Vidyo®

TEMDEC
Telemedicine Development Center of Asia

Demonstration
with Manual book

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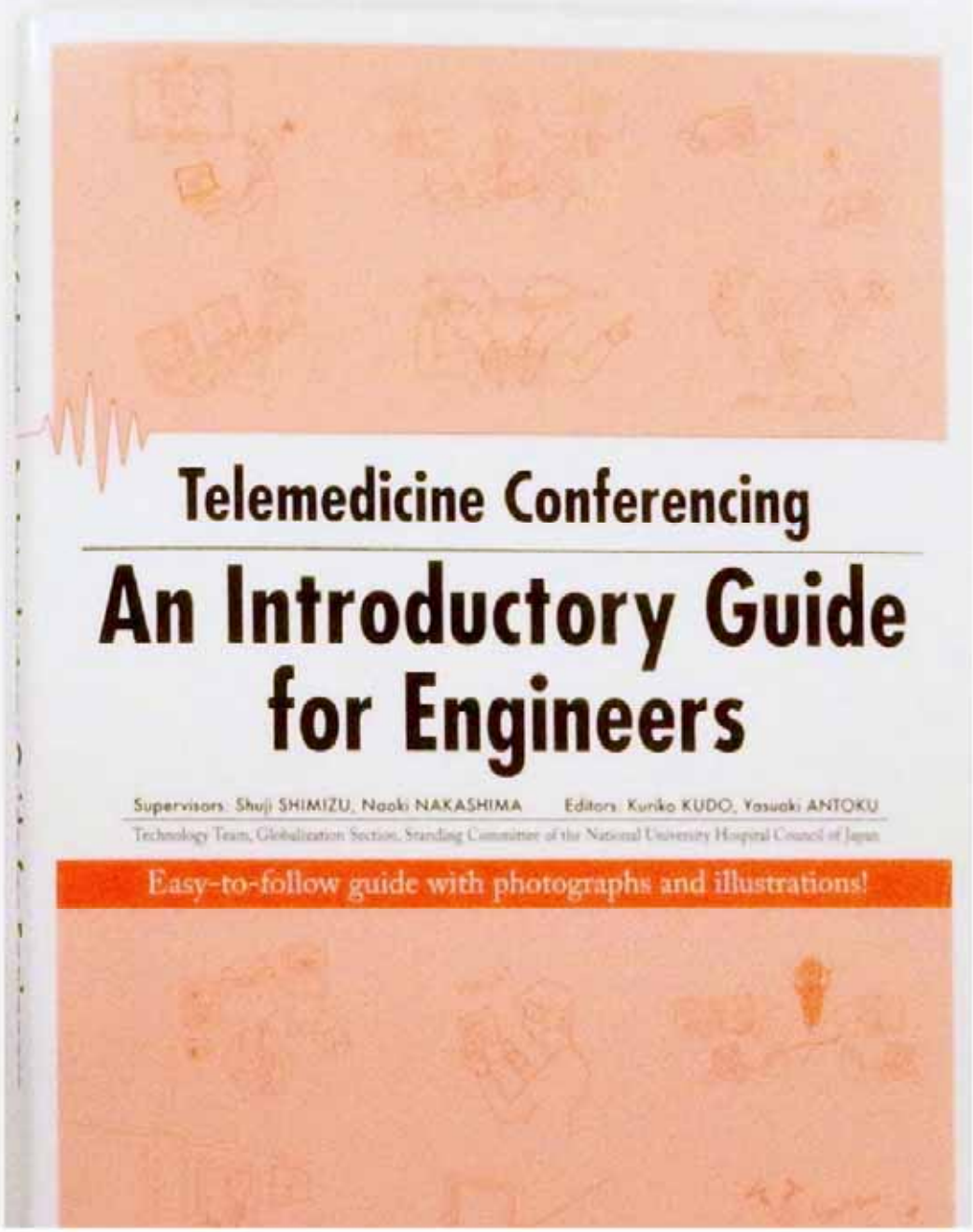
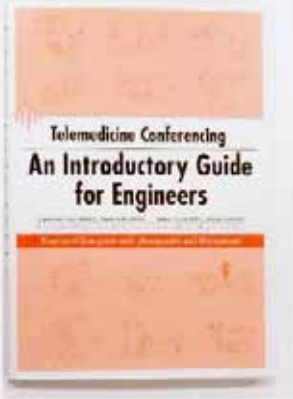


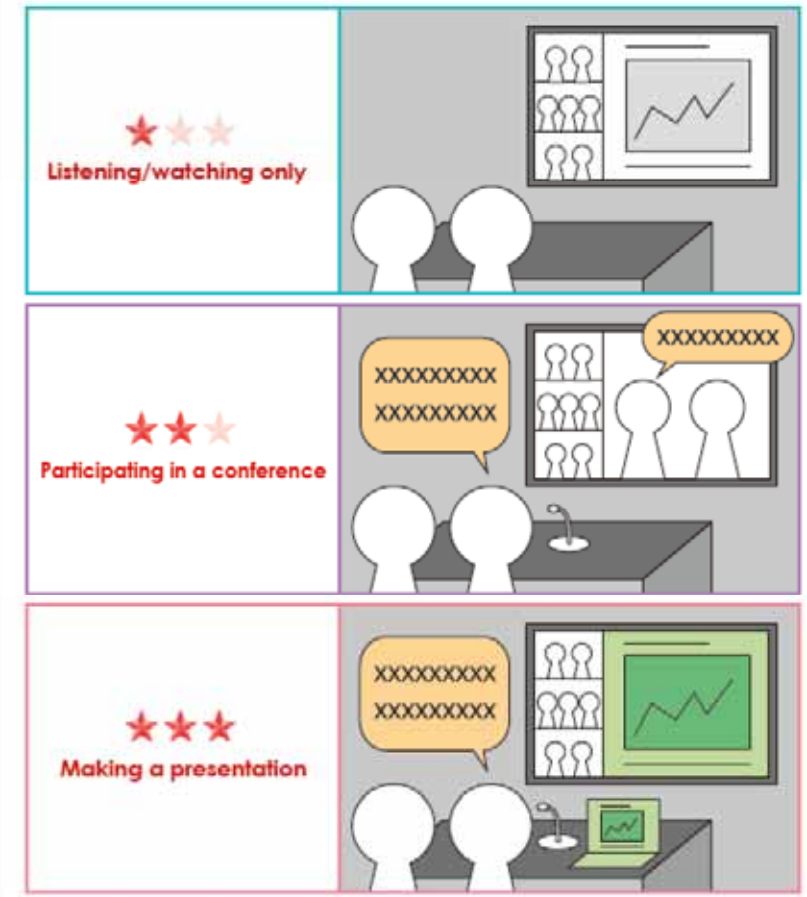
Telemedicine Conferencing
- An Introductory Guide for Engineers

Globalization Project Team -Standing Committee
of the National University Hospital Council of Japan

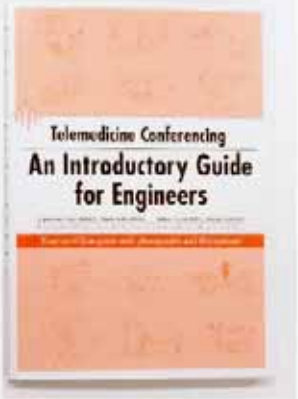


Target

- The engineers of the institution that is connecting to the conference hosted by others.
- Non-native English speaker
- Three technical levels:
  - ★☆☆ Listening/ watching only
  - ★★☆ Participating in a conference
  - ★★★ Making a presentation



Contents



1 Advance Preparations

2 Networks

3 Teleconferencing Systems

4 Venue Setup

5 Points to Note During the Conference

6 Troubleshooting

Appendix!!

-Flowchart
for Determining Event Type

-Checklist
Depending on Event Type

-H.323 List

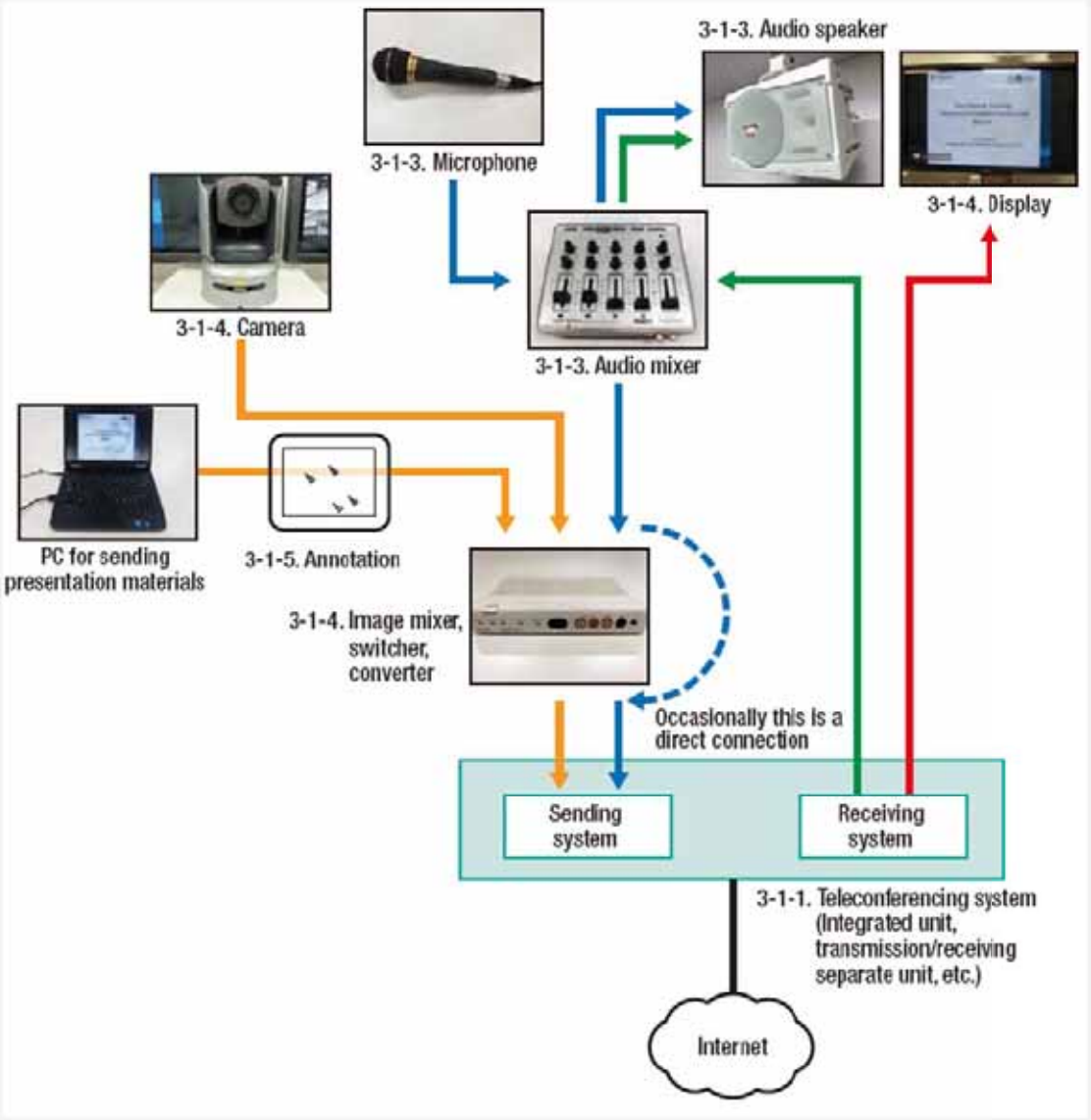
Glossary

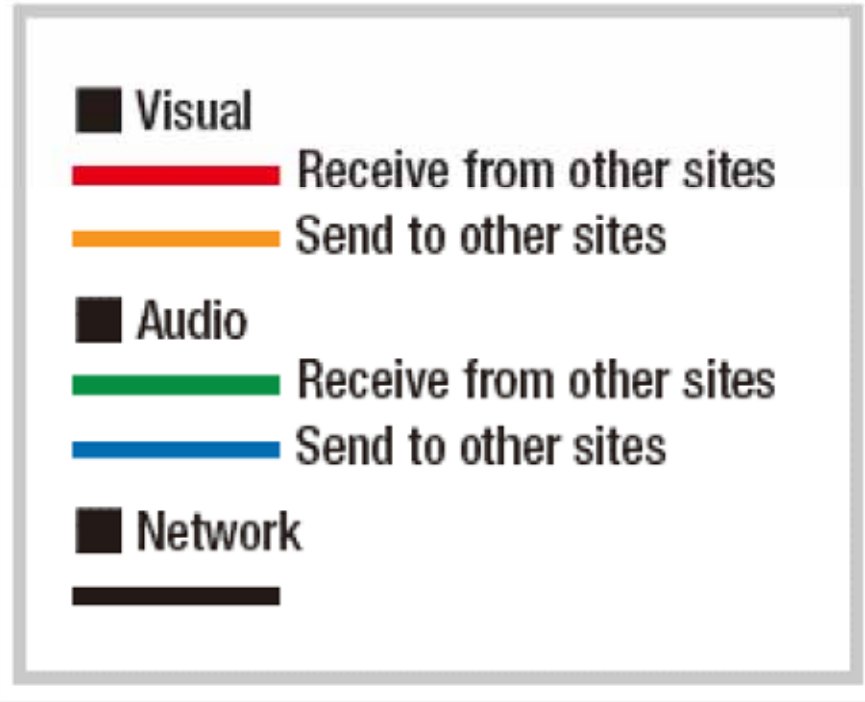
Chapter

3

Teleconferencing Systems

3-1. Equipment Types and Combinations





3-1. Equipment Types and Combinations

H.323

Polycom, Cisco, Sony, etc

- Expensive
+ Low bandwidth
+ Easy to use

DVTS

Free software developed by WIDE project since 1998

+ Less cost
- Big bandwidth
- Difficult to setup

Vidyo

Multipoint teleconference system conformable to H.264

+ Less cost
+ Low bandwidth
+ Easy to use
- Expensive for transmitting movie and live demos

3-2-2.VidyoDesktop

Vidyo

Work with Normal Network

Internet- 3G/4G, Wifi, LTE
DHCP and Global IP
Bandwidth 1-8 Mbps

Vidyo Desktop

Endpoint

Let's Try!!

- **VidyoDesktop** (PC Application)
  Content Sharing (Only still pictures)
- **Vidyo Room** (Exclusive Hardware)
  $10,000 or higher
  Content Sharing (including Movie clip)
- **Vidyo Mobile App**

Vidyo Room

3-2-2. VidyoDesktop

Vidyo

1) Recommended requirements for Vidyo

PC

- Windows:10/8.1/8/7/XP
- Mac:OS X 10.6 or later
- CPU At least Core 2 Duo 2GHz
- RAM 2 GB

Webcam

Logitech Webcam (Pro C920, C910, C510, C310, Pro 9000, C600, C905, QuickCam Pro 9000
Creative Live! Cam Socialize HD

USB Headset, SpeakerPhone

Logitech USB ClearChat headset series
Plantronics USB headsets, Plantronics P420 speakerphone
ClearOne Chat 50 or Chat 150 speakerphone
Jabra Speak 410 speakerphone

3-2-2.VidyoDesktop

Vidyo

2) Preparations and installation

1. Connect your web camera and speakerphone or headset to your PC.
2. Connect your PC to the internet.
3. Access the URL for the VidyoPortal
   https://vidyo-portal.med.kyushu-u.ac.jp/
4. Download VidyoDesktop.
5. Run the downloaded program.

3-2-2. VidyoDesktop

3) Login and search room

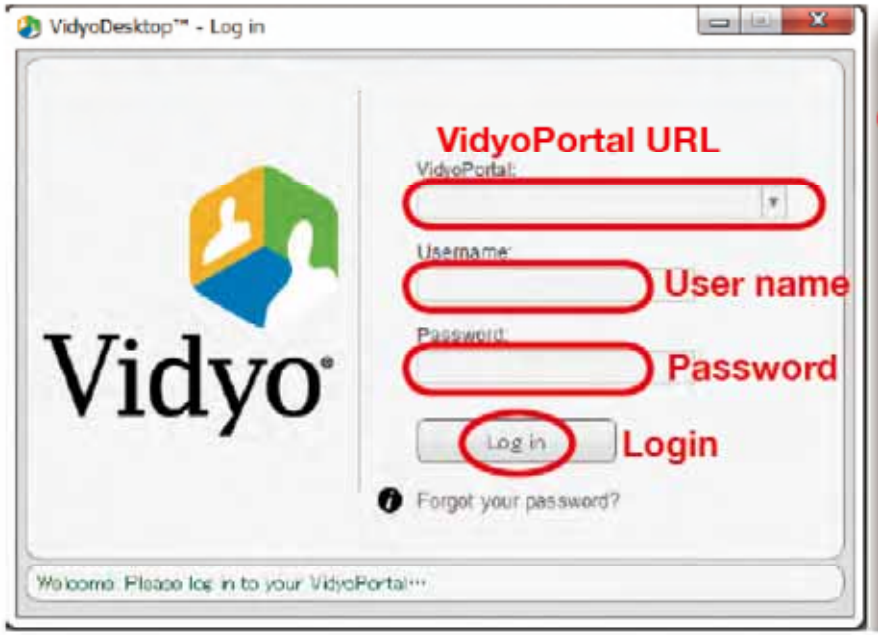


Figure. 3-25 Login Screen

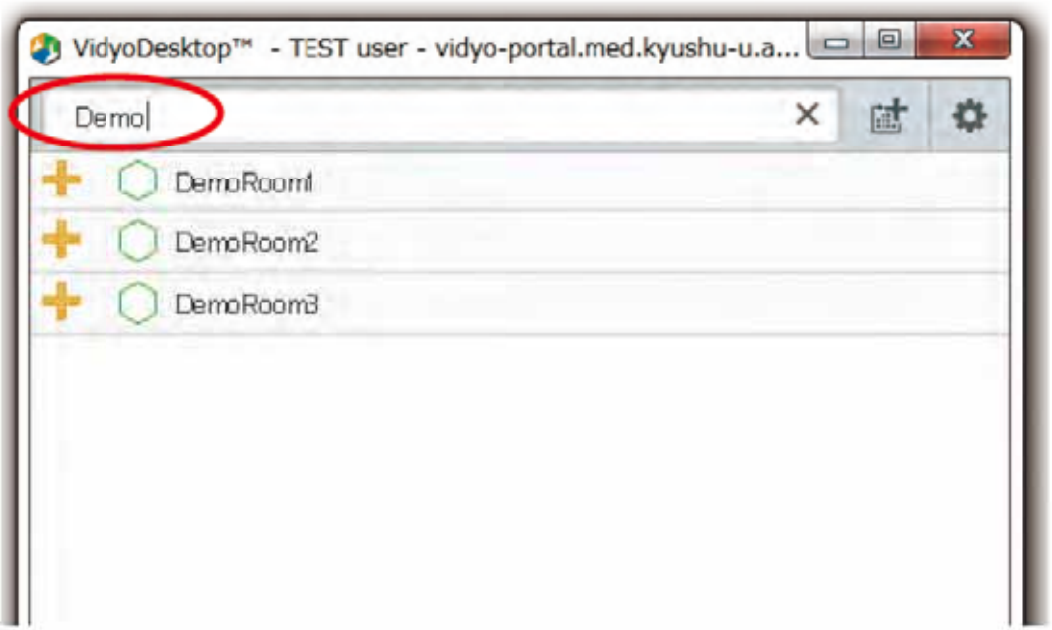


Figure. 3-26 Search for "Demo" in the Search Field

3-2-2. VidyoDesktop

Vidyo

4) Participate in a room

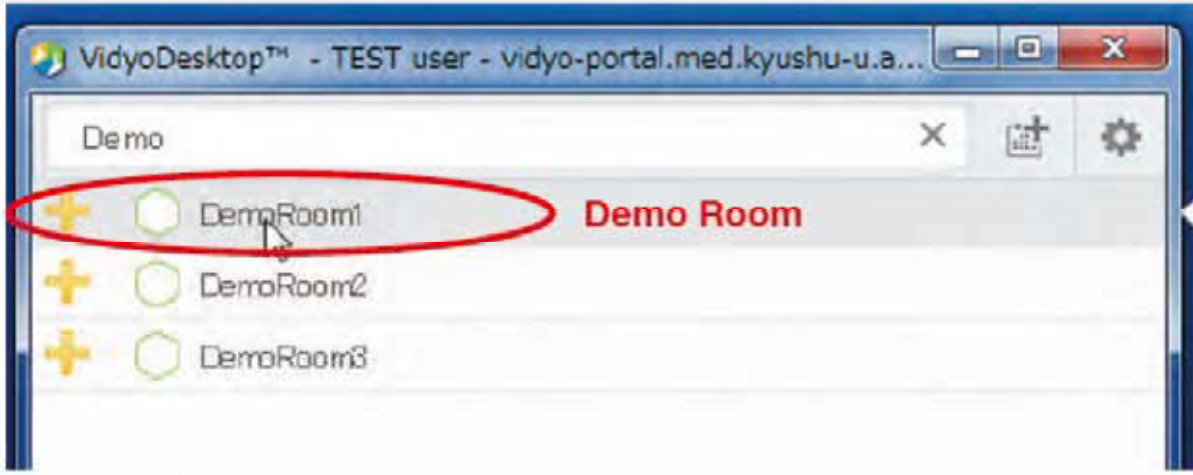


Figure. 3-27 Screenshot of Search Screen

Figure. 3-28 Connect to Room

3-2-2. VidyoDesktop

Vidyo

5) Operations when in a conference

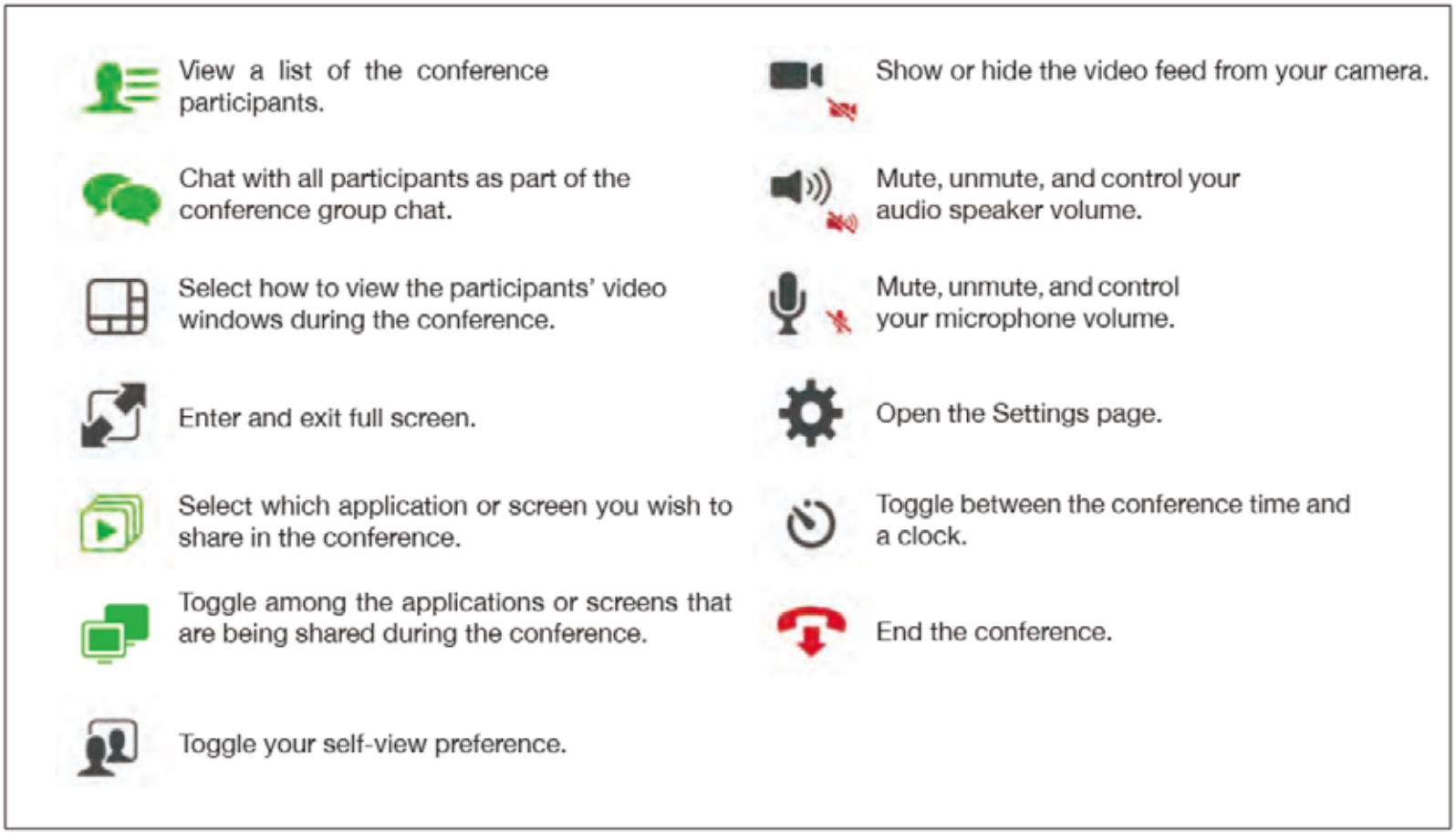


Figure. 3-31 List of menu Icons

3-2-2. VidyoDesktop

Vidyo

6) Sharing presentation

1. Click on the **"Start Sharing"** and select **your display**.

*** Do not select the PowerPoint software from the list.**

2. Sharing has started.
   The VidyoDesktop window will shrink and the desktop screen will appear.

*** From your counterpart, both your camera and your sharing will be shown.**

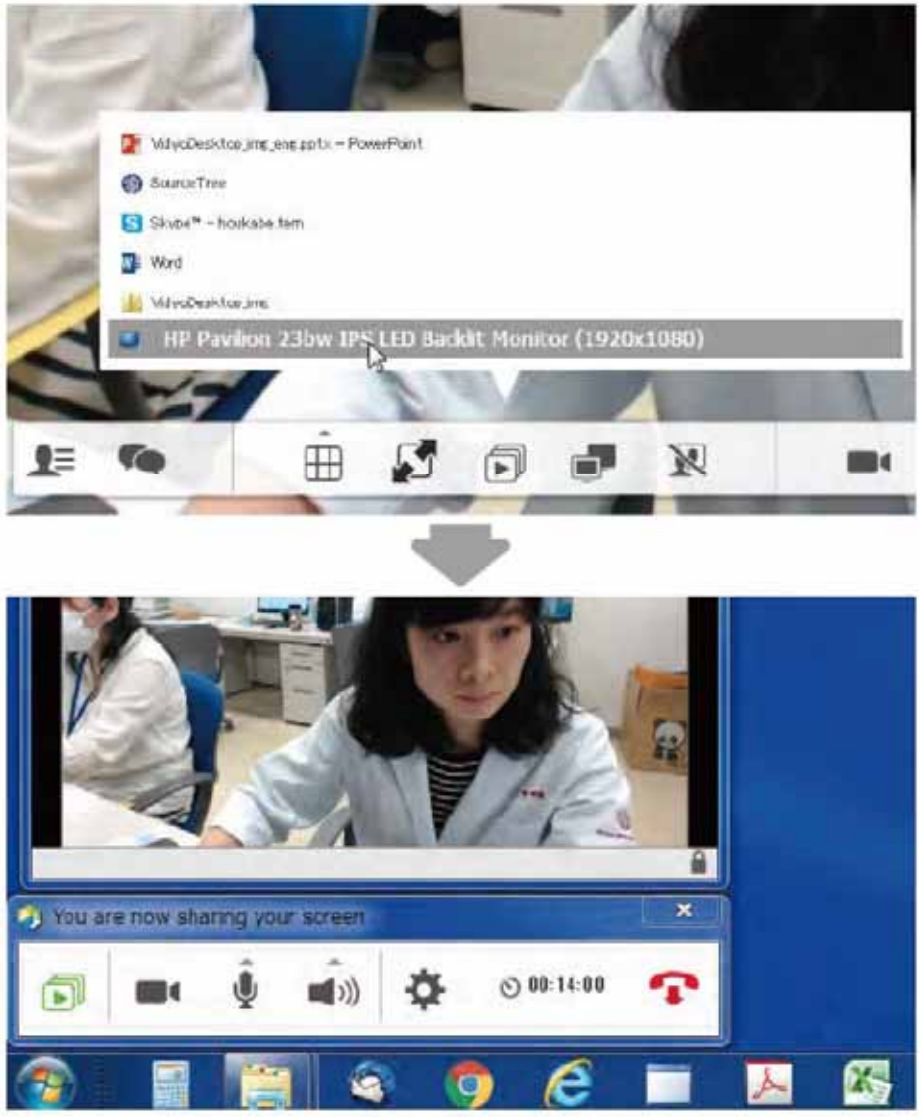


Figure. 3-34

3-2-2. VidyoDesktop

6) Sharing presentation

3. Open your PowerPoint slideshow.

Figure. 3-35

3-2-2. VidyoDesktop

Vidyo

6) Sharing presentation

4. To stop sharing your presentation, click once again on the **"Start Sharing"** icon and select **"Stop Sharing"** .

Figure. 3-36

*** Once you stop sharing theVidyoDesktop, window will be restored to full size.**

*** Once your presentation has finished, be sure to stop sharing your screen.**

Vidyo

Sharing movie Contents

Contents sending = lower framerate.

Movie cannot send with contents sharing smoothly!

Then, how we send movie smoothly?

⇒Use hardware!

Use VidyoRoom

Use H.323 + Gateway connection + Switching Image

TEMDEC supports sending movie file from Hardware.

⇒Presenters need to send the movie file in advance

Vidyo

Sharing movie Contents by H.323

- **Switch image source:**
  Good for sending movie.

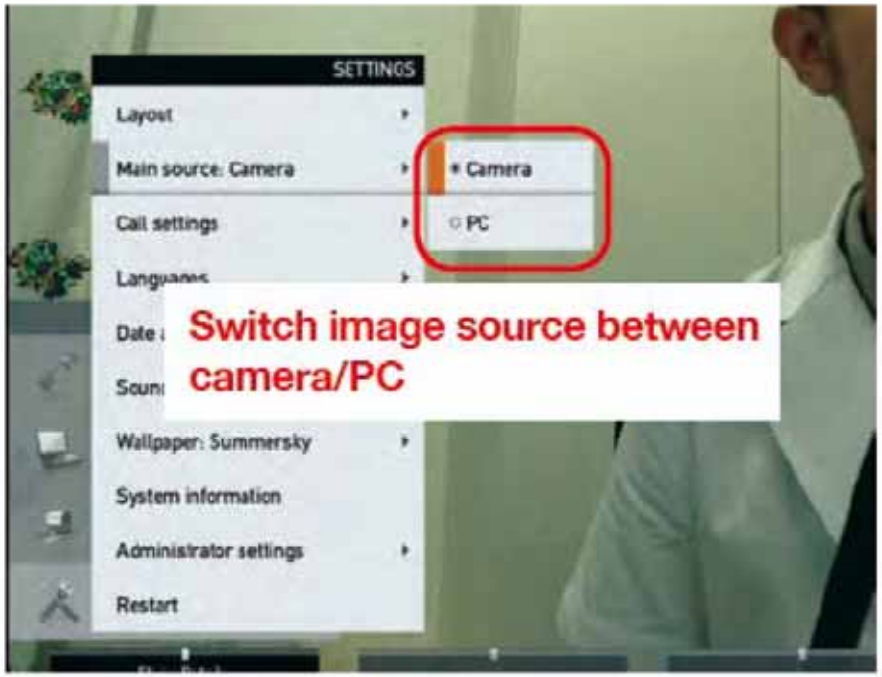


Figure. 3-20 Switch image Source to Camera

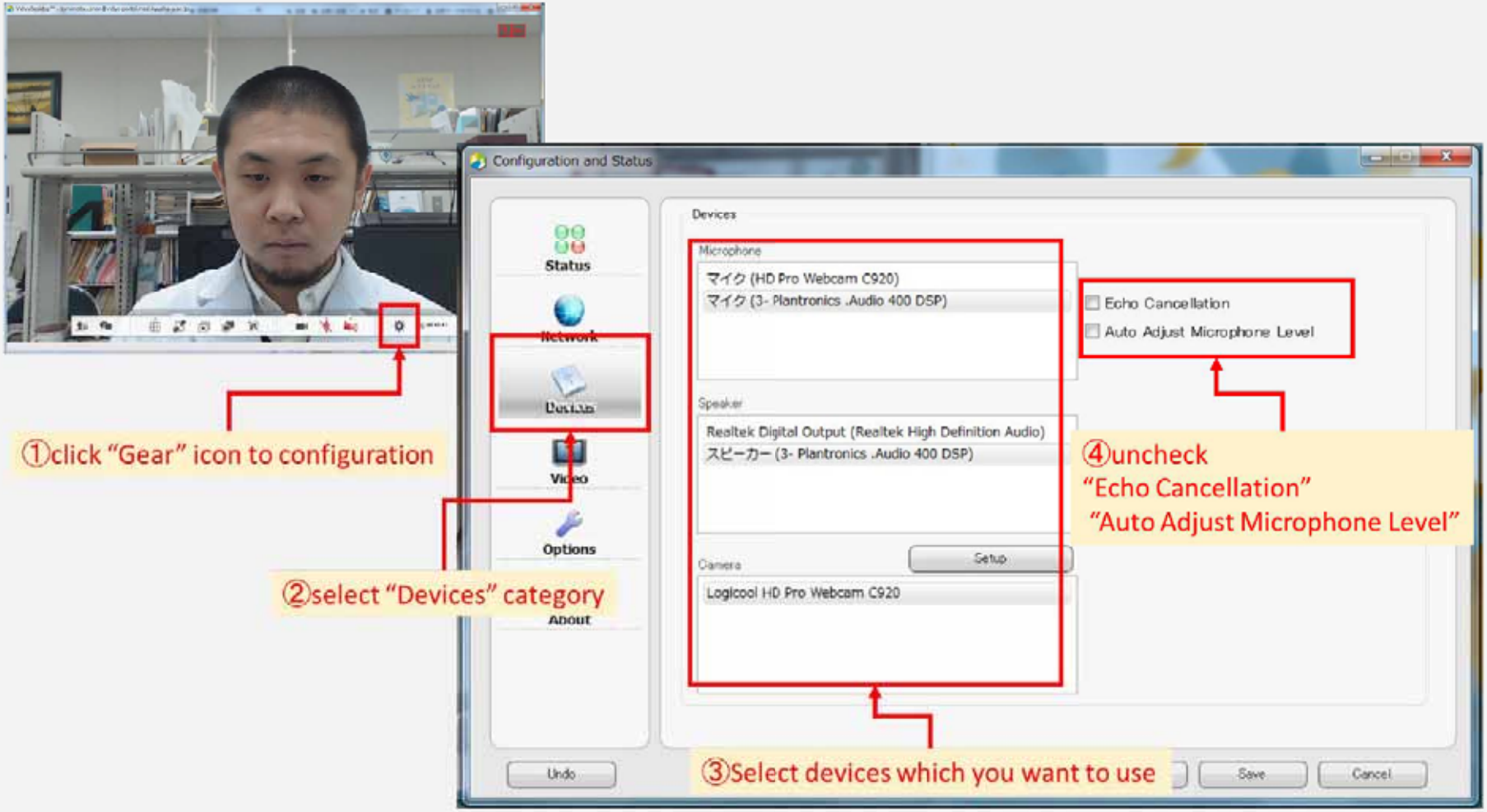
- **Contents sharing:**
  Not good for sending movie.

Figure. 3-21 "Contents sharing" button

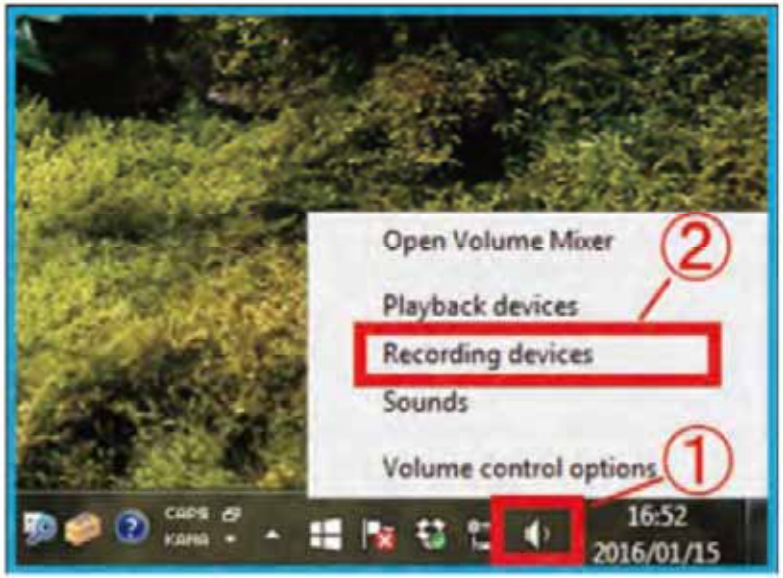
3-2-2.VidyoDesktop

Vidyo

Audio Adjustment in Vidyo Desktop



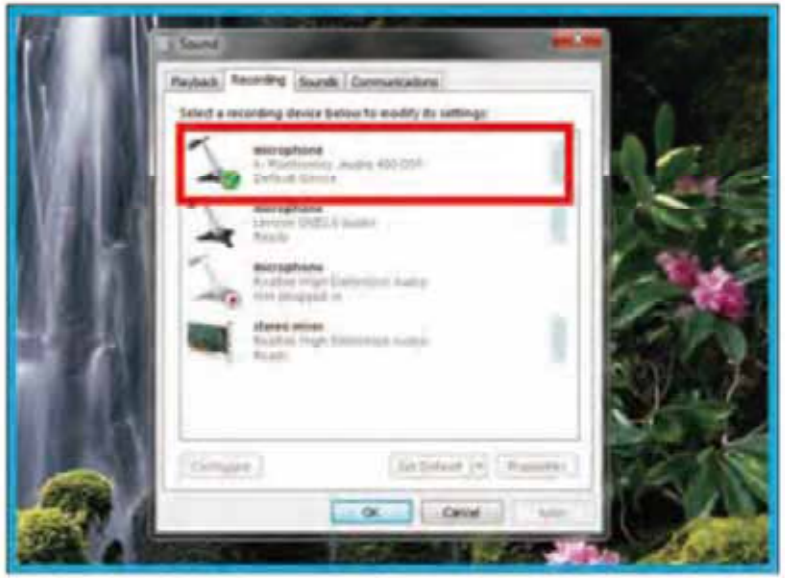
Audio Adjustment in the PC



Adjust microphone level from the recording device settings on your PC

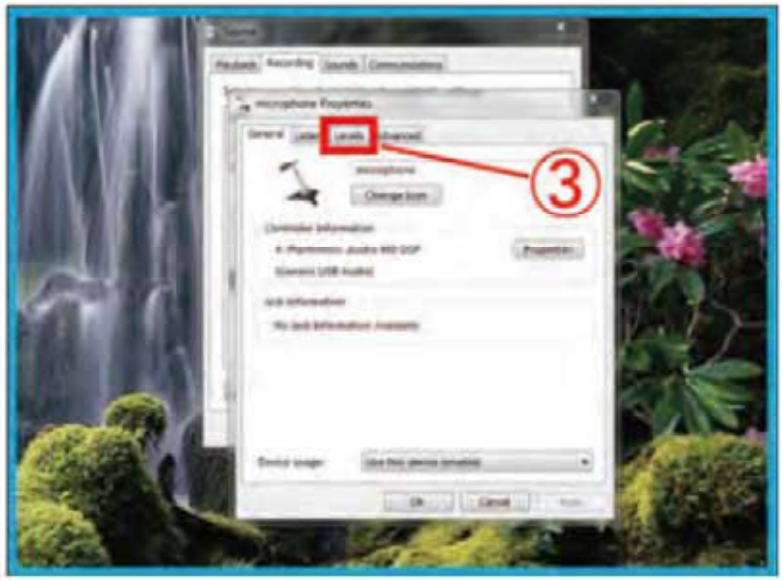
Right-click on the speaker icon at the bottom right-hand of your PC screen ① and select "Recording devices" ②.

Audio Adjustment in the PC



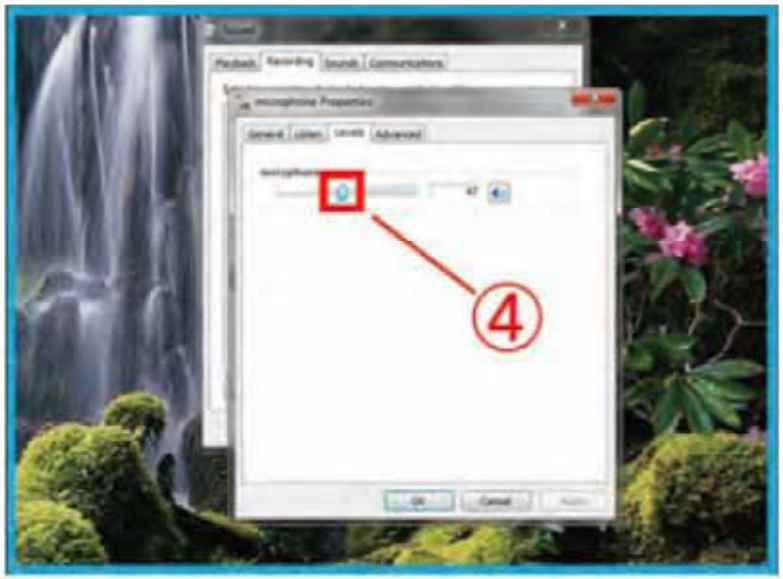
Select the microphone you are using from the list of recording devices and double click.

Audio Adjustment in the PC



Select the “Levels” tab ③ in microphone properties.

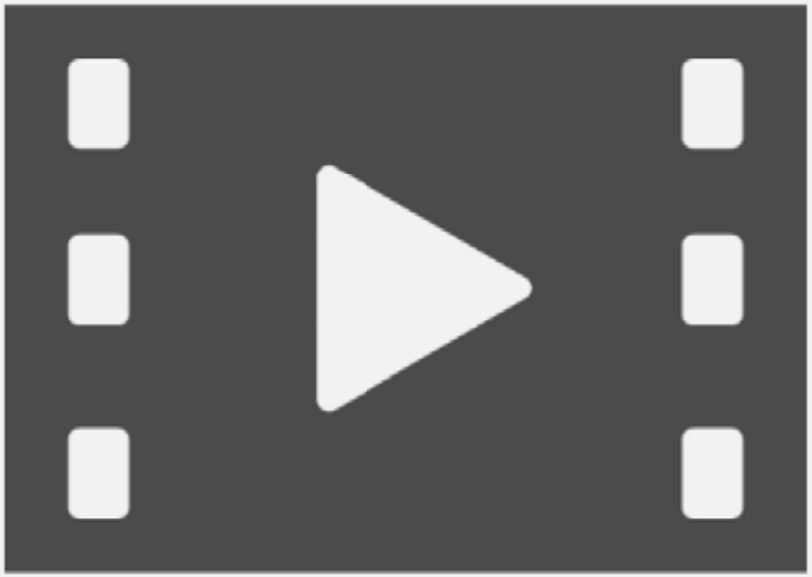
Audio Adjustment in the PC



Adjust by dragging the slider ④.

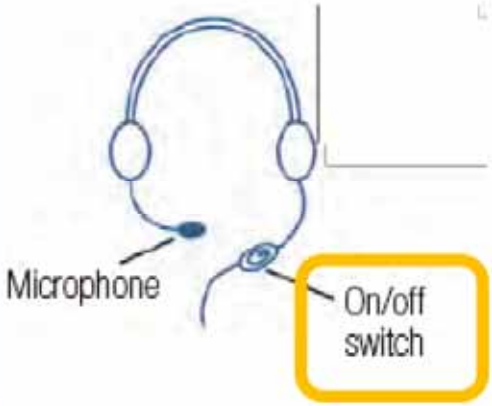
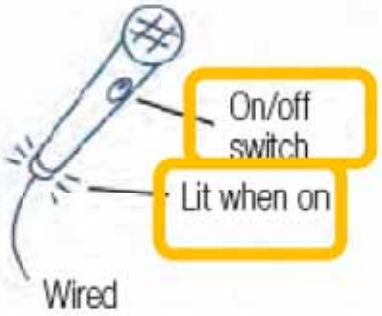
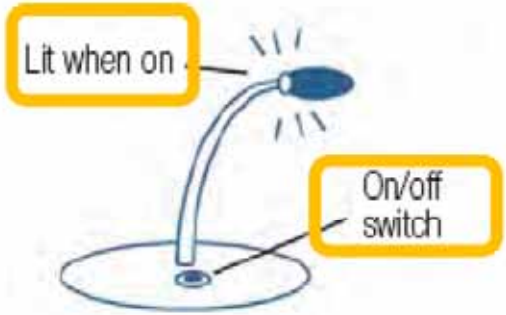
Figure. 3-33 Method for Setting Recording Devices (Windows 7)

3-1-3. Audio equipment



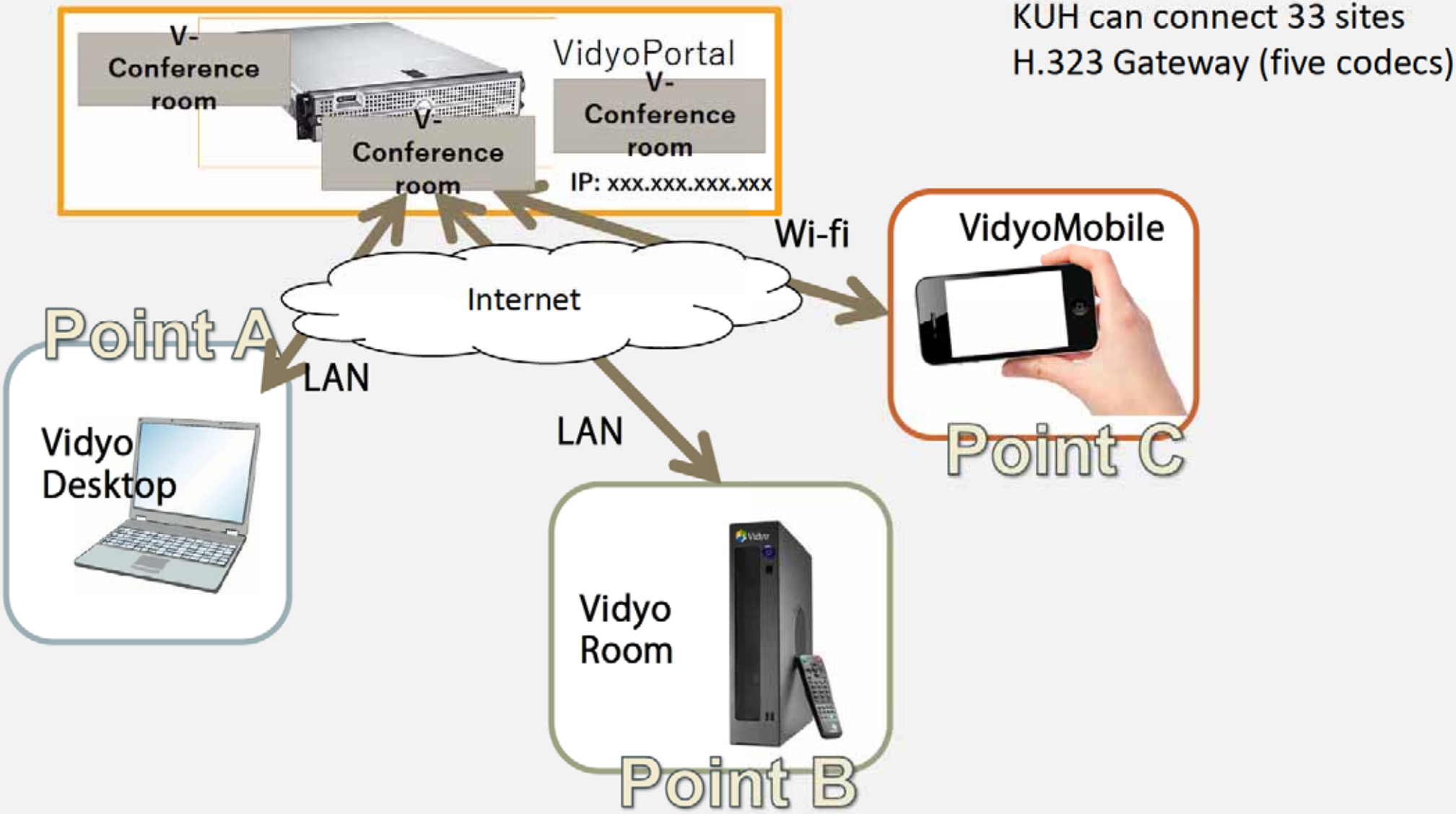
3-1-3. Audio equipment

Table. 3-1 Microphones Suitable for Telemedicine Conferencing

	Headset	Hand-held microphone	Stand microphone
Illustration			
Recommended user	Surgeon performing live surgery	Questioner/Moderator	Chair/Moderator
Benefits	Hands-free and usually echo-free	Easy to hand around	Hands-free/Does not need to be worn
Hints for choosing equipment	On/off switch in accessible position	Has on/off switch Can visually confirm when on/off Color differentiation when using multiple devices	Has on/off switch Can visually confirm when on/off

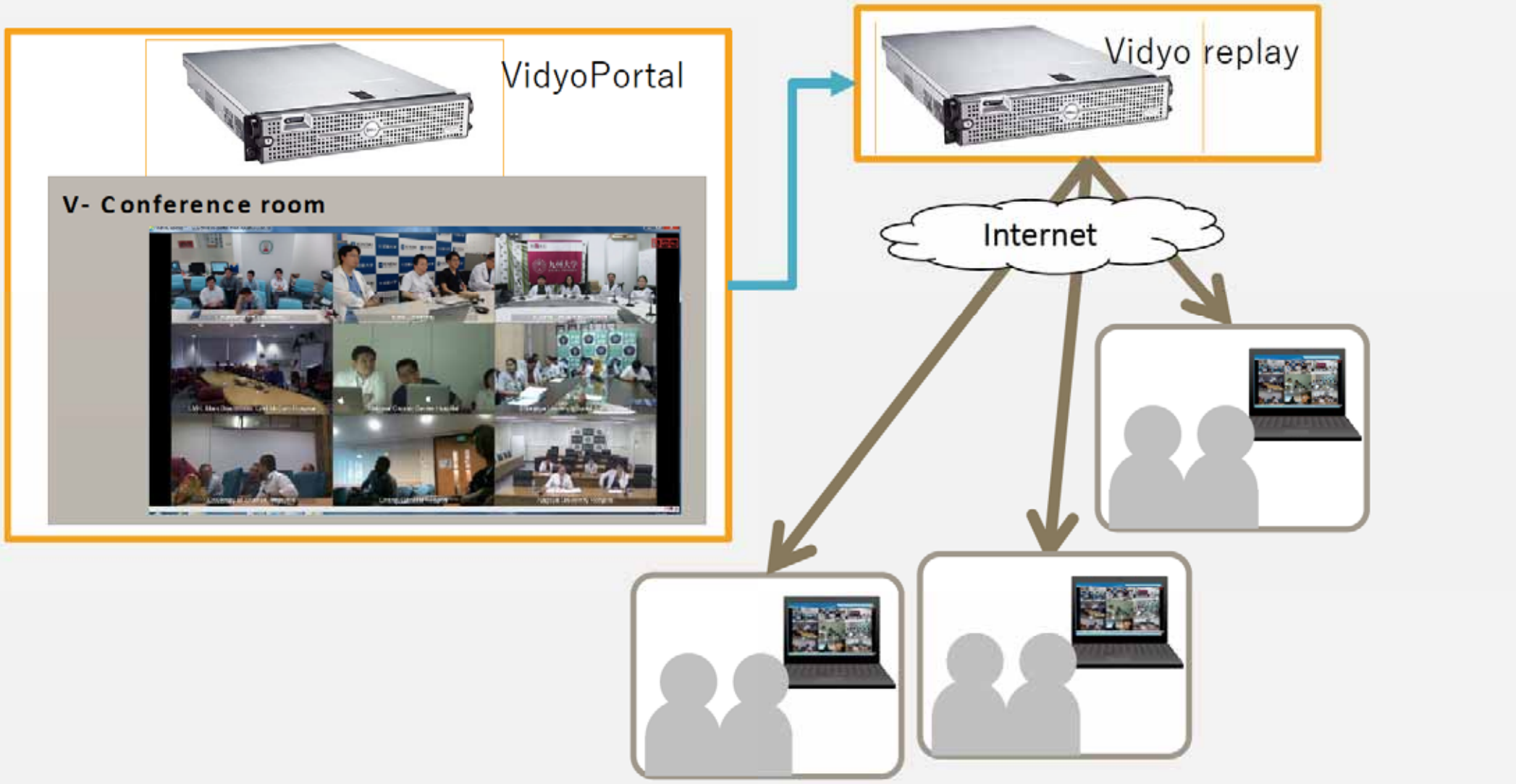
Connection of Vidyo

KUH can connect 33 sites
H.323 Gateway (five codecs)



Streaming

KUH can stream out 300 sites



Chapter 3
Teleconferencing Systems

Rules for use KUH Vidyo

1. Booking in Advance (including test)

- Short purpose
- Day and Time
- How many sites

2. Reporting afterwards

- Short Result
- Photos
- Problems

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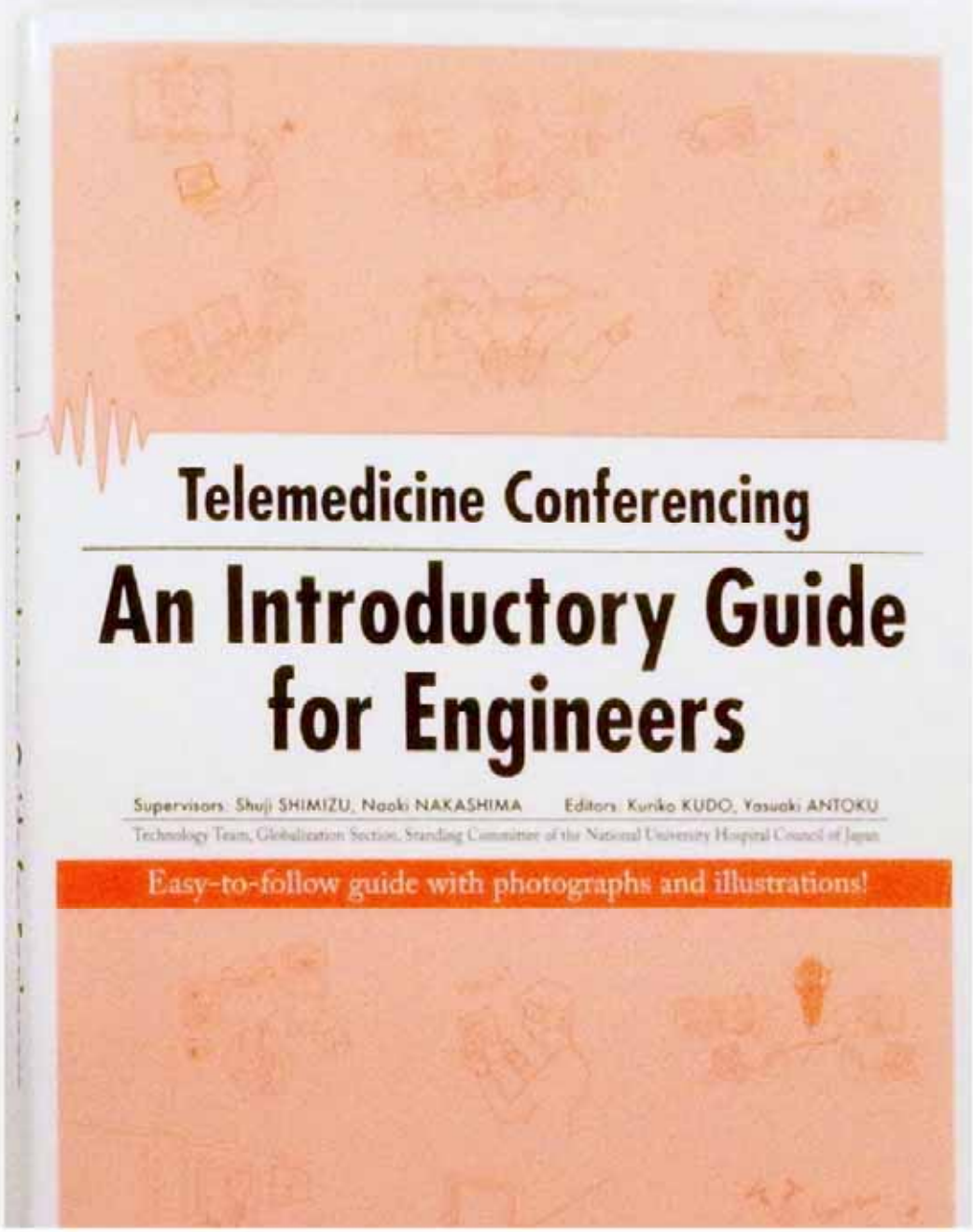
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