Specifications

SMART Document Camera™

Model SDC-450

Physical specifications

Size	
Folded	10" W × 2 3/4" H × 12" D (25.4 cm × 7 cm × 30.5 cm)
Set up	8" W × 21 3/4" H × 15" D (20.3 cm × 55 cm × 38 cm)
Weight	5.4 lb (2.45 kg)
Shipping size	19" W × 5 3/4" H × 12 5/8" D (48.2 cm × 14.5 cm × 32 cm)
Shipping weight	10 lb (4.5 kg)
Mixed reality cube	
Size	2 1/8" W × 2 1/8" H × 2 1/8" D (5.5 cm × 5.5 cm × 5.5 cm)
Weight	2 oz. (57 g)
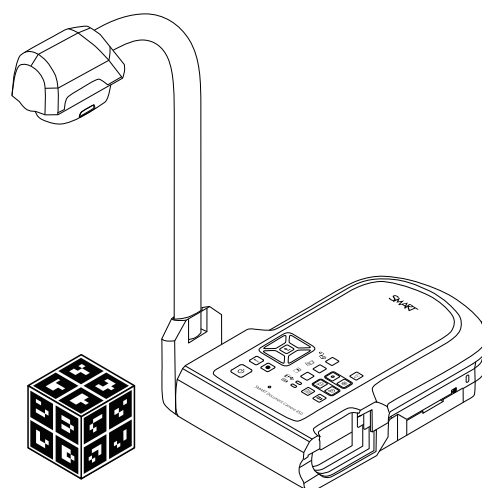
All dimensions +/- 1/8" (0.3 cm). All weights +/- 1 oz. (30 g).

Standard features

Flexible camera arm with rotational movement for easy positioning and storage.

Lighting	Built-in LED illumination lamp
Lens	Lens with manual and automatic focus, f 6.26 (~30.75 mm); f 3.2 (wide angle) to f 6.8 (telephoto)
Zoom	8 × optical, 10 × digital, 80 × total magnification
Resolution	5 MP sensor and resolution
Frame rate	Max. 30 fps
Brightness control	Automatic and manual brightness control
Shooting area	Max. 15 3/4" × 11 3/4" (40 cm × 30 cm)

1   smarttech.com/kb/170280

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Input/output connections

Video format	Analog composite format PAL/NTSC selectable 2-position switch, using RCA connector with supplied RS-232 / composite video cable
VGA output	Analog RGB output 0.7 V at 75 Ω unbalanced
	XGA: 1024 × 768 60 Hz
	SXGA: 1280 × 1024 60 Hz
	HDTV 720p: 1280 × 720 60 Hz
	HDTV 1080p: 1920 × 1080 60 Hz
DVI-I	Provides both analog and digital output formats
	HD 1080p 60 Hz, HD 720p 60 Hz, XGA 60 Hz, SXGA 60 Hz
VGA input	D-sub 15 pin pass-through (see note below)
USB connection	USB mini-B (connect to computer)
SD memory card slot	1 GB to 32 GB
Mass storage mode	Change from camera to mass storage mode using on-screen display (OSD) to access the SD card and internal memory via USB.
Internal memory	Internal memory for storage of up to 240 images
Video recording	Onto USB drive / SD / SDHC

> **NOTE**
>
> The SMART Document Camera video switching feature might not operate as expected if you use it with displays or projection devices not provided by SMART.
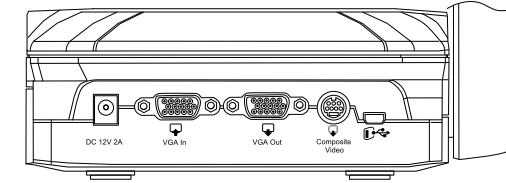
Audio connections

|	
Audio In (microphone)	3.5 mm jack
Audio Out	3.5 mm jack
Microphone	Built-in microphone for voiceover during video recording

Connection panels

Rear panel

The rear connection panel has DC 12 V, 2 A, VGA In, VGA Out, Composite Video out and USB mini-B connectors.
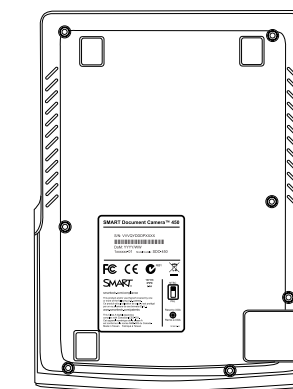

Left panel

The left connector panel has a DVI output, a switch for selecting either computer or USB flash drive and audio in and out connections.
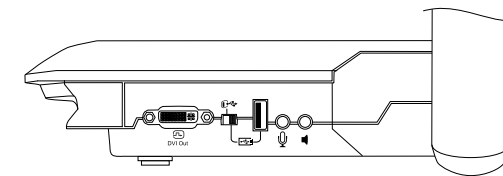
Right panel

The right connector panel has an SD/SDHC memory card slot, a switch for selecting VGA-DVI or composite video output and a security lock slot.
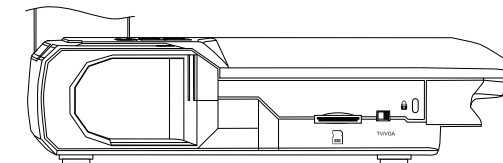
Bottom panel

The bottom panel has an NTSC-PAL switch to change the format of the composite video output for your television and a resolution reset button to reset the VGA/DVI resolution output to XGA.

Power consumption	Max. 21.6 W
Energy efficiency	Level V Energy Star energy efficiency rating
Power source	100–240 V, 50/60 Hz
DC power supply	12 V, 2 A
	5.5 mm, no center pin DC power socket
	Includes plug adapters for power supply for North America, the United Kingdom, the European Union and Australia.
Cables	5' (1.5 m) power cable
	5' 9" (1.8 m) USB-A to USB mini-B
	5' 9" (1.8 m) VGA cable, HD15, M-M
	Composite video adapter cable (RS-232 / composite video)
Software	SMART Notebook™ collaborative learning software and Mixed Reality Tools for the SMART Document Camera are available from smarttech.com/software. SMART Notebook 11 SP1 software or later is required for Mixed Reality Tools. See the SMART Notebook software release notes for a complete list of system requirements.
	Mixed Reality Tools enables you to manipulate 3D models in .notebook files using your SMART Document Camera and mixed reality cube. For more information, see the *SMART Document Camera 450 user's guide* (smarttech.com/kb/170279).
Supported operating systems	Windows® XP (32-bit), Windows Vista® (32-bit, 64-bit), Windows 7 (32-bit, 64-bit), Windows 8 (32-bit, 64-bit), Mac OS X 10.6 and later—Intel® only (PowerPC® not supported)
Also includes	Mixed reality cube
	Anti-glare sheet
	Microscope adapter
Documentation	Included with the product: registration card, warranty sheet, cautions and warnings, and quick connect guide. The user's guide is available online.
Warranty	Five-year limited equipment warranty. See warranty document for details.
Environmental compliance	EU RoHS, EU WEEE
Regulatory certification	CB, CE, C-Tick, FCC

User interfaces

Control panel

1	Select/Enter	7	Select Playback
2	Menu	8	LED Lamp ON/OFF
3	Record video	9	Image brightness
4	Power ON/OFF	10	Zoom IN/OUT
5	Select camera	11	Auto-focus
6	Select computer pass-through	12	Capture to SMART Notebook software or to local memory
		13	USB usage indicator: computer or USB drive

OSD   There are four tabs on the OSD menu: Image, Presentation, Setting and System.

Camera mode

Image settings	◦ Brightness: adjust the brightness level manually between 0–63
	◦ Contrast: adjust the contrast level manually between 0–255
	◦ Mode: select from six types of image settings (Sharp, Graphics, Motion, Microscope, Macro and Infinite)
	◦ Effect: convert the image into color, black/white or film negative
	◦ Mirror: select to flip the image
	◦ Advanced: select to set the Auto Image, Exposure and White Balance
	◦ Focus: adjust the focus manually
	◦ Rotate: select to rotate the image by 90º in Camera mode only

Camera mode	
Presentation	○ Picture in Picture (PIP): shows a thumbnail image of captured picture/video from the memory in the corner of the screen in Camera mode ○ Split Screen: divides screen into two ○ Timer: on-screen countdown timer
Setting	○ Capture: set captured image options (resolution, quality and single/continuous) ○ Recording: set recorded video quality ○ Storage: select SD memory card, USB flash drive or built-in memory ○ Format: delete all data from the selected memory ○ USB to PC: select the mode of your document camera ○ Flicker: select refresh rate between 50 Hz–60 Hz
System	○ Language: select or change language ○ Output Display: set the resolution to display the image on screen ○ Backup: copy images from the built-in memory to a SD card or USB flash drive ○ Save Setting: save current setting in the selected profile number ○ Recall Setting: restore the setting back to the selected profile number ○ Information: display product information ○ Default: restore all settings to factory default settings

Microscope Microscope mode is supported with included adapter.

Operating specifications

Temperature 32 °F to 95 °F (0 °C to 35 °C)

Humidity 30% to 85% humidity, non-condensing

SMART order numbers

SDC-450 SMART Document Camera 450

FRU-CUBE Replacement mixed reality cube

1013550 Mixed reality collaboration cube

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