P30HD Specifications

Model		P30HD
Camera	Image pick-up	1/2.8" CMOS
	Total pixels	2144(H) x 1588(V)
	Effective pixels	1920(H) x 1536(V)
	Frame rate	30fps
	Resolution	Analog RGB :800(H) x 800(V)TV lines or more
Optics	Zoom	Powered, 16× Optical
	Lens	f=4.9mm-78.4mm(16x zoom) F2.7
	Shooting area	1080p : Max.400×223mm Min.27×15mm
		720p : Max.400×223mm Min.27×15mm
		SXGA : Max.400×320mm Min.27×22mm
		WXGA : Max.400×248mm Min.27×17mm
		XGA : Max.400×299mm Min.27×20mm
	Focus	Auto/Manual/Zoom Sync
Function	White balance	Auto/One-Push/Manual
	Image mode	Text1/Text2/Text3/Graphics1/Graphics2
	Edge Effect	Provided (only for Graphics1 mode)
	Still Image storage	Provided
	Movie storage	Provided
	Digital zoom	8×
	Gamma setting	Provided (only for Graphics1 mode)
	Graphical OSD(On Screen Display)	Provided
	Image save	SD memory card/SDHC memory card/USB memory
	State presetting	Up to 3 user settings
	Brightness control	Auto/Manual
	Support Function	"Highlight, Mask, Scroll(in digital zoom), Mosaic
		Split screen,PinP(Picture-in-Pcture)
		Colour filter, Pause, Image rotation(0°/180°)
		Positive/negative conversion, Color/B&W selection"
Interface	Input selection	Main/External
	Output terminal	RGB output mini D-sub 15P connector, femalex1
		HDMI output terminal x1
		Line Out terminal φ3.5mm stereo minijack
	Input terminal	RGB input mini D-sub 15P connector, female x1
		Mic In/Line Out terminal (shared), 3.5mm-diameter stereo mini jack x1
	Ext. control terminal	USB device (2.0 compliant) Mini-B receptacle x1
		RS-232C D-sub 9P connector male ×1
	Analog RGB output	1080p : 1920x1080@60Hz,
		720p : 1280x720@60Hz
		SXGA:1280x1024@60Hz,
		WXGA:1280x800@60Hz
		XGA:1024x768@60Hz
	HDMI output	Image output : 1080p/720p
		Audio output : PCM44.1kHz sampling frequency
	Memory Interface	SD memory card slot x1, USB host(2.0 compliant) Type A receptacle x1
Lighting	Illumination light	White LED
Others	Accessories	AC adapter, AC cord, RGB cable, USB cable(for connecting to PC)
		Remote control, Strap(for remote control)
		AAA batteries(for remote control), Slide shooting adapter,
		Image Mate CD-ROM, Image Mate installation manual
		Instruction manual(CD-ROM), Warranty,Important safe guards
	Power source	12V DC(AC adapter AC100-240V)
	Power consumption	23.5W
	Dimensions (W×D×H)	376x482x549mm setup
		376x482x181mm folded
	Weight	Approx. 4.7kg (main unit only)

H: horizontal, V: vertical
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ELMO's Helping to Provide a Greener Future for Our Children

This ELMO product complies with RoHS Directive 2002/95/EC (Restriction Of the use of certain Hazardous Substances in electronic equipment). This compliance helps to ensure a healthier and greener environment for all our children.

Profile

All dimensions in mm

Rear Panel

HDMI OUT | Analogue RGB OUT | Analogue RGB IN | RS-232C | Audio MIC OUT | USB | DC 12V
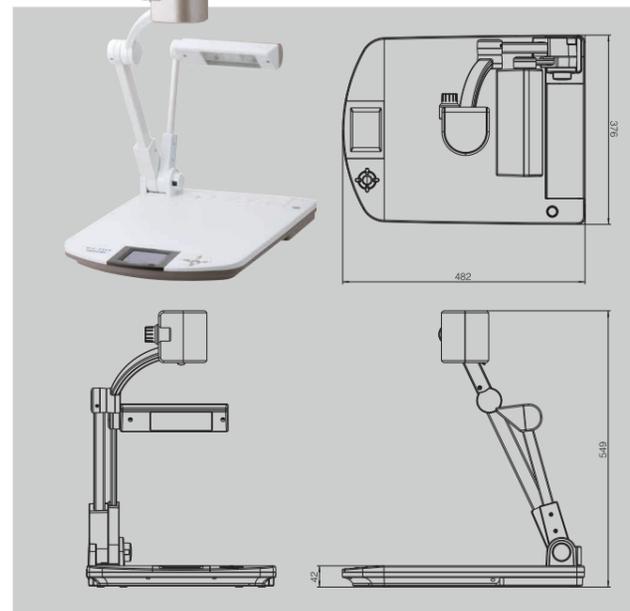
Supplied accessory

Slide Shooting Adapter

LET'S Start ICT in Education with "Document Camera"!

Visit the ELMO global website to understand what a document camera is in 13 different languages. The ELMO global website introduces you to the useful and effective ways of using the document camera and how the ELMO document camera is used and supported by teachers worldwide. http://www.elmoglobal.com

VEGETABLE OIL INK

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ELMO

Power of Visualization

P30HD Visual presenter

Anytime You Need

University

Project references in a lecture or a seminar

Make productive and effective lectures by projecting and vividly displaying teaching materials, such as documents, valued art objects, or archaeological information.

Inspection

Conduct testing and quality control for manufacturing lines
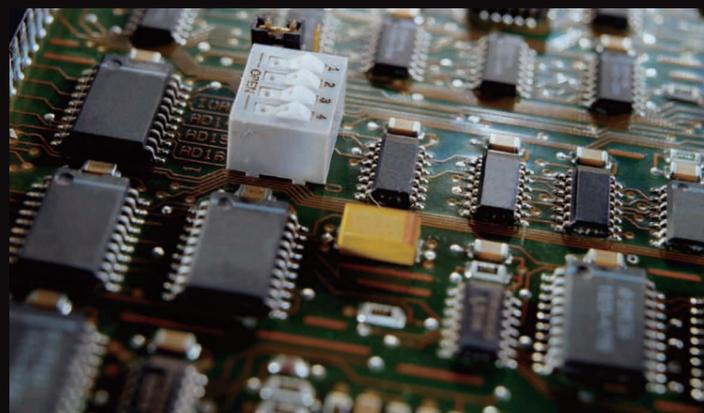
Display and enlarge small parts or detailed wiring to a much more magnified view, allowing testing and quality control to be conducted accurately.

Court

Display sketches or articles of evidence

Detailed sketches and even the smallest articles of evidence can be projected through the P30HD, making easy-to -understand trials achievable.

Powerful Presentation

Teleconference

Display documents in TV conferences between different networked locations

Both a view of the other conference party and the document being displayed can be seen at the same time. Quick and effective decisions can be made through such easy-to-understand TV conferences.

Promotion

Use for promotional presenations or operating explanations of a new product

Complex explanations, such as product operating instructions, can be demonstrated live, using the actual object, making presentations more effective and persuasive.

Meeting

Convenient for various meeting purposes

Easily conduct presentations by projecting documents, product samples, or any object at all. And with the Elmo wireless tablet (CRA-1, sold separately), annotating important points on live images becomes possible, allowing the presenter to share information quickly and efficiently.

P30HD Function

Clear Vision

Projecting to a large high-quality digital TV or a plasma display over 100″ can demonstrate the true value of the P30HD.You will instantly recognize the P30HD′s unprecedented clarity
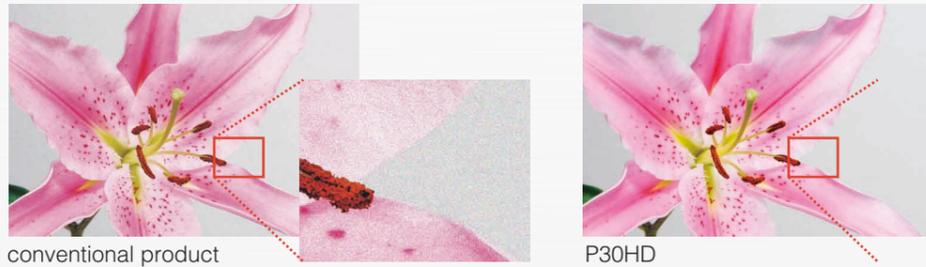
conventional product

P30HD

3.4-Megapixel CMOS Image Sensor

The P30HD's megapixel image sensor captures everything from fine text to three-dimensional objects in 1080p full HD.

Powerful 128×Zoom

When the P30HD′s high-magnification 16X optical zoom is combined with its 8X digital zoom, images can be enlarged up to 128 times for the clear, distortion-free display of even the tiniest details. This feature helps the audience improve their understanding of the points made in a lecture or a presentation.

Optical Zoom **16X** × Digital Zoom **8X** = **128X**

3D Noise Reduction

New developed 3D noise reduction helps to remove picture distortion completely.
Crystal clear images can now be shown on a big screen without any flickering in the image.

Full-HD & HDMI Output

The P30HD′s versatile output connections bring greater freedom and flexibility to presentations.
With its full-HD output and HDMI port, for example, the P30HD can be connected to a digital TV via a single cable for the ultra-easy display of full-HD images.

16 : 9

Smooth Moving Images at 30 fps

The P30HD captures and reproduces moving images at 30 fps (frames per second) for the display of truly smooth, natural-looking motion.

30-frame/s

Smooth

15-frame/s
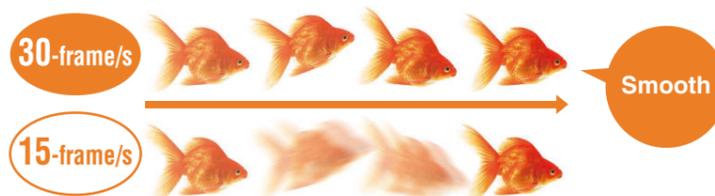
Quick Operations

Zoom Dial & AF Button

With zoom and auto focus conveniently concentrated on the camera head, you can zoom in, zoom out, and adjust the focus as needed without disrupting the flow of your presentation.

Adjustable Free-Angle Camera Arm

Broaden the view and heighten your impact. The flexible camera arm lets you capture your subjects from any angle and focus attention precisely where you want it. Simply lower the arm and rotate the camera head to project an intriguing bottom-to-top look at a three-dimensional object.

Built-in 3.5-inch LCD monitor

Thanks to the built-in 3.5-inch LCD monitor, you see before you on the control panel exactly what viewers see behind you on the screen. This way, you can adjust your materials as needed and continue your presentation without ever turning around or missing a beat.

Wireless remote control

The uniquely designed infra-red receiver can pick up a signal from up to a distance of 7m, enabling you to control the P30HD from almost anywhere.

RS-232C

By connecting the RS-232C to a computer, you are able to use the computer to control power (on/off) and other functions.

Supportive Features

Presentation Support Tools

The P30HD has various presentation support features, such as Picture in Picture, Split screen, Masking, Highlighting, Color filtering, and Mosaic, which help presentations and lectures to be more effective and interactive.
Also, video can be recorded with audio via the built-in microphone.

Split Screen

Show a still image and a live image simultaneously.

Pine
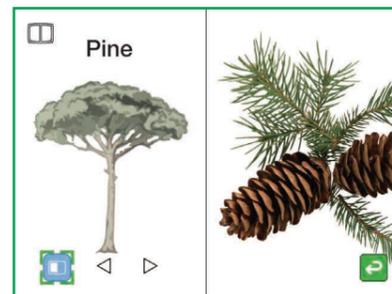
Highlight

Draw attention to a particular section of an image.
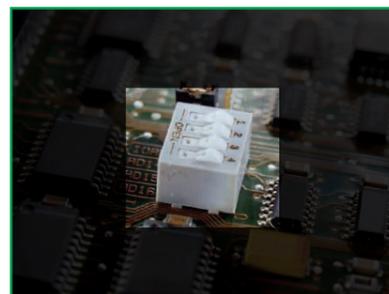
Mask

Hide a selected part of an image from view.

Movie storage	Provided
Digital zoom	8×
Gamma setting	Provided (

Movie storage	Provided
Digital zoom	8×
Gamma setting	Provided (
Graphical OSD(On Screen Display)	Provided
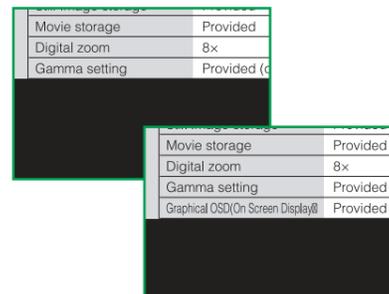
Mosaic

Give images a mosaic-like effect.

Picture-in-Picture

Display a quarter-size still image along with a live image.

Color Filter

Blacken specific colored parts of an image.

Recording

Save Presentation on External Memory

Both still images(jpg) and audio video files(mp4) can be saved on a USB flash drive or SD Memory Card for future use. Files may also be saved to a PC or Mac using Image Mate Software(included).

Audio Input & Output

With the P30HD, audio enhancement can be added to presentations or lectures via the built-in microphone or an external microphone input (Mic In/Line In). Audio output can be routed to the external HDMI or Audio Line Out port.

Built-in Microphone

USB Flash Drive   SD Memory Card

ELMO Tablet (sold separately)

Annotate on Live Images

The images captured from the P30HD can be annotated in real time, creating a solution for conveying complicated concepts and important points.

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CRA-1

Annotate Live Images without a Computer

Connection diagram

Digital television

ELMO Tablet

The CRA-1's wireless adapter can be plugged into the P30HD directly, allowing direct annotation on live images from anywhere in the room without using a computer.

Obtain added features with a Computer

Connection diagram

Computer

Digital television

ELMO Tablet
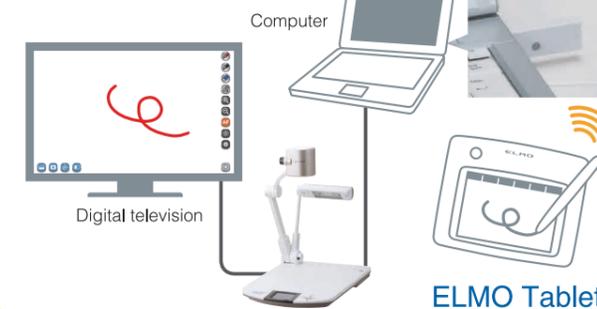
With the CRA-1's supplied software - Image Mate Accent, there are more features that can be used in presentations, including various recording features, time lapse photography, interactive whiteboard features, and more.