

## Major Specification

CODE: 1349

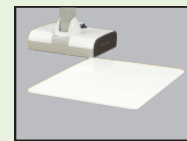
Power/Power consumption	DC 12V (AC adapter AC100-240V) /16.2W	Highlight mask	Provided(Only for color document 1 mode)
Image sensor	1/2.8 inch CMOS	Gamma setting	Provided(Only for color document 1 mode)
Frame rate	30fps	Image mode	Text(1/2/3)/Colored doc.1/Colored doc.2
Total pixels	Horizontal 2,144, Vertical 1,588...Approx 3,400,000 pixels.	Still image storage	Provided
Effective pixels	Horizontal 1,920, Vertical 1,536,	Pause	Provided
Lens	f=4.0mm-48.0mm(12x zoom) F3.2-3.6	Video storage	Provided
Shooting area	SXGA Max.420mm x 334mm Min.48.5mm x 38.5mm	Image rotation	0°/180°
	WXGA Max.420mm x 259mm Min.48.5mm x 30.5mm	Illumination lamp	White LED
	XGA Max.420mm x 313mm Min.48.5mm x 36.5mm	Input selection	Main/External
	1080p Max.420mm x 233mm Min.48.5mm x 27.5mm	USB camera function	Provided(USB Video Class Supported)
	720p Max.420mm x 233mm Min.48.5mm x 27.5mm	Output terminals	RGB output mini-Dsub 15P connector female x 1 HDMI output terminal x 1 Line output terminal φ3.5mm Stereo mini jack x 1
Focus adjustment range	Lens from the edge 50mm - ∞ (f=23.4mm or more) 200mm - ∞ (f=23.4mm or more)	Input terminals	RGB input mini-Dsub 15Pconnector female x 1 HDMI input terminal x 1 Microphone input/Line input φ3.5mm Stereo mini jack x 1
Zoom	Optical 12x , Digital 8x	Ext. control	USB device(2.0 compliant) Type Mini B Receptacle x 1
Focus	Auto/One-push/Zoom interlocked	Memory interface	SD card slot x 1 USB host(2.0 compliant) TypeA Receptacle x 1
Brightness control	Auto/Manual(level adjustable)	Dimensions	W355mm x D373.5mm x H426.5mm(setup) W195mm x D294mm x H469mm(folded)
Resolution	Analog RGB Horizontal/Vertical 800TV or more	Weight	Approx.3.2kg(main unit only)
Image output	SXGA,WXGA,XGA,1080p,720p	Accessories	AC adapter,Power cord,USB cable,Instruction manual, Image Mate CD-ROM,Infrared wireless remote control, AAA battery,Easy start-up guide,warranty sheet
HDMI output	Image output 1080p,720p Audio output PCM 44.1kHz Sampling		
White balance	Auto/One-push/Manual		
Flicker correction	60Hz/50Hz		
Positive/Negative conversion	Provided		
Color/B&W selection	Provided		

## Optional Accessories



**Microscope attachment lens**

CODE 1332



**Stage**

CODE 1345

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

<http://www.elmoglobal.com>

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.

## 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.



ELMO CO., LTD. is one of the sponsors for Japan Committee Vaccines for the World's Children (JCV).

JCV operates under basic guidelines and objectives of the Children's Vaccine Initiative (CVI) founded in 1990 by UNICEF, WHO, UNDP, the Rockefeller Foundation, and the World Bank.

ISO 9001  
ISO 14001

ELMO CO., LTD. (Head Office and Factory's) OMS/EMS has been registered to ISO 9001:2008 and 14001:2004.



Read the "Instruction Manual" carefully before using the projector.

Do not place this product in locations subject to water, humidity, vapor, dust, oil, smoke, etc. as it may cause fire, electric shock, or damage to this unit.

"ELMO", "Image mate", "Teacher's choice" are trademarks of ELMO COMPANY, LIMITED.

XGA, WXGA, and SXGA are trademarks of International Business Machines Corporation. HDMI is a trademark of HDMI Licensing LLC.

This product is licensed under AVC Visual Patent Portfolio License for the personal and non-commercial user of a consumer to (i) play personal or non-commercial AVC Video (ii) play AVC Video that is provided by authorized third-party (iii) Contact MPEG-LA, LLC if used for promotional or commercial purpose. Other brand names and product names may be trademarks or registered trademarks of their respective owners. Design and specifications are subject to change without prior notice.

## ELMO CO., LTD.

6-14, Meizen-cho, Mizuho-ku  
Nagoya, 467-8567, Japan  
E-mail : [overseassales@elmo.co.jp](mailto:overseassales@elmo.co.jp)

## ELMO (Beijing) Co., Ltd.

#603 South Tower, EAS logistics Bldg.,  
No.21 Xiaoyun Rd., Chaoyang Dist.,  
Beijing 100027, P.R.China  
Tel. +86 10 5716 3482  
Fax. +86 10 6462 6605

Distributed by

## ELMO USA Corp.

Headquarters  
1478 Old Country Road  
Plainview, NY 11803 U.S.A.  
Tel. +1 (516) 501 1400  
Fax. +1 (516) 501 0429  
E-mail : [elmo@elmousa.com](mailto:elmo@elmousa.com)  
Web : <http://www.elmousa.com>

## West Coast Branch

5555 Garden Grove Blvd.  
Suite 375  
Westminster, CA 92683  
Tel. +1 (714) 828 8457

## ELMO Europe SAS

Headquarters  
Immeuble Elysées La Défense,  
7C Place du Dôme,  
92056 Paris La Défense, France  
Tel. +33 (0)1 73 02 67 06  
Fax. +33 (0)1 73 02 67 10  
E-mail : [info@elmoeurope.fr](mailto:info@elmoeurope.fr)  
Web : <http://www.elmoeurope.fr>

## German Branch

Hansallee 201, Haus 1  
40549 Düsseldorf  
Germany  
Tel. +49 (0) 211 544756 40  
Fax. +49 (0) 211 544756 60  
E-mail : [info@elmo-germany.de](mailto:info@elmo-germany.de)  
Web : <http://www.elmo-germany.de>

**ELMO**  
— SINCE 1921 —

Teacher's + Choice



ELMO's New  
**Visual Presenter**

Interactive Document Camera

**TT-12**



# The essential teaching tool for the interactive classroom has evolved.

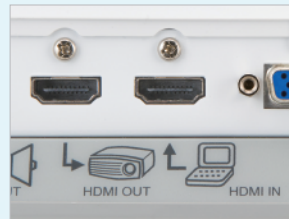
## More beautiful and easier than ever!

### High Definition Images(1080p)

#### 3.4 million pixels CMOS sensor & HDMI output

The high resolution sensor of the TT-12iD allows you to show small letters and 3-D objects in Full HD (1080p) resolution via HDMI.

### HDMI external input selection



#### HDMI & Analog RGB switcher

In addition to the superb image quality and easy-to-use functions, the new TT-12iD is now equipped with the HDMI input. With the independent built-in switchers, the external image input to the HDMI input is output from the HDMI output and the external image input to the Analog RGB input is output from the Analog RGB output.

### Excellent Color Reproduction

The TT-12iD's exact color reproduction is visually engaging for students and enhances the learning experience.

## More convenient!

### Save Classroom Presentations on External Memory

#### Save on SD card or USB flash drive

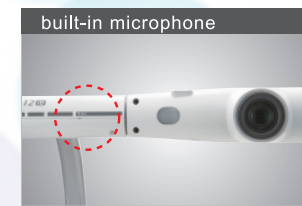
The TT-12iD allows still images (jpg) and audio video files (mp4) to be saved on an SD Memory Card or USB flash Card or USB flash drive for future use.



### Audio input & Output

#### Built-in microphone and external audio input

With TT-12iD, audio enhancement can be added to classroom presentations via the built-in microphone or an external microphone input (Mic in/Line in). The audio output can be routed to the external HDMI or audio line out port.



### Easy Control at Your Fingertips

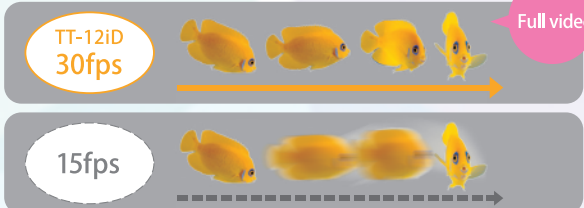


#### Zoom dial and one push AF button (Auto focus with one push)

A simple turn of the zoom dial is all that is needed to zoom in, zoom out and make fine zoom adjustments. For added ease of use, the AF (Auto Focus) button enables easy one-touch auto focusing.

### Reproduces Smooth Motion

#### Full video (30 frames/sec.)



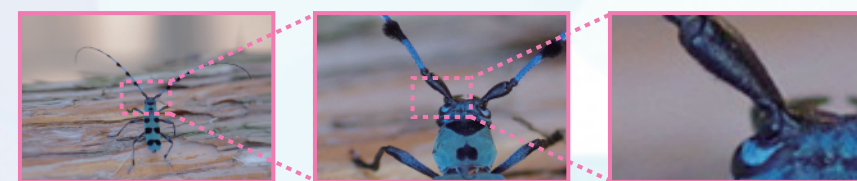
The TT-12iD captures and reproduces moving images at 30fps (frames per second) for the display of truly smooth, natural motion.

## Larger!

### Magnify With Clarity

When the TT-12iD's high-magnification 12X optical zoom is combined with its 8X digital zoom, images can be enlarged up to 96 times for a clear, distortion-free display of even the tiniest details.

$$\text{Optical Zoom } 12x \times \text{Digital Zoom } 8x = 96x$$



#### With a Large Shooting Area, Various Teaching Materials Can Be Displayed at Once

Maximum shooting area of 420mm x 334mm(at SXGA)

## More flexible!

### View Material from Various Angles

#### 300° Rotation

The rotating camera head turns 300 degrees allowing projection from various angles.

Easy operation with one hand



### Easily Connect to an Interactive Whiteboard

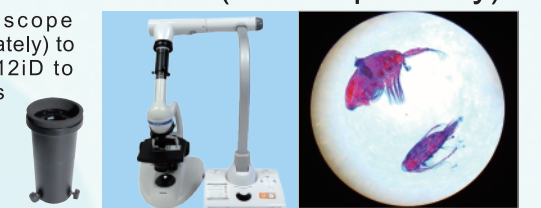
#### USB Camera Function

By simply connecting to a computer via USB, the TT-12iD functions as a USB camera. As no official software is required, the connection with external devices, such as an interactive whiteboard, has improved the broad utility.

### Easily Project Microscope Images

#### Microscope Attachment Lens(sold separately)

Simply attach the microscope attachment lens (sold separately) to a microscope and the TT-12iD to view live microscopic images (e.g., slide specimens) enlarged on a screen or monitor.



### Control from Anywhere in the Classroom

#### Wireless Remote Control

### Anti-Slip

With improved non-slip rubber grip

### Save your movies and photos to your computer

#### Imagemate Software (supplied)

By using the supplied Imagemate Software you can view the live image from the TT-12iD on your computer and save images and videos.

#### Live image display

To display the live image from the TT-12iD on your computer.

#### Normal recording

To record the live image of the TT-12iD as a video. The audio from the microphone connected to your computer can also be recorded.

#### Long time recording

The TT-12iD can record at set intervals. Choose between recording video or images. The audio of your computer cannot be recorded.

#### Annotation tool

You can annotate on content captured by the TT-12iD.