SONY

Vision Exchange™

PEQ-C100
Collaboration System

PEQ-C130
Collaboration System

Exchange Information, Exchange Ideas, Exchange Visions

Sony's Vision Exchange provides a dynamic and flexible solution to cover various teaching space and meeting room needs.
For education, changing the environment from a "one way teaching" platform to an "interactive and collaborative active learning" platform for everyone.
Lecturers and presenters can brainstorm and work collaboratively by sharing each individual's multimedia presentation content together, even bringing in other participants at remote locations to join the discussion as required.

Active Learning	Interactive Lecture	Conference Room

Encourage Discussions with Simple Work Flow
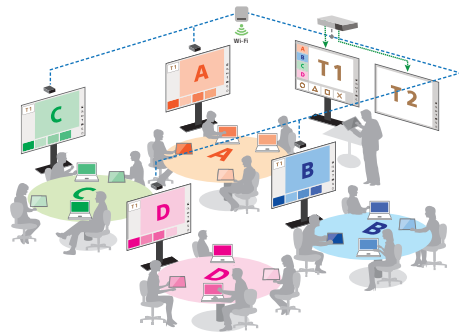
Maximize Student's Learning Experience

Share more and Communicate Better

Let teams, lecturers and presenters brainstorm and work collaboratively by sharing each individual's multimedia presentation content together.

Stimulate lectures by having students participate with their BYOD (Bring Your Own Device). Give instant feedback by annotating on their shared image.

Remote communication capabilities that allow all effective collaborations to be shared even on the remote side.

Simulated image

Introduction

Sony's new 'Vision Exchange' solution brings Active Learning and corporate meetings alive.

Sony introduces Vision Exchange, the intuitive new collaboration solution for education and corporate users.

Uniquely flexible and cost effective, Vision Exchange brings together students, lecturers and presenters in a dynamic workgroup-based environment that encourages creative discussion and knowledge exchange.
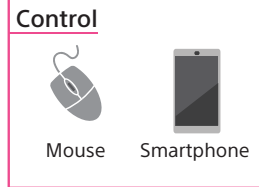
Ideal for universities, colleges of higher education and corporate conference rooms, Vision Exchange provides a dynamic, flexible solution to suit a wide range of teaching spaces and meeting areas. Teams can brainstorm and work collaboratively, wirelessly sharing content from everyone's laptop or tablet. It is just as easy to bring in participants to join the discussion by adding a video connection to remote locations, making teamwork truly global.
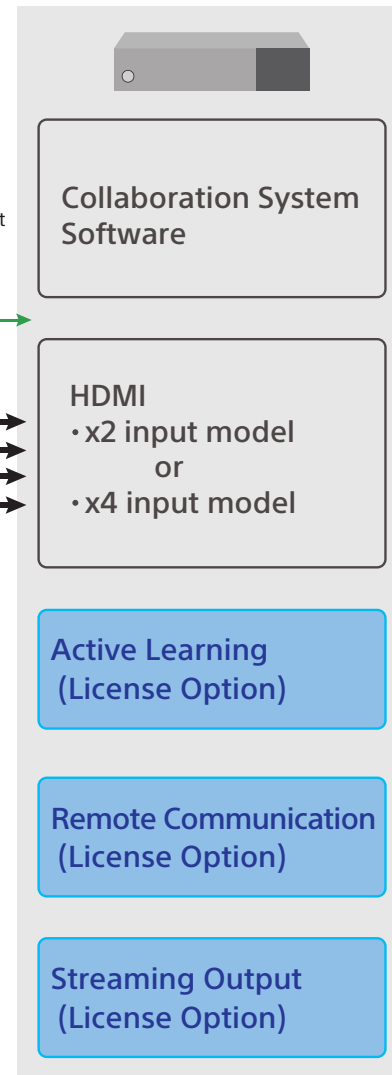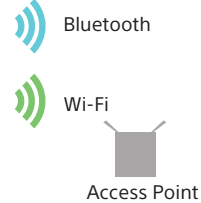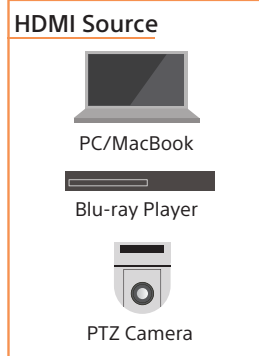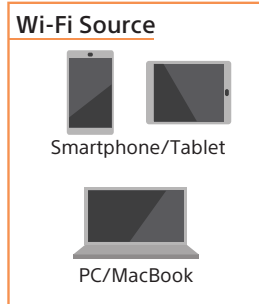
Simple Drag & Drop Control

Encourage Discussions with Active Learning

Sharing more with remote location

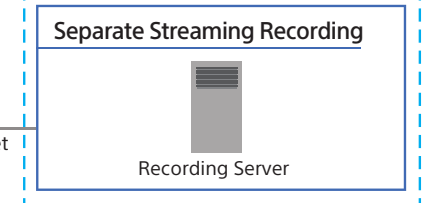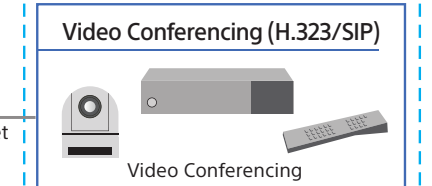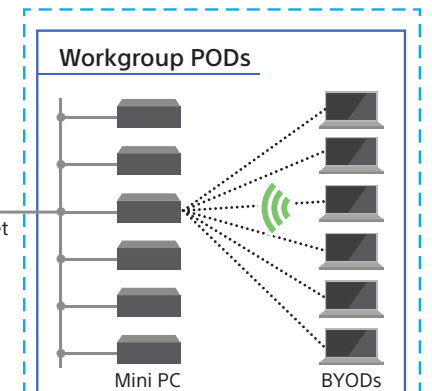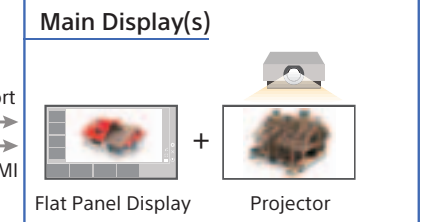## Input and Control

Control

Mouse   Smartphone

Bluetooth

Wi-Fi

Access Point

Media Input

Wi-Fi Source

Smartphone/Tablet

Wi-Fi

PC/MacBook

HDMI Source

PC/MacBook

Blu-ray Player

PTZ Camera

HDMI

Internet

Upgrade/Service

Ethernet

Collaboration System Software

Displayport

HDMI

HDMI
- x2 input model
  or
- x4 input model

Active Learning (License Option)

Remote Communication (License Option)

Streaming Output (License Option)

Output and Connectivity

Main Display(s)

Flat Panel Display   +   Projector

Workgroup PODs

Mini PC   BYODs

Ethernet

Video Conferencing (H.323/SIP)

Video Conferencing

Ethernet

Separate Streaming Recording

Recording Server

Ethernet

Active Learning

Sony's Vision Exchange is a solution that brings together students, lecturers and presenters in a workgroup-based collaborative environment. Cost-effective, easy to configure and intuitive for every user, this total active learning solution is ideal for universities and colleges of higher education.
Sony's Vision Exchange lets teams, lecturers and presenters brainstorm and work collaboratively by sharing each individual's multimedia presentation content together, even bringing in other participants at remote locations to join the discussion as required.

Simulated image
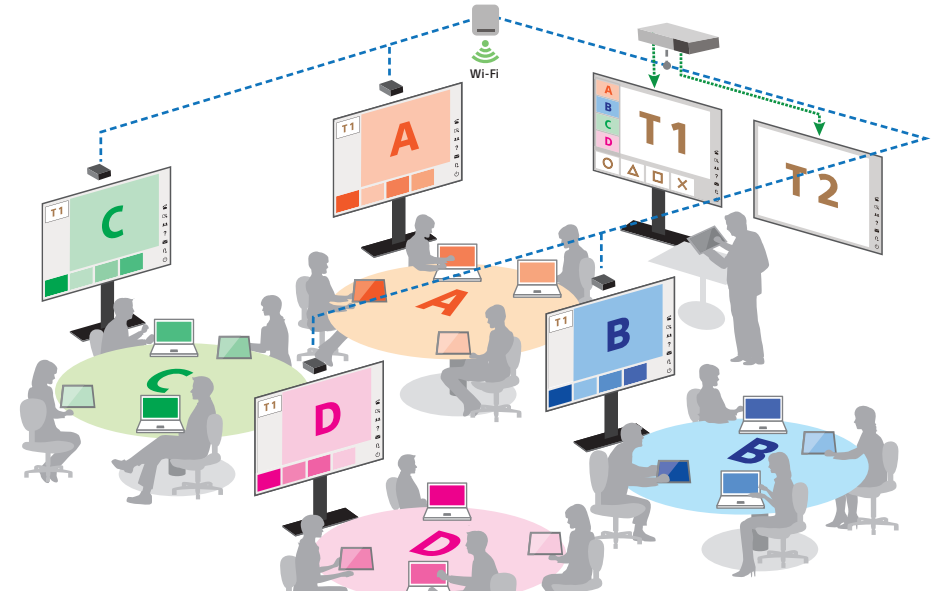
Universities
- Currently no optimum solution. Trial and error.
- Increase in cost of equipment.

Faculty
- Difficult AV Operation.
- Large burdens on the faculty.

Students
- Limited to either single BYOD, whiteboard or labels, etc.
- Outcome of discussions cannot be taken home.

Pain

Universities
- Easy to configure.
- Cost-effective.

Faculty
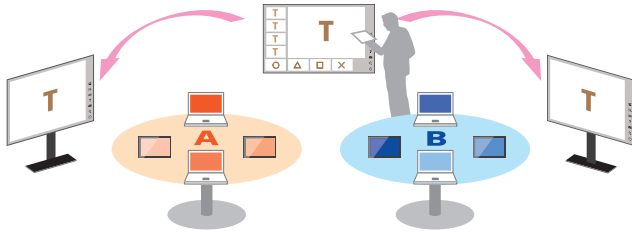- Intuitive operation.
- Efficient class.

Students
- Multiple BYOD, whiteboard and labels with bird-eye view.
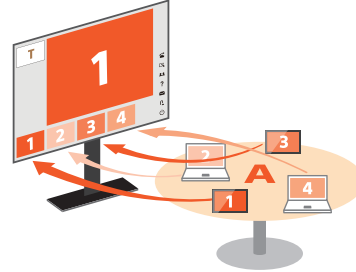- Outcome of discussions can be saved/downloaded.

Gain

Active Learning Class Workflow

Share to Class

- Easy sharing of teacher's materials (Laptop/tablet images, document camera, HDMI inputs, etc.)
- Any image on the main view will be shown to all work group POD displays in full screen when the "Pod share" button is pressed

Active Group Discussion

- Any student can easily mirror their BYOD content.
- Enhance discussions by simple switching, annotation/digital tag whiteboard mode
- Teachers can monitor and select any group's information then share to all other group screens.
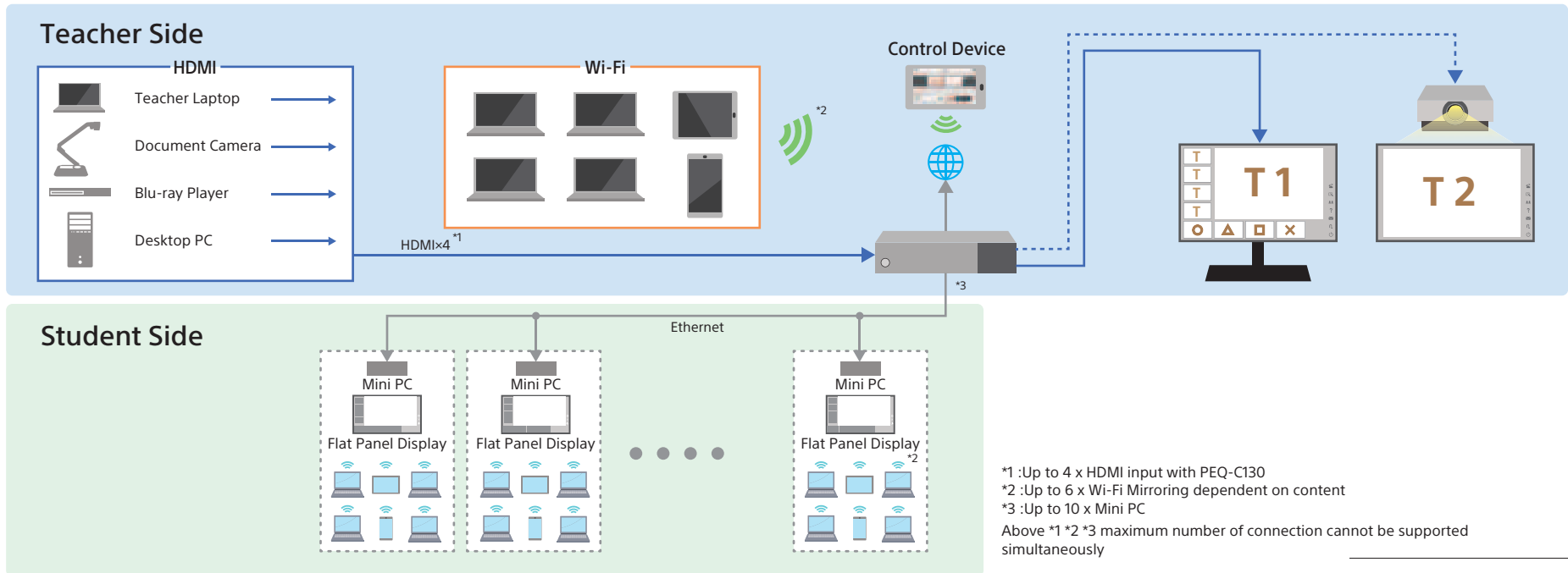
Present and Feedback
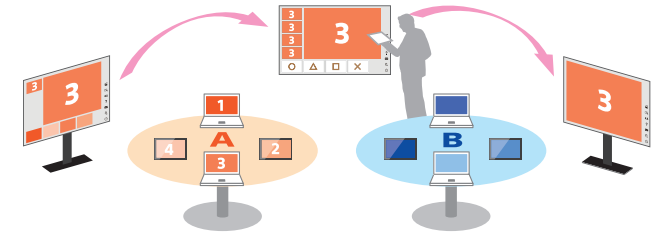
- Quickly drag & drop to share anyone's screen
- Promptly reflect the teacher or student comments with annotations to feedback

System Diagram of Active Learning

- Vision Exchange is a simple Pod PC structure. Easy to configure and scalable by simply adding Pod with Ethernet cable.
- Flexible system capable of supporting up to 10 groups (6 BYOD per table).

*1 :Up to 4 x HDMI input with PEQ-C130
*2 :Up to 6 x Wi-Fi Mirroring dependent on content
*3 :Up to 10 x Mini PC

Above *1 *2 *3 maximum number of connection cannot be supported simultaneously

Interactive Lecture

One way lecture style classes are no longer sufficient enough for students who want to learn deeper. Sony's Vision Exchange provides dynamic and flexible solutions to cover various teaching spaces, changing the environment from a "one way teaching" platform to an "interactive lecture".

The faculty can easily bring up any sources in the classroom and intuitively switch multiple content from smartphones or tablet interfaces. The souces can be anything from traditional HDMI AV (Faculty laptop PC, document camera, Blu-ray players, etc.) to any students' BYOD (Bring Your Own Device) images who want to share their images wirelessly.
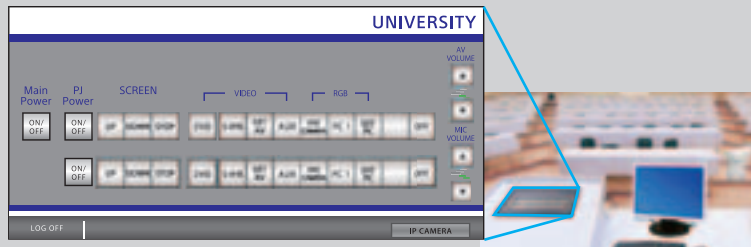
The faculty can also give feedback to the students' BYOD images with annotations and maximize student learning experiences.
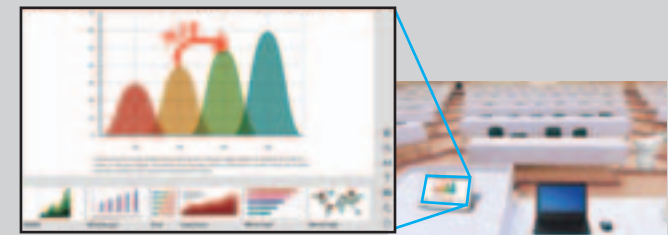

Simulated image

Complicated Switching
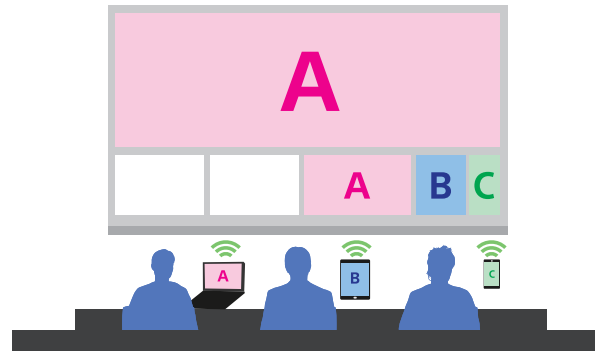

Pain

Intuitive Control

Gain

Intuitive UI

Intuitively switch between desired contents with ease.

Interactive Mirroring

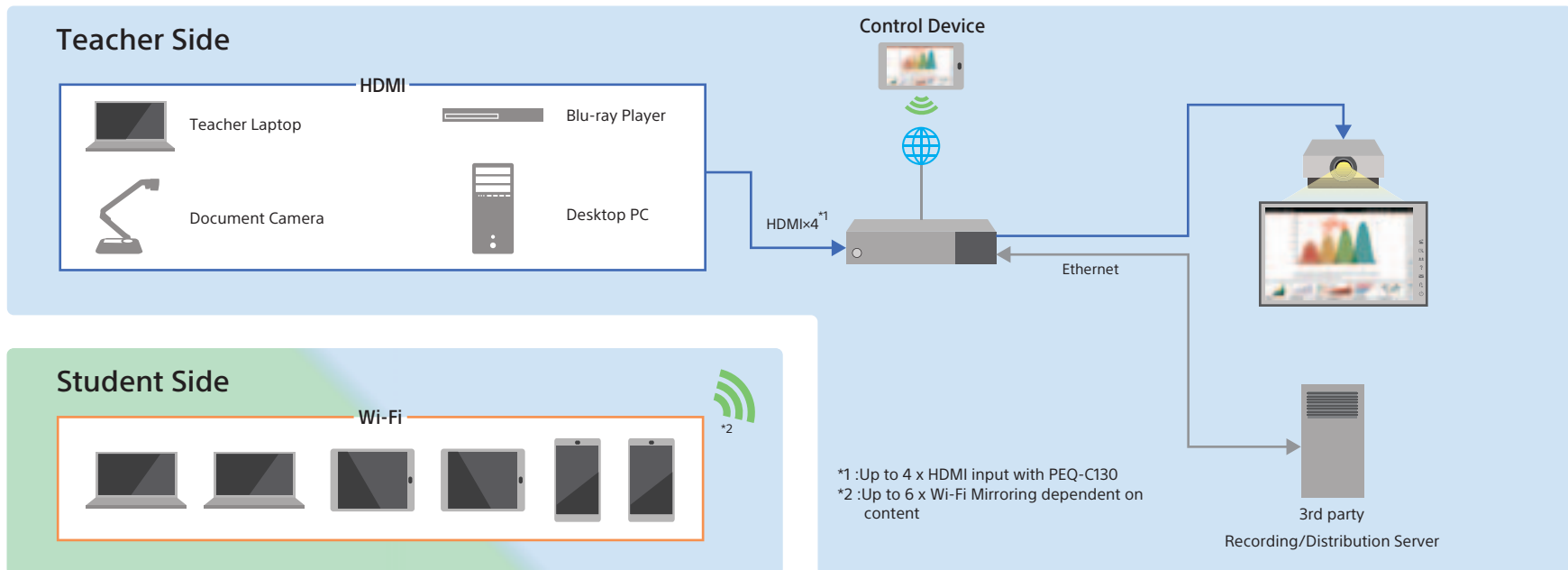Maximize student's learning experience by interacting with students.

Annotation

| Touch panel screen | Tablet | Mouse |

Give instant feedback to students with annotations.

System Diagram of Interactive Lecture

- Vision Exchange allows intuitive switching of AV sources with rich input interface (4 HDMI inputs).
- A highly flexible system that can wirelessly receive up to 6 student BYOD.

Teacher Side

HDMI

Teacher Laptop

Blu-ray Player

Document Camera

Desktop PC

HDMI×4[*1]

Control Device

Ethernet

Student Side

Wi-Fi

[*2]

*1 :Up to 4 x HDMI input with PEQ-C130
*2 :Up to 6 x Wi-Fi Mirroring dependent on content

3rd party

Recording/Distribution Server

Conference Room

Cabled single content source and a single display, plus a dedicated AV system with switchers, video conferencing systems and other hardware. This complex set-up is frequently a cause of wasted time and frustration, as presenters struggle with awkward wiring instead of focusing on the meeting itself. Vision Exchange eliminates these operational headaches, allowing participants to focus on the meeting with improved communication.

Participants can share not only content from their own devices (laptops, tablets and smartphones) images, but annotations overlaid on images or whiteboard description in real-time. It even has remote communication capabilities that will allow all of these effective collaborations to be extended to even remote locations. Vision Exchange let's you collaborate and communicate better .

Near Side

Far Side

Simulated image

- Wasting time with complex AV/IT remote controllers ?
- Want to annotate over any source ?
- Want to share whiteboard, tablet/smartphone to the far side ?
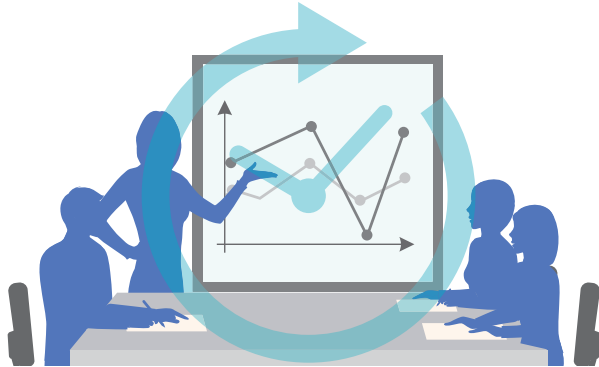- Taking snapshots with smartphone and sending them via e-mail ?

Pain

- Vision Exchange does it all with it's intuitive control.
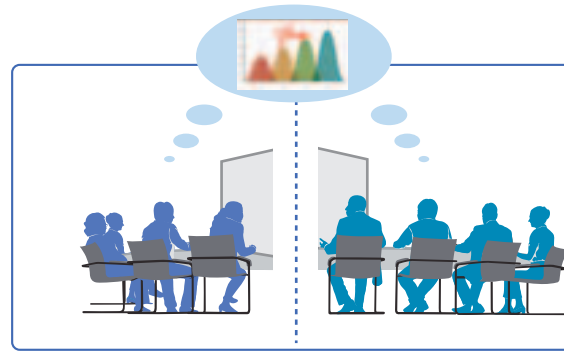- The far side has a better understanding with richer content and clearer message.
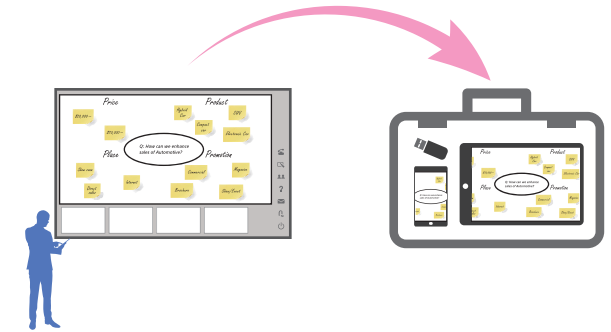
Gain

Time Efficient

Swiftly share images to make meetings efficient.

Easy Sharing

Share and communicate vividly what you have in mind to the far side.
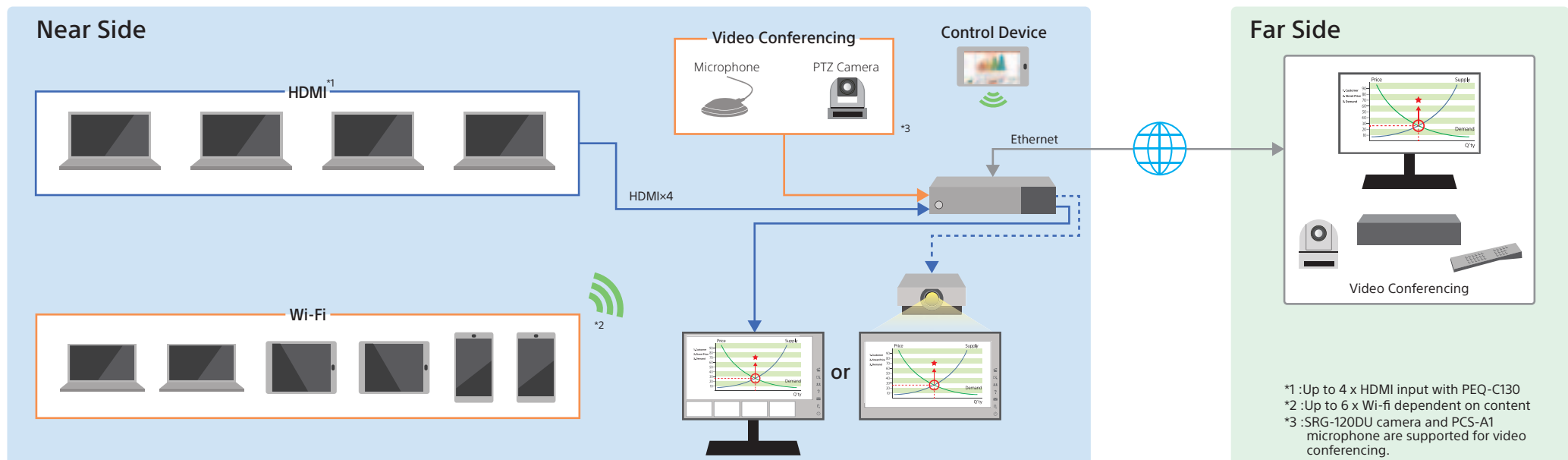
Take Home Deliverables

Take home meeting outcomes without the tedious work.

System Diagram of Remote Communication

Simulated image

- Far side can be a traditional video conferencing terminal (H.323, SIP).
- PCS-MCS1 is recommended for the multipoint video conferencing.

Near Side

HDMI *1

Wi-Fi

*2

Video Conferencing

Microphone   PTZ Camera

*3

Control Device

HDMI×4

Ethernet

or

Far Side

Video Conferencing

*1 :Up to 4 x HDMI input with PEQ-C130
*2 :Up to 6 x Wi-fi dependent on content
*3 :SRG-120DU camera and PCS-A1 microphone are supported for video conferencing.

Features

Control

BYOD device	Web Browser
• Windows® (7 / 8.1 / 10), 32bit or 64bit • Android™	Google Chrome™
• macOS • iOS	Safari

- All of the user functions of Vision Exchange Main Unit and Pod PC can be controlled by Web application, touch panel interface, or mouse/keyboard*1.
- Web application GUI is optimized for smartphone, but applicable for other devices (tablet, PC/MacBook).

  *1 Wireless mouse/keyboard is recommended.

Mirroring

- Screen image and audio of Windows® OS*1, macOS*2, iOS*3 and Android™*4 devices can be sent to Vision Exchange Main Unit and Pod PC wirelessly.

  *1 Windows® 7, 8, 10.
  *2 OS X v10.10 Yosemite or later.
  *3 iOS 9, iOS 10.
  *4 Android™ mirroring to be supported.

Whiteboard/Annotation/Digital Tag

- Whiteboards can be brought up anytime for brainstorming sessions and note taking.
- Annotations can be made over any source available.
- Digital Tag can be used to maximize collaboration results.
- All of the functions above can be done directly from the screen (touch panel, mouse/keyboard) or from BYOD simultaneously.
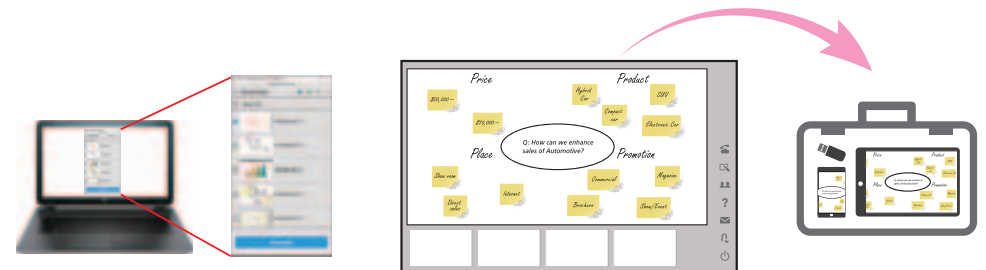
Snapshot/Download

- Any image on the Main View can be saved as a snapshot together with annotation overlayed.
- Snapshot images are stored in the "Snapshot Folder" in the bottom thumbnail to be viewed again anytime.
- All of the snapshot images can be downloaded to connected BYOD or to a USB Memory inserted to Vision Exchange Main Unit or Pod PC.

Option

Active Learning License
PEQA-C10

- All workgroup tables can be viewed on Main Unit
- Share Main View to all group tables anytime
- Facilitators can check the progression of each Pod
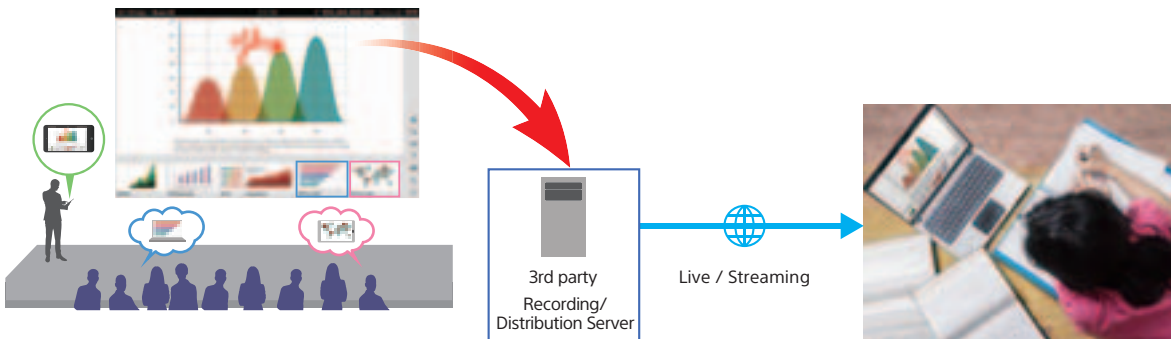- Students can be supported by Annotation
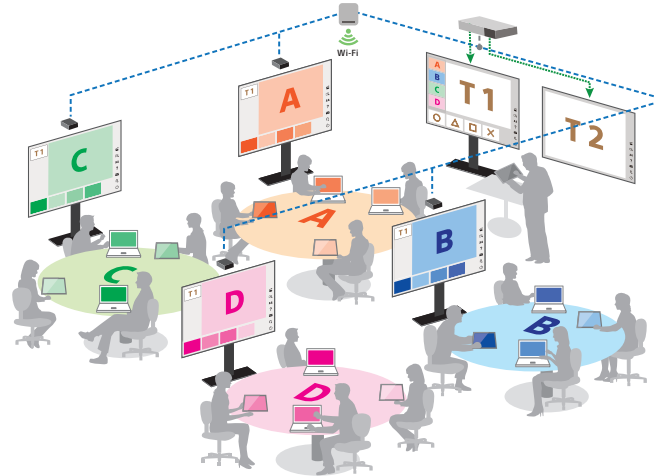
Remote Communication License
PEQA-C20

- Share Main View with the far side anytime
- Easily recieve content from the far side

Simulated image

Streaming Out License
PEQA-C30

3rd party
Recording/
Distribution Server

Live / Streaming

Simulated image

- Streaming output is supported by Vision Exchange Main Unit for Recording, Lecture Capture or Live Distribution purposes.
- Primary Display can be streamed out using either multicast or unicast with RTP (H.264/AAC).

Pod PC Software
PES-C10

ZIP
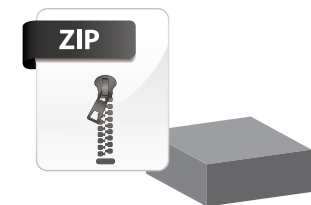
- Pod PC Software[1] is required for the Mini PC for each Pod table.
- Same GUI concept of Vision Exchange Main Unit for ease of use throughout the classroom.

*1: Refer to page 12 for function and PC spec.

Specifications

Key Features

Features		Collaboration System	Pod PC Software
Control	Mouse, HID Touch Panel Control, Web UI (Smartphone)	○	○
Mirroring	Windows® OS, macOS, iOS, (Android™ OS*1) Devices	○	○
HDMI Input	HDMI x 2 input, or HDMI x 4 input	○	
Collaboration	Whiteboard, Annotation, Snapshot, Download	○	○
Active Learning	License Option	○	
Remote Control	License Option	○	
Streaming Output	License Option	○	

*1 Android™ mirroring to be supported

Specifications

| Interface	PEQ-C130	PEQ-C100
Video Input	HDMI x 4	HDMI x 2
Video Output	HDMI x 1, Display Port x 1	
Audio Input	Microphone Input Mini-jack x 1, Line Input Mini-jack x 1	
Audio Output	Line Output Mini-jack x 1	
Network Port	1000BASE-T x 2	
USB Port	USB 2.0 x 2 (Front) USB 3.0 x 4 (Rear)	
OSD Lanuguage		
OSD Lanuguage	English, Japanese, Simplified Chinese	
General Specification		
Dimension	W:370mm x H:56mm x D:245mm (W:14 5/8 x H:2 1/4 x D:9 3/4 inches)	
Weight	Approx. 3.4kg (7.5lb)	
Power	DC 19.5 V (AC Adapter : AC 100 V to 240 V, 50/60 Hz)	

Pod PC Hardware Requirements

CPU	6th Generation Intel® Core™ i5-6260U (1.8 GHz, 4 MB cache, 2 cores, 4 threads) or higher
Memory	4 GB × 2 DDR4-2133 or higher *1
SSD	128 GB, 6 Gbps or higher
OS	Windows® 10 Pro 64-bit Anniversary Update or later
OS Language	English
Graphics Driver	Intel Graphics Driver version 21.20.16.4627 or later
LAN	10/100/1000 Mbps Ethernet or higher (RJ45)

Use the specified CPU and graphics driver. The software will not launch correctly if a CPU and graphics driver other than those specified are used.

*1 A single 8 GB DIMM is not recommended as it has lower performance than two 4 GB DIMMs.
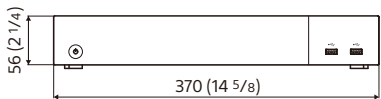
Connector Panels
PEQ-C130
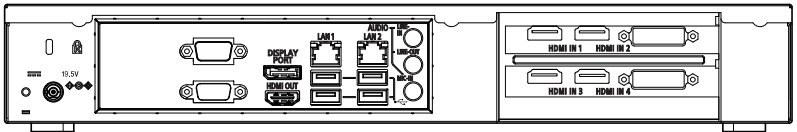
* HDMI IN3 and HDMI IN4 are not available with PEQ-C100

Dimension

Unit: mm (inches)

Front

56 (2 1/4)
370 (14 5/8)

Top

245 (9 3/4)