

Specifications

Main Unit (KX-VC600 / KX-VC300 / KX-VC500)		KX-VC600	KX-VC300	KX-VC500
Video	Video Codec	ITU-T H.264 high profile		ITU-T H.264 high profile
	Compatible Resolutions	ITU-T H.264 baseline profile (For connection to MCUs and non-Panasonic video conference systems)		
	Camera Input Resolution	1920 x 1080p *1 / 1920 x 1080i *1 / 1280 x 720p / 1280 x 540p / 960 x 540p / 704 x 480p / 352 x 240p		
	PC Input Resolutions	1920 x 1080i		
Audio	Audio Codec	XGA, SVGA, VGA		
	No. of Channels	MPEG-4 AAC LD		
	Bitrate	2		
	Sound Processing Function	32 kbit/s (Monaural only), 64 kbit/s, 96 kbit/s (per channel)		
	Microphone	Stereo Echo Canceller		
Transmission	Communication Protocol	SIP		
	Other	AV QoS Call Control, Encrypted Transmission (AES)		
Maximum conference points	4 *2	2 *3	4 *2	
External Interface	Video Inputs	HDMI (Camera) x 2, RGB (PC) x 1 (Switchable 3 inputs)		
	Video Output	HDMI x 1, RCA (Component) x 1		
	Audio Input	Analogue Boundary Microphone port x 1, Digital Boundary Microphone port x 1, RCA (Stereo) x 1, Stereo mini-plug (Headset) x 1	Analogue Boundary Microphone port x 1, RCA (Stereo) x 1, Stereo mini-plug (Headset) x 1	Digital Boundary Microphone port x 1, RCA (Stereo) x 1
	Audio Output	RCA (Stereo) x 1 (Audio output to display is via HDMI), Stereo mini-plug (Headset) x 1		RCA (Stereo) x 1 (Audio output to display is via HDMI)
Network	RJ45 port x 1			
Dimensions (width x depth x height)	Approx. 320 mm x approx. 230 mm x approx. 60 mm			Approx. 430 mm x approx. 280 mm x approx. 80 mm
Weight	Approx. 2.0 kg			Approx. 4.0 kg
Power Input	AC 100-240 V, 1.2-0.6 A, 50/60 Hz			
DC Power Input	DC 16 V, 2.5 A			
Power Consumption	Maximum: approx. 39 W	Maximum: approx. 23 W		Maximum: approx. 32 W
Operating Temperature	0 °C to 40 °C			
Operating Humidity	10 % to 90 % (non-condensing)			

Boundary Microphone (sold separately)	KX-VCA001	KX-VCA002
Maximum pickup range	Approx. 3 m(radius), 360°	Approx. 2 m(radius), 300°
Pickup method	Stereo / Monaural *4	Stereo / Monaural *5
Microphone unit	Unidirectional ECM microphone parts x 4	Unidirectional ECM microphone parts x 2
Number of connections	Maximum 4 microphones	Maximum 1 microphone
Maximum input sound pressure	110 dBspl	
Number of terminals for microphone connection	2	1
Dimensions	Approx. 120 mm(diameter) x 25 mm	Approx. 75 mm(diameter) x 32 mm
Cable length	Approx. 8.5 m	
Power input	Supplied from main unit via proprietary cable	
Weight	Approx. 280 g	Approx. 80 g
Operating temperature	0 °C to 40 °C	
Operating humidity	10 % to 90 % (non-condensing)	

HD Communication Camera	
Pan / Tilt	Pan: ±100°, Tilt: ±30°
Zoom	12x optical zoom
Presets	9 positions
Connection cable	HDMI
Dimensions (width x depth x height)	Approx. 160 mm x approx. 165 mm x approx. 178 mm
Weight	Approx. 1.4 kg
Power consumption	Power supply voltage: 12 VDC±10% (with AC adaptor attached) Consumption current: 1.0 A
Operating temperature	0 °C to 40 °C
Operating humidity	10 % to 90 % (non-condensing)

\*1 The optional Activation Key Card lets you upgrade the maximum resolution of the KX-VC300 system to 1080p/i.  
 \*2 Some restrictions apply when 3 or 4 locations are connected. For details, please consult with your local dealer.  
 When connecting to non-Panasonic video conference systems, connection is limited to 2 locations.  
 \*3 The KX-VC300 also allows connection of 3 or 4 locations when it is on the receiving end of a call.  
 The optional Activation Key Card lets you expand the KX-VC300's maximum conference points to up to 4 locations.  
 \*4 Either output can be set through system settings. However, when using together with an Analogue Boundary Microphone,  
 or when connecting to an MCU or non-Panasonic video conference system, stereo output may not be available.  
 \*5 When using together with an Analogue Boundary Microphone, or when connecting to an MCU or non-Panasonic video conference system, the output is monaural.



So Real, So Simple

Trademarks and registered trademarks

- Android is a trademark of Google Inc.
- Linux is the registered trademark of Linus Torvalds in the U.S. and other countries.
- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Important

- Safety Precaution: carefully read the operating instructions and installation manual before using this product.

- All TV pictures are simulated.
- Weights and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.

DISTRIBUTED BY :

**Panasonic**<sup>®</sup>

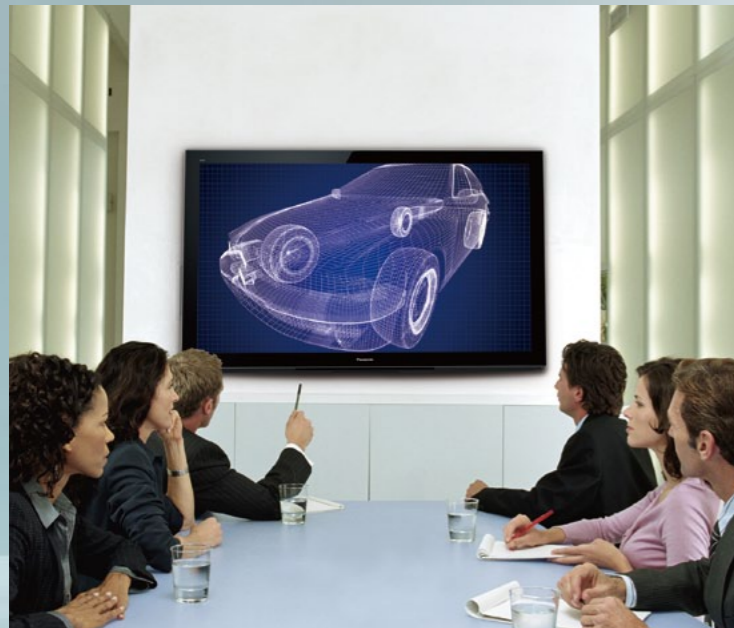
HD Video Conferencing Unit: <http://panasonic.net/psn/products/hdvc/index.html>

Printed in Japan 1201 (PSJ-KXVC002E-CT)



# Distance Is No Longer a Barrier

Our HD Video Conferencing Unit makes it possible to communicate and collaborate with colleagues and industry experts wherever they happen to be.



## Manufacturing

By connecting development, production and sales departments, and collaborating with true-to-life ambience from remote sites, you can reduce travelling times and costs while enhancing cooperation between your company and your partner companies.



## Healthcare

Providing medical advice and training for young doctors in rural hospitals from specialists in city hospitals can be done very smoothly. By linking sub cameras and sharing PC screens, even highly technical exchanges, such as viewing X-rays, can be conducted with ease.



## Education




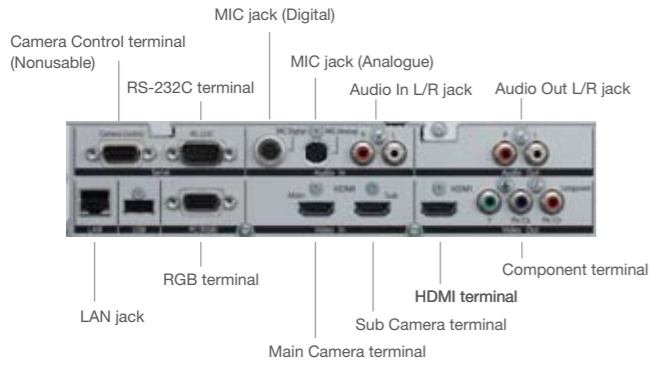
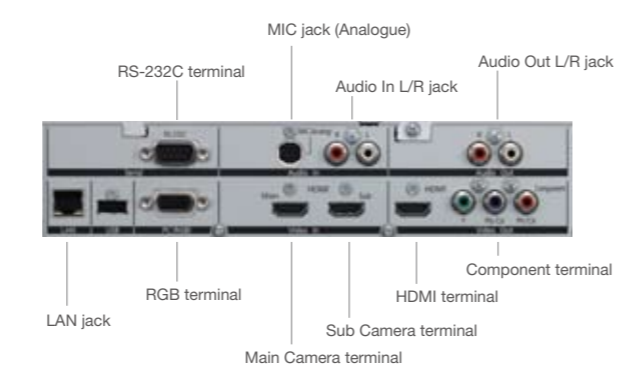
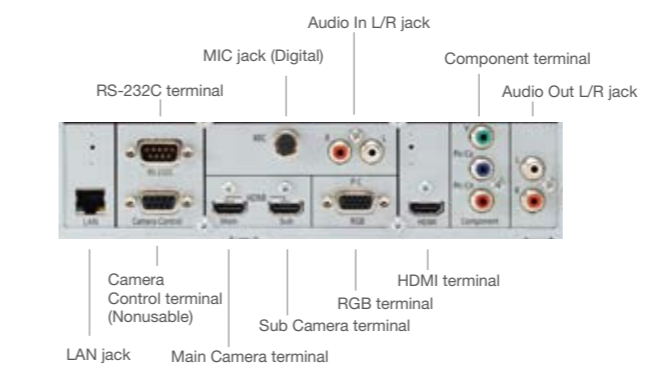

Connecting classrooms, research labs, other departments and even other schools makes it easy to share knowledge. This lets you respond to demands for reducing the travelling time between campuses, solving the shortage of specialised instructors, and diversifying after-school lessons for elementary education.



## And more...

The high-quality HD Video Conferencing Unit enables zero-distance communication for operations at construction sites and financial institutions, music rehearsals, retail businesses, storage inventory management, public services, and various other business situations.

# Select or Combine Any of Three Models Based on Your Application and Scale

<p>4-site Connection Compatible Model with Full-HD Image Quality</p> 	<p>Entry Model with 2-Site Connection</p> 	<p>4-site Connection Compatible Model with Full-HD Image Quality</p> 	<p><b>HDVC PTZ Camera Pack</b></p> <p>KX-VCPA600 Main Unit (KX-VC600) + Remote Control + HD Communication Camera (PTZ Camera)</p> <p>KX-VCPA300 Main Unit (KX-VC300) + Remote Control + HD Communication Camera (PTZ Camera)</p>
<p><b>KX-VC600</b> (Remote control included. Boundary Microphone sold separately.)</p> <ul style="list-style-type: none"> <li>Up to 4 site connection</li> <li>Real time Full-HD 1080p/i video quality</li> <li>High quality audio and smooth 2-way stereo conversation</li> <li>Convenient sub-camera and PC connection for real-time collaboration</li> <li>Easy, user-friendly operation</li> <li>Stable connection with Panasonic's AV-QoS</li> </ul>	<p><b>KX-VC300</b> (Remote control included. Boundary Microphone sold separately.)</p> <ul style="list-style-type: none"> <li>2 site connection* (expandable up to 4 with option)</li> <li>Real time HD 720p video quality (expandable to 1080p/i with option)</li> <li>High quality audio and smooth 2-way stereo conversation</li> <li>Convenient sub-camera and PC connection for real-time collaboration</li> <li>Easy, user-friendly operation</li> <li>Stable connection with Panasonic's AV-QoS</li> </ul> <p>* The KX-VC300 also allows connection of 3 or 4 locations when it is on the receiving end of a call.</p>	<p><b>KX-VC500</b> (Remote control included. Boundary Microphone sold separately.)</p> <ul style="list-style-type: none"> <li>Up to 4 site connection</li> <li>Real time Full-HD 1080p/i video quality</li> <li>High quality audio and smooth 2-way stereo conversation</li> <li>Convenient sub-camera and PC connection for real-time collaboration</li> <li>Easy, user-friendly operation</li> <li>Stable connection with Panasonic's AV-QoS</li> </ul>	<p><b>Optional Accessories*</b></p> <p>HD Communication Camera AW-VC3E Full-HD images are supported. Main camera pan, tilt and zoom can be operated by remote control.</p> <p>Digital Boundary Microphone KX-VCA001 A high-grade microphone with a direction recognition function that detects the direction that voices are coming from.</p> <p>Analogue Boundary Microphone KX-VCA002 A compact, economical and high-grade stereo microphone.</p> <p>Camera Security Adaptor KX-VCZ001 A theft prevention accessory for full-HD camcorder</p>
<p>[ Rear Panel View ]</p> 	<p>[ Rear Panel View ]</p> 	<p>[ Rear Panel View ]</p> 	<p><b>Related Products*</b></p> <p>Full-HD Camcorder      Full-HD Plasma/LCD Display</p>  <p>HDMI cables are required for connection to the camera, TV, etc.</p>

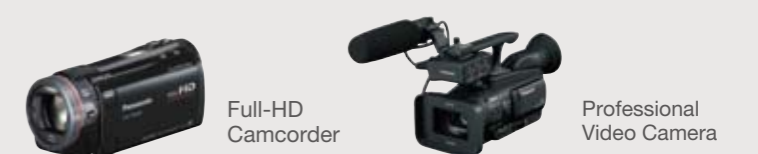
## Function Comparison List

	Maximum conference points	Image resolution	Other-brand device connection <sup>*1</sup>	MCU interoperability <sup>*2</sup>	Computer connection	Sub camera connection	Digital Boundary Microphone	Analogue Boundary Microphone
KX-VC600	4	Full HD 1080p/i	Yes	Yes	Yes	Yes	Up to 4 units	Yes
KX-VC300	2 <sup>*3</sup>	HD 720p <sup>*4</sup>	Yes	Yes	Yes	Yes	No	Yes
KX-VC500	4	Full HD 1080p/i	Yes (optional) <sup>*5</sup>	Yes (optional) <sup>*5</sup>	Yes	Yes	Up to 4 units	No

<sup>\*1</sup> Please ask your nearest dealer about other-brand devices that can be connected.  
<sup>\*2</sup> Please ask your nearest dealer about MCUs that can be connected.  
<sup>\*3</sup> The KX-VC300 also allows connection of 3 or 4 locations when it is on the receiving end of a call.  
The optional Activation Key Card lets you expand the KX-VC300's maximum conference points to up to 4 locations.  
<sup>\*4</sup> The optional Activation Key Card lets you upgrade the maximum resolution of the KX-VC300 system to 1080p/i.  
<sup>\*5</sup> The optional Activation Key Card lets you connect the KX-VC500 to MCUs or non-Panasonic video conference systems.

## Select the Video Camera Based on Your Needs

The connected camera can be flexibly combined and used with a commercial full-HD camcorder or professional camera based on your needs.



# Panasonic Technology Lets You Achieve Real Collaboration

## High Image Quality

Full-HD\* 1080p images are produced at an IP rate of approximately 1.5 Mbps. This makes visual communication with distant people as easy and comfortable as watching Full-HD programmes on TV. Even changes in the facial expressions of each person are distinctly relayed, and text from documents can be clearly read.

\*The KX-VC300 displays 720p images.



**SD**  
Conventional Video Conference Systems



**Full HD**  
Even changes in the facial expressions, body language, hand gestures and fast movements of each person are smoothly reproduced.

### Panasonic's Image Quality Technology

The Uniphier® system LSI, which is a digital home electronics platform, achieves realistic images that clearly portray the facial expressions and body language of each person.



\* Uniphier® is a registered trademark of Panasonic Corporation.

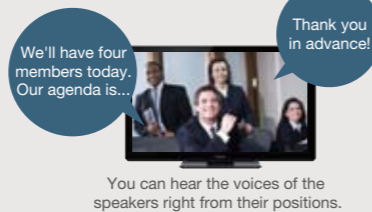
## High Sound Quality

Full-duplex audio in broadband stereo allows high-quality sound to fill the room with clarity. A unique Echo Canceller prevents echoes and howling, and there are hardly any delays or interruptions even when two people speak at the same time. You enjoy smooth, natural conversations, just as if you were all in the same room.



### High-Performance Digital Boundary Microphone (Optional)

With four built-in microphones, the Digital Boundary Microphone features a direction recognition function that reflects the direction and position of the speaker's voice to the listener's side speakers.



\*The Digital Boundary Microphone is compatible with the KX-VC600 and KX-VC500.

There is hardly any interruption even when two people speak at the same time or when conversations overlap.

### Other-Brand Device/MCU Interoperability

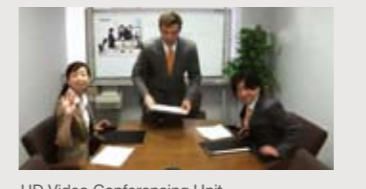
Interoperability with other-brand devices and MCUs is a standard feature. This allows smooth expansion into existing video conference systems, and multi-point communications using an MCU.



## Stable Connection

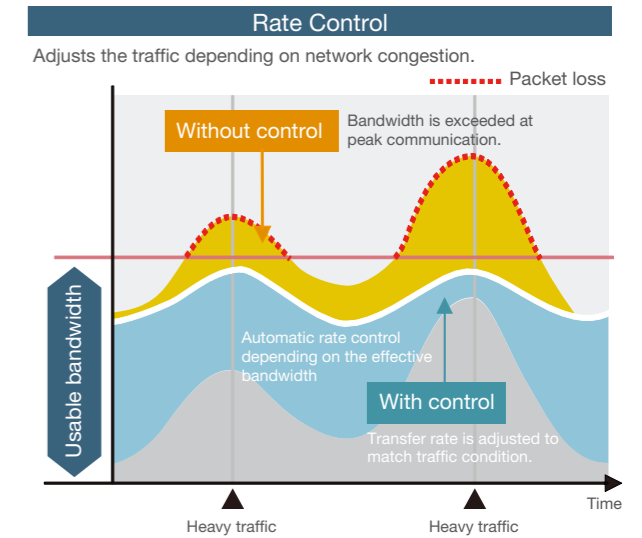
The generation of packet losses is prevented by a rate control function, and lost packets are restored by the combined use of Forward Error Correction (FEC) and Automatic Repeat reQuest (ARQ). Image disruptions and audio interruptions are suppressed for both intranet and Internet connections to ensure stable connection.

Comparison with a congested network connection.



General Video Conference System

HD Video Conferencing Unit



## Sharing a PC Screen

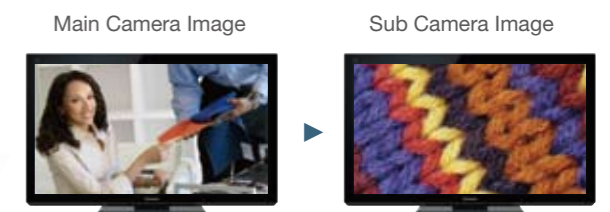
Graphs and other presentation data displayed on your PC screen can be shown to the other party. Also, a composite image display that simultaneously shows a PC screen image and the other party's image is possible, so the other party's facial expressions can be seen while talking.

\* The composite image display is only available when all sites begin sharing a PC screen using a Version 2.3 HD Video Conferencing Unit.  
\* The composite image display cannot be used when MCUs or non-Panasonic video conference systems are connected.



## Close-up Views with a Sub Camera

Use a sub camera to display close-up views of detailed parts that are difficult to see with the naked eye.



Still Image Data



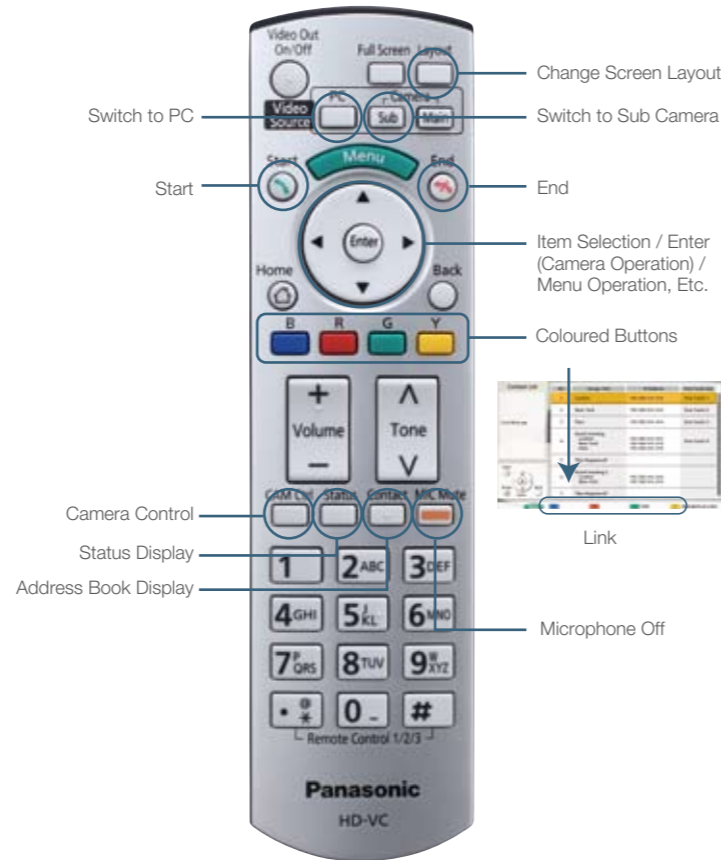
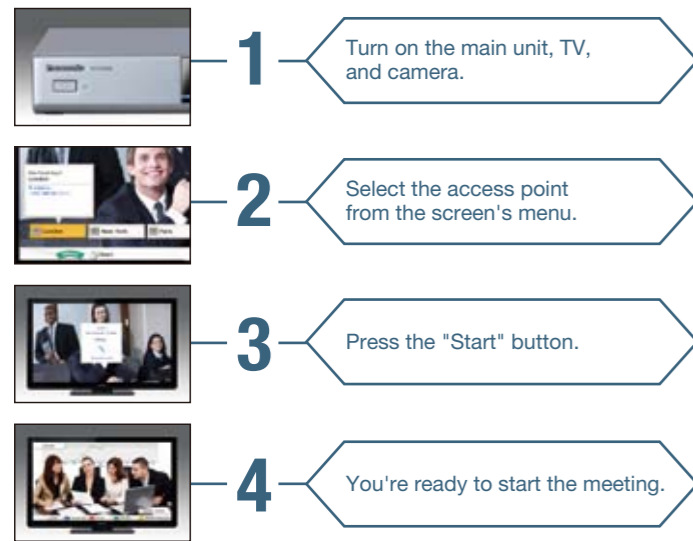
### Snapshots

High-resolution still images taken with a sub camera can be sent in order to share sharp, clear images while sending only a small amount of data.

# Panasonic Technology Lets You Achieve Real Collaboration

## Easy Operation

Most operations can be handled using the remote control, so you can operate the system as if you were watching TV. Switching screen displays and switching between a PC and sub camera can be done easily with the click of a button. Large characters, buttons, easy-to-see displays, and colour combinations are designed for easy operation.



Commonly used functions can be easily operated by using allocated buttons.

## Changeable Screen Layouts

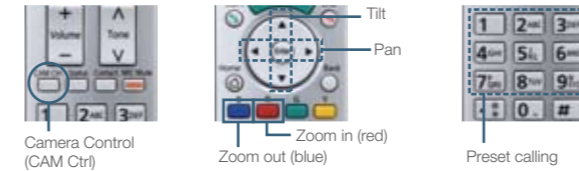
Even when 4 sites are connected, the screen layouts can be flexibly changed to enable smooth remote conferencing. Changing the screen layout is done with a one-touch button on the included remote control, so it is easy even for someone doing it the very first time.



## Camera Control

When an HD Communication Camera is connected, the HD Video Conferencing Unit remote can be used to control pan, tilt, zoom and preset recall\* operations for both your camera and the camera at another party's site.

\* Up to nine shooting positions and zoom sizes can be set and shifted by a single touch of the remote control during communication. Preset registration is possible only for your own site (and not during communication).



The HD Communication Camera can be connected to a main unit with an HDMI cable.

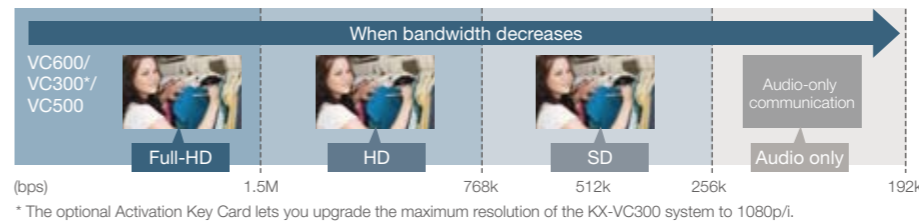
- 1/3" Full-HD MOS image sensor
- Zoom: 12x optical zoom
- Pan: ±100° (The camera lens rotates left or right.)
- Tilt: ±30° (The camera lens moves up or down.)
- Preset: 9 positions

- The HD Video Conferencing Unit used at all communicating sites must be Version 2.3 in order to enable camera control during communication.
- Cameras connected to the VC500 cannot be controlled. Note that cameras connected to the VC600/300 (Ver. 2.3) at the other parties' sites can be controlled from the VC500 (Ver. 2.3).
- Ceiling mounting is not possible.

## Low Bandwidth Communication Supported

The HD Video Conferencing Unit enables communication at low bandwidths by adjusting to the network status. Video and audio communication at 256 kbps/site minimum, and audio-only communication at 192 kbps/site minimum are possible.\*

\* For 2-site communication. Actual communication varies depending on the network status and settings.



\* The optional Activation Key Card lets you upgrade the maximum resolution of the KX-VC300 system to 1080p/i.

## External Control Interface

A disclosed external device interface allows control over the network from an external device other than the remote. Due to CGI use, applications can be developed on Windows®, Linux®, iOS(iPad/iPhone), Android and other platforms regardless of the type of OS.

\* Please ask your nearest dealer for details.

## TV Stand Installation Examples

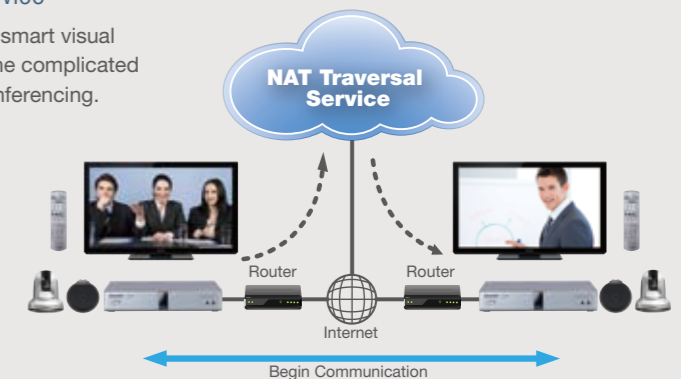


## NAT Traversal Service - Easy to Connect Cloud Service

This is a cloud service that uses dedicated Panasonic servers. It provides smart visual communication without having to use ordinary leased lines, and without the complicated router settings that leased lines require. It's the easy way to start videoconferencing.

- No complicated router settings needed.
- Access a 7-digit terminal ID number with the same ease as dialling a phone number.
- Connect securely with encrypted communication, using the Internet.

- \* Actual use requires the separate purchase of the KX-VCS701 (for 1 year of use) or KX-VCS703 (for 3 years of use) Activation Key Card for the NAT Traversal Service.
- \* Connection using this service is only possible between Panasonic HD Video Conferencing Units. Please ask your nearest dealer for details of this service.
- \* Please use a router that has been approved by Panasonic for use with this service.
- \* Availability varies depending on the country and region.
- \* Legal regulations prevent the supply of this service to China.

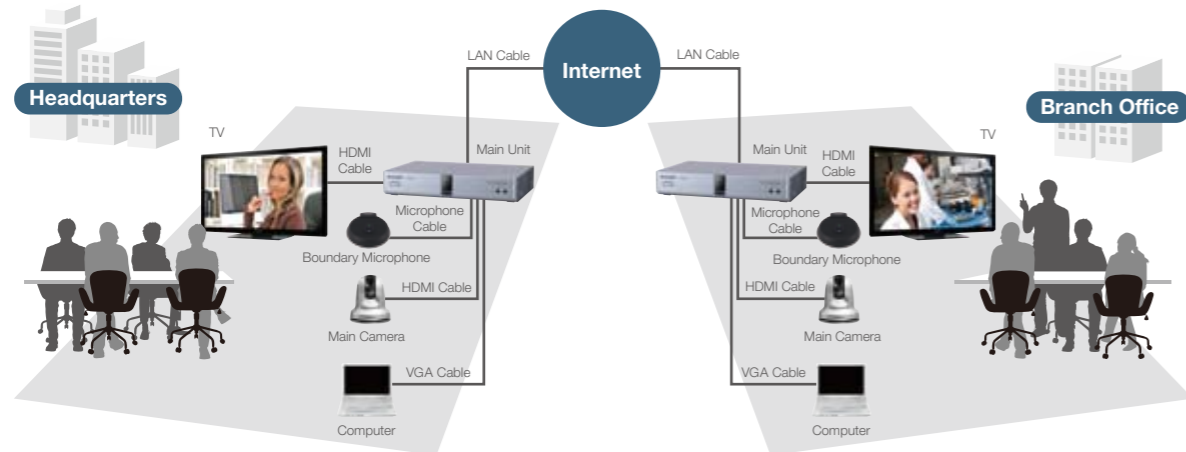


For detailed information, please access the following URL. [http://panasonic.net/psn/products/hdvc/nat\\_traversal/index.html](http://panasonic.net/psn/products/hdvc/nat_traversal/index.html)

# System Configuration Example

## 2-Site Connection

This standard remote conference system lets you connect conference rooms between distant offices.



## 4-Site Connection

This remote conference system lets you hold meetings to share detailed product checks and data.



### Microphone Connectivity

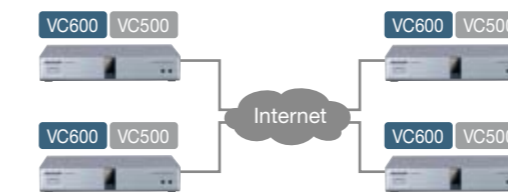
	KX-VCPA600 (Main Unit) / KX-VC600	KX-VCPA300 (Main Unit) / KX-VC300	KX-VC500
Digital Boundary Microphone KX-VCA001	Yes (1-4 Units)	No	Yes (1-4 Units)
Analogue Boundary Microphone KX-VCA002	Yes (1 Unit)	Yes (1 Unit)	No

## Site Connection

**KX-VC300**  
Designed for 2-site connection.

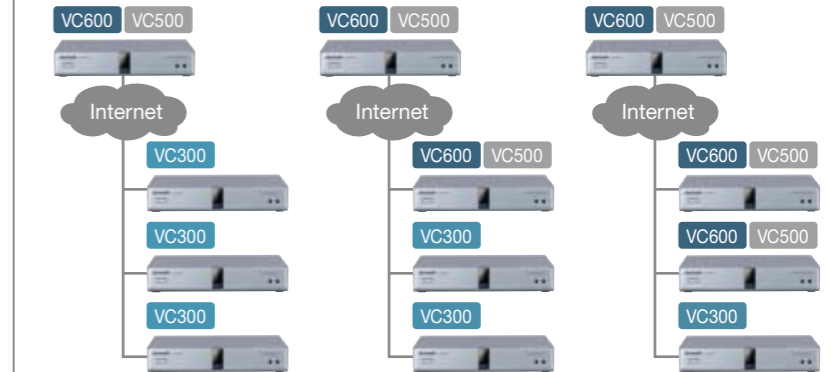


**KX-VC600/VC500**  
Connects up to 4 locations.



## KX-VC600/VC500 and KX-VC300 Connection

The KX-VC300 allows connection of up to 4 locations when it is on the receiving end of a call with the KX-VC600/VC500 set as the base unit.



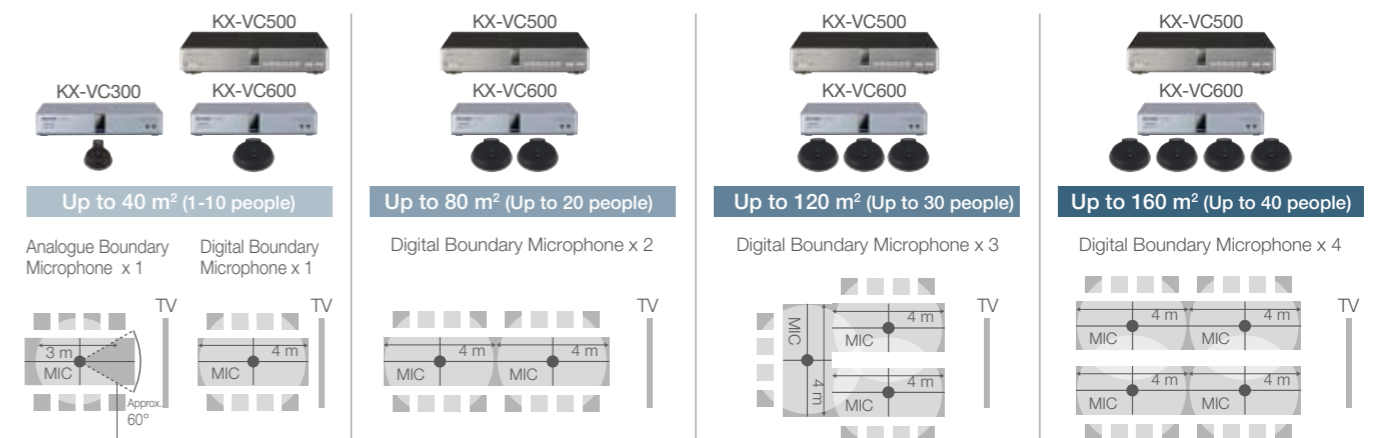
## Function Expansion

Purchasing the optional Activation Key Card lets you flexibly expand functions based on your needs.



## Microphone and Pick-up Capacity

You can configure flexible systems that match the number of connection locations and the sizes of the rooms.



\*The Analogue Boundary Microphone exceeds the sound-collecting range at an angle of about 60° on the connector side.

\*This diagram is intended only as a layout example. It is not meant to show the maximum number of people that can be covered. \*This is the pick-up capacity when using the Digital/Analogue Boundary Microphone. The capacity varies when using another microphone.