

Ultra Short Throw LCD Projectors

Specifications		
Model name	CP-TW3506	CP-AW3506
Display system	3LCD	
Display device	Size of effective display area	0.59", aspect ratio 16 : 10
	Number of pixels	1,024,000 pixels (1280 horizontal x 800 vertical)
Lens	Zoom	Digital zoom (1.35x)
	Focus	Powered
Light source	250W (high pressure mercury lamp)	
Screen size	60 - 100 inch	
Light output (Brightness)	3,700 lm ¹	
Contrast ratio (full white / full black)	20,000 : 1 ²	
Speaker	16W x 1 mono	
Displayable scanning frequency	Horizontal	15 - 106 kHz
	Vertical	50 - 120 Hz
Display resolution	Computer	VGA, SVGA, XGA, WXGA, SXGA, WXGA+, WXGA++, WSXGA+, UXGA, Full HD, Mac 16"
	Video	NTSC, NTSC4.43, PAL, SECAM, PAL-M, PAL-N, PAL(60Hz), 480i@60, 480p@60, 576i@50, 576p@50, 720p@50/60, 1080i@50/60, 1080p@50/60
Terminals	COMPUTER IN 1	Mini-D-sub 15-pin connector x 1
	COMPUTER IN 2 / MONITOR OUT	Mini-D-sub 15-pin connector x 1
	VIDEO	Composite video (RCA connector) x 1
	HDMI IN	HDMI connector x 2 (HDCP compliant)
	MHL IN	HDMI connector x 1 (HDCP compliant)
	Shared with HDMI1 input terminal	
	AUDIO IN	3.5mm stereo mini connector x 1, RCA connector L/R x 1
	AUDIO OUT	3.5mm stereo mini connector x 1
	Microphone Input	3.5mm mono mini connector x 1
	CONTROL(RS-232C)	D-sub 9-pin connector x 1
LAN	RJ45 connector x 1	
USB-A	USB type A x 2 (PC less Presentation or wireless adapter)	
USB-B	USB type B x 1 (Interactive Function, USB mouse control and USB Display) USB type B x 1 (USB Display and USB mouse control)	
Operating temperature	0 - 40°C (When the ambient temperature exceeds 35°C, the brightness of the lamp is reduced automatically.)	
Operating humidity (RH)	20 - 80%RH (non-condensing)	
Power requirements	AC 100-120V(50/60Hz) : 3.8A , AC 220-240V(50/60Hz) : 1.9A	
Power consumption	AC 100-120V:380W , AC 220-240V:360W	
Standby mode power consumption	0.35W at saving mode ³	
Standard outside dimensions (W x H x D)	382mm x 141mm x 362mm (15.0" x 5.6" x 14.3")	
	377mm x 136mm x 360mm (14.8" x 5.4" x 14.2") (Excluding protrusions)	
Weight	Approx. 4.5kg (9.9 lbs.) Approx. 4.3kg (9.5 lbs.)	
Accessories	Remote control, AA batteries, Power cord, Computer cable, Cable cover, Adapter cover, User's manuals, Security label, Application CD, USB cable, Interactive Pen, AAA batteries, Pen tips, Application DVD	Remote control, AA batteries, Power cord, Computer cable, Cable cover, Adapter cover, User's manuals, Security label, Application CD
Optional parts	Lamp	DT01411
	Filter set	UX37191
	Mounting accessories	HAS-AW100 (Bracket for ceiling mount), HAS-203L (Fixing adapter for low ceilings), HAS-P100 (Fixing adapter for high ceilings), HAS-WM03 (Wall mount unit), HAS-WM05 (Wall mount unit)
	Tabletop use kit	TT-03
	USB wireless adapter	USB-WL-11N
	Interactive Pen	I-PEN4
	Finger Touch Unit	FT-01B

¹ When PICTURE MODE is set to DYNAMIC, and ACTIVE IRIS is set to OFF. ² When PICTURE MODE is set to DYNAMIC, and ACTIVE IRIS is set to PRESENTATION. ³ SAVING mode disables the functions of MONITOR OUT, AUDIO OUT, speaker sound, network communication, RS-232C control except POWER ON command, etc. in standby.

Environment	
<ul style="list-style-type: none"> ▶ Compliance with EU Directive RoHS¹ ▶ Reduction of resin usage in production Use of hot runners in molds for making upper housing in order to reduce mill ends. ▶ Power saving mode engaged during standby ▶ Eco mode Eco mode provides power saving. 	<p>¹ RoHS is the acronym of "Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment".</p>

—Design and specifications are subject to change without notice.

- The projected images and comparison photos in this catalog are simulations.
- LCD panels, polarizers and other optical components and cooling fans may need replacement after prolonged usage. For more details, please consult a Hitachi sales representative.
- Do not use in places where there is a lot of water, dampness, steam, dust, soot or tobacco smoke. This may result in fire or malfunction.
- Optical components (lamp, LCD panel, polarizing plate, PBS [polarizer beam splitter]) have limited service lives. They must be repaired or replaced if they are used for a long period of time.
- These projectors use a mercury lamp with high internal pressure. Because of its properties, this lamp may burst with a loud noise or burn out if struck or after it has been used for a period of time. The time until it bursts or burns out varies greatly according to differences between lamps and usage conditions. Turning the lamp's power on and off frequently shortens its service life.
- Optical components other than the lamp: If the projector is used for six hours or more per day, they may need to be replaced in less than a year.
- LCD panel: If the projector is used continuously for six hours or more, its replacement cycle may be shortened.
- Do not turn projector on again for ten minutes after shutdown. Neglect can shorten the lifetime of the lamp. During use and immediately after use, do not touch anywhere near the lamp and the vents as these parts are extremely hot.
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HITACHI

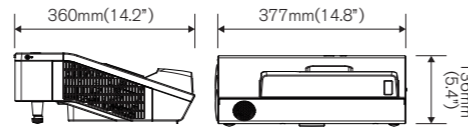
Hitachi America, Ltd., Digital Media Division
 Hitachi Home Electronics Asia (S) Pte. Ltd.
 Hitachi Sales (Malaysia) Sdn. Bhd.
 Hitachi Sales (Thailand), Ltd.
 Hitachi (Hong Kong), Ltd.
 Hitachi Sales Corp. of Taiwan
 Hitachi Australia Pty Ltd.
 Hitachi Europe Ltd., Digital Media Group Consumer Affairs Department
 Hitachi Consumer Marketing, Inc.

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 Whitebrook Park, Lower Cookham Road, Maidenhead, Berkshire, SL6 8YA, UK Tel: +44-844-481-0297 www.hitachidigitalmedia.com
 http://www.hitachi.co.jp/proj/

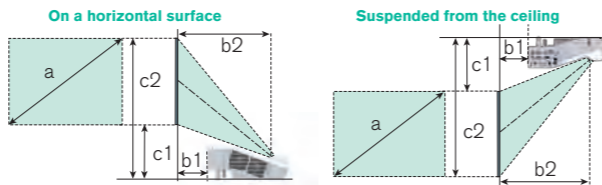
October 2017

NM-E500 102017

Dimensions



Projection Distance

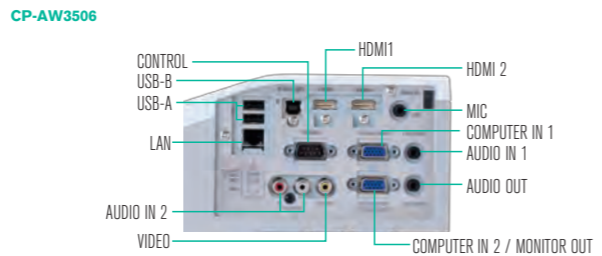
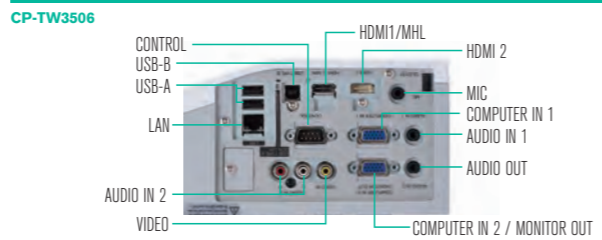


The figures above are not drawn to scale.

CP-TW3506, CP-AW3506 (1,280 x 800) (±8%)

Screen size(diagonal) type (inch)	Projection distance				Screen height				
	a	b1	b2	c1	c2	m	inch	m	inch
60	1.5	0.128	5.0	0.409	16.1	0.313	12.3	1.121	44.1
65	1.7	0.163	6.4	0.444	17.5	0.332	13.1	1,207	47.5
70	1.8	0.198	7.8	0.479	18.9	0.351	13.8	1,293	50.9
75	1.9	0.233	9.2	0.514	20.2	0.369	14.5	1,379	54.3
80	2.0	0.268	10.5	0.549	21.6	0.388	15.3	1,465	57.7
85	2.2	0.303	11.9	0.584	23.0	0.407	16.0	1,551	61.1
90	2.3	0.338	13.3	0.619	24.4	0.426	16.8	1,638	64.5
95	2.4	0.373	14.7	0.654	25.7	0.445	17.5	1,724	67.9
100	2.5	0.408	16.1	0.689	27.1	0.464	18.3	1,810	71.3

Terminals



Ultra short throw projectors that provide vivid images in bright classrooms and meeting rooms

*Projected images are simulations



Ultra short throw interactive projector CP-TW3506

Ultra short throw projector CP-AW3506

Project visual beauty in real time. Technology that delivers details in bright environments.

The video processing technology enhances high-definition video in real time. Using this technology, you can enjoy high-definition images without losing the color information of the original image, and project high-definition video in classrooms, lecture halls, large meeting rooms, and other bright spaces.



ACCENTUALIZER

This function makes pictures look more real by enhancing (1) Shade, (2) Sharpness and (3) Gloss to make pictures clear. You can also adjust the effects by three levels according to your surroundings, video contents, etc.

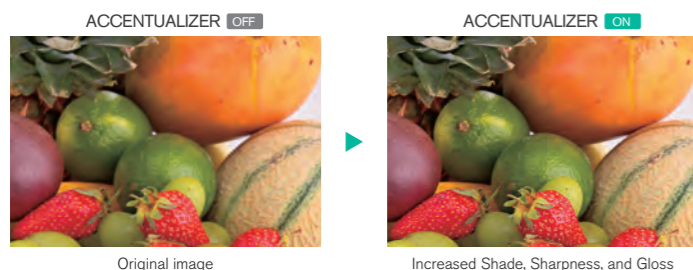
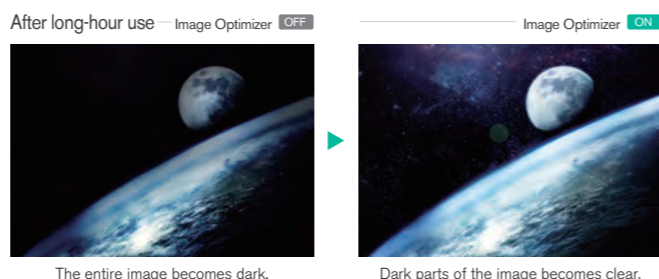


Image Optimizer

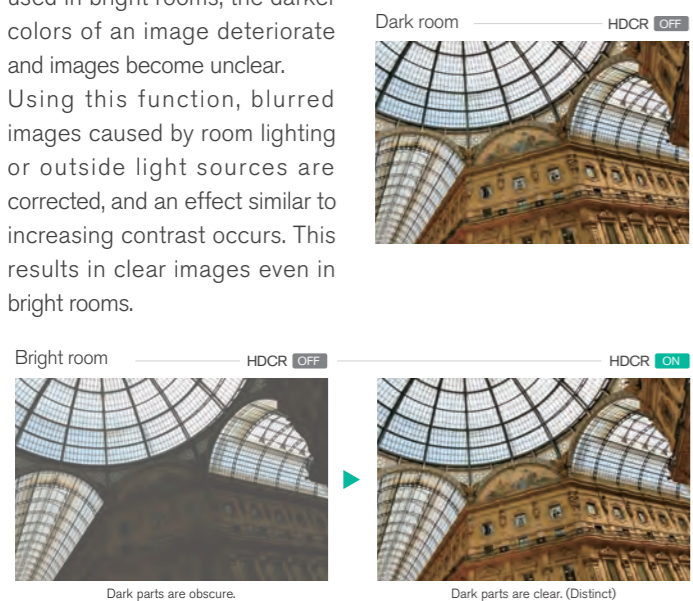
Equipped with IMAGE OPTIMIZER that maintains visibility of an image through automatic image correction in accordance with lamp consumption.

* This function may not work properly when HDCR/ACCENTUALIZER is ON.



HDCR (High Dynamic Contrast Range)

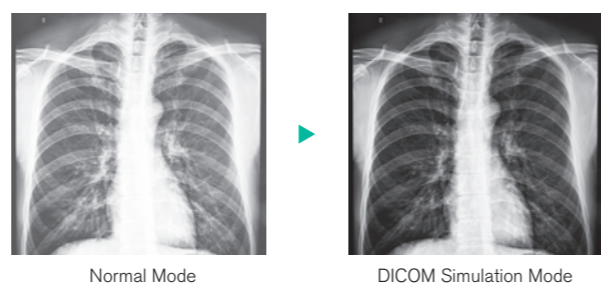
When average projectors are used in bright rooms, the darker colors of an image deteriorate and images become unclear. Using this function, blurred images caused by room lighting or outside light sources are corrected, and an effect similar to increasing contrast occurs. This results in clear images even in bright rooms.



DICOM® Simulation Mode

The DICOM (Digital Imaging and Communications in Medicine) Simulation Mode projects grayscale images which approximate DICOM Part 14 specifications. This mode is ideal for viewing grayscale medical images, such as X-rays, for training and educational purposes.

The projectors have a DICOM (Digital Imaging and Communications in Medicine) Simulation Mode. This mode simulates the DICOM standard, which is a standard applicable to digital communications in medicine, and is useful for displaying medical images such as X-rays. These projectors are not medical devices and are not compliant with the DICOM standard, and neither the projector nor the DICOM Simulation Mode should be used for medical diagnosis.
* Comparison photos are simulations.



* The above images are representations of the effects and differ from actual images.

LINE UP * Local availability may be limited.

Tseries Ultra Short Throw

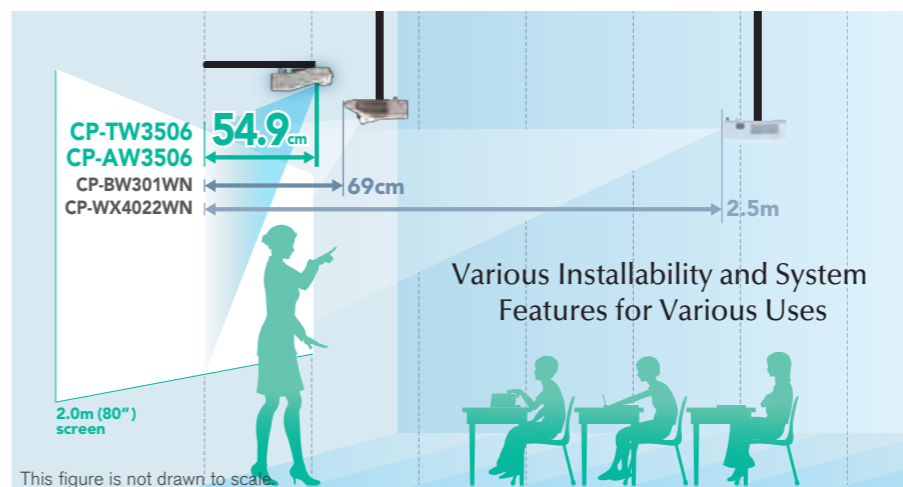


CP-TW3506
WXGA 3,700lm

Aseries Ultra Short Throw



CP-AW3506
WXGA 3,700lm

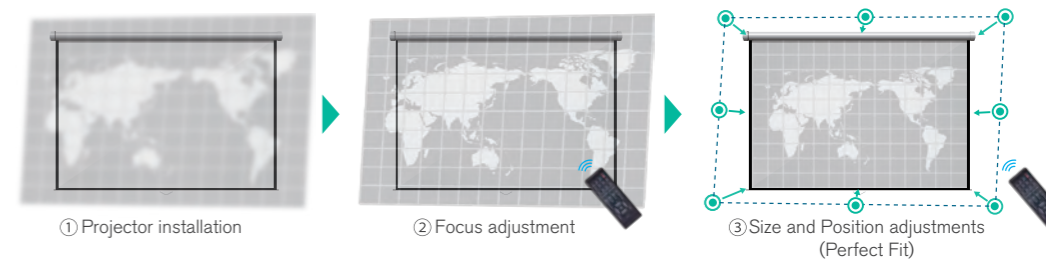


Reduced Glare and Shadows

These projectors feature Ultra Short Throw, for projecting a 2m (80inches) image from only 54.9cm (21.6inches) onto a wall or screen. Ultra Short Throw greatly reduces glare from the projector's light source, making it easier for the teacher or presenter to see the audience. The audience also has a clearer view because the shadows of the teacher's or presenter's hands and body are minimized. The result is a better classroom or meeting room experience for everyone.

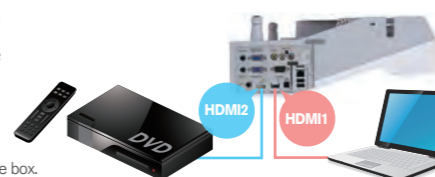
Powered Focus and Perfect Fit

Equipped with powered focus and Perfect Fit with which the position of four corners and four sides of a projected image can be adjusted. With the remote controller at hand, you can adjust focus and the position of an image.



2 - HDMI & MHL*1 inputs

Equipped with 2 HDMI input terminals for the current widely-used interface.



* HDMI cable is not included in the box.

Project images by connecting a smartphone or tablet that supports MHL to the projector using an MHL cable.



*1 For T series projector only. MHL cable is not included in the box.

Tabletop Use (Option)



The optional tabletop use kit TT-03 allows to stand the projector vertically and a 1.5m (60") diagonal image down onto a table.

16W Internal Speaker

Equipped with a 16W speaker and microphone terminal that allow you to comfortably make presentations using content with sound or using a microphone.

Various Network Features

Wireless Capability (Option)

Connect a projector to a computer using the optional USB wireless adapter. The adapter supports IEEE 802.11b/g/n.

SIMPLE ACCESS POINT mode



Without an access point

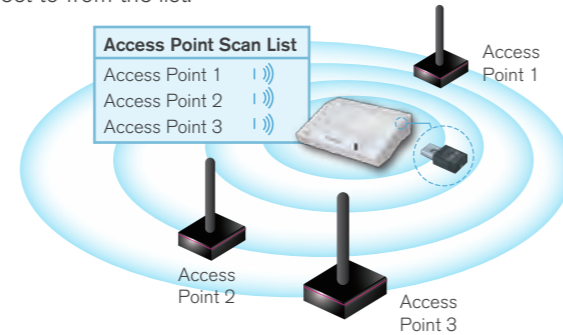
INFRASTRUCTURE mode



With an access point

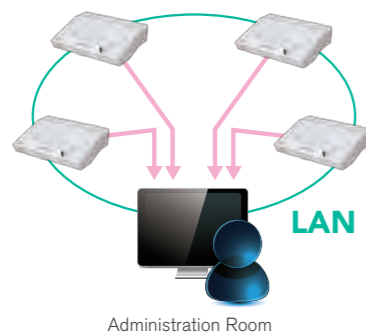
Easy WLAN Connection

Searches available wireless networks and displays the list of SSIDs when used in Infrastructure mode. You can select an SSID to connect to from the list.



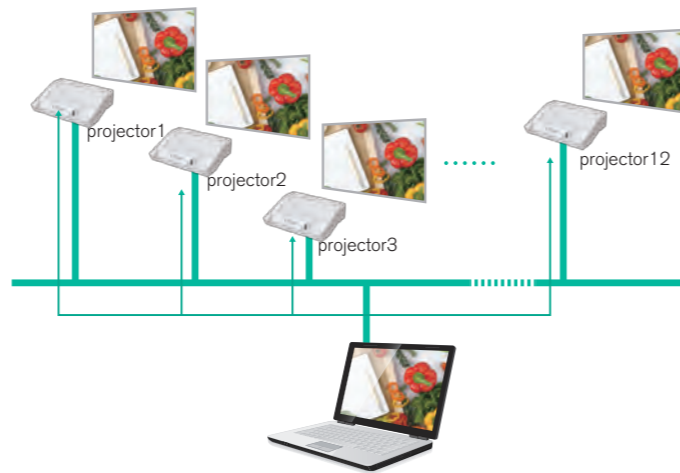
Convenient Networking

Manage and control multiple projectors over your LAN with Centralized Reporting, Scheduling, E-mail Alerts, and My Image (Image Transfer).



Multi Projector

You can project the same image to up to 12 projectors simultaneously. This is useful for meetings and lectures in large venues where a single screen would not be sufficient.



Easy Schedule Setting

You can schedule routine and special projector events, including power on, power off, input selection and other settings.

EVENT SCHEDULE			
MONDAY to FRIDAY			
08:00	POWER	ON	
	INPUTSOURCE	COMPUTER IN 1	
12:30	INPUTSOURCE	HDMI 1	
17:00	POWER	OFF	

Smart Device Control

Plugging the optional USB wireless adapter to the projector and using the dedicated free online application developed by Hitachi, projectors can be controlled from a tablet or smartphone.

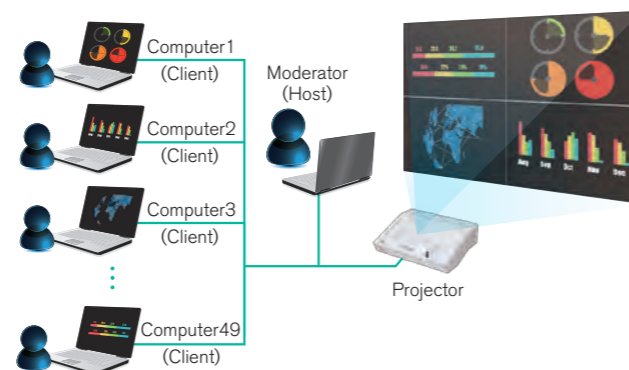


* See the Hitachi website for details http://www.hitachi.co.jp/proj/en/apps/pj_connection.html

Moderator Control Mode

Setting one computer from the multiple computers (up to 50) that are connected to the projector as the moderator (host) makes it possible for the moderator to project from the other computers (Clients).

* Moderator Control Mode supports LiveViewer 6 (Windows® application) only.



Go Green

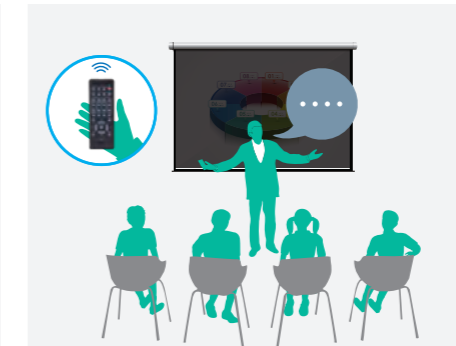
Saver Mode



This feature developed by Hitachi reduces the projector lamp brightness and consumption power, resulting in considerable energy savings. Set the Saver mode time from 1 to 30 minutes, and if the projected image does not change in that time, Saver mode activates. Saver mode can also be activated manually.



During a presentation using the screen.



Darken the screen with the remote control while the presenter speaks.



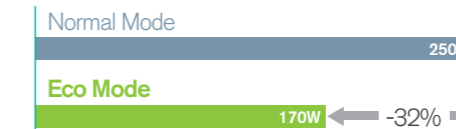
The screen automatically turns dark when not in use during group discussions.

Intelligent Eco Mode

This feature developed by Hitachi automatically changes the brightness of the lamp according to the level of the input signal. Lamp brightness is reduced when a darker image is projected, and returns to normal when a brighter image is projected, eliminating unnecessary energy consumption from the lamp.

Eco Mode

Using Eco Mode reduces lamp power approximately 32% compared to 250W in Normal Mode.



* Lamp brightness in Eco Mode is lower compared to Normal Mode.

Saving Mode

Consumption power can be reduced to 0.35W when in standby, making it possible to reduce running costs.

* STANDBY MODE must be set to SAVING.
* Available functions during standby when SAVING is set are limited.

High Reliability and Stability

Easy Maintenance

The lamp door and the filter cover are located on the top and the side, facilitating maintenance and replacement even when the projector is installed on the ceiling.



Hybrid Filter

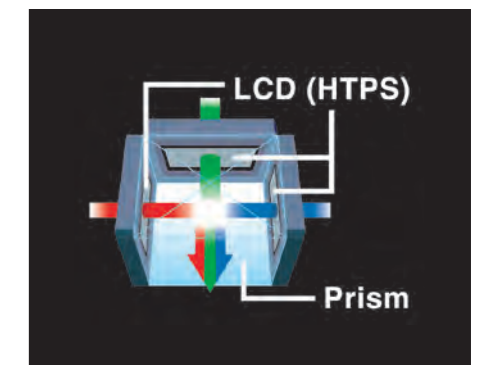
The hybrid filter is composed of an unwoven cloth and a HAF (High Air Flow) filter, protecting the optics from dust, dirt, and chalk particles. The filter can last up to 4,000 hours*1 without cleaning.

*1 Varies according to usage environment.



3LCD chips with Inorganic Alignment Layers

These Hitachi 3LCD projectors incorporate three LCD panels with inorganic alignment layers that are extremely light resistant, increasing brightness and contrast ratio. They provide smooth images and high reliability.



An interactive function with enhanced operability and functionality



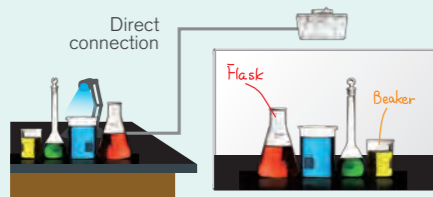
Advanced Writing/Drawing Capabilities

PC less Drawing

T Series projector comes with a built-in drawing function allowing you to directly draw and write on the projected screen without a PC.

Directly Draw on the Projected Screen

You can write and draw on images projected from connected devices such as Document camera.



Save and Open Drawn Screens

You can save the image drawn on the projector screen. This enables you to easily manage what you've taught in the past.

Convenient Painter Tool

Equipped with the Pen, Eraser, Undo, Redo functions. You can also change the pen color and thickness. With the easy-to-use Painter tool bar, you can teach classes smoothly.



Variety Rich Templates

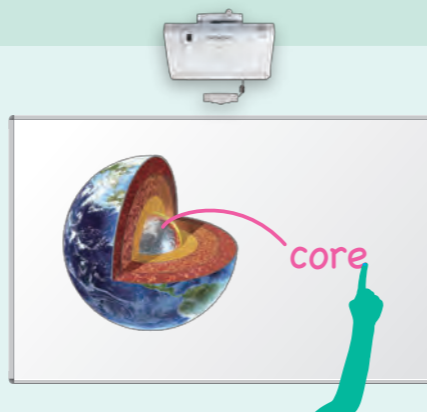
You can conveniently use the interactive function with over 100 pre-installed templates including graphs, Graphic Organizers, Plain Color, and many more.



Finger Touch (Option)

The T Series projector incorporates the optional finger touch unit that enables the projector to detect finger touch activity on the screen area. It allows users to annotate and interact with the material presented. Instead of simply showing static images, students and teachers can interact with on screen material for hands-on interactivity that brings learning to life.

* When using the finger touch unit at bright environment, auto calibration may not be used.
 * Please use the finger touch unit on a flat screen.
 * The finger touch unit may not be used in locations where there is sunlight or light from an incandescent light source.



Multiple interactive pens

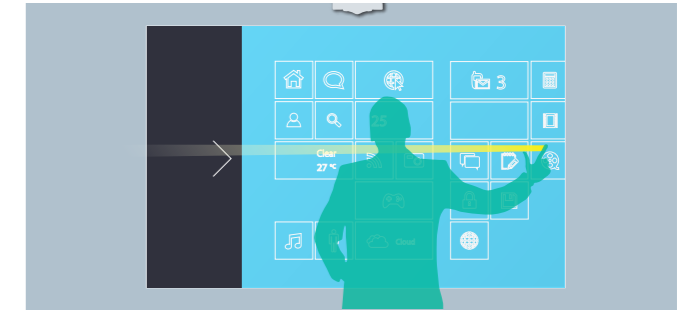
With up to 6 interactive pens pupils can do more than just watch - they can interact with the onscreen content. Let them enjoy providing answers, showing their understanding and becoming involved in lessons as never before.



Windows® multi touch

Windows® 8.1 / 10 multi touch allows users with touch enabled Windows® 8.1 / 10 systems to operate the PC directly from the interactive screen with up to 6 of pens or touches* including Windows® 8.1 / 10 gesture.

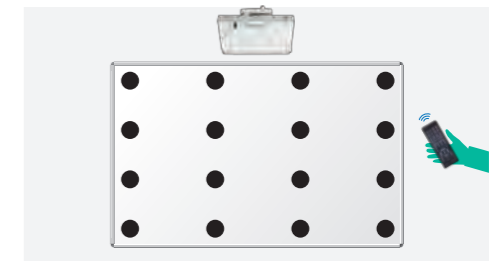
* Optional finger touch unit is required.



Auto Calibration

Auto calibration is completed easily and quickly with the remote control. Calibration can be performed and the interactive function can be used on both the 16 : 10 and 4 : 3 screen type.

* The image for aligning the position is displayed automatically.



Interactive Software

This product includes a drawing application that offers more sophisticated drawing functions.

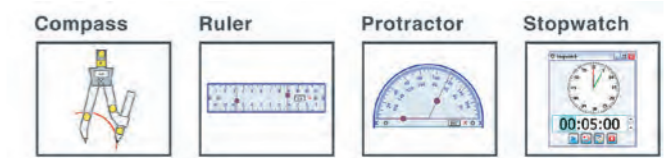
Neatly Convert Letters or Figures

You can automatically convert freehand shapes into geometric objects and handwriting into text on the projected image. These operations are easily accomplished with the interactive pen.



Select a Variety of Useful Tools

The interactive pen lets you operate a compass, ruler, protractor, stopwatch and other useful tools on the projected image, making lessons even easier to understand.



System requirements for drawing application

- **Windows®**
 - **CPU:** Intel® Pentium® 4 (1.8GHz or faster) • **HDD:** 900 MB free space • **Memory:** 1 GB or more • **Display:** 32bit • **OS:** Windows® 7 (32/64bit), Windows® 8.1 (32/64bit), Windows® 10 (32/64bit) (The drawing application has been verified with the latest service pack at the time of release. The drawing application does not support Windows® Tablet PC Edition and Server Edition.) • **Network:** Internet-connected environment • **Application:** Internet Explorer® 9 / 10 / 11, Microsoft® Word 2010/2013, Microsoft® Excel® 2010/2013, Microsoft® PowerPoint® 2010/2013, Adobe® Reader® X/XI, Adobe® Acrobat® Reader® DC, Adobe® Flash® Player 11 • **Others:** DVD-ROM drive, Video cards supporting hardware overlay feature (for using the movie features) [When using the Webcam function] DV (digital video devices, DV camera, D-VHS etc.), Capture Devices which support DirectShow with WDM drivers [For hosting a remote conference] • **CPU:** Intel® Core™2 Duo 2.0GHz or faster • **HDD:** 2GB or more free space • **Memory:** 2GB or more • **Others:** TCP/IP Network of 54Mbps or greater [For i-Learn: maths toolbox] • **Display:** 1024x768 or higher • **Application:** Adobe® Reader® • **Others:** 32bit color 3D graphic card
- **Macintosh**
 - **CPU:** Intel® CPU • **HDD:** 900 MB free space • **Memory:** 1GB or more • **Display:** High Color (16bit) or more • **OS:** Mac OS X 10.9/10.10/10.11 • **Network:** Internet-connected environment • **Application:** Adobe® Flash® Player 11 • **Others:** DVD-ROM drive [For hosting a remote conference] • **CPU:** Intel® Core™2 Duo 2.0GHz or faster • **HDD:** 2GB or more free space • **Memory:** 2GB or more • **Others:** TCP/IP Network of 54Mbps or greater [For i-Learn: maths toolbox] • **Display:** 1024 x 768 or higher • **Application:** Adobe® Reader® • **Others:** 32bit color 3D graphic card