EPSON
EXCEED YOUR VISION

Specifications

Specifications		EH-TW4500	EH-TW3500
Projection System		RGB liquid crystal shutter projection system	
LCD	Pixel Number	2,073,600 dots (1920x1080)x3	
	Native Resolution	1080p	
	Panel Size (Diagonal)	0.74 - inch wide panel with MLA (D7, C2F, 12bit)	0.74 - inch wide panel with MLA (D7, 10bit)
Light Output		1600 lm*	1800 lm*
Color Light Output		1600 lm*	1800 lm*
Screen Size (Projected Distance)		30-300 inch (Wide 0.87 to Tele 19.15 m)	
Contrast		200,000:1**	36,000:1**
HQV		YES	NO
Projection Lens	Type	Manual zoom/focus	
	F-number	2.0-3.17	
	Focal Length	22.5-47.2 mm	
	Zoom Ratio	1-2.1	
Lens Shift Range	Vertical	96 % max.(upward) and 96 % max. (downward)	
	Horizontal	47 % max.(left and right)	
Lamp		200 W UHE (E-TORL)	
Fan Noise		28 dB (Color mode: Theatre Black1/Theatre Black2, Brightness Control: Low)	
Supported RGB signal resolutions		1280x1024/1360x768/1024x768/800x600/640x480	
Supported Video Signals		NTSC/NTSC4.43/PAL/M-PAL/N-PAL/PAL60/SECAM	
Digital Input		HDMI Ver.1.3a (Deep Color, x.v.Color)	
Video Input		3RCA (Component), RCA (Composite), S-Video	
Analog RGB Input		Mini D-Sub 15 pin x 1	
Control I/O		RS-232C	
Color mode		Theatre/Theatre Black1/Theatre Black2/x.v.Color/Natural/Living Room/Dynamic	
Epson Cinema Filter		Controlled automatically with color mode	
		ON : Natural/Theatre/Theatre Black1/Theatre Black2/x.v.Color	
		OFF: Living Room/Dynamic	
Auto Iris Function		Controlled automatically adjusting to video source (User selectable)	
Other Functions		Epson Super White, Customized Gamma Adjustment	
		Six-Axis Color Adjustment, Advanced Sharpness Adjustment, etc.	
Operation Temperature		5 °C to 35 °C (41 °F to 95 °F)	
Power Supply Voltage		100-240 VAC ±10% , 50/60 Hz	
Power Consumption		100-240 VAC 50/60 Hz 3.2-1.3 A	
Size (Maximum Dimension)		390 (W) x 450 (D) x 145 (H) mm	
Weight		Approx. 16.5 lbs/7.5kg	
Supplied Accessories		Power cord (3.0 m)	
		Remote controller	
		User's manual Set	
		Battery Alkaline, size R6 x 2	

*Color mode: Dynamic, Zoom: Wide, Lens shift: V5:5/H Center
**Color mode: Dynamic, Brightness control: High, Zoom: Wide, Lens shift: V10:0/H Center, Auto Iris: On

Connection panel

| HDMI | Component Video 3RCA | S-Video | Video RCA | Computer Mini D-Sub 15 pin | Control RS-232C | Trigger Out |

HDMI1 HDMI2 Y Cb/Pb Cr/Pr Component S-Video Video PC RS-232C Trigger Out
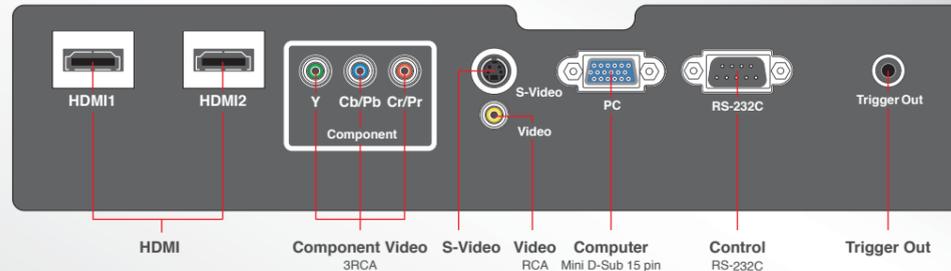
Optional Accessories

ELPLP49	Spare Lamp
ELPAF21	Air Filter (1 unit)
ELPCC01W	Cable Cover (TW3500)
ELPCC02B	Cable Cover (TW4500)

Common Options

ELPSC06	Portable Screen
ELPSC07	60 inch Screen
ELPSC08	80 inch Screen
ELPSC18	80 inch Pull Up Screen

Warranty Service

2 years Onsite Warranty
Service to be provided for local purchase only.

EPSON COVERPLUS+
Extended Warranty

The warranty service can be extended by purchasing Epson COVERPLUS Extended Warranty.
For more information, please contact Epson customer support.

Bold, Bright, Beautiful...3LCD Technology
3LCD technology achieves brighter, more natural images and smoother, sharper video playback. No color break-up makes images gentler on the eyes.

Projection Distance and Screen Size

16:9 Screen Size Units: cm (in.)	Projection Distance Units: cm (ft.)	
	Shortest (Zoom Adjustment Wide)	Longest (Zoom Adjustment Tele)
30″ 66 x 37 (26 x 15)	87 - 188 (2.8 - 6.2)	
40″ 89 x 50 (35 x 20)	117 - 252 (3.8 - 8.3)	
60″ 130 x 75 (51 x 28)	177 - 380 (5.8 - 12.5)	
80″ 180 x 100 (71 x 39)	238 - 508 (7.8 - 16.7)	
100″ 220 x 120 (87 x 47)	298 - 636 (9.8 - 20.9)	
120″ 270 x 150 (106 x 59)	359 - 764 (11.8 - 25.1)	
150″ 330 x 190 (130 x 75)	450 - 956 (14.7 - 31.4)	
200″ 440 x 250 (173 x 98)	601 - 1276 (19.7 - 41.9)	
300″ 660 x 370 (260 x 146)	903 - 1915 (29.6 - 62.8)	

4:3 Screen Size Units: cm (in.)	Projection Distance Units: cm (ft.)	
	Shortest (Zoom Adjustment Wide)	Longest (Zoom Adjustment Tele)
30″ 61 x 46 (24 x 18)	106 - 230 (3.5 - 7.6)	
40″ 81 x 61 (32 x 24)	143 - 309 (4.7 - 10.1)	
60″ 120 x 90 (47 x 35)	217 - 465 (7.1 - 15.3)	
80″ 160 x 120 (63 x 47)	291 - 622 (9.6 - 20.4)	
100″ 200 x 150 (79 x 59)	365 - 778 (12.0 - 25.5)	
120″ 240 x 180 (94 x 71)	439 - 935 (14.4 - 30.7)	
150″ 300 x 230 (118 x 91)	550 - 1170 (18.0 - 38.4)	
200″ 410 x 300 (161 x 118)	735 - 1561 (24.1 - 51.2)	
300″ 610 x 460 (240 x 181)	1105 - 2344 (36.3 - 76.9)	

Super-resolution always brings you to Full HD World

3LCD

Home Projector
EH-TW4500

Home Projector
EH-TW3500

Home Projector EH-TW4500
Home Projector EH-TW3500

Ultra High Contrast **200,000:1**

(EH-TW3500 has a 36,000:1 contrast ratio)

Super-resolution Technology*²

Improve the resolution of the picture which blurred or blurred by expansion processing

Up-scaling

SD video

HD video

Super-resolution processing

Mixed color separation
- Separate mixed colors that are neighboring a border of an object in order to deblur.
- People feel that the resolution got higher and the quality was improved.

Real Color Reproduction*²

3D LUT
3D LUTs are commonly used in the film industry for the purposes of monitor calibration and color management.
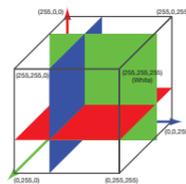
Real home cinema 3D LUT
Newly developed algorithm which makes 3D LUT to reproduce natural and precise colors
- Vastly increase the management points of color

High Specs for Smoother Images in a Quiet, Full High Definition Projector

Epson's newly developed 12-bit drive*¹ new D7 liquid crystal panel: Crystal Clear Fine*², along with Epson's own DEEPBLACK technology*³ work together to project extremely sharp, high contrast images. It has been newly equipped with the HQV Reon VX chip for "noise" reduction and is now capable of projecting smoother images.

Equipped with Crystal Clear Fine*²

"DEEPBLACK" technology*³
The contrast ratio is dramatically improved by newly developed Epson Optical Technology.

Full high-definition LCD panel (1920 x 1080 pixels)

720 panel (1280 x 720 pixels)

DEEPBLACK equipped machine

Previous machines

Frame Interpolation Technology*²

Film is encoded on Blu-ray at 24 frames per second. Frame Interpolation deconstructs and reconstructs these sources for a 1080p frame rate output of up to 120 Hz, virtually eliminating flicker and frame-to-frame judder.

Frame Interpolation ○ Normal ○

Off interpolation

ON interpolation

Advanced Auto Iris Technology*²

Double layers, double dynamic contrast ratio

TW4500 have auto iris with double layers.
- It controls the light intensity more and make dark image more darker.
- TW3500 is made the opening narrow and also can control the light intensity more.

HQV SILICON OPTIX

It's equipped with the HQV Reon VX chip for a reduction in "noise" and the production of smooth and clear images*⁴.

Jaggy reduction

Original image | Without Mixed Color Separation | With Mixed Color Separation

Mosquito noise reduction

Original image | Without HQV Reon VX Chip | With HQV Reon VX Chip

Block noise reduction

Original image | Without HQV Reon VX Chip | With HQV Reon VX Chip

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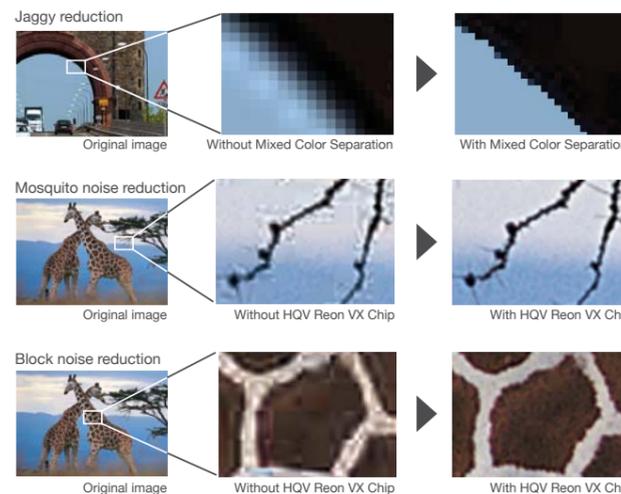
Top-class Basic Performance Features for Outstanding Image Quality

Bright 1800 lm*⁵, E-TORL
E-TORL

The small, yet highly luminescent 200W lamp (E-TORL) is capable of projecting an impressive 1800 lm, making it possible to enjoy clear images.

(E-TORL = Epson Twin Optimize Reflection Lamp)

Projection Lens:
Wide Zoom Range 2.1x and High Resolving Power

Color aberration is diminished considerably thanks to the precise arrangement of a large caliber aspherical glass lens and extra low dispersion glass. Also, the number of lenses used has been reduced to 14 which now employ a newly developed ultra-low reflection multi-coating to minimize flare and allow the images to be represented brightly in sharp, ultra high contrast.

High Contrast Ratio (200,000:1*⁶)
Thanks to DEEPBLACK technology*³,
D7 technology LCD panel,
"C₂Fine"*² and Auto Iris Function

By making use of the DEEPBLACK technology which suppresses elliptical polarization in the LCD and minimizes light leakage along with the D7 "C₂FINE", the projector can regulate the image brightness and contrast like never before. In bright scenes, the whites are very bright and dark scenes are projected in a richer black than ever possible before, allowing for incredibly clear and vivid images projected with an amazing 200,000:1*⁶ contrast ratio.

Low contrast image | High contrast image

Epson Cinema Filter
"Epson Cinema Filter" adjusts the image color optically. By adjusting the three primary colors of light (Red, Green and Blue) with exceptional balance and precision, the projector is able to project an extensive range of colors for beautiful images with genuine color.

v'
0.6
0.5
0.4
0.3
0.2
0.1
0 0.1 0.2 0.3 0.4 0.5 0.6 u'

—— EH-TW4500
······ NTSC

Epson Cinema Filter

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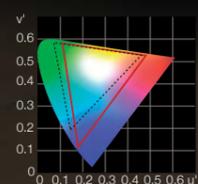
7 Color Modes
Choose from any one of the seven pre-set color modes for perfect color to suit the image. It is also possible to change the lamp brightness between high and low, depending on your taste.

Color Mode	Lamp Power	New Epson Cinema Filter	Recommended Applications
Dynamic	High/Low Changeable	Off	For all-round performance
Living Room			For faithful representation of incoming signals
Natural			Recommended for most movies
Theatre		On	Clear, professional monitor-like images
Theatre Black 1			For the warmth and depth of theater-like images
Theatre Black 2			
x.v.Color			Color management - Extended-gamut YCC color space for video applications - xvYCC

Built-in Ver.1.3a HDMI terminal x2 Also corresponds with 1080p input

It has a built-in Ver.1.3a HDMI terminal capable of transmitting nearly double the information of previous HDMI versions, thus expanding the number of colors considerably. Connecting with a next generation Ver.1.3a compatible disc player makes it possible to enjoy high definition images even further.

HDMI 1 | HDMI 2 | **HDMI**

Wide-ranging Adaptability

Vertical & Horizontal Lens Shift
It comes equipped with vertical and horizontal lens shift function that allows the user to reposition the image up to nearly 2 screen widths laterally and close to 3 screens vertically without altering the shape or compromising the image quality. This useful function allows you to place the projector off to the side and view an undistorted image on the screen.

Horizontal Lens Shift

100" wide screen (2.2m width)
3.0m
3.3m
2.2m
Range of set up possibilities
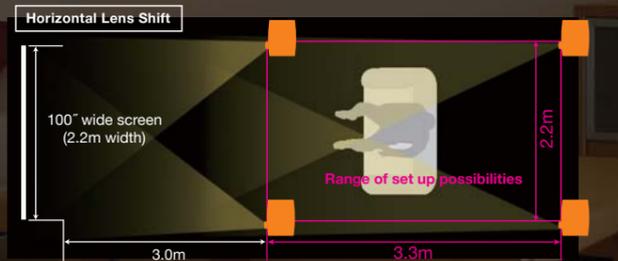
The projection screen can be moved left or right nearly 2 screen widths.
*The horizontal lens shift allows the center of the screen to be shifted approximately half a screen width to the left or right of center.

2.1x Wide Zoom Ratio / Short Focus Lens
The wide zoom ratio helps to increase the range of set up possibilities by allowing for movement both forward and back with relation to the screen. The short focus lens is capable of projecting a 100 inch screen from as close as 3.0m from the screen.

Vertical Lens Shift

100" wide screen (1.2m height)
58cm
3.0m
3.3m
2.3m
Range of set up possibilities
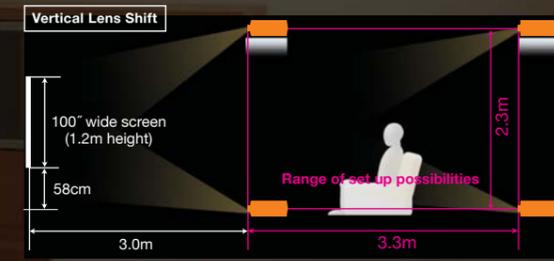
The projection screen can be moved up or down nearly 3 screens.
*The vertical lens shift allows the center of the screen to be shifted up or down approximately one screen height in either direction.

### Easy to Use

Easy to Use Remote Controller
The conveniently sized and well designed remote controller is easy to hold and use. Light-up the buttons with a push of the light activation button for use in a dark room.

EH-TW4500 | EH-TW3500

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x.v.Color
x.v.Color

xvYCC is an Extended-gamut YCC color space for video applications. Natural and vivid colors can be displayed more accurately with x.v.Color technology.

Six-Axis Color Adjustment
The hue and saturation for each of the RGBCMY color components can be adjusted independently. This feature enables you to make more precise color adjustments than anything so far, allowing you to customize images to suit your own color preferences.

[RGBCMY]
Hue | Saturation | Brightness

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x.v.Color is a registered trademark of Sony HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

*¹ EH-TW3500 has a 10-bit drive. *² Only with EH-TW4500. *³ Only with EH-TW4500. *⁴ Only with EH-TW4500. *⁵ EH-TW4500 is 1800lm. *⁶ EH-TW3500 has a 36,000:1 contrast ratio.