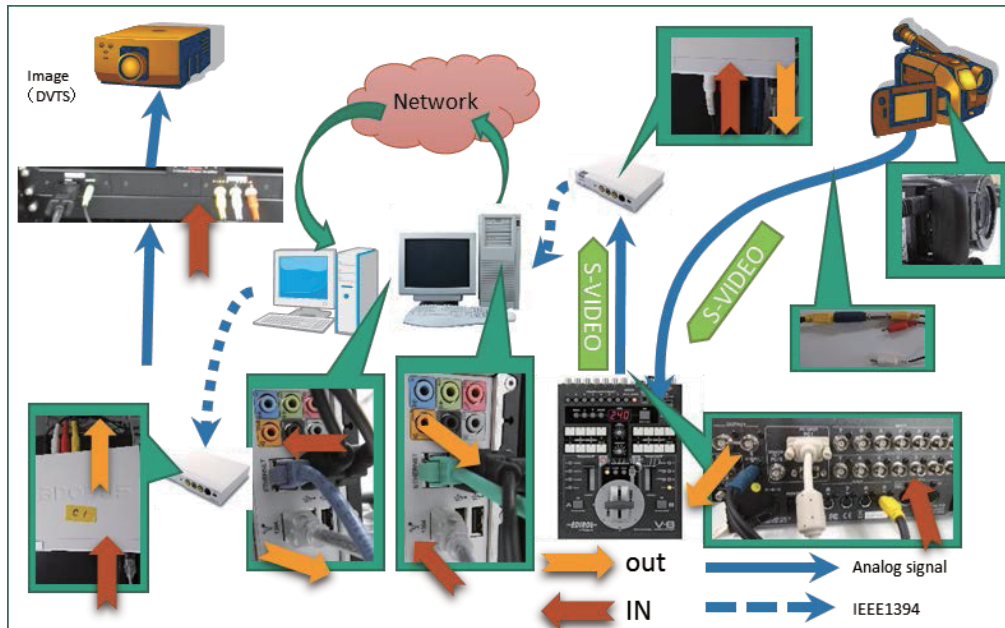
We introduced our system configuration at Gifu University Hospital for the web conference.

Systems used: DVTS (Digital Video Transport System) and VidyDesktop

Equipment: Video camera: HDR-XR520V (Sony), Video mixer: V-8 (Roland), Microphone: PRO-100 (Audio-Technica), Audio mixing console: MG-102C (Yamaha), Analog DV converter: 2 x ADVC-110 (Canopus)

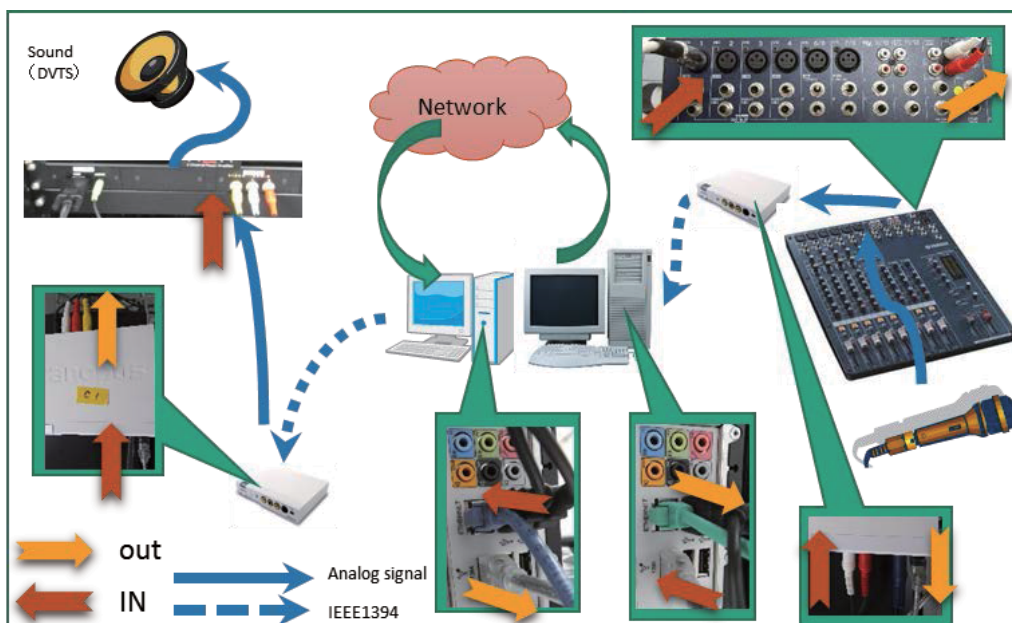
## 1. DVTS

## i. Configuration for transmitting and receiving images



Video images recorded by the camera and presentation slides are mixed and modified with the mixing console. The image is then sent to the IEEE 1394 port of the PC via ADVC. The other PC receives the video through the Internet. The video signal is then transmitted from the IEEE 1394 port to the projector via ADVC.

## ii. Configuration for transmitting and receiving sound





Signals from the microphone are sent to the PC from the “REC-OUT” output of the audio mixing console via ADVC. The audio signal goes out to and comes in from the Internet, and the IEEE 1394 port and ADVC connect the PC and the speaker system.

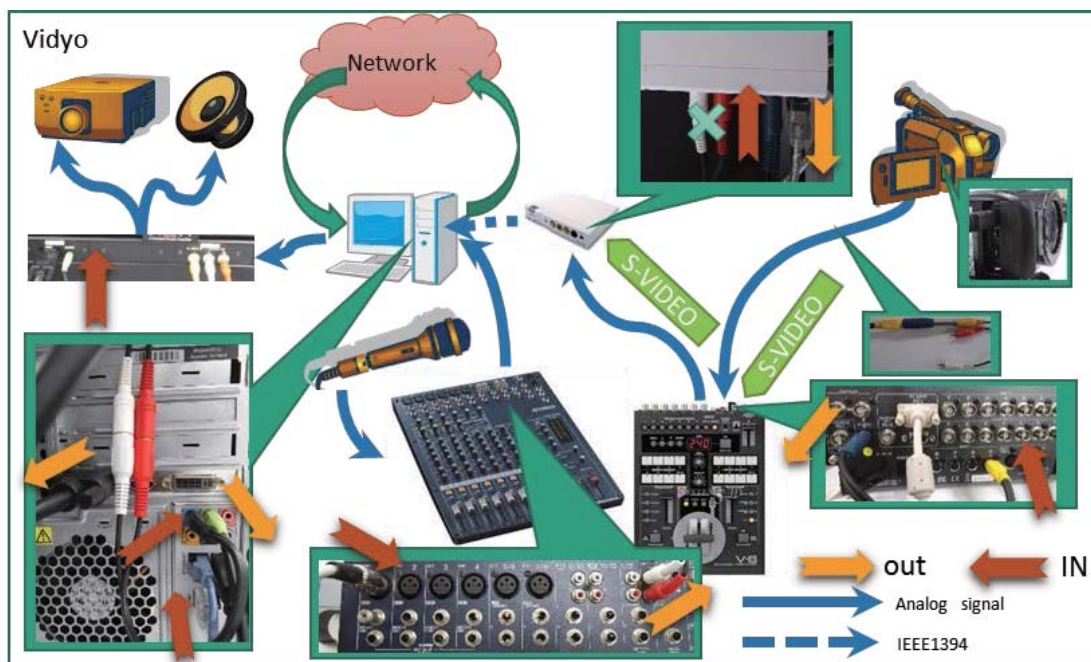
**2. Vidyo**

Configuration differences between DVTS and Vidyo

	DVTS	Vidyo
<b>PCs required</b>	2 (send and receive)	1
<b>Audio via IEEE 1394</b>	Yes	No
<b>Output to IEEE 1394</b>	Yes	No

Because the IEEE 1394 port cannot be used for this system, the audio signal is sent directly from the mixing console to the PC line-in port.

Configuration for the Vidyo system



**3. Remarks**

- The configurations described above are just examples. They have two disadvantages: 1) A person’s own voice is not transmitted to the speaker. 2) Voices from the other side cannot be adjusted with the audio mixing console. We encourage modification of the system configuration for your convenience.
- For the Vidyo system, it is better to make it simple because that is the philosophy of web conferences these days: simple and easy.
- To achieve a meeting with clear sound, it is of extreme importance to turn on the microphone ONLY when you speak.
- Preparing an alternate method of communication (e.g., Skype) is strongly recommended in case of unforeseen problems. Furthermore, do not forget to share the information if the room or systems used will be changed. This kind of information helps to anticipate incidents such as an IP address change, strong echo sound, or a bandwidth shortage.