

Panasonic

PT-EZ580 Series

LCD Projectors

PT-EZ580 / PT-EZ580L
PT-EW640 / PT-EW640L
PT-EW540 / PT-EW540L
PT-EX610 / PT-EX610L
PT-EX510 / PT-EX510L



Smart Choice.

Bright, Quiet, and Economical Projection Solutions



PT-EZ580 / EZ580L | 5,400 lm | 5,000 : 1 | WUXGA

PT-EW640 / EW640L | 5,800 lm | 5,000 : 1 | WXGA

PT-EW540 / EW540L | 5,000 lm | 2,000 : 1 | WXGA

PT-EX610 / EX610L | 6,200 lm | 5,000 : 1 | XGA

PT-EX510 / EX510L | 5,300 lm | 2,000 : 1 | XGA

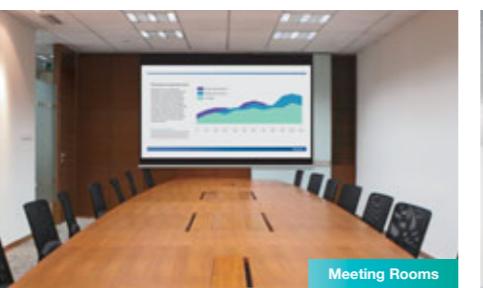




Lecture Halls



Classrooms



Meeting Rooms



Engineering / Art Classes

High Picture Quality

Vivid Pictures in Bright Environments

With up to 6,200 lm^{*2} of brightness, the PT-EZ580 Series serves up brilliant, punchy images even with the lights on. Text is sharp and clearly legible while graphics, photos, and video images are reproduced with a clean and natural vibrancy.

High Contrast Performance with Iris

Expect dazzling highlights and inky blacks with a high contrast ratio of 5,000:1^{*3} assisted by an iris, which alters brightness according to the scene or image.

WUXGA Resolution for Brilliant Full HD images

With native WUXGA 1920 x 1200-pixel widescreen resolution, the PT-EZ580/EZ580L is capable of displaying Full HD video from Blu-ray Disc and other sources in beautifully rich, vivid detail.

Daylight View Basic Function for Bright Pictures in Well-Lit Environments

Panasonic's Daylight View Basic technology resolves hidden details in dark images that are normally difficult to see in bright conditions. Using an ambient light sensor, Daylight View Basic adjusts halftone color and brightness to suit the room. Resulting images are clear, bright, and easy to see.



Easy Multi-Source Viewing with Side-by-Side and P-in-P Modes

Two different image sources can be simultaneously displayed on a single screen. You can also switch to P-in-P mode and display a sub-window on the main screen. The sub-window can be positioned in any corner of the screen to expand the usable area.

DICOM Simulation Mode^{*4} for Medical Training

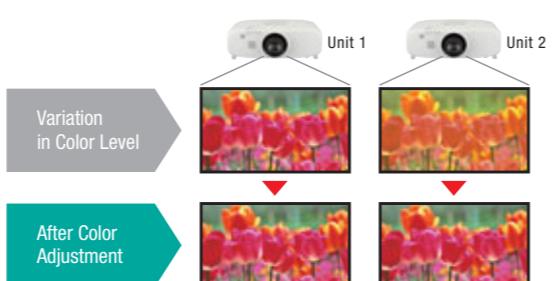
The PT-EZ580 Series is compatible with DICOM standards for presentations relating to medicine.

DICOM Simulation Mode reproduces complex images, such as X-rays, with exceptionally high levels of detail and contrast.



Color Adjustment Function

A color adjustment function allows you to easily correct for slight variations in the color reproduction range of individual units set up for multiple projection, particularly in side-by-side configuration. Correction can be performed on 3 colors or 7 colors.



"The picture looks dim and washed out, even with the lights off."



SOLUTION



Brilliant high-quality images in bright environments



"Our AV network is aging and the maintenance costs are blowing out."



SOLUTION



Long-life lamp and filter contribute to a much lower TCO



"We have a lot of devices to connect, and the wiring is becoming a nightmare."



SOLUTION



Easy installation with DIGITAL LINK and easy setup features



Introducing the PT-EZ580 Series—compact yet powerful projectors designed to light up lecture theaters and conference rooms with big, brilliantly detailed images in up to WUXGA^{*1} resolution. Stellar picture quality combines with simple system integration and ultimate ease of use, while periodical maintenance has been pushed back further than ever before. Flexible, economical, and engineered for everyday reliability, the PT-EZ580 Series answers the toughest questions with innovative projection technology.



The Answer is Panasonic.

* With lamp power set to Eco.

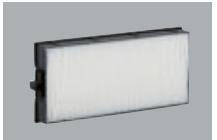
Low Maintenance and Running Costs

Lamp Replacement Cycle of up to 4,500 Hours^{*5}

Users need not pay for higher brightness and imaging quality with increased running costs. The PT-EZ580 Series has a recommended lamp replacement cycle of up to 4,500 hours^{*5}, delivering considerable savings over the life of the product.

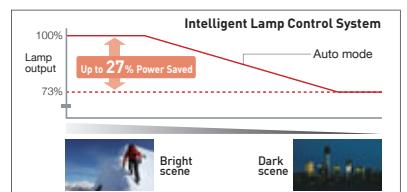
Long-Life Eco Filter and Dust-Resistant Cabinet

The PT-EZ580 Series is highly resistant to dust, with maintenance extended to an impressive 17,000 hours^{*6} for the Eco Filter (which may be washed and reused^{*7}). Extensive optical shielding and sealing, a straight airflow path, and improved filter sealing add up to an essentially dust-free design that keeps images brighter for a longer duration.



Intelligent Lamp Control Reduces Power Consumption

When in Auto Mode, Intelligent Lamp Control manages lamp output levels in real time, reducing power by up to 27%^{*8} when maximum output is not needed (in darker scenes, for example). Shift correction technology preserves the optimal color balance as lamp output fluctuates.



Additional Features

- Quick and easy ceiling-mount access to lamp, filter, and lens
- Power-saving Eco Standby Mode draws just 0.3 W of power^{*9}
- Eco Management button on remote gives quick access to a range of Eco functions

System Flexibility

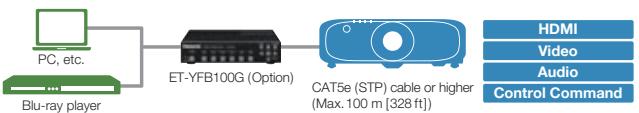
Simplified DIGITAL LINK Connections

Developed using HDBaseT™ technology, the included DIGITAL LINK connection^{*10} routes uncompressed Full HD video and Ethernet/RS-232C control commands through a single cable for distances of up to 100 m (328 ft). This greatly simplifies installation (especially when the projector is incorporated into an existing network or control system) while saving money on cable costs.



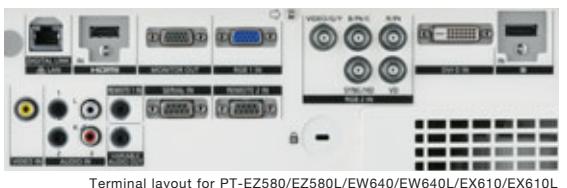
Connect Multiple Devices Using a Single Cable

An optional Digital Interface Box is available to connect multiple source devices (such as Blu-ray Disc players, computers, document cameras, etc.) to the projector via a single DIGITAL LINK CAT5e cable using its abundant input connections. This powerful AV routing hub is server-rack mountable and simplifies installation.



DisplayPort for PC and Macintosh

The PT-EZ580 Series includes a DisplayPort terminal^{*10} capable of carrying silky-smooth 1080p video at 50/60 Hz from compatible personal computers to your projector.



Terminal layout for PT-EZ580/EZ580L/EW640/EW640L/EX610/EX610L

Additional Features

- Mechanical lens shutter can physically block projection when desired with no light leakage^{*12}
- Direct Power Off function enables safe projector shutdown via breaker switch
- Anti-theft measures include customizable startup logo, password protection, and security bar

Powered Lens Shift, Zoom, and Focus

Unlike other projectors in its class, the PT-EZ580 Series has powered vertical and horizontal lens shift, zoom, and focus capabilities, allowing you full control of picture adjustment via remote control.

Horizontal/Vertical and Corner Keystone Correction

All you need to do is designate four points as the corners of the projected image, and this function will automatically perform horizontal and vertical keystone correction.

Quiet 29 dB^{*11} Design Won't Interrupt Lectures or Meetings

The quiet design keeps noise levels down to 29 dB^{*11}, with the sound of the cooling fan hardly noticeable. This helps to keep attention focused on the presenter's speech, and minimizes distractions during quiet moments.

Compatible with Leading Control Systems

The PT-EZ580 Series can plug right into an existing projection system controlled by Crestron Connected™, PJLink™ Class 1, and AMX software. Panasonic's Multi-Projector and Monitoring Software is also available to enable easy control of multiple projectors from a single PC.



Emulation Function Makes Replacement Easy

When replacing a legacy Panasonic projector, the RS-232C serial terminal included on the PT-EZ580 Series allows you to continue to use the existing control commands.

Shared Lenses Between PT-EZ580 Series and PT-EZ770 Series

If you're considering adding both PT-EZ580 Series and PT-EZ770 Series projectors to your AV network, it's good to know that our range of optional lenses (including fixed-throw, short-throw, and long-throw) is fully interchangeable between the two lines.



^{*1} The PT-EZ580/EZ580L only. ^{*2} Brightness ratings for models in the PT-EZ580 series are as follows: PT-EX610/EX610L (6,200 lm), PT-EW640/EW640L (5,800 lm), PT-EZ580/EZ580L (5,400 lm), PT-EX510/EX510L (5,300 lm), and PT-EW540/EW540L (5,000 lm). ^{*3} The PT-EW540/EW540L and PT-EX510/EX510L have a contrast ratio of 2,000:1 without an iris. ^{*4} This product is not a medical instrument. Do not use for actual medical diagnosis. ^{*5} With lamp power set to Eco. Up to 4,000 hours with lamp power set to Normal and Auto. The usage environment affects the lamp replacement cycle. ^{*6} The usage environment affects the duration of the filter. ^{*7} When washing, please follow the procedures listed in the operating instructions. We also recommend replacing the filter after it has been washed and reused twice. If the filter is not sufficiently clean after washing, replace it with a new one. ^{*8} With lamp mode set to Auto. ^{*9} When the Standby Mode is set to Eco, network functions such as Power On via LAN will not operate. Also, only certain commands can be received for external control using the serial terminal. ^{*10} Except for PT-EW540/EW540L and PT-EX510/EX510L. ^{*11} 29 dB with lamp power set to Eco. 35 dB with lamp power set to Normal. ^{*12} PT-EW540/EW540L and PT-EX510/EX510L replace the mechanical lens shutter with an AV mute function.

Projection distance

PT-EZ580 / EZ580L

Diagonal image size	Projection distance (L)										Height from the edge of screen to center of lens (H)	
	ET-ELW21	ET-ELW22	ET-ELW20		Standard lens		ET-ELT20		ET-ELT21			
Throw ratio (16:10 aspect ratio)	0.8:1	0.8-1.0:1	fix	min.[wide]	max.[tele]	min.[wide]	max.[tele]	min.[wide]	max.[tele]	ET-ELW21	ET-ELW22	ET-ELW20 / Standard / ET-ELT20 / ET-ELT21
40"	629 [2.1]			1017 [3.3]	1407 [4.6]	1357 [4.5]	2354 [7.7]	2290 [7.5]	3807 [12.5]	3716 [12.2]	6029 [19.8]	269 [0.90]
50"	801 [2.6]			1285 [4.2]	1772 [5.8]	1710 [5.6]	2954 [9.7]	2891 [9.5]	4787 [15.7]	4698 [15.4]	7589 [24.9]	337 [1.10]
60"	973 [3.2]	1004 [3.3]	1259 [4.1]	1553 [5.1]	2137 [7.0]	2063 [6.8]	3554 [11.7]	3492 [11.5]	5767 [18.9]	5681 [18.6]	9149 [30.0]	404 [1.30]
70"	1145 [3.8]	1179 [3.9]	1476 [4.8]	1822 [6.0]	2502 [5.2]	2416 [7.9]	4155 [13.6]	4093 [13.4]	6747 [22.1]	6663 [21.9]	1070 [35.1]	471 [1.50]
80"	1317 [4.3]	1354 [4.4]	1693 [5.6]	2090 [6.9]	2867 [9.4]	2770 [9.1]	4755 [15.6]	4694 [15.4]	7727 [25.4]	7645 [25.1]	12269 [40.3]	538 [1.80]
90"	1488 [4.9]	1530 [5.0]	1911 [6.3]	2358 [7.7]	3233 [10.6]	3123 [10.2]	5356 [17.6]	5295 [17.4]	8707 [28.6]	8627 [28.3]	13829 [45.4]	606 [2.00]
100"	1660 [5.5]	1705 [5.6]	2128 [7.0]	2626 [8.6]	3598 [11.8]	3476 [11.1]	5956 [19.5]	5896 [19.3]	1041 [20.0]	1035 [19.6]	15389 [50.6]	673 [2.20]
120"	2004 [6.6]	2056 [6.7]	2563 [8.4]	3162 [10.4]	4328 [14.2]	4182 [13.7]	7157 [23.5]	7098 [23.3]	11647 [38.2]	11573 [38.0]	18509 [60.7]	808 [2.40]
150"	2519 [8.3]	2582 [8.5]	3215 [10.5]	3967 [13.4]	5423 [17.8]	5241 [17.2]	8959 [29.4]	8901 [29.2]	14587 [47.9]	14520 [47.6]	23189 [76.1]	1010 [3.30]
200"	3379 [11.1]	3459 [11.3]	4302 [14.1]	5308 [17.4]	7249 [23.8]	7066 [23.0]	11961 [39.2]	11906 [39.1]	19487 [63.9]	19431 [63.7]	30988 [101.7]	1346 [4.40]
250"	4237 [13.9]	4336 [14.2]	5389 [17.7]	6649 [21.8]	9074 [29.8]	8771 [28.8]	14963 [49.1]	14911 [48.9]	24387 [80.0]	24341 [79.9]	38788 [127.3]	1683 [5.50]
300"	5096 [16.7]	5212 [17.1]	6476 [21.2]	7989 [26.2]	10900 [35.8]	10537 [34.6]	17965 [58.9]	17917 [58.8]	29287 [96.1]	29287 [96.0]	46558 [152.8]	2019 [6.60]
350"	5954 [19.5]	6089 [20.0]	7562 [24.8]	9330 [30.6]	12725 [41.7]	12302 [40.4]	20968 [68.8]	20922 [66.8]	34187 [112.2]	34163 [112.1]	54388 [178.4]	2356 [7.70]
400"	6813 [22.4]	6966 [22.8]	8649 [28.4]	10471 [35.0]	14551 [47.7]	14067 [46.2]	23970 [78.6]	23927 [78.5]	39088 [128.2]	39073 [128.2]	62188 [204.0]	2692 [8.80]

PT-EW640 / EW640L, PT-EW540 / EW540L

Diagonal image size	Projection distance (L)										Height from the edge of screen to center of lens (H)	
	ET-ELW21	ET-ELW22	ET-ELW20		Standard lens		ET-ELT20		ET-ELT21			
Throw ratio (16:10 aspect ratio)	0.8:1	0.8-1.0:1	fix	min.[wide]	max.[tele]	min.[wide]	max.[tele]	min.[wide]	max.[tele]	ET-ELW21	ET-ELW22	ET-ELW20 / Standard / ET-ELT20 / ET-ELT21
40"	638 [2.1]			1030 [3.4]	1423 [4.7]	1378 [4.5]	2383 [7.8]	2320 [7.6]	3854 [12.6]	3764 [12.3]	6104 [20.0]	269 [0.90]
50"	812 [2.7											

Specifications

Model	PT-EZ580 / EZ580L	PT-EW640 / EW640L	PT-EW540 / EW540L	PT-EX610 / EX610L	PT-EX510 / EX510L	
Power supply	100–240 V AC, 50/60 Hz					
Power consumption	510 W [0.3 W with Standby Mode set to Eco*1, 10 W with Standby Mode set to Normal, 37 W with the Audio Setting's In Standby Mode set to ON.]	495 W [0.3 W with Standby Mode set to Eco*, 10 W with Standby Mode set to Normal, 37 W with the Audio Setting's In Standby Mode set to ON.]	485 W [0.3 W with Standby Mode set to Eco*, 4 W with Standby Mode set to Normal, 34 W with the Audio Setting's In Standby Mode set to ON.]	495 W [0.3 W with Standby Mode set to Eco*, 10 W with Standby Mode set to Normal, 37 W with the Audio Setting's In Standby Mode set to ON.]	485 W [0.3 W with Standby Mode set to Eco*, 4 W with Standby Mode set to Normal, 34 W with the Audio Setting's In Standby Mode set to ON.]	
LCD panel	Panel size 19.0 mm [0.76"] diagonal [16:10 aspect ratio]				20.0 mm [0.79"] diagonal [4:3 aspect ratio]	
	Display method Transparent LCD panel (x 3, R/G/B)					
	Drive method Active matrix					
	Pixels 2,304,000 [1,920 × 1,200] × 3, total of 6,912,000 pixels	1,024,000 [1,280 × 800] × 3, total of 3,072,000 pixels		786,432 [1,024 × 768] × 3, total of 2,359,296 pixels		
Lens	PT-EZ580/EW640/EW540/EX610/EX510: powered zoom [1.7–2.8:1], powered focus F 1.7–2.3, f 26.9–45.4 mm, PT-EZ580L/EW640L/EW540L/EX610L/EX510L: optional powered zoom/focus and fixed-focus lens					
Lamp	335 W UHM lamp × 1					
Lamp replacement cycle	4,000 hours*2 [Lamp power: Normal], 4,500 hours*2 [Lamp power: Eco]					
Screen size (diagonal)	1.02–10.16 m (40–400 in), 16:10 aspect ratio			1.02–10.16 m (40–400 in), 4:3 aspect ratio		
Brightness*3	5,400 lm [lamp power: Auto/Normal, Dynamic Mode, standard lens]	5,800 lm [lamp power: Auto/Normal, Dynamic Mode, standard lens]	5,000 lm [lamp power: Auto/Normal, Dynamic Mode, standard lens]	6,200 lm [lamp power: Auto/Normal, Dynamic Mode, standard lens]	5,300 lm [lamp power: Auto/Normal, Dynamic Mode, standard lens]	
Center-to-corner uniformity*3	90 %					
Contrast*3	5,000:1 [full on/full off, lamp power: Auto, Iris: ON]	2,000:1 [full on/full off, lamp power: Auto]	5,000:1 [full on/full off, lamp power: Auto, Iris: ON]	2,000:1 [full on/full off, lamp power: Auto]		
Resolution	1,920 × 1,200 pixels	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]		
Scanning frequency	DVI-D/HDMI/DisplayPort/ DIGITAL LINK	Dot clock: 25 MHz–162 MHz [VGA: 640 × 480 pixels to WUXGA: 1,920 × 1,200 pixels, VESA CVT-RB compliant, compatible with HDCP] DisplayPort and DIGITAL LINK not included on PT-EW540/EW540L and PT-EX510/EX510L.				
	RGB (analog)	fH: 15 kHz – 91 kHz, fV: 24 Hz – 120 Hz, dot clock: up to 162 MHz				
	YPbPr (YCbCr)	fH: 15.73 kHz, fV: 59.94 Hz [480i (525i)] fH: 31.47 kHz, fV: 59.94 Hz [480p (525p)] fH: 15.63 kHz, fV: 50 Hz [576i (625i)] fH: 31.25 kHz, fV: 50 Hz [576p (625p)] fH: 45.00 kHz, fV: 60 Hz [720 (750)/60p]	fH: 37.50 kHz, fV: 50 Hz [720 (750)/50p] fH: 33.75 kHz, fV: 60 Hz [1080 (1125)/60i] fH: 28.13 kHz, fV: 50 Hz [1080 (1125)/50i] fH: 28.13 kHz, fV: 25 Hz [1080 (1125)/25p] fH: 27.00 kHz, fV: 24 Hz [1080 (1125)/24p]	fH: 27.00 kHz, fV: 48 Hz [1080 (1125)/24sF] fH: 33.75 kHz, fV: 30 Hz [1080 (1125)/30p] fH: 67.50 kHz, fV: 60 Hz [1080 (1125)/60p] fH: 56.25 kHz, fV: 50 Hz [1080 (1125)/50p]		
	Video/YC	fH: 15.73 kHz, fV: 59.94 Hz [NTSC/NTSC4.43/PAL-M/PAL60], fH: 15.63 kHz, fV: 50 Hz [PAL/SECAM/PAL-N]				
Optical axis shift	Vertical ±60 %, horizontal ±10 % from center of screen [powered]*4			Vertical ±50 %, horizontal ±10 % from center of screen [powered]*4		
Keystone correction range	Vertical: ±40°*5, horizontal: ±30°*6					
Installation	Ceiling/floor, front/rear					
Built-in speaker	3.7 cm round shape × 1, output power: 10.0 W [monaural]					
Terminals	DVI-D IN: DVI-D 24-pin x 1 [DVI 1.0 compliant, compatible with HDCP, compatible with single link only] 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] DisplayPort IN: DisplayPort 20-pin x 1 (DisplayPort 1.1, compatible with HDCP, audio signal: Linear PCM [Sampling frequency: 48 kHz/44.1 kHz/32 kHz])		—	DisplayPort IN: DisplayPort 20-pin x 1 (DisplayPort 1.1, compatible with HDCP, audio signal: Linear PCM [Sampling frequency: 48 kHz/44.1 kHz/32 kHz])	—	
	RGB 1 IN: D-sub HD 15-pin [female] x 1 RGB 2 IN: BNC × 5 [RGB/Y • Pb (Cb) • Pr (Cr) × 1], shared with VIDEO IN [S-video/composite video]					
	VIDEO IN: Pin jack x 1					
	MONITOR OUT: D-sub 15-pin [female] x 1 [compatible with RGB/Y • Pb (Cb) • Pr (Cr)]					
	AUDIO IN: Pin jack [L/R] x 1, M3 x 2					
	AUDIO OUT: M3 x 1 [variable]					
	SERIAL IN: D-sub 9-pin [female] x 1 for external control					
	REMOTE IN: M3 x 1 for wired remote control					
	REMOTE IN 2: D-sub 9-pin [female] x 1 for external control					
	LAN: RJ-45 x 1 for network connection, DIGITAL LINK, 100Base-TX, compatible with PJLink™		LAN: RJ-45 x 1 for network connection, 10Base-T, 100Base-TX, compatible with PJLink™	LAN: RJ-45 x 1 for network connection, DIGITAL LINK, 100Base-TX, compatible with PJLink™	LAN: RJ-45 x 1 for network connection, 10Base-T, 100Base-TX, compatible with PJLink™	
Operating noise*3	35 dB [lamp power: Normal], 29 dB [lamp power: Eco]					
Filter	× 1, replacement cycle: up to 17,000 hours*8					
Mechanical shutter	Yes	— (AV mute)	Yes	— (AV mute)		
Cabinet materials	Molded plastic [PC + ABS]					
Dimensions (W × H × D)	PT-EZ580/EW640/EX610/EW540/EX510: 530 × 177*9 × 445 mm [20-7/8 × 6-31/32*9 × 17-1/2 in] [with supplied lens] PT-EZ580L/EW640L/EX610L/EW540L/EX510L: 530 × 177*9 × 385 mm [20-7/8 × 6-31/32*9 × 15-5/32 in] [without lens]					
Weight*7	PT-EZ580/EW640/EX610/EW540/EX510: Approximately 10.6 kg [23.4 lbs] [with supplied lens] PT-EZ580L/EW640L/EX610L/EW540L/EX510L: Approximately 9.8 kg [21.6 lbs] [without lens]					
Operating environment	Operating temperature: 0 °C–45 °C [32 °F–113 °F]*10, operating humidity: 10 %–80 % [no condensation]					
Supplied accessories	Power cord with power cord holder, wireless/wired remote control unit x 1, batteries (R03/LR03/AAA type × 2), Software CD-ROM × 1 [Logo Transfer Software, Multi Projector Monitoring and Control Software]					

*1 When the Standby Mode is set to Eco, network functions such as Power On via LAN will not operate. Also, only certain commands can be received for external control using the serial terminal.

*2 The values above are maximum values when they are used in cycles of being turned on for 2 hours and off for 0.25 hours. When the lamps are turned on and off more frequently, the lamp replacement cycle is shortened. The usage environment affects the lamp replacement cycle. *3 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. *4 The axis shift function cannot be used with the ET-ELW21. *5 With vertical correction only. *6 With horizontal correction only. *7 Average value. May differ depending on the actual unit. *8 The usage environment affects the duration of the filter. *9 With legs at shortest position. *10 The operating temperature range is 0 °C to 40 °C [32 °F to 104 °F] when used at altitudes between 1,400 m and 2,700 m [4,593 ft to 8,858 ft] above sea level. When operating temperature exceeds 40 °C [35 °C at high altitude], lamp power may automatically switch to Eco in order to protect the projector. Models with an "L" designation are sold without a lens.



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

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 leaflet are intended 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. Crestron Connected is a trademark of Crestron Electronics, Inc. HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. DisplayPort is a trademark or registered trademark of the Video Electronics Standards Association. HDBaseT™ is a trademark of the HDBaseT Alliance. All other trademarks are the property of their respective trademark owners. Projection images simulated. © 2014 Panasonic Corporation. All rights reserved.

All information included here is valid as of August 2014.

PT-EZ580G2 Printed in Japan.