PCS-XA80
PCS-XA55

HD Visual Communication Systems

SONY
make.believe

HD

IPELA™

Powerful, Compact, and Stylish

The PCS-XA80 and PCS-XA55 HD Desktop Visual Communication Systems

Attractive Additions to Your Desktop

Package Configurations

|	PCS-XA80	PCS-XA55
	High-end HD Desktop Package	High-performance HD Desktop Package
Feature Comparison		
MCU Option[1]	Yes	No
DSG Option[2]	Yes	Yes
Dual Network Ports	Yes	No
Maximum Bandwidth	10 Mbps	4 Mbps
S-Video In	Yes	No
TABLET/OPTION/EXT Ports	3	1
AUX Audio In	2	1
Echo Canceller Mic (PCSA-A7P4)	Yes	No
Package Configurations		
HD Codec Unit	PCS-XG80S	PCS-XG55S
HD Camera Unit	PCSA-CXA55	PCSA-CXA55
RF Remote Commander	PCS-RF1	PCS-RF1

[1] Requires the PCSA-MCG80
[2] Requires the PCSA-DSG80

Key Features

Stunning 720p High-definition (HD) Images

The PCS-XA80 and the PCS-XA55 adopt the H.264 video codec, which enables efficient transmission of high-quality images at up to 60 fps in a high-definition resolution of 1280 x 720 pixels. Stunning HD video enhances your videoconferencing with lifelike images for effective communication.
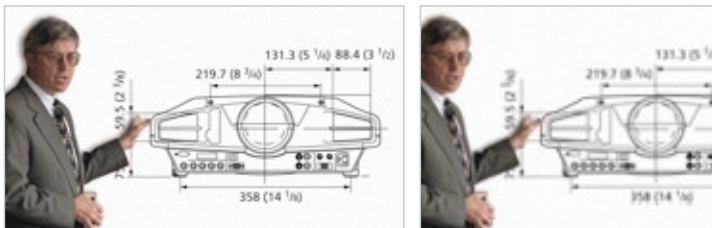
HD   SD

(Simulated images)

Superb Audio Quality

The units produce clear and natural stereo sound, using the MPEG-4 AAC compression format. Since the each has a built-in stereo echo canceller, which eliminates the annoying echo often heard with other systems, communication sounds far more natural.

ITU-T H.239 Support – Presentation Data Transferred at 30 fps*

With support for the ITU-T H.239 (video and presentation data) standard, the PCS-XA80 and the PCS-XA55 can send both the video and presentation data that is displayed on your PC to videoconferencing counterparts for more effective communication.

Presentation data can be transferred at frame rates as high as 30 fps*, providing natural and smooth presentations even when using animation effects or showing videos from your PC. This presentation data can also be shown either from a projector or a sub display, using the RGB output.

* Requires optional PCSA-DSG80 software. These functions are available except when using the 720/60p video formats.

IP Network
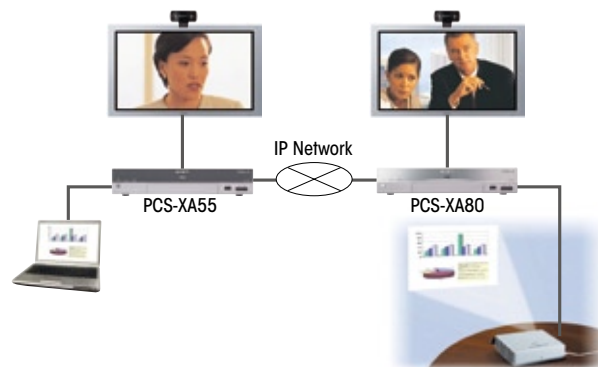
PCS-XA55   PCS-XA80

Compact and HD High-quality 8-megapixel Pixel CMOS Camera Unit (PCSA-CXA55)

The PCS-XA80 and the PCS-XA55 have a dedicated compact HD camera (PCSA-CXA55) with eight mega pixel CMOS sensor that brings you high-quality HD images at a resolution of in 1280 x 720 pixels, as smooth as 30 fps. They attach to a wide variety of displays in your office, so this HD visual communication system doesn't disturb or alter your existing office aesthetics.

Covering an 80.1 degree wide angle, this HD camera has a lot of useful features, such as an electrical zoom(x3) capability, manual pan/tilt function, and privacy shutter.

Privacy shutter

Microphone

8-megapixel CMOS

Kiosk Mode

The PCS-XA80 and the PCS-XA55 have a convenient Kiosk mode that can be used to provide unattended services for applications such as remote consulting or customized distance learning. This mode not only provides a user-friendly interface for customers, but is also a delight for system integrators because it is both easy to configure and flexible. For example, up to four locations can be preset and customized thumbnail images can be designed

Video Annotation Function*

For effective communication, the PCS-XA80 and the PCS-XA55 offer a useful video annotation function. Conference participants can clearly point out specific parts of shared data, including live images and presentation data, by simply by writing on a tablet. This function helps minimize the time and effort required to communicate, enabling you to deliver clear, strong messages.

* Requires an optional third-party pen tablet device.

PCS-XA55

IP Network

PCS-XA80

Pen Tablet
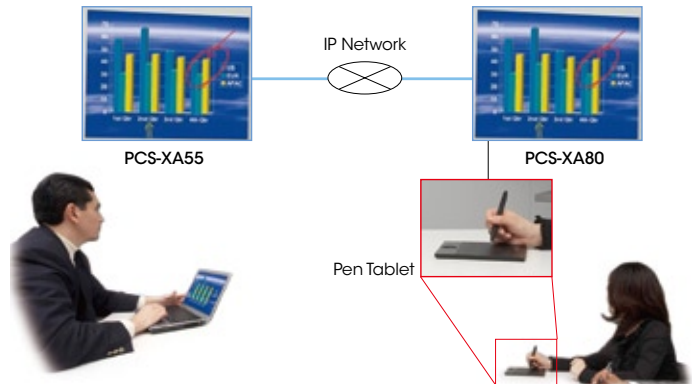
Enhanced Intelligent QoS™ Functions for Stable and Secure Videoconferencing

To handle the transmission of large amounts of HD video data, while maintaining high-quality and stable communication over an IP network, the units incorporate the following advanced Quality of Service (QoS) functions:

- Adaptive FEC (Forward Error Correction)
- Real-time ARQ™ (Automatic Repeat reQuest)
- ARC (Adaptive Rate Control)

These functions work in harmony for fast and consistent data throughput during the transmission of video signals, by adapting to any changes in network condition, and correcting any packet loss.

With Enhanced Intelligent QoS

Without Enhanced Intelligent QoS

(Simulated images)

Multi-point Connection – Embedded MCU*

Using optional PCSA-MCG80 MCU software, the PCS-XA80 can be configured to communicate simultaneously with up to five remote videoconferencing sites (six sites in total), using either an IP (H.323 protocol) or ISDN (H.320 protocol) connection.

* Available for the PCS-XA80 only.

Simple Setup and Easy Operation

The units have been thoughtfully designed with an intuitive GUI, which includes a simple layer structure with translucent cascading menus. This provides simple functionality – users find it very easy to operate the entire videoconferencing system, including the camera.

One-touch Dialing With the RF Remote Commander Unit

For user convenience, the PCS-XA80 and PCS-XA55 adopt an RF Remote Commander unit which you do not have to point directly towards the system. What's more, the units have a convenient One-touch Dialing feature, which gives you easy connection to any of your registered contacts – just at the touch of a function button on the RF Remote Commander unit (this button corresponds to a thumbnail image on the GUI). Up to four contacts for one-touch dialing can be shown on the home menu from a maximum of 1,000 registered contacts.

Other Features

• Memory Stick™ recording - video/presentation data (including annotations) and audio can be recorded for later review
• Presentation data can be sent as a single stream by selecting the RGB input
• Built-in streaming function for multicasting to large audiences
• Support for IPv6
• Support for H. 460 Firewall Traversal
• Up to 100 camera preset positions can be stored, each with a thumbnail image for easy recall

Videoconferencing for Our Environment

You can help reduce CO_2 emissions and support our environment by using videoconferences in lieu of business travel. Sony HD visual communication systems can make you feel as if you are communicating in the same room. Stay in touch, travel less, and save our earth. Sony has an answer.

Optional Accessories

PCSA-MCG80
HD MCU Software*
*PCS-XA80 only

PCSA-DSG80
HD Data Solution Software
(for H.239 video and presentation data)

PCSA-B768S
ISDN I/F Box 768Kbps

PCSA-B384S
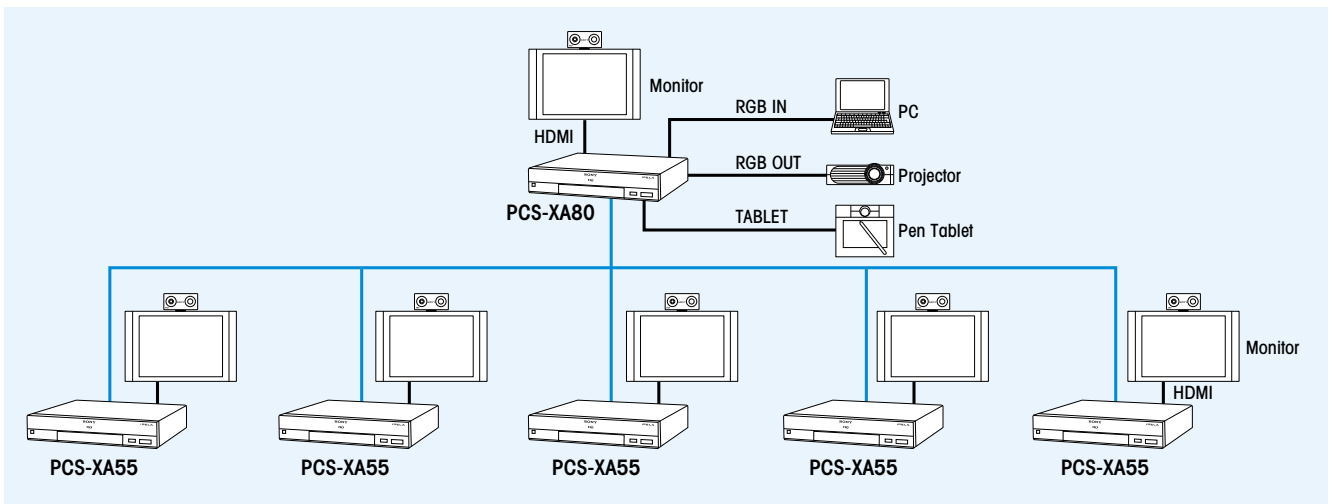ISDN I/F Box 384Kbps

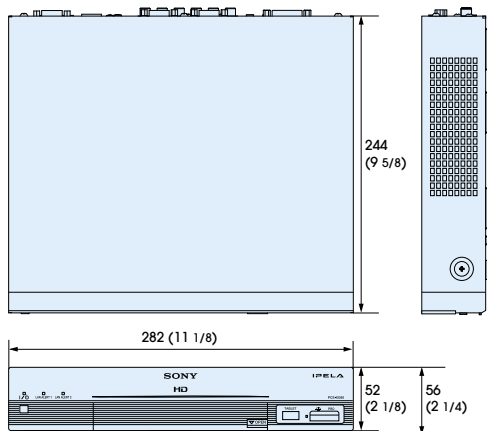**PCS-A1**
Omnidirectional Microphone

PCSA-A3
Unidirectional Microphone

PCSA-A7P4
Echo cancelling microphone*
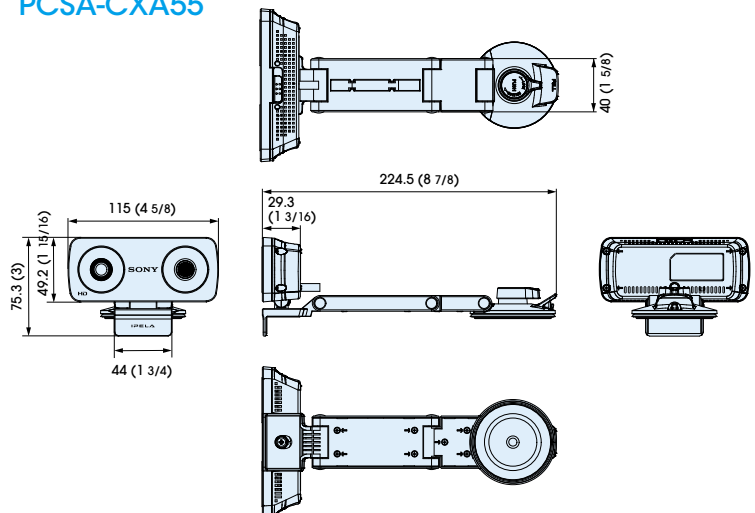(4 units package)
*PCS-XA80 only

Sample System Configuration

Monitor

HDMI

RGB IN — PC

RGB OUT — Projector

TABLET — Pen Tablet

PCS-XA80

PCS-XA55   **PCS-XA55**   **PCS-XA55**   **PCS-XA55**   **PCS-XA55**

Monitor

HDMI

Dimensions

PCS-XA80(PCS-XG80S)/
PCS-XA55(PCS-XG55S)

244
(9 5/8)

282 (11 1/8)

52
(2 1/8)

56
(2 1/4)

PCSA-CXA55

40 (1 5/8)

224.5 (8 7/8)

29.3
(1 3/16)

115 (4 5/8)

75.3 (3)

49.2 (1 15/16)

44 (1 3/4)

Connector Panels

PCS-XA80 (PCS-XG80S)

Front
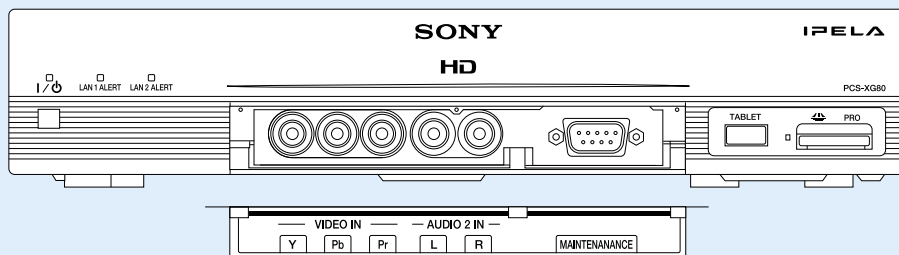
Rear
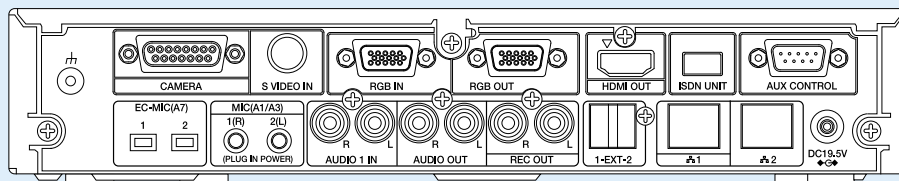
PCS-XA55 (PCS-XG55S)

Front
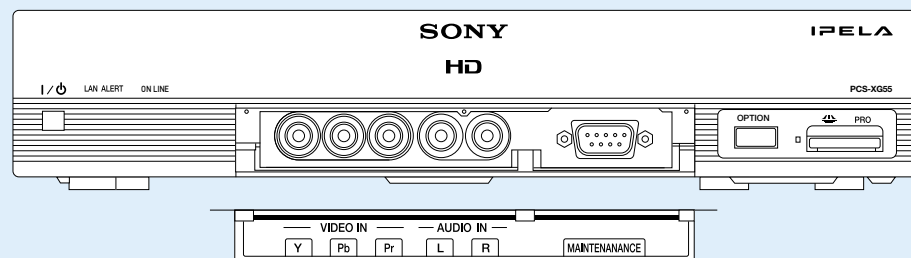
Rear
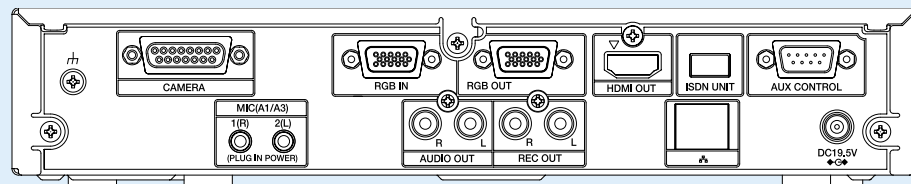
Specifications

HD Camera Unit

PCSA-CXA55	
Image sensor	1/3.2-type 8 Megapixels CMOS image sensor
Effective pixels	Approx. 6.0 Megapixels (16:9)
Position preset	100 positions (Saved in Main Unit)
Focus	Auto / Manual
Gain	Auto (Auto Gain Control)
Focal length	f=2.9mm (F2.8)

Zoom ratio	3x digital zoom
Pan / Tilt angle	Manual Pan±20° / Tilt±20°
Horizontal viewing angle	Approx. 80.1°
S/N Ratio	50 dB
Power	Supplied from Codec Unit
Other features	Auto White Balance, Backlight Compensation

Specifications

HD Codec Unit

	PCS-XA80 (PCS-XG80S)	PCS-XA55 (PCS-XG55S)
Video		
Communication protocol standards	H.320, H.323, IETF SIP	H.320, H.323, IEFT SIP
Compression standard	H.261, H.263, H.263+, H.263++, H.264, MPEG-4 Video (SIP only)	H.261, H.263, H.263+, H.263++, H.264, MPEG-4SP@L3 (SIP only)
Resolution	4:3 - QCIF (176 x 144), CIF (352 x 288), 4CIF (704 x 576) 16:9 - wCIF/w288p (512 x 288), w432p (768 x 432), w4CIF (1024 x 576), 720p (1280 x 720)	4:3 - QCIF (176 x 144), CIF (352 x 288), 4CIF (704 x 576) 16:9 - wCIF/w288p (512 x 288), w432p (768 x 432), w4CIF (1024 x 576), 720p (1280 x 720)

Maximum frame rate	Max. 60fps: H.264 - 720p
	Max. 30fps: H.261 - QCIF, CIF
	  H.263 - QCIF, CIF
	  H.264 - QCIF, CIF, 4CIF, wCIF, w432p, w4CIF
	Max. 10fps: H.263 - 4CIF
		Max. 60fps: H.264 - 720p
		Max. 30fps: H.261 - QCIF, CIF
		  H.263 - QCIF, CIF
		  H.264 - QCIF, CIF, 4CIF, wCIF, w432p, w4CIF
		Max. 10fps: H.263 - 4CIF

Bit rate	IP - 64 kb/s to 10 Mb/s ISDN - 56 kb/s to 768 kb/s (with optional PCSA-B768S), 56 kb/s to 384 kb/s (with optional PCSAB384S)	IP - 64 kb/s to 4 Mb/s ISDN - 56 kb/s to 768 kb/s (with optional PCSA-B768S), 56 kb/s to 384 kb/s (with optional PCSA-B384S)
Audio		
Bandwidth and coding	MPEG-4 AAC Stereo: 22 kHz at 192 kb/s (IP only) MPEG-4 AAC Mono: 14 kHz at 48 kb/s, 64 kb/s, 96 kb/s MPEG-4 AAC Mono: 22 kHz at 96 kb/s (IP only) G.711: 3.4 kHz at 56 kb/s, 64 kb/s G.722: 7.0 kHz at 48 kb/s, 56 kb/s, 64 kb/s G.728: 3.4 kHz at 16 kb/s	MPEG-4 AAC Stereo: 22 kHz at 192 kb/s (IP only) MPEG-4 AAC Mono: 14 kHz at 48 kb/s, 64 kb/s, 96 kb/s MPEG-4 AAC Mono: 22 kHz at 96 kb/s (IP only) G.711: 3.4 kHz at 56 kb/s, 64 kb/s G.722: 7.0 kHz at 48 kb/s, 56 kb/s, 64 kb/s G.728: 3.4 kHz at 16 kb/s
Echo cancellation	Stereo echo-canceling supported Noise reduction included Automatic gain control included	Stereo echo-canceling supported Noise reduction included Automatic gain control included
Network		
Protocol	TCP/IP, UDP/IP, RTP/RTCP, DHCP, DNS, TELNET, SSH, HTTP, SNMP, NTP, ARP, PPPoE, UPnP	TCP/IP, UDP/IP, RTP/RTCP, DHCP, DNS, TELNET, SSH, HTTP, SNMP, NTP, ARP, PPPoE, UPnP
QoS (Quality of Service)	Adaptive FEC (Forward Error Correction), Real-time ARQ (Auto Repeat reQuest), ARC (Adaptive Rate Control), IP Precedence, DiffServe	Adaptive FEC (Forward Error Correction), Real-time ARQ (Auto Repeat reQuest), ARC (Adaptive Rate Control), IP Precedence, DiffServe
Others network features	NAT, UDP shaping, TCP/UDP port setting, Auto gatekeeper discovery, Packet reordering, URI Dialing, IPv6	NAT, UDP shaping, TCP/UDP port setting, Auto gatekeeper discovery, Packet reordering, URI Dialing, IPv6
Standards		
ITU-T (excludes audio/video standards)	H.221, BONDING, H.225.0, H.231, H.241, H.242, H.243, H.245, H.350, H.460.18, H.460.19	H.221, BONDING, H.225.0, H.231, H.241 H.242, H.243, H.245, H.350, H.460.18, H.460.19
IETF	RFC2190, RFC3016, RFC3047, RFC3261, RFC3264, RFC3550, RFC3984, RFC4573, RFC4587, RFC4629, RFC4856, RFC4628, RFC5168	RFC2190, RFC3016, RFC3047, RFC3261, RFC3264, RFC3550, RFC3984, RFC4573, RFC4587, RFC4629, RFC4856, RFC4628, RFC5168
Encryption	H.233, H.234, H.235 ver.3	H.233, H.234, H.235 ver.3
Far end camera control	H.224, H.281	H.224, H.281
Screen Layout		
	Full screen, Picture-in-Picture,Picture-and-Picture, Side-by-Side split screen	Full screen, Picture-in-Picture, Picture-and-Picture, Side-by-Side split screen
Data Sharing		
	H.239 (video and presentation data)*	H.239 (video and presentation data)*
Lip Synchronization		
	ON/OFF	ON/OFF
Mic off Function		
	ON/OFF	ON/OFF
Interface		
Video input	D-Sub 15-pin Dedicated Camera I/F x 1, S-Video x 1, Y/Pb/Pr x 1, RGB (D-sub 15) x 1	D-Sub 15-pin Dedicated Camera I/F x 1, Y/Pb/Pr x 1, RGB (D-sub 15) x 1
Video output	HDMI (video, audio) x 1, RGB x 1	HDMI (video, audio) x 1, RGB x 1
Audio input	External analog microphone input Mini-jack (Plug in power) x 2 (L/R) EC-Mic Input x 2 (PCSA-A7) Audio Input (MIC/AUX) x 2 (RCA pin, stereo)	External analog microphone input Mini-jack (Plug in power) x 2 (L/R) Audio Input (MIC/AUX) x 1 (RCA pin, stereo)
Audio output	HDMI (video, audio) x 1, Line Output (RCA pin, stereo) x 1, REC Output (RCA pin, stereo) x 1	HDMI (video, audio) x 1, Line Output (RCA pin, stereo) x 1, REC Output (RCA pin, stereo) x 1
Memory stick	Memory Stick/Memory Stick Duo Slot x 1	Memory Stick/Memory Stick Duo Slot x 1
Network	10BASE-T/100BASE-TX x 2, ISDN Unit Interface x 1	10BASE-T/100BASE-TX x 1, ISDN Unit Interface x 1
Control	RS-232C x 1	RS-232C x 1
Maintenance interface	RS-232C x 1	RS-232C x 1
Other interface	Tablet Interface x 1	Tablet Interface x 1
General		
Operating temperature	5 to 35 °C (41 to 95 °F)	5 to 35 °C (41 to 95 °F)
Operating humidity	20 to 80% (non condensing)	20 to 80% (non condensing)
Storage temperature	-20 to 60 °C (-4 to 140 °F)	-20 to 60 °C (-4 to 140 °F)
Storage humidity	20 to 80% (non condensing)	20 to 80% (non condensing)
Power requirements	DC 19.5 V (AC Adapter : AC 100 to 240 V, 50/60 Hz)	DC 19.5 V (AC Adapter: AC 100 to 240 V, 50/60 Hz)
Power consumption	40 W (the codec only)	40 W (the codec only)
Power consumption (stand-by)	10 W (the codec only)	10 W (the codec only)
Dimensions (W x H x D)	282 x 56 (including rubber feet) x 244 mm (11 1/8 x 2 1/4 x 9 5/8 inches), excl. projections	282 x 56 (including rubber feet) x 244 mm (11 1/8 x 2 1/4 x 9 5/8 inches), excl. projections
Mass	Approx. 2.2 kg (4 lb 14 oz)	Approx. 2.0 kg (4 lb 3 oz)
Supplied Accessories		
	AC adapter, HDMI cable (3m), RF Remote Commander Unit, Batteries for Remote Commander unit x 2, CD-ROM (Operating instructions, Before using this unit, Connection sheet, Quick dial guide), Before using this unit, Connection sheet, Quick dial guide, Important notice regarding software, Warranty booklet	AC adaptor, HDMI cable (3 m), RF Remote Commander Unit, Batteries for Remote Commander unit x 2, CD-ROM (Oerating instructions, Before using this unit, Connection sheet, Quick dial guide, Important notice regarding software), Warranty booklet

* PC images up to SXGA resolution is supported. It requires the optional HD data solution software PCSA-DSG80 to send video and presentation data simultaneously.

Distributed by