# **Panasonic**

## PT-TW330 Series

Short Throw 1-Chip DLP™ Projectors

PT-**TW331R** PT-**TW330** 

PT-**TW240** 

PT-**TX301R** 

PT-**TX300** 



## **Introducing 5 New Short Throw Projectors:** Some Models are Available with an Interactive Function."

A short throw projector with superior functions, which is also more environmentally friendly.

This enhanced line, featuring an interactive function\*1, will make your lectures more effective, and give your presentations more impact.

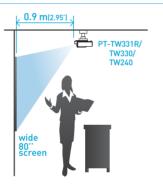




### Superb Performance in a compact body

#### Images are projected onto an 80-inch wide screen with a projection distance of 0.90 m\*2

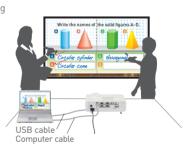
Close range projection reduces not only shadows of the presenter but also glare of the projection light, making lectures and meetings less stressful.



#### The interactive function\*1 allows you to write on a projected image

You can write or draw figures on the projected image with the Interactive Pen/ Pointer. The scanning camera frame rate of PT-TW331R/TX301R, which is

twice as high as that of our existing products \*8; ensures smoother writing. In addition, two users can write simultaneously, to make classes and presentations more effective. It is easy to store the words and figures in a computer for information sharing.



#### A Maximum 8,500-Hour\*3\*4 Lamp Replacement Cycle

When the lamp power is set to AUTO, it can operate for up to 8,500 hours\*3\*4 without needing to be replaced. This also helps reduce maintenance and operating costs.

\*When set to AUTO, the projector automatically controls the picture by adjusting the lamp to

#### A Full 3,100 lm\*5 of Brightness and 7,500:1 Contrast

A remarkable 3,100 lm\*5 of brightness and 7,500:1 contrast have been achieved in a compact, easy-to-carry body. Bright, clear images enhance a variety of viewing situations and applications.

#### Quiet 29-dB\*6 Design Does Not Interrupt **Meetings or Classes**

The quiet design keeps noise levels down to 29 dB\*6, so the sound of the cooling fan is hardly noticeable. This helps the audience to keep their attention on the speech when someone is giving a presentation or on the screen images during quiet scenes.

#### Compact 2.5 kg(5.5 lb)\*7 Body

The compact, lightweight body makes it easy to carry from room to room, or to the client's office for an on-site presentation.

#### Convenient features of Interactive functions

#### **Auto calibration**

The auto calibration helps to reduce setting time. Manual calibration is also available by touching four points with the Interactive Pen/Pointer.

#### Dual pen support\*9

Select the dual pen mode (Half screen mode/Full screen mode). Two users can write simultaneously, making your classes and presentations more efficient.

#### Half screen mode

The drawing screen is divided into two sections. Individually select color and line width for each screen.



#### Two Interactive Pens provided

Lightly touch the screen with the pen to write

#### Full screen mode

Write on the full screen. The color and line width of the two pens are same



\* Interactive Pointer available as an option

#### **Functionality improved**

The faster frame rate ensures smooth, comfortable writing.



### **Excellent and Eco Friendly Performance**

#### Intelligent Lamp Control System Reduces Power Consumption

When the lamp power is set to Auto, the intelligent lamp control system automatically adjusts the lamp output in accordance with the brightness of the projected image and reduces it by up to 70%\*10. As a result, power consumption is effectively reduced.

#### Conventional Lamp System



#### Intelligent Lamp Control System



#### 0.5 W\*11 Standby Power Consumption

The standby power consumptions is as low as  $0.5 \,\mathrm{W}^{*11}$ , reducing running cost and effects on the environment

#### **Eco-friendly**

- No halogenated flame retardants are used in the cabinet.
- Lead-free glass is used for the lens.
- Coating-free cabinet for easy recycling.
- Switchable lamp mode

#### Various Convenient Functions

#### **HDMI Input Terminal and Abundant Interfaces**

Extensive interfaces include an HDMI input terminal, 2 sets of computer (RGB) input terminals, a wired LAN terminal, and a serial (RS-232C) terminal for external control. These features support a wide range of system architectures for portable or ceiling-mounted use.



#### 8 W High-output Speaker Meets Your Meeting/Seminar Room Needs

The volume level of the 8 W high-output speaker is enough for meeting rooms and classrooms; you do not need to use an external speaker. You can make multi-media presentations.

#### **Audio Can Be Output in Standby Mode**

Audio can be output from the audio output terminal in Standby mode\*12. This function is useful when the audio output terminal is connected to the external audio system \*13 via the projector.

#### "Wall Color Setting" Convenient for a Classroom with no Screen

When projecting onto non-white surfaces, this mode corrects the color scheme of the projected image to prevent color irregularities from occurring between the source and the projected image. Five colors available: white, light yellow, light blue, pink and dark green.

#### "Crestron Connected™" Compatible

The wired LAN terminal allows Crestron's application software, "Crestron Connected™", which can control various system devices by using a personal computer connected to the network.

#### Easy to Replace the Lamp

Replace the lamp from the top of the projector. When replacing the lamp, there is no need to detach the projector from the ceiling bracket.



#### "Security Bar" Useful for **Protection against Theft**

Equipped with a "security bar" for preventing theft.



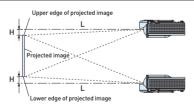
#### Wireless Remote Control is Convenient When Using More Than One Projector

A maximum of six IDs (ID1-ID6) avilable, and "ALL" IDs can be set up, allowing individual remote control of each projector.



#### **Projection distance**

unit: meters (feet)



#### PT-TW331R/TW330/TW240

(10.10 aspect ratio, till ow ratio. 0.321.1)							
Diagonal image size		Projection distance (L)		Height from the edge of screen to center of lens (H)			
1.14	[45"]	0.51	(1.66')	-0.08	(-0.25')		
1.27	[50"]	0.56	(1.84')	-0.08	(-0.27')		
1.52	[60"]	0.67	(2.21')	-0.10	(-0.33')		
1.78	[70"]	0.79	(2.58')	-0.12	(-0.38')		
2.03	[80"]	0.90	(2.95')	-0.13	(-0.44')		
2.29	[90"]	1.01	(3.32')	-0.15	(-0.49')		
2.54	[100"]	1.12	(3.68')	-0.17	(-0.55')		
3.05	[120"]	1.35	(4.42')	-0.20	(-0.66')		
3.81	[150"]	1.68	(5.53')	-0.25	(-0.82')		
5.08	[200"]	2.25	(7.37')	-0.33	(-1.10')		
5.72	[225"]	2.53	(8.29')	-0.38	(-1.23')		

PT-TX301R/TX300

(4:3 aspect ratio; throw ratio: 0.626:1)

Diagonal image size		Projection distance (L)		Height from the edge of screen to center of lens (H)	
1.02	[40"]	0.51	(1.67')	-0.09	(-0.30')
1.27	[50"]	0.64	(2.09')	-0.11	(-0.38')
1.52	[60"]	0.76	(2.50')	-0.14	(-0.45')
1.78	[70"]	0.89	(2.92')	-0.16	(-0.53')
2.03	[80"]	1.02	(3.34')	-0.18	(-0.60')
2.29	[90"]	1.14	(3.76')	-0.21	(-0.68')
2.54	[100"]	1.27	(4.17')	-0.23	(-0.75')
3.05	[120"]	1.53	(5.01')	-0.27	(-0.90')
3.81	[150"]	1.91	(6.26')	-0.34	(-1.13')
5.08	[200"]	2.54	(8.35')	-0.46	(-1.50')

#### **Dimensions**

unit: mm (inch)

PT-TW331R/TX301R





PT-TW330/TW240/TX300





- \*1 PT-TW331R/TX301R
- PT-TW331R/TW330/TW240.
- This is the maximum value when the lamp power is set to Auto mode where the lamp is turned on for 2 hours and off for 0.25 hours. If the lamp is turned on more times or kept on for a long time, the lamp replacement cycle will shorten. The usage environment affects the duration of the lamp.

  4 PT-TW240. PT-TW331R/TW330/TX301R/TX300 can operate for up to 7,500 hours.

  5 PT-TW331R/TW330. PT-TX301R/TX300 has brightness of 3,000 lm. PT-TW240 has brightness

- \*6 The lamp power is set to Eco2. For PT-TW240, set it to Eco.
  \*7 PT-TW330/TW240/TX300.
  \*8 The frame rate of PT-TW331R/TX301R is 60 fps.; that of our existing model, PT-TW231R, is 30 fps. \*9 Available for Windows® operating system.
  \*10 PT-TW331R/TW330/TX301R/TX300. For PT-TW240, the lamp output is reduced by up to 64%
- \*11 When [LAN (Standby)] / [VGA Out (Standby)] / [In Standby Mode (Audio)] are all set to [Off].
- Select the Menu for setting.
- \*13 In addition to the speaker, an audio amplifier is necessary.

#### **Specifications**

N	lodel	PT-TW331R	PT- <b>TW330</b>	PT- <b>TW240</b>	PT-TX301R	PT- <b>TX300</b>			
Power supply		100—240 V AC, 50/60 Hz							
Power consumption		301 W (0.5 W when STANDBY MODE set to ECO,*1 6.0 W when STANDBY MODE set to NORMAL.*2)		254 W (0.5 W when STANDBY MODE set to ECO,*1 6.0 W when STANDBY MODE set to NORMAL.*2)	301 W (0.5 W when STANDBY MODE set to ECO,*1 6.0 W when STANDBY MODE set to NORMAL				
DLPTM	Panel size		16.5 mm (0.65 inches) (16:10 aspect ratio)		14 mm (0.55 inches) (4:3 aspect ratio)				
chip	Display method			DLP™ chip x 1 DLP™ system					
	Pixels		1,024,000 (1,280 x 800) pixels	786,432 (1,024 x 768) pixels					
Lens			.521:1 Throw ratio), manual focus, F 2.8, f 7		Fixed(0.626:1 Throw ratio), manual focus, F 2.8, f 7.26mm				
Lamp		240 W U	lamp 190 W UHM lamp		240 W UHM lamp				
Lamp replacement cycle (Normal / Eco / AUTO)		, , ,	3,000 / 4,000 (Eco1,Eco2) / 7,500 hours*3		3,000 / 4,000 (Eco1,Eco2) / 7,500 hours*3				
Screen size	. 0 /		- 5.72 m (45 – 225 inches), 16:10 aspect ratio		1.02 – 5.08 m (40 – 200 inches), 4:3 aspect ratio				
Brightness*4		3,10	U IM	2,700 lm 80%	3,000 lm				
Contrast*4	mer uniformity*4		7 500 : 1 (full on off)(D		nin Lamp power: ALITO)				
Resolution		1 280 × 800 pivole /laput cia	7,500 : 1 (full on/off)(During RGB signal input, Color mode : Dynamic, Lamp power:AUTO)  1,280 × 800 pixels (Input signals that exceed this resolution will be converted to 1,280 × 800 pixels.)  1,024 × 768 pixels (Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.)						
Optical axis	chift	1,200 × 000 pixeis (iriput sig	10:-1.2						
Оршсаі аль	HDMI	10:-1.2 fr: 15 kHz – 91.1 kHz. fv: 24 Hz –85.1 Hz. dot clock: 25 MHz –162 MHz							
	RGB (analog)	1H: 15 kHz – 91.1 kHz, W: 24 Hz –85.1 Hz, dot clock: 25 WHz – 102 WHz							
Scanning frequency	YPBPR (YCBCR)	fh: 15.75 kHz, fv: 60 Hz [480i(525i)], fh: 15.63 kHz, fv: 50 Hz [576i(625i)], fh: 33.75 kHz, fv: 60 Hz [480p(525p)], fh: 27.00 kHz, fv: 60 Hz [720(750)/60p], fh: 37.50 kHz, fv: 50 Hz [720(750)/50p], fh: 37.50 kHz, fv: 50 Hz [780(1125)/50p], fh: 27.00 kHz, fv: 24 Hz [1080(1125)/24p], fh: 67.50 kHz, fv: 60 Hz [1080(1125)/50p]							
	Video								
Keystone co	rrection range	fii: 15.75 kHz, fi: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fii: 15.63 kHz, fi: 50 Hz [PAL/PAL-N/SECAM]  Vertical: ±40° (manual)							
Installation		Ceiling/floor, front/rear							
	HDMI IN	HDMI 19-pin x 1 (Deep color, compatible with HDCP) Audio signal Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)							
	COMPUTER 1 IN	D-sub HD 15-pin (female) x 1 [RGB/YPB(Ca)/PR(Ca) x 1]							
	COMPUTER 2 IN	D-sub HD 15-pin (female) x 1 [RGB/YPB(Cs)/PR(Cs) x 1]							
	MONITOR OUT	D-sub HD 15-pin (female) x 1 (The signal selected from computer input 1/2 is output.)							
	VIDEO IN	Pin jack x 1							
Terminals	SERIAL IN	D-sub 9-pin (female) x 1 for external control (RS-232C compliant)							
	AUDIO 1 IN	M3 x 1 (L-R x 1) (for Computer)							
	AUDIO 2 IN	M3 x 1 (L-R x 1) (for VIDEO)							
	I AN	M3 x 1 (L-R x 1) (variable)  RJ-45 × 1 (for network connection, 100BASE-TX/10BASE-T, compliant with PJLink™ (class 1))							
	Mini USB	1 (for Interactive function)  - 1 (for Interactive function)  - 1 (for Interactive function)				_			
Built-in spe		1 (for interactive randition)	eractive function) – I (for interactive function) –  7 cm x 4 cm Oval x1 output power 8 W (Monaural)						
Cabinet ma		Molded plastic (PC)							
Dimensions (W × H × D)		288 x 106*5 x 270.5 mm (11-11/32" x 4-3/16" x 10-21/32)	288 x 100*5 x 246*6 mm (11-	11/32" x 3-15/16" x 9-11/16)	288 x 106*5 x 270.5 mm (11-11/32" x 4-3/16" x 10-21/32)	288 x 100*5 x 246*6 mm (11-11/32" x 3-15/16" x 9-11/16)			
Weight		Approx.2.7 kg (6 lbs)*7	Approx.2.5 I	cg (5.5 lbs)*7	Approx.2.7 kg (6 lbs)*7	Approx.2.5 kg (5.5 lbs)*7			
Noise level		37 dB (Lamp power: Normal); 32 dB (Lamp power: Eco1); 35 dB (Lamp power: Normal); 29 dB (Lamp power: Eco2) 29 dB (Lamp power: Eco)			37 dB (Lamp power: Normal); 32 dB (Lamp power: Eco1); 29 dB (Lamp power: Eco2)				
Operating environment		Operating temperature: 5°C - 40°C(41°F - 104°F) [Less than 750 m (2,500 ft) above sea level]; 5°C - 35°C(41°F - 95°F) [750 - 1,500 m (2,500 - 5,000 ft) above sea level]]; 5°C - 30°C(41°F - 86°F) [1,500 - 3,000 m(5,000 - 10,000 ft) above sea level]  Operating humidity: 20% - 80% (no condensation)							
Supplied accessories		Power cord (3 m) x 1 $^{\rm st}$ , Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8m) x 1, Interactive pen x 2, Batteries (AAA type x 4), USB cable (5.0 m) x 1, Application software (Light Pen 3) CD-ROM x 1	Power cord (3 m) x 1*8, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8m) x 1		Power cord (3 m) x 1 %, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8m) x 1, Interactive pen x 2, Batteries (AAA type x 4), USB cable (5.0 m) x 1, Application software (Light Pen 3) CD-ROM x 1	Power cord (3 m) x 1**, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8m) x 1			

#### Optional accessories

Ceiling mount bracket for high ceilings\*9 ET-PKV100H



Attachment for ceiling mount bracket ET-PKL300B



Replacement lamp unit ET-LAL331 \*Exclusively for PT-TW240

ET-LAL341

\*Exclusively for

TX301R/TX300





...usively fo PT-TW331R/ TX301R

- \*1 When [LAN (Standby]]/[VGA Out (Standby]]/[In Standby Mode (Audio)] are all set to [Off].
  \*2 When [LAN (Standby]]/[VGA Out (Standby]]/[In Standby Mode (Audio)] are all set to [On].
- This is the maximum value when the lamp is turned on for 2 hours and off for 0.25 hours. If the lamp is turned on more times or kept on for a long time, the lamp replacement cycle will shorten. The usage environment affects the duration of the lamp.
- \*4 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
- \*5 With legs at shortest position. \*6 With lens at shortest position.
- \*7 The above values are averages. Actual values may be different according to the product.
   \*8 Power code (x2) for the PT-TW331REA/TW330EA/TW240EA/TX301REA/TX300EA.
- \*8 Power code [x2] for the PT-TW331REA/TW330EA/TW240EA/TX301REA/TX300EA.

  \*9 This product is used together with an optional bracket attachment (sold separately).

  \*10 The Interactive Pen is the same as those which are supplied with PT-TW331R/TX301R.

#### Caution

Do not install the projector in locations that are subject to excessive water, humidity, steam or oily smoke. Doing so may result in fire, malfunction or electric shock

#### **NOTE ON USE**

- The projector uses a high-voltage mercury lamp under high internal pressure. This lamp may break, emitting a popping sound, or fail to illuminate, due to impact or extended use.
  The high-wattage lamp becomes very hot during operation. Please observe the following precautions:
  Never place objects on top of the projector while it is in operation.
  Make sure there is an unobstructed space of 1,000 mml3 ft 3 in) or more around the projector's exhaust openings.
  If stacking projector units, care must be taken to provide the recommended space between units. These space requirements also apply to installation where only one projector unit is operating at one time and the other unit is used as a backup.
- If the projector is placed in a box or enclosure, the temperature of the air surrounding the projector must match the operating temperature listed in the specifications table during use. Also, make sure the projector's intake and exhaust openings are not blocked. Ensure there is sufficient ventilation to prevent hot air from the exhaust openings being recirculated into the intake opening.

  3 The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.

   The lamp replacement cycle varies greatly depending on individual lamp characteristics and usage conditions.

   The brightness of the lamp will gradually decrease with use.

  4 Due to natural characteristics of lamps, screen brightness may fluctuate. This is not an indication of faulty lamp performance.

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice. Product availability differs depending on region and country. This product may be subject to export control regulations. The projection distances and throw ratios given in this brochure are for use only as guidelines. For more detailed information, please consult the dealer from whom you are purchasing the product. The PJLink trademark is an application trademark in Japan, the United States, and other countries and regions or registered trademarks. Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. DLP<sup>TM</sup> [Digital Light Processing], DLP<sup>TM</sup> Chip, DLP Medallion Logo and DLP<sup>TM</sup> Link<sup>TM</sup> are trademarks of Texas Instruments. HDMI, the HDMI logo and High-Definition Multimedia Interface is a trademark or registered trademark of HDMI Licensing LLC. Crestron Connected is a registered trademarks of Crestron Electronics, Inc. All other trademarks are the property of their respective trademark owners. Projection images simulated. © 2013 Panasonic Corporation. All rights reserved.



For more information about Panasonic projectors, please visit Projector Global Web Site - panasonic.net/avc/projector Facebook - www.facebook.com/panasonicprojector YouTube - www.voutube.com/user/PanasonicProjector