# **Panasonic**

## PT-**EZ580** Series

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





PT- <b>EZ580/EZ580</b> L	5,400 lm	5,000:1	WUXGA
PT- <b>EW640/EW640</b> L	5,800 lm	5,000 : 1	WXGA
PT- <b>EW540/EW540</b> L	5,000 lm	2,000:1	WXGA
PT- <b>EX610/EX610</b> L	6,200 lm	5,000:1	XGA
PT- <b>EX510/EX510</b> L	5,300 lm	2,000:1	XGA













#### 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.





Daylight View Basic

## 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.

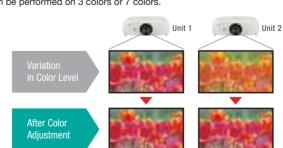
DICOM Simulation Mode reproduces complex images, such as X-rays, with exceptionally high levels of detail and contrast.





#### 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.









Brilliant high-quality images in bright environments



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





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."





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

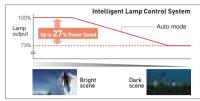
be washed and reused\*7). Extensive optical shielding and sealing, a straight airflow path, and improved filter sealing add up to an essentially dust-free design that keeps images brighter for a longer duration.



#### 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 LINK 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 Jayout for PT-E7580/E7580I /EW640/EW640I /EX610/EX610I

#### 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 guiet 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. **PULink** 

#### **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. \*The usage environment affects the duration of the filter. \*T 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. \*B With lamp mode set to Auto. \*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

#### For more information, please visit the Projector Global Web Site at panasonic.net/avc/projector

#### Projection distance PT-EZ580/EZ580L Projection distance (L) Height from the edge of screen to center of lens (H) Diagonal ET-ELW20 Standard lens ET-ELT20 ET-ELT21 ET-ELW21 FT-FI W20/Standard/ 2 8-4 6-1 0.8:1 ET-ELW21 Throw ratio (16:10 aspect ratio) in.(wide) nin.(wide) max.ftele -54 - 592 (-0.20 - 1.90) 1017 (3.3) 1407 [4.6] 1357 [4.5] 2354 (7.7) 2290 (7.5) 3807 (12.5) 3716 [12.2] 6029 [19.8] 629 [2.1] 269 (0.90) 50' 1285 [4.2] 1772 (5.8) 1710 (5.6) 2954 [9.7] 2891 (9.5) 4787 (15.7) 4698 [15.4] 7589 [24.9] 801 (2.6) -67 - 740 (-0.20 - 2.40) 337 [1.10] 4n" 1553 (5.1) 2137 [7 በ] 2043 [4.8] 355/(11.7) 3/92 (11.5) 5747 (18 9) 5481 [18 4] 9149 [30 0] 973 (3.2) \_81 \_ 888 (\_0 30 \_ 2 90) (0/ (1 30) 4155 (13 A) -9% - 1037 (-0 30 - 3 /0) /71 (1 5n) 70' 1822 [6.0] 2502 [5.2] 2/,1/, [7 9] (13 (1) 4747 (22.1) 6663 [21.9] 10709 (35.1) 11/5 [3.8] 2090 (6.9) 2867 (9.4) 2770 (9.1) 4755 (15.6) 4694 (15.4) 7727 (25.4) 7645 (25.1) 12269 (40.3) 1317 (4.3) -108 - 1185 (-0.40 - 3.90) 538 (1.80) 3233 [10.6] 3123 [10.2] 5356 [17.6] 5295 (17.4) 8707 [28.6] 8627 [28.3] 13829 [45.4] 1488 [4 9] -121 - 1333 (-0.40 - 4.40) 606 [2.00] 5956 (19.5) 15389 (50.5) 3162 (10.4) 4328 [14.2] 4182 (13.7) 7157 (23.5) 7098 (23.3) 11647 (38.2) 11573 (38.0) 18509 (60.7) 2004 (6.6) -162 - 1777 (-0.50 - 5.80) 150" 5423 (17.8) 5241 (17.2) 8959 (29.4) 8901 (29.2) 14587 (47.9) 14520 (47.6) 23189 (76.1) 2519 [8 3] -202 - 2221 (-0.70 - 7.30) 1010 (3.30) 3967 [13 4] 7249 [23.8] 7006 [23.0] 11961 [39.2] 11906 [39.1] 19487 [63.9] 19431 [63.7] 30988 [101.7] 3378 [11.1] -269 - 2962 (-0.90 - 9.70) 1346 (4.40) 200, 5308 (17.4) 250 6649 [21.8] 9074 [29.8] 8771 [28.8] 14963 [49 1] 14911 [48 9] 24387 [80.0] 24341 [79.9] 38788 [127.3] 4237 [13.9] -337 - 3702 (-1.10 - 12.10) 300, 7989 (26.2) 10900 [35.8] 10537 [34.6] 17965 [58.9] 17917 [58.8] 29287 [96.1] 29252 [96.0] 46588 [152.8] 5096 [16.7] -404 - 4442 (-1.30 - 14.60) 2019 (6.60) 9330 [30.6] 12725 [41.7] 12302 [40.4] 20968 [68.8] 20922 [68.6] 34187[112.2] 34163 [112.1] 54388 [178.4] 5954 [19.5] -471 - 5183 (-1.50 - 17.00) 2356 (7.70)

PT-EW640/EW640I	L, PT-EW540	/EW540L									unit: mm (feet)
Diagonal				Proj	ection distanc	e (L)				Height from the edge of screen to	center of lens (H)
image size	ET-E	LW20	Standa	rd lens	ET-E	LT20	ET-E	LT21	ET-ELW21		
Throw ratio	1.3-	1.7:1	1.7-	2.8:1	2.8-	4.6:1	4.6-	7.2:1	0.8:1	ET-ELW20/Standard/ ET-ELT20/ET-ELT21	ET-ELW21
(16:10 aspect ratio)	min.(wide)	max.(tele)	min.(wide)	max.(tele)	min.(wide)	max.(tele)	min.(wide)	max.(tele)	fix	L1-LL120/L1-LL121	
40"	1030 (3.4)	1423 (4.7)	1378 (4.5)	2383 (7.8)	2320 (7.6)	3854 (12.6)	3764 (12.3)	6104 (20.0)	638 (2.1)	-54 - 592 (-0.20 - 1.90)	269 (0.90)
50"	1302 (4.3)	1792 (5.9)	1735 (5.7)	2991 (9.8)	2928 (9.6)	4845 (15.9)	4758 (15.6)	7683 (25.2)	812 (2.7)	-67 - 740 (-0.20 - 2.40)	337 (1.10)
60"	1574 (5.2)	2161 (7.1)	2093 (6.9)	3599 (11.8)	3536 (11.6)	5837 (19.2)	5752 (18.9)	9261 (30.4)	986 (3.2)	-81 - 888 (-0.30 - 2.90)	404 (1.30)
70"	1846 (6.1)	2530 (8.3)	2450 (8.0)	4207 [13.8]	4145 (13.6)	6829 (22.4)	6746 (22.1)	10840 (35.6)	1159 (3.8)	-94 - 1037 (-0.30 - 3.40)	471 (1.50)
80"	2118 (6.9)	2899 (9.5)	2807 (9.2)	4816 (15.8)	4753 (15.6)	7820 (25.7)	7740 (25.4)	12419 (40.7)	1333 (4.4)	-108 - 1185 (-0.40 - 3.90)	538 (1.80)
90"	2389 (7.8)	3268 (10.7)	3164 (10.4)	5424 (17.8)	5361 (17.6)	8812 (28.9)	8734 (28.7)	13997 (45.9)	1507 (4.9)	-121 - 1333 (-0.40 - 4.40)	606 (2.00)
100"	2661 (8.7)	3637 (11.9)	3521 (11.6)	6032 (19.8)	5970 (19.6)	9804 (32.2)	9728 (31.9)	15576 (51.1)	1681 (5.5)	-135 - 1481 (-0.40 - 4.90)	673 (2.20)
120"	3205 (10.5)	4375 (14.4)	4236 [13.9]	7248 (23.8)	7187 (23.6)	11787 (38.7)	11717 (38.4)	18733 (61.5)	2028 (6.7)	-162 - 1777 (-0.50 - 5.80)	808 (2.60)
150"	4020 (13.2)	5483 (18.0)	5307 (17.4)	9073 (29.8)	9012 (29.6)	14762 (48.4)	14699 (48.2)	23469 (77.0)	2550 (8.4)	-202 - 2221 (-0.70 - 7.30)	1010 (3.30)
200"	5380 (17.7)	7328 (24.0)	7093 (23.3)	12114 (39.7)	12054 (39.5)	19720 (64.7)	19670 (64.5)	31363 (102.9)	3419 (11.2)	-269 - 2962 (-0.90 - 9.70)	1346 (4.40)
250"	6739 (21.1)	9173 (30.1)	8879 (29.1)	15155 (49.7)	15095 (49.5)	24678 (81.0)	24640 (80.8)	39256 (128.8)	4288 (14.1)	-337 - 3702 (-1.10 - 12.10)	1683 (5.50)

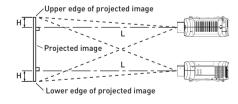
10671 (35.0) 14551 (47.7) 14067 (46.2) 23970 (78.6) 23927 (78.5) 39088 (128.2) 39073 (128.2) 62188 (204.0) 6813 (22.4)

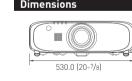
8098 (26.6) 11019 (36.2) 10665 (35.0) 18195 (59.7) 18137 (59.5) 29636 (97.2) 29611 (97.1) 47149 (154.7) 5156 (16.9)

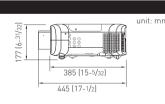
10816 [35.5] 14709 [48.3] 14236 [46.7] 24277 [79.6] 24221 [79.5] 39552 [129.8] 39552 [129.8] 62936 [206.5] 6894 [22.6]

12864 [42.2] 12450 [40.8] 21236 [69.7] 21179 [69.5] 34594 [113.5] 34581 [113.5] 55043 [180.6] 6025 [19.8]

PT-FX610/FX6101 PT-FX510/FX5101 Projection distance (L) Height from the edge of screen to center of lens (H) Diagonal image size ET-ELT21 ET-ELW21 Standard lens ET-ELT20 ET-ELW20/Standard/ ET-ELW21 1.7-2.8:1 Throw ratio (4:3 aspect ratio) 2.8-4.6:1 0.8:1 1.3 - 1.7 : 14.6-7.2:1 ET-ELT20/ET-ELT21 min.(wide) max.[tele] min.(wide) max.(tele) min.(wide) | max.(tele) min.(wide) max.[tele] fix 40" 972 (3.2) 1346 [4.4] 1301 (4.3) 2256 (7.4) 2191 (7.2) 3650 [12.0] 3555 (11.7) 5777 (19.0) 602 (2.0) 0 - 610 (0.0 - 2.0) 305 (1.00) 4590 (15.1) 1229 (4.0) 1696 [5.6] 1640 (5.4) 2832 (9.3) 2768 (9.1) 4497 (14.8) 7274 (23.9) 767 (2.5) 0 - 762 (0.0 - 2.0) 381 (1.30) 1486 (4.9) 2046 (6.7) 1979 (6.5) 3408 (11.2) 3344 (11.0) 5531 (18.1) 5439 (17.8) 932 (3.1) 0 - 914 (0.0 - 3.0) 457 (1.50) 1743 (5.7) 2318 (7.6) 3984 (13.1) 3921 (12.9) 6471 (21.2) 6382 (20.9) 1097 (3.6) 0 - 1067 (0.0 - 3.5) 2000 (6.6) 4560 (15.0) 4497 (14.8) 7412 (24.3) 7324 (24.0) 1262 [4.1] 0 - 1219 (0.0 - 4.0) 610 (2.00) 3096 [10.2] 2996 [9.8] 5136 (16.9) 5073 (16.6) 8353 (27.4) 8266 [27.1] 13262 [43.5] 1427 [4.7] 0 - 1372 (0.0 - 4.5) 686 (2.30) 2257 (7.4) 3446 [11.3] 3335 [10.9] 5712 [18.7] 5650 [18.5] 9293 [30.5] 9208 [30.2] 14759 [48.4] 0 - 1524 (0.0 - 5.0) 762 (2.50) 100" 2514 (8.2) 1592 (5.2) 120" 3028 (9.9) 4146 [13.6] 4013 [13.2] 6864 (22.5) 6803 (22.3) 11174 (36.7) 11092 (36.4) 17753 (58.2) 1922 [6.3] 0 - 1829 [0.0 - 6.0] 914 (3.00) 150" 3799 [12 5] 5196 (17.0) 5030 (16.5) 8592 (28.2) 8532 (28.0) 13996 (45.9) 13918 (45.7) 22244 (73.0) 2417 (8 በ) 0 - 2286 (0.0 - 7.5)1143 (3.80) 200 5084 (16.7) 6946 [22.8] 6725 [22 1] 11472 [37.6] 11414 [37.4] 18699 [61.3] 18629 [61.1] 29729 [97.5] 3242 [10.6] 0 - 3048 (0.0 - 10.0) 1524 (5.00) 250" 6369 [20.9] 8696 [28.5] 8420 [27.6] 14352 [47.1] 14296 [46.9] 23402 [76.8] 23339 [76.6] 37214 [122.1] 4067 [13.3] 0 - 3810 (0.0 - 12.5) 1905 (6.30) 10115 (33.2) 17232 [56.5] 17178 [56.4] 28105 (92.2) 28050 (92.0) (//499 (1/4.7) 0 = 4572 (0 0 = 15 0) 2286 [7 50] 300, 745/ [25 1] 107/77 [37, 3] (892 [14 1] 5717 (18.8) 0 - 5334 (0.0 - 17.5) 2667 (8.80) 13505 (44.3) 22992 (75.4) 22942 (75.3) 37511 (123.1) 37471 (122.9) 0 - 6096 (0.0 - 20.0)







-538 - 5923 (-1.80 - 19.40) 2692 (8.80)

-404 - 4442 (-1.30 - 14.60) 2019 (6.60)

-471 - 5183 (-1.50 - 17.00)

#### Optional accessories

Zoom lens ET-ELW20

/.nn"

350'



















Brackets included for various installation needs including server rack (EIA standards) mounting.

Software ET-SWA100 Series





Low-ceiling mount bracket



FT-PKF200S also available



Bracket assembly



ET-PKE200B ible with FT-PKF200H



FT-I AF300



Farly Warning

Specificat	ions									
Model		PT-EZ580/EZ580L	PT-EW640/EW640L	PT-EW540/EW540L	PT-EX610/EX610L	PT-EX510/EX510L				
Power supp	ly	100-240 V AC, 50/60 Hz	1	1	1					
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 0N.]	495 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.]	485 W [0.3 W with Standby Mode set to Eco*1, 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*1, 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 Eco*1, 4 W with Standby Mode set t Normal, 34 W with the Audio Settin 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 as	pect ratio)				
	Display method	Transparent LCD panel (× 3, R/G	i/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/EX510L: optional powered zoom/focus and fixed-focus lens								
Lamp		335 W UHM lamp × 1								
Lamp replac	cement cycle	4,000 hours*2 (lamp power: Nor	mal), 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 asp	pect ratio				
Brightness*	3	5,400 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/Norm Dynamic Mode, standard lens)				
Center-to-c	orner uniformity*3	90 %								
Contrast*3		5,000:1 (full on/full off, lamp power: Auto	, Iris: 0N)	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: Aut				
Resolution		1,920 × 1,200 pixels			1,024 × 768 pixels (Input signals will be converted to 1,024 × 768 p					
Scanning frequency	DVI-D/HDMI/DisplayPort/ DIGITAL LINK		A: 640 x 480 pixels to WUXGA: 1,9: ot included on PT-EW540/EW540	20 x 1,200 pixels, VESA CVT-RB co _ and PT-EX510/EX510L.	mpliant, compatible with HDCP)					
	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: 37.50 kHz, fv: 50 Hz [720 [750]/50p]       fh: 27.00 kHz, fv: 48 Hz [1080 [1125]/24sF]         fh: 31.47 kHz, fv: 59.94 Hz [480p [525p]]       fh: 33.75 kHz, fv: 60 Hz [1080 [1125]/60]       fh: 33.75 kHz, fv: 30 Hz [1080 [1125]/30p]         fh: 15.63 kHz, fv: 50 Hz [576i [625i]]       fh: 28.13 kHz, fv: 50 Hz [1080 [1125]/50]       fh: 67.50 kHz, fv: 60 Hz [1080 [1125]/50p]         fh: 45.00 kHz, fv: 60 Hz [720 [750]/60p]       fh: 27.00 kHz, fv: 24 Hz [1080 [1125]/24p]       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 % fr	om center of screen (powered)				
Keystone co	rrection range	Vertical: ±40°*5, horizontal: ±30°*6								
Installation		Ceiling/floor, front/rear								
Built-in spe	aker	$3.7 \text{ cm}$ round shape $\times$ 1, output power: $10.0 \text{ W}$ (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 × 1 (Deep DisplayPort IN: DisplayPort 20-p (DisplayPort 1.1, compatible with audio signal: Linear PCM	pin x 1	g frequency: 48 kHz/44.1 kHz/32 kH DisplayPort IN: DisplayPort 20-pin x 1 [DisplayPort 1.1, compatible with HDCP], audio signal: Linear PCM (Sampling						
		(Sampling frequency: 48 kHz/44 RGB 1 IN: D-sub HD 15-pin (fem			frequency: 48 kHz/44.1 kHz/32 kHz]					
		RGB 2 IN: BNC × 5 (RGB/Y • PB (CR) • 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)								
		AUDIO OUT: M3 x 1 (variable)								
		SERIAL IN: D-sub 9-pin (female) x 1 for external control								
		REMOTE IN: M3 × 1 for wired remote control  REMOTE IN 2: D-sub 9-pin (female) x 1 for external control								
		LAN: RJ-45 × 1 for network connect compatible with PJLink™		LAN: RJ-45 × 1 for network connection, 10Base-T, 100Base-TX, compatible with PJLink™	LAN: RJ-45 × 1 for network connection, DIGITAL LINK, 100Base-TX, compatible with PJLink™	LAN: RJ-45 × 1 for network conne 10Base-T, 100Base-TX, compatible with PJLink™				
Operating n	oico*3	35 dB (lamp power: Normal), 29	dB (lamp power, Fee)	companie with 1 JEHIK	computation with 1 SEIIIK	companie with Little				
Filter	uise	× 1, replacement cycle: up to 17								
	chuttor		es	— (AV mute)	Yes	— (AV mute)				
Mechanical Cabinet mat			25	— (AV mute)	res	— (Av mute)				
	(W × H × D)	Molded plastic (PC + ABS)  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-EZ580/EW640/EX610/EW540/EX510: Approximately 9.8 kg [21.6 lbs] (without lens)								
Operating e	nvironment	Operating temperature: 0 °C-45 °C (32 °F-113 °F]*10, operating humidity: 10 %-80 % [no condensation]								
		operating temperatures 0 40 0 (zz 1 10 1) operating numbers, 10 % 00 % (in condensation)								

<sup>\*!</sup> 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.

\*! 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 senial terminal.
\*\* 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. \*\*1 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.

Power cord with power cord holder, wireless/wired remote control unit  $\times$  1, batteries [R03/LR03/AAA type  $\times$  2], Software CD-ROM  $\times$  1 (Logo Transfer Software, Multi Projector Monitoring and Control Software)

## **Panasonic**

Supplied accessories



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

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