

# DC450

Document Camera / Visualiser

"The new DC450 document camera is capable of delivering incredible high image quality with its 8MP camera, direct HDMI output up to 30fps, full A3 shooting area, and 10x optical zoom."



8mp Camera



F2 8-F3 5



XGA. UXGA. 720 and 1080 support



Full A3 420 x 297 mm (16.5" x 11.7'



Full SD CARD Support for both Images and Video saving



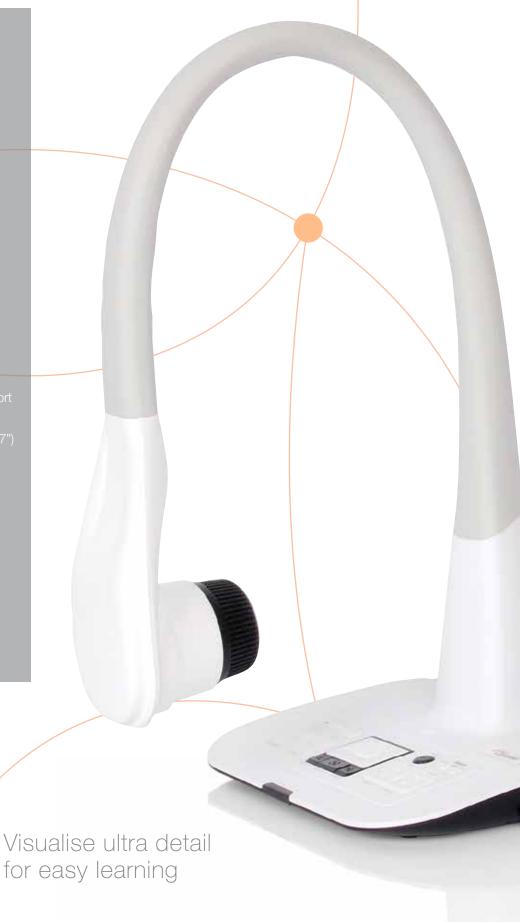
Built-in speaker



Built-in microphone



lmage save at 0.8MP, 2MP, 5MP, 8MP resolutions





#### Visualise more detail for easy learning

When it comes to teaching people, it's often the detail that counts and more is always better. Being able to share your ideas and knowledge with a large audience can be difficult- but a huge benefit.

With the Optoma DC450, you simply position items under the camera, connect it to a projector and show everything on the big screen live as it happens. Information becomes clear and everyone shares your vision.

The DC450 features a 8-megapixel sensor, 80X total zoom (10X optical zoom / 8X digital zoom) and up to 30 frames-persecond video (at full resolution) for stunning image quality and performance allowing you to see detail often not visible to the human eye. Take photos or video using the camera function and include them in future presentation – it's all so easy.

Create more engaging lesson content by easily capturing images, video and audio with the DC450 Document Camera. You can even take a video of a science experiment with the document camera, save it on your PC / Laptop via USB or save to a SD Card and use it in your next class and students can record their demonstrations during presentations for later review.

The DC450 is powerful, robust and full of useful features that will revolutionise any classroom lessons or meeting room presentations.

DC450 - Enhancing the way we communicate.

#### Easy operation

Not all of us are experts when it comes to understanding new equipment, however, the DC450 is simple to use and easy to understand. Just turn on the Document Camera (Visualiser) connect it to a projector or panel and you are ready to go.

Unlike many other Document Cameras, the main controls are on the base unit, so even if you lose the remote control the education does not stop.

8-megapixel sensor, 10x optical zoom and up to 1080 resolution via HDMI.

#### Exceptionally smooth video performance

Up to 30 frames-per-second video at full resolution.

# HDMI In/Out (Take full advantage)

Have a High Definition Projector or panel? We have HDMI In / Out so go direct with only one cable; you can show full 1080 High Definition quality video and audio to really showcase your students' best vivid work.

# VGA In/Out for legacy devices

Never worry if you go into a meeting or classroom with a Notebook or laptop and cannot connect to your document camera, the DC450 has both VGA In / Out and HDMI In / Out so will connect to most devices.

# **Rotating Camera Lens**

Rotating the camera lens enables easily set up if your doing back projection where the image would be upside down. Just rotate the lens so your image is the correct way up even if it's behind you. You can also rotate the image in software using SMART DC.

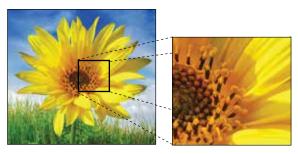




## Amazing image quality

Display more detail with the latest 8MP CMOS sensor and full 1080 output.

Powerful 80x Zoom Capabilities for ultra high detail.



## Record full-motion video at up to 30fps

Amazing quality image and video performance helps you to attract your audience's attention effectivelypermanent storage on a hard drive just connect a PC/Laptop using the supplied USB cable and software or save direct to your SD Card then you can review anytime anywhere.



## Save Images or video directly to a SD Card

MAX 32GB, easily save images or video directly to SD/SDHC card. Recall your saved material from SD card anytime without connecting to a PC or laptop.

Images can be saved at 0.8MP, 2MP, 5MP or 8MP for maximum flexibility and also quality.



Image	Dimensions
0.8MP	1024 x 678
2MP	1600 x 1200
5MP	2560 x 1920
8MP	3264 x 2448

#### Capture it, save it, display it..

Sometimes we want to keep a memory of what the camera sees: by pressing the "SNAP" button on the remote control, or base unit images and video can be stored direct to a SD CARD. To review your images just hit the playback button. For permanent storage on a hard drive just connect a PC/Laptop using the supplied USB cable and software or save direct to your SD Card (32 GB Max) then you can review anytime anywhere.

#### Flexible (Gooseneck) arm

With an incredibly flexible neck, the DC450 is designed to help teachers and students with its ability to flex and bend, so allowing you to get up-close and personal to capture that perfect image.

With the DC450 you have ultimate control. Want to freeze something under the camera whilst handing out the original, or perhaps compare items using the Picture-in-Picture "PIP" so that comparisons can be made between one item and another. It's all easy for the Optoma DC450 Document Camera (Visualiser).

#### Record Audio & Video

The built in microphone enables easy video and audio recording to create multimedia content for lessons and student presentations.

Eco friendly LED illumination (3 x mode brightness).

Sometimes you need a bit of extra illumination. The DC450 uses eco-friendly; low power LED lamps which are cool to the touch and mercury free, however, due to the excellent sensitivity of the camera the lamp is seldom required. The LED light has 3 light levels for even more flexibility.



## Smart DC Software

It takes just a USB cable to connect your PC / Laptop to the DC450. Start sharing instantly and do editing together live as a class through Smart DC! "Supplied with the DC450" Use all the enhanced drawing and annotation tools! You can also turn your lesson into video clips through the recording feature and save to either you PC / Laptop or to a SD Card.

You can also use Skype to connect to another school and share your ideas.





#### DC450 Connections

- DC 5V Power Socket
- 2. VGA Output Port
- VGA Input Port
- 4 Mini HDMI-Out
- 5 Mini HDMI-In
- 6 CD Cord Clas
- 7 LICE Dort

#### DC450 Control panel

() Power On/Off

Invert image 180°

M. A Maara/Narmal aviit

II Freeze the current image

Capture a still image

Direction keys

Zoom out

One-time auto focus

Pass the signal from PC via RGB input port to RGB output port.

A Turn on/off the LED lamp and adjust the brightness.

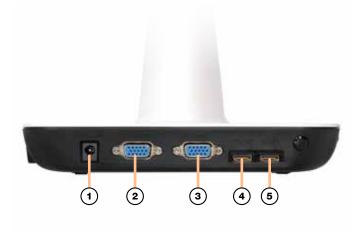
-റ്- Show/hide brightness adjustment bar

Delete one file from memory when in playback mode

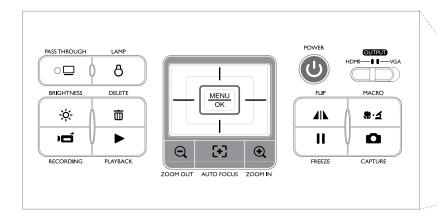
Record a video clip

Enter playback mode to display recorded pictures and video clips

HDMI - VGA Output Switch









#### DC450 Remote

- Brightness hotkey
- (b) Power on / off
- Freeze current image. \* Pause the clip while playing video
- Show or hide on-screen icons
- To show or hide OSD menu
- Finter playback mode to display recorded pictures and video clips
- U Invert image 180°
- Select and adjust
- Record a video clip
- Capture a still image
- $\Theta/\Theta$  700m out / 700m in
- One-shot auto focus
- [-7/[+] Use the level bar to adjust the focus manually
- 2X or 4X digital zoom
- Highlight function on / of
- Mask function on / off
- ▲ Macro / Normal switch
- Adjust highlighted / masked area size
- Set color for highlighted / masked area
- Increase / decrease volume
- Picture in Picture function on /off \*For displaying a still image as an insert while displaying another image



# DC450 Specifications

Image sensor	1/3.2" CMOS Colour sensor
Total pixels	8M pixels
Output resolution	XGA / UXGA / 720 / 1080
Zoom	80X total zoom
200111	10X Optical / 8X Digital
Frame rate	Up to 30fps (max.)
Focus	Auto / Manual
Lens	F2.8-F3.5
Shooting area	A3 landscape (297 x 420 mm) (29.7 x 42 cm)
S. Soung aroa	(11 x 17 inches)
Image rotation	Software rotation 0° / 90° / 180° / 270°
Lens rotation	-90° / 0° / 90° Mechanical rotate
Recording	Yes (to SDHC card)
Internal storage	115Mb
External storage	SDHC (32GB max.)
Image effects	Graphic / Text / B&W / Negative / Mirror / Freeze /
irriage ellects	Sketch
White balance	Auto / Manual (Auto, Fluorescent, Tungsten
	and Custom)
Presentation tools	Yes (Smart DC)
Picture-in-picture	Yes
Still image resolution	8MP / 5MP / 2MP / 0.8MP
Image control	Freeze / Highlight / Mask / Flip / PIP / Slideshow
Capture mode	Single / Continuous
Flicker filter control	Yes (50 / 60Hz)
Remote control	Yes (full function)
Light source	Embedded LED lamp (3 x brightness settings)
VGA output	Yes
VGA pass through	Yes
mini HDMI output	Yes
mini HDMI input	Yes
USB 2.0 port	Yes (PC camera / built-in image download)
Audio input	Built-in MIC
Audio output	Built-in speaker
Clock	For Date Stamp
Microscope adaptor	Yes (Ø28mm ,Ø31mm, Ø33mm, and
\/\(\tau_{\text{\tin}\text{\tex{\tex	Ø34mm eyepieces)
VESA Mounting	75mm VESA mount holes
On-Screen menu	Yes (control from remote or base unit)
0.6	(English, French, Deutsch, Spanish)
Software languages	English, Deutsch, French and Spanish
Dimensions (W x H x D)	operating: 160 x 200 x 530mm
	folded: 160 x 200 x 375mm
Net weight	1.65kg
Power source	DC 5V, 100-240V, 50-60Hz
Power consumption	2.250w ~ 3.75w (Max)
In The Box	DC450 Visualiser
	Power cord (UK/EU/US)
	Power adapter
	Mini HDMI to HDMI cable
	VGA cable
	USB cable (2.0)
	Microscope Adapters (Ø28mm, Ø31mm,
	Ø33mm, and Ø34mm eyepieces)
	Remote control
	User manual / Software (CD)

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