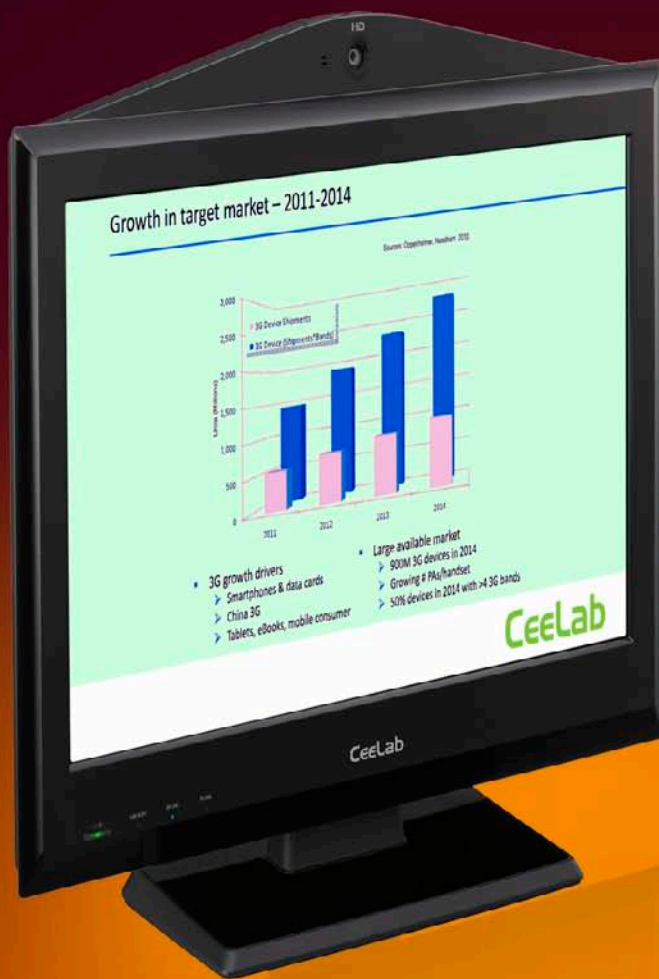


ARROW 1000

HD Desktop Visual Communication System



Key Features

Stunning 720p High-definition (HD) Images

Stunning HD video enhances your videoconference with lifelike images for effective communication. The Arrow 1000 uses a high quality H.264 video codec enabling efficient transmission of high-quality images up to 60 frames per second (fps) in high-definition resolution of 1280 x 720 pixels.

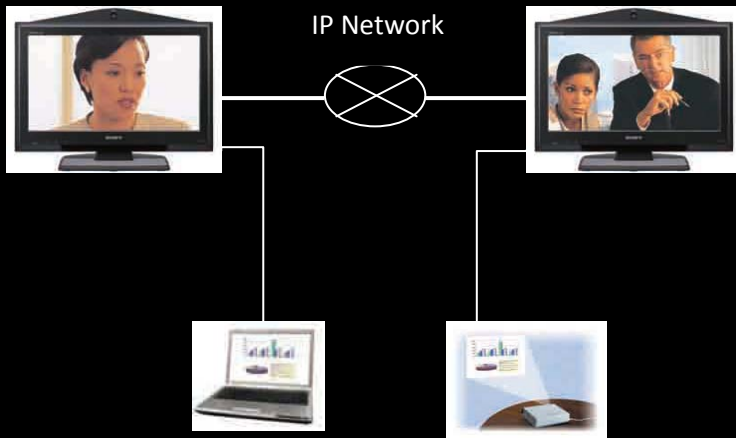
Lifelike Stereo Sound

The Arrow 1000 realizes natural and clear voice with an advanced echo canceller.

ITU-T H.239 Support - Presentation Data transferred at 30 fps*1

With support for the ITU-T H.239 (video and presentation data) standard, the Arrow 1000 can send both the video and presentation data displayed on your PC to remote videoconferencing sites for more effective and improved communication. Presentation data can be transferred at frame rates as high as 30 fps*1, providing natural and smooth presentations even when using animation or showing video clips from your PC. This presentation data can also be shown from either a projector or sub display, using the RGB output.

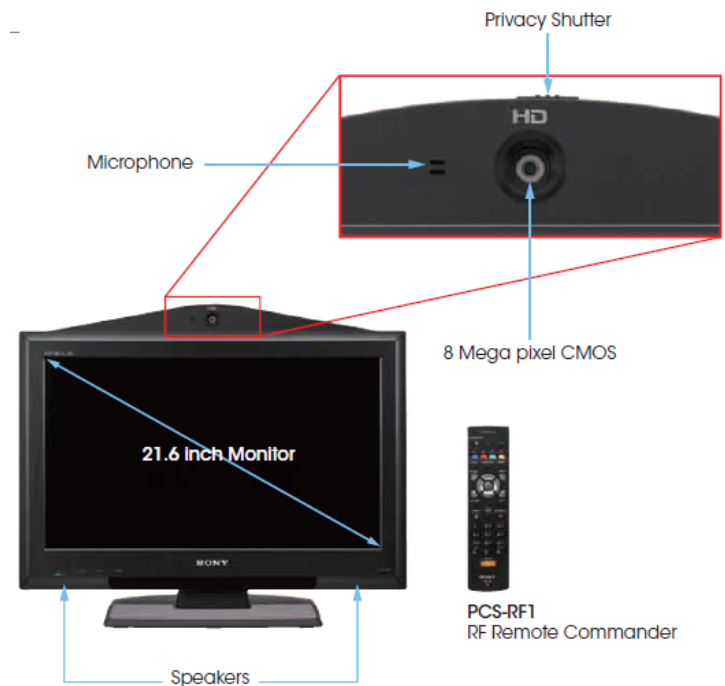
(*1) These functions are available except when using the 720/60p video format.



Transportable all-in-one Design

The Arrow 1000 is an all-in-one visual communication system that combines a high-quality built-in camera, 21.6-inch WXGA LCD, speakers, and a microphone in one compact sleek design that can also double as a PC display. The unit incorporates a privacy shutter which can be closed if you prefer not to be seen.

Also the Arrow 1000 has a wide 80.1 degree horizontal viewing angle, making it ideal not only for use on individual desktops, but also in small meeting spaces with a number of participants.



KIOSK Mode

The Arrow 1000 has 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 the user, but is also simple for system integrators as it is both easy and flexible to configure. For example, up to four locations can be preset and customized thumbnail images can be designed.



Enhanced Intelligent QoS™ Functions for Stable and Secure Videoconferencing

To handle the transmission of large amounts of HD video data and to maintain high-quality, stable communications over an IP network, the Arrow 1000 incorporates 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 changes in network condition, and correcting for packet loss.



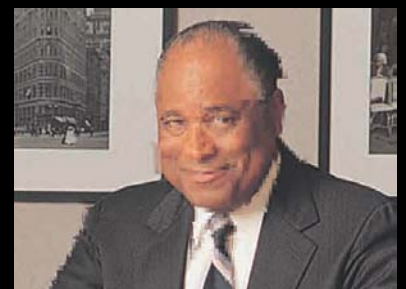
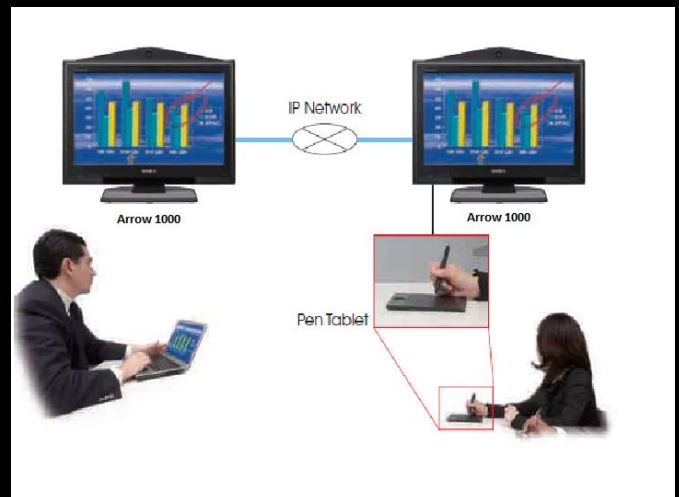
With enhanced Intelligent QoS

Video annotation Function(*2)

For effective communication, the Arrow 1000 offers a useful video annotation function. Conference participants can clearly point out specific parts of shared data, including live images and presentation data, by simply using a pen tablet.

This function can help to minimize time and effort in your communications, enabling you to deliver a clear, strong message.

(*2) Requires an optional third-party pen tablet



Without enhanced Intelligent QoS

Multi-point Connection - embedded MCU

Using either an IP (H.323 protocol) or ISDN (H.320 protocol) connectivity, the Arrow 1000 can communicate with up to two remote videoconferencing sites (three sites in total) simultaneously.

One-touch Dialing with the RF remote Commander unit

For user convenience, the Arrow 1000 uses an RF Remote Commander unit which you do not have to point directly towards the system. What's more, the Arrow 1000 has a convenient One-touch Dialing feature, allowing the user to easily connect to any of your registered contacts by just pushing a function button on the RF Remote Commander unit that 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.

Simple Setup and easy Operation Intuitive GUI - Simple Layer Structure /translucent Cascading Menus

The Arrow 1000 was designed with an intuitive GUI, utilizing translucent cascading menus. The simple layer structure and easy functionality allow the user to operate the videoconferencing system, including the camera, much more easily and intuitively.

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



Optional Accessories



PCS-A1
Omnidirectional Microphone



PCSA-A3
Unidirectional Microphone

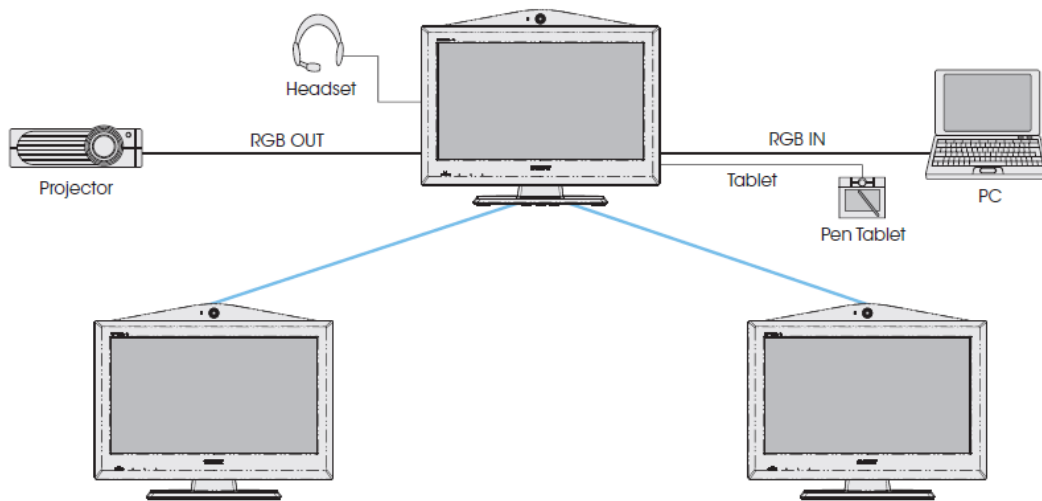


PCSA-B768S
ISDN I/F Box 768Kbps

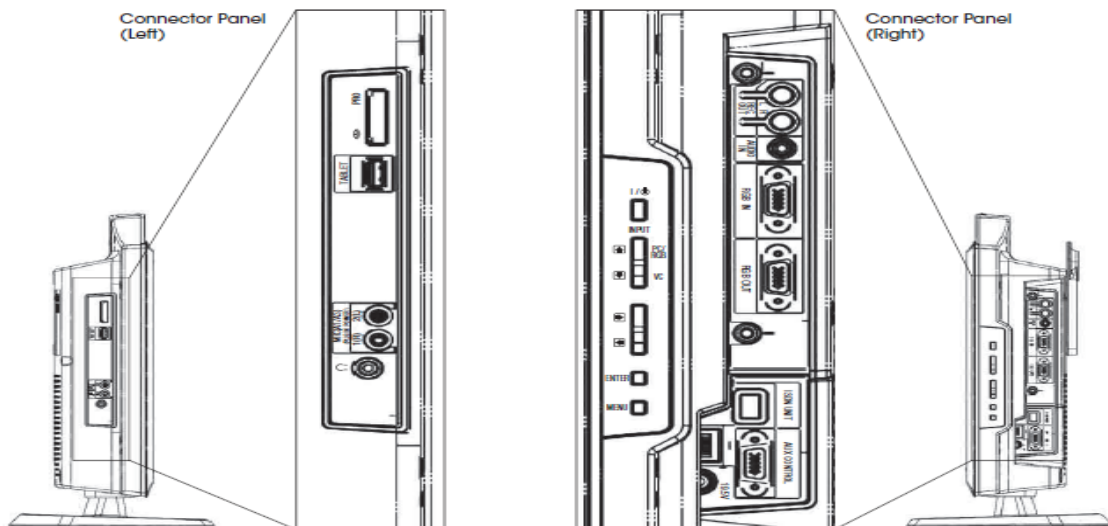


PCSA-B384S
ISDN I/F Box 384Kbps

Sample system configuration



Connector Panels

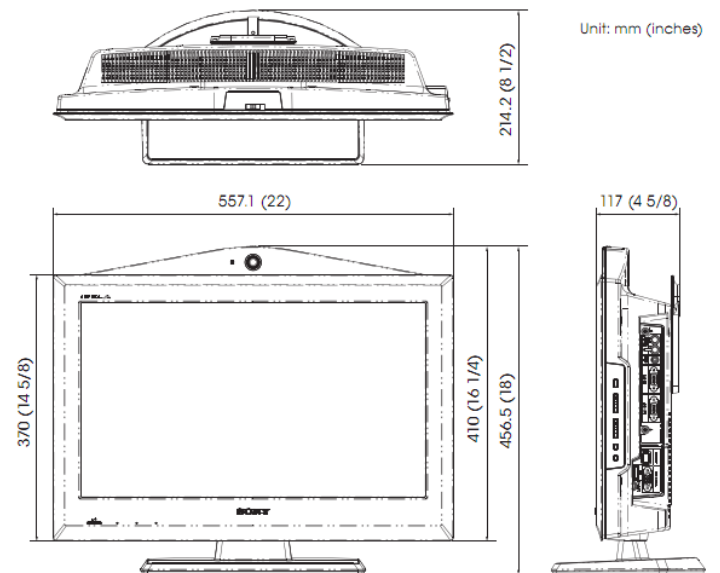


Specifications

Arrow 1000	
Video	
Communication protocol standards	H.320, H.323, IEF, SIP
Compression standard	H.261, H.263, H.263+, H.263+++, H.264, MPEG-4 video (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)
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
Bit rate	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 LC/LD Stereo: 22 kHz at 192 kb/s (IP only) MPEG-4 AAC LC/LD Mono: 14 kHz at 48 kb/s, 64 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	ON/OFF Stereo Echo Cancelling, Auto Gain Control, Noise Suppressor
Network	
Protocol	TCP/IP, UDP/IP, DHCP, DNS, TELNET, SSH, HTTP, SNMP, NTP, ARP, PPPoE, UPnP, RTP/RTCP
QoS (Quality of Service)	Adaptive FEC, Real-time ARQ, ARC, IP Precedence, DiffServe
Others network features	NAT, UDP shaping, TCP/UDP port setting, Auto gatekeeper discovery, URI Dialing, IPv6
Standards	
ITU-T (excludes audio/video standards)	H.221, BONDING, H.225.0, H.231, H239, 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
Encryption	H.233, H.234, H.235 ver.3
Far end camera control	H.224, H.281
Screen Layout	
	Full screen, Picture-in-Picture, Picture-and-Picture, Side-by-Side
Data Sharing	
	PC Image supported up to SXGA
Lip Synchronization	
	AUTO/OFF
Mic off Function	
	ON/OFF
Interface	
Video input	AUX Video input (RGB x1)
Video output	RGB x1
Audio input	AUX Mic input L/R x1 (Analog, Plug-in power PCSA-A1/PCSA-A3) AUX input (mini stereo) x1
Audio output	Headphone output (mini stereo) x1 REC Output (Pin, Stereo) x1
Memory stick	Memory Stick/Memory Stick Duo Slot x 1
Network	10BASE-T/100BASE-TX x 1; ISDN Unit Interface x1
Control	RS-232C
Maintenance interface	RS-232C x 1
Other interface	Memory Stick Slot x1, Tablet interface
General	
Operating temperature	5 to 35 °C (41 to 95 °F)
Operating humidity	20 to 80% (non condensing)
Storage temperature	-20 to 60 °C (-4 to 140 °F)
Storage humidity	20 to 80% (non condensing)
Power requirements	DC 19.5 V (AC Adapter: AC 100 to 240 V, 50/60 Hz)
Current consumption	5 A
Dimensions (W x H x D)	557.1 x 456.5 x 214.2 mm (22 x 18 x 8 1/2 inches) excl. projections, including stand
Mass	Approx. 8.2 kg (18 lb 1 oz)
Supplied Accessories	
	AC adaptor x1, PCS-RF1(RF Remote Commander Unit)x1, Batteries for Remote Commander unit x 2, CD-ROM (Operating instructions) x1, Operation Guide x1, Quick connection guide/Remote commander guide x1, Worldwide Warranty Booklet x1

Camera	
Image Sensor	1/3.2-type 8 Megapixels CMOS image sensor
Position preset	100 positions (saved in main unit)
Focal Length	f = 2.9 mm (F2.8)
Focus	Auto/Manual
Horizontal viewing Angle	Approx. 80.1°
Zoom Ratio	3x digital zoom
GAIN	AUTO
Other features	Auto white Balance backlight
Display	
Size	21.6 inch
Aspect ratio	16:9
Resolution	1366 x 768 (WXGA)
Brightness	270 cd/m ²
Response time	6.5 ms
Contrast ratio	2500:1

Dimensions



Local Contact

