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S P E C   F I L E

Product Number : PT-**DW10000**

Product Name : 3-Chip DLP™ Projector

3-Chip DLP™ Projector

PT-**DW10000**

Specifications

Main Unit

Power supply:	North America:	120 V AC, 20 A, 60 Hz
	Europe, Asia	220–240 V AC, 15 A, 50/60 Hz
Power consumption:		1,450 W (25 W in standby mode with fan stopped)
DLP™ chip:	Panel size:	0.95˝ diagonal (16:9 aspect ratio)
	Display method:	DLP™ device x 3 (R, G, B), DLP™ projection system
	Pixels:	2,073,600 (1,920 x 1,080) x 3, total of 6,220,800 pixels
Lens:		Optional powered zoom/focus lenses
Lamp:		250 W UHM™ lamp x 4
Screen size:		70–600 inches, 16:9 aspect ratio
		(70–300 inches with the ET-D75LE5, 16:9 aspect ratio)
Brightness[1]:		10,000 lumens (four-lamp operation mode)
Center-to-corner uniformity[1]:		90%
Contrast[1]:		5,000:1 (full on/full off, in dynamic iris 3 mode)
Resolution:		1,920 x 1,080 pixels (Input signals that exceed this resolution will be converted to 1,920 x 1,080 pixels.)

Scanning frequency:	RGB:	Horizontal: 15–100 kHz, Vertical: 24–120 Hz[2], Dot clock: 20–162 MHz
	YP_BP_R (YC_BC_R):	480i: f_H 15.75 kHz; fv 60 Hz, 576i: f_H 15.63 kHz; fv 50 Hz, 480p: f_H 31.50 kHz; fv 60 Hz, 576p: f_H 31.25 kHz; fv 50 Hz, 720/60p: f_H 45.00 kHz; fV 60 Hz, 720/50p: f_H 37.5 kHz; fV 50 Hz, 1035/60i: f_H 33.75 kHz; fv 60 Hz, 1080/60i: f_H 33.75 kHz; fv 60 Hz, 1080/50i: f_H 28.13 kHz; fv 50 Hz, 1080/25p: f_H 28.13 kHz; fv 25 Hz, 1080/24p: f_H 27.00 kHz; fv 24 Hz, 1080/24sF: f_H 27 kHz; fv 48 Hz, 1080/30p: f_H 33.75 kHz; fv 30 Hz, 1080/60p: f_H 67.5 kHz; fv 60 Hz, 1080/50p: f_H 56.25 kHz; fv 50 Hz
	S-Video/Video:	Horizontal: 15.75/15.63 kHz, Vertical: 50/60 Hz, (NTSC, NTSC4.43, PAL, PAL60, PAL-N, PAL-M, SECAM)
Optical axis shift*:	Vertical:	±50% (±40° with the ET-D75LE6) from center of screen, powered
	Horizontal:	±30% (±20° with the ET-D75LE6) from center of screen, powered
Keystone correction range:		Vertical: ±40° (±22° with the ET-D75LE5, ±28° wih the ET-D75LE6)
Installation:		Ceiling/floor, front/rear
Terminals:	DVI-D IN:	DVI-D 24-pin x 1, DVI 1.0 compliant, HDCP compatible, single link
	RGB1 IN:	BNC x 5
	Y, P_B, P_R	Y: 1.0 p-p, 75 ohms (incl. sync signal), P_B/P_R: 0.7 Vp-p, 75 ohms
	R, G, B:	0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms
		HD/SYNC: 1.4–5 Vp-p, positive/negative automatic, 75 ohms
		VD: 1.4–5 Vp-p, positive/negative automatic, 75 ohms
		NOTE: HD/SYNC, and VD terminals do not accept 3-value direct sync signals.
	RGB2 IN:	D-sub HD 15-pin x 1
	Y, P_B, P_R	Y: 1.0 p-p, 75 ohms (incl. sync signal), P_B/P_R: 0.7 Vp-p, 75 ohms
	R, G, B:	0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms
		HD/VD/SYNC: TTL, high impedance, positive/negative automatic
		VD: 1.4–5 Vp-p, positive/negative automatic, 75 ohms
		NOTE: HD/SYNC, and VD terminals do not accept 3-value direct sync signals.
	VIDEO IN:	BNC x 1, 1.0 Vp-p
	VIDEO OUT:	BNC x 1, 1.0 Vp-p, active through
	S-VIDEO IN:	Mini DIN 4-pin x 1
		Y: 1.0 Vp-p, C: 0.286 Vp-p, 75 ohms (S1 signal compatible)
	LAN:	RJ-45 x 1, 10Base-T/100Base-TX, compatible with PJLink™ (class 1)
	SERIAL IN[4]:	D-sub 9-pin x 2 (RS-232C compliant, RS-422 compliant)
	SERIAL OUT[4]:	D-sub 9-pin x 1 (RS-422 compliant)
	REMOTE 1 IN:	M3 jack x 1 for wired remote control
	REMOTE 1 OUT:	M3 jack x 1 for link control
	REMOTE 2 IN:	D-sub 9-pin x 1 for external control (parallel)

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Optional board slot*[5]:

With ET-MD77SD1 installed:	SERIAL IN:	BNC x 1, SD-SDI signal (4:2:2), SMPTE 259M compliant, 480i, 576i
	SERIAL OUT:	BNC x 1, active through
With ET-MD77SD3 installed:	SERIAL IN:	BNC x 1
		SD-SDI signal (4:2:2): SMPTE 259M compliant, 480i, 576i
		Single-link HD-SDI signal (YCBCR 4:2:2 10-bit): SMPTE 292M compliant, 720/50p, 720/60p, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p
	SERIAL OUT:	BNC x 1, active through
With ET-MD77SD4 installed:	Link A/Link B IN:	BNC x 1 for each
		Single-link HD-SDI signal (YCBCR 4:2:2 10-bit): SMPTE 292M compliant, 720/50p, 720/60p, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p
		Dual-link HD-SDI signal (RGB 4:4:4 12-bit/10-bit): SMPTE 372M compliant, 1920 x 1080/24p, 1920 x 1080/24sF
		Dual-link HD-SDI signal (X´Y´Z´ 4:4:4 12-bit): 2048 x 1080/24p, 2048 x 1080/24sF
With ET-MD77DV installed:	DVI-D IN:	DVI-D 24-pin x 1, DVI 1.0 compliant, compatible with HDCP, single link
		EDID1: 480p, 576p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p, 720/60p, 720/50p
		EDID2: Compatible with non-interlaced signals only,
		VGA (640 x 480) – U-XGA (1,600 x 1,200), dot clock: 25–162 MHz

NOTE: LAN terminals on the optional board can not be used. Use the LAN terminal on the projector.

Power cord:	3 m/9.8´
Cabinet material:	Moulded plastic
Dimensions (W x H x D):	578 x 320 x 643 mm (22-3/4˝ x 12-19/32˝ x 25-5/16˝) (without lens)
Weight:	32 kg (70.5 lbs) or less (without lens)
Operating temperature*[6]:	0°–45°C (32°–113°F)
Operating humidity:	10%–80% (no condensation)

Remote Control Unit

Number of functions:	35 keys, 39 functions
Power supply:	3 V DC (AA battery x 2)
Operation range*[7]:	Approx. 30 m when operated from directly signal receptor
Dimensions (W x H x D):	51 x 22.7 x 176 mm (2˝ x 7/8˝ x 6-15/16˝)
Weight:	134 g (4.7 oz) (including batteries)

Optional Accessories

Zoom lens (0.9 – 1.1:1):	ET-D75LE6
Zoom lens (1.4 – 1.8:1):	ET-D75LE1
Zoom lens (1.8 – 2.8:1):	ET-D75LE2
Zoom lens (2.8 – 4.6:1):	ET-D75LE3
Zoom lens (4.6 – 7.4:1):	ET-D75LE4
Zoom lens (7.3 – 13.8:1):	ET-D75LE8
Fixed-focus lens (0.7:1):	ET-D75LE5
SD-SDI/network board:	ET-MD77SD1
HD-SDI/SD-SDI/network board:	ET-MD77SD3
DVI-D/network board:	ET-MD77DV
Replacement lamp unit	ET-LAD10000 (one unit)
	ET-LAD10000F (a set of four lamps)
Ceiling mount bracket for high ceilings	ET-PKD100H
Ceiling mount bracket for low ceilings	ET-PKD100S
Frame	ET-PFD100
Carrying handle	ET-HAD100

**Weights and dimensions shown are approximate. Specifications subject to change without notice.**
*1   Values indicate overall average values of the product at the time of shipment and are stated based on JIS X 6911:2003 Data Projector Specification Sheet Format. Measurement method and conditions are based on Appendix 2.
*2   Smooth image reproduction may not be possible when a motion video signal with a vertical frequency other than 50 or 60 Hz is input.
*3   Shift range is limited during simultaneous horizontal and vertical shifting.
*4   Contact your dealers for details when the control using RS-232C or RS-422 is required.
*5   The LAN terminal on the optional board will be inactivated after installation. Use the LAN terminal on the main unit.
*6   Operating temperature is 0°C–40°C (32°F–104°F) when the fan control is set to "HIGHLAND" (for over 1,400 m to 2,700 m above sea level).
*7   Operation range differs depending on environments.

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Shape of the plug receptacle

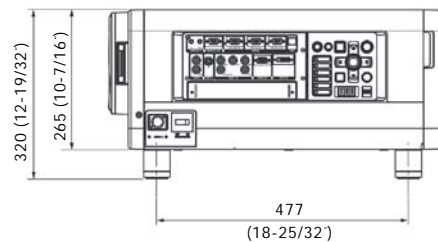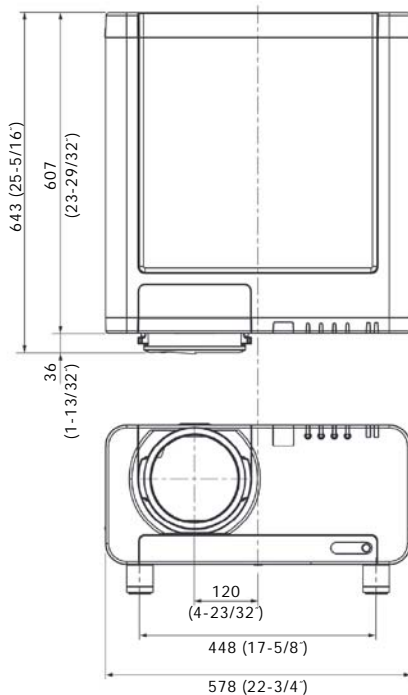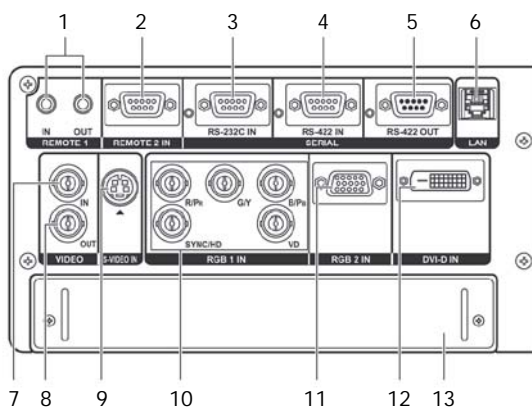AC 120V AC, 20 A   AC 220-240V AC, 16 A   AC 220-240V AC, 13 A/15 A

G
W
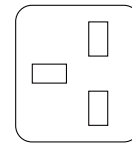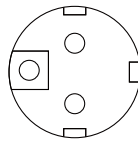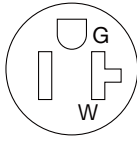
Note: Be sure to use the power plug adaptor cord supplied with the projector.
The supplied power plug adaptor can be used with the PT-DW10000 only.

Dimensions

643 (25-5/16˝)
607 (23-29/32˝)
36 (1-13/32˝)

unit : mm (inch)
NOTE: This illustration is not drawn to scale.

120 (4-23/32˝)
448 (17-5/8˝)
578 (22-3/4˝)

320 (12-19/32˝)
265 (10-7/16˝)
477 (18-25/32˝)

Terminals

1   2   3   4   5   6

IN OUT
REMOTE 1   REMOTE 2 IN   RS-232C IN   RS-422 IN   RS-422 OUT   LAN
SERIAL

IN
OUT
VIDEO   S-VIDEO IN   R/PR   G/Y   B/PB   RGB 2 IN   DVI-D IN
SYNC/HD   VD
RGB 1 IN

7 8   9   10   11   12   13

1   Remote 1 input/output
2   Remote 2 input
3   Serial input (RS-232C)
4   Serial input (RS-422)
5   Serial output (RS-422)
6   LAN connector
    (10Base-T/100Base-TX)
7   Video input
8   Video output
9   S-Video input
10 RGB 1 (YPBPR) input
11 RGB 2 Input
12 DVI-D input
13 Optional board slot

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Standard setting-up positions
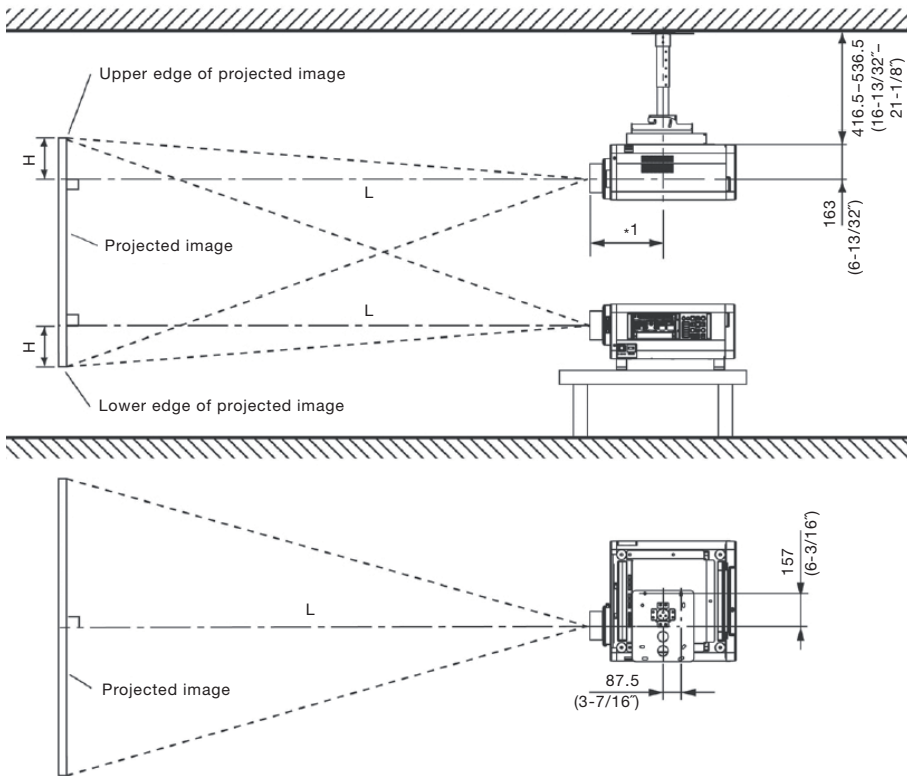
*1 When the lens protrudes to the maximum.

414 mm (16-5/16˝) with the ET-D75LE6
316.5 mm (12-15/32˝) with ET-D75LE1
301 mm (11-27/32˝) with the ET-D75LE2
304.5 mm (12˝) with the ET-D75LE3
328.4 mm (12-15/16˝) with the ET-D75LE4
456.5 mm (17-31/32˝) with the ET-D75LE8
404.5 mm (15-15/16˝) with the ET-D75LE5

unit : mm (inch)

NOTE:

Illustrations show the projector installed using optional ceiling bracket ET-PKD100H and an optional lens.

This illustration is not drawn to scale.

Projection distance (screen aspect ratio 16:9)

Lens (Throw ratio)* Screen size (inch, diagonal)	Distance to screen												Height from the edge of screen to center of lens (H)		
	Zoom											Fixed-focus	Zoom lenses		Fixed-focus lens
	ET-D75LE6 Zoom lens (0.9–1.1:1)		ET-D75LE1 Zoom lens (1.4–1.8:1)		ET-D75LE2 Zoom lens (1.8–2.8:1)		ET-D75LE3 Zoom lens (2.8–4.6:1)		ET-D75LE4 Zoom lens (4.6–7.4:1)		ET-D75LE8 Zoom lens (7.3–13.8:1)		ET-D75LE5 Fixed-focus lens (0.7:1)	Zoom lenses except ET-D75LE6	ET-D75LE6	
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.				
70	1,393 / 4.6	1,662 / 5.5	2,072 / 6.8	2,768 / 9.1	2,801 / 9.2	4,215 / 13.8	4,226 / 13.9	7,094 / 23.3	7,101 / 23.3	11,374 / 37.3	11,091 / 36.4	21,142 / 69.4	1,022 / 3.35	-87 – 959 / -0.29 – 3.15	0 – 872 / 0 – 2.86	436 / 1.43
80	1,600 / 5.2	1,910 / 6.3	2,379 / 7.8	3,178 / 10.4	3,212 / 10.5	4,832 / 15.9	4,843 / 15.9	8,125 / 26.7	8,132 / 26.7	13,013 / 42.7	12,730 / 41.8	24,214 / 79.4	1,180 / 3.87	-100 –1,096 / -0.33 – 3.60	0 – 996 / 0 – 3.27	498 / 1.63
90	1,807 / 5.9	2,158 / 7.1	2,686 / 8.8	3,588 / 11.8	3,624 / 11.9	5,449 / 17.9	5,460 / 17.9	9,156 / 30.0	9,163 / 30.1	14,652 / 48.1	14,370 / 47.1	27,286 / 89.5	1,338 / 4.39	-112 –1,233 / -0.37 – 4.05	0 –1,121 / 0 – 3.68	561 / 1.84
100	2,014 / 6.6	2,406 / 7.9	2,992 / 9.8	3,998 / 13.1	4,035 / 13.2	6,067 / 19.9	6,077 / 19.9	10,187 / 33.4	10,193 / 33.4	16,292 / 53.5	16,009 / 52.5	30,358 / 99.6	1,496 / 4.91	-125 –1,370 / -0.41 – 4.49	0 –1,245 / 0 – 4.08	685 / 2.25
120	2,428 / 8.0	2,902 / 9.5	3,606 / 11.8	4,817 / 15.8	4,858 / 15.9	7,301 / 24.0	7,312 / 24.0	12,248 / 40.2	12,255 / 40.2	19,570 / 64.2	19,288 / 63.3	36,501 / 119.8	1,812 / 5.94	-149 –1,644 / -0.49 – 5.39	0 –1,494 / 0 – 4.90	747 / 2.45
150	3,049 / 10.0	3,646 / 12.0	4,526 / 14.8	6,047 / 19.8	6,093 / 20.0	9,153 / 30.0	9,164 / 30.0	15,341 / 50.3	15,348 / 50.4	24,488 / 80.3	24,207 / 79.4	45,717 / 150.0	2,286 / 7.50	-187 –2,055 / -0.61 – 6.74	0 –1,868 / 0 – 6.13	934 / 3.06
200	4,084 / 13.4	4,886 / 16.0	6,060 / 19.9	8,096 / 26.6	8,150 / 26.7	12,240 / 40.2	12,250 / 40.2	20,496 / 67.2	20,502 / 67.3	32,685 / 107.2	32,404 / 106.3	61,076 / 200.4	3,076 / 10.09	-249 –2,740 / -0.82 – 8.99	0 –2,491 / 0 – 8.17	1,245 / 4.08
250	5,119 / 16.8	6,126 / 20.4	7,594 / 24.9	10,145 / 33.3	10,208 / 33.5	15,326 / 50.3	15,337 / 50.3	25,650 / 84.2	25,657 / 84.2	40,881 / 134.1	40,602 / 133.2	76,435 / 250.8	3,866 / 12.68	-311 –3,424 / -1.02 – 11.23	0 –3,113 / 0 – 10.21	1,557 / 5.11
300	6,154 / 20.2	7,366 / 24.2	9,128 / 29.9	12,194 / 40.0	12,265 / 40.2	18,413 / 60.4	18,423 / 60.4	30,805 / 101.1	30,811 / 101.1	49,078 / 161.0	48,799 / 160.1	91,794 / 301.2	4,656 / 15.28	-374 –4,109 / -1.23 – 13.48	0 –3,736 / 0 – 12.26	1,867 / 6.13
400	8,224 / 27.0	9,846 / 32.3	12,196 / 40.0	16,292 / 53.5	16,380 / 53.7	24,586 / 80.7	24,596 / 80.7	41,114 / 134.9	41,120 / 134.8	65,471 / 214.8	65,194 / 213.9	122,512 / 401.9	-	-498 –5,479 / -1.63 – 17.98	0 –4,981 / 0 – 16.34	-
500	10,294 / 33.8	12,326 / 40.4	15,264 / 50.0	20,390 / 66.9	20,495 / 67.2	30,759 / 100.9	30,769 / 100.9	51,423 / 168.7	51,429 / 168.7	81,864 / 268.6	81,589 / 267.7	153,230 / 502.7	-	-623 –6,849 / -2.04 – 22.47	0 –6,226 / 0 – 20.43	-
600	12,364 / 40.6	14,806 / 48.6	18,332 / 60.1	24,488 / 80.3	24,610 / 80.7	36,932 / 121.2	36,942 / 121.2	61,732 / 202.5	61,738 / 202.6	98,257 / 322.4	97,948 / 321.5	183,948 / 603.5	-	-747 –8,219 / -2.45 – 26.97	0 –7,472 / 0 – 24.51	-

millimeters
feet

• The figures in the above table may vary by approximately ±5% depending on the projection lens that is used.
• When vertical keystone correction is used, the image is corrected in the direction that reduces its projected size.
• At the shortest projection distance, the zoom lens characteristics may cause slight image distortion.

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Calculation of the projection distance

For a screen size different from the above, use the equation below to calculate the projection distance.

ET-D75LE6	16 : 9	minimum	L (mm) = (diagonal screen size in inches) x 20.7 - 56.6
		maximum	L (mm) = (diagonal screen size in inches) x 24.8 - 73.6
ET-D75LE1	16 : 9	minimum	L (mm) = (diagonal screen size in inches) x 30.68 - 76
		maximum	L (mm) = (diagonal screen size in inches) x 40.98 - 100
ET-D75LE2	16 : 9	minimum	L (mm) = (diagonal screen size in inches) x 41.15 - 80
		maximum	L (mm) = (diagonal screen size in inches) x 61.73 - 106
ET-D75LE3	16 : 9	minimum	L (mm) = (diagonal screen size in inches) x 61.73 - 96
		maximum	L (mm) = (diagonal screen size in inches) x 103.09 - 122
ET-D75LE4	16 : 9	minimum	L (mm) = (diagonal screen size in inches) x 103.09 - 116
		maximum	L (mm) = (diagonal screen size in inches) x 163.93 - 101
ET-D75LE8	16 : 9	minimum	L (mm) = (diagonal screen size in inches) x 163.95 - 386
		maximum	L (mm) = (diagonal screen size in inches) x 307.18 - 360
ET-D75LE5	16 : 9	(fixed focus)	L (mm) = (diagonal screen size in inches) x 15.798 - 84

- **The figures in the above table may vary by approximately ±5% depending on the projection lens that is used.**
- **When vertical keystone correction is used, the image is corrected in the direction that reduces its projected size.**
- **At the shortest projection distance, the zoom lens characteristics may cause slight image distortion.**

Mounting and Operation Precaution

Do not mount the projector so that it angles downward from the vertical (including downward angles of ±45°, because this would adversely affect its lamp cooling ability. For detailed information, please consult your sales representative.
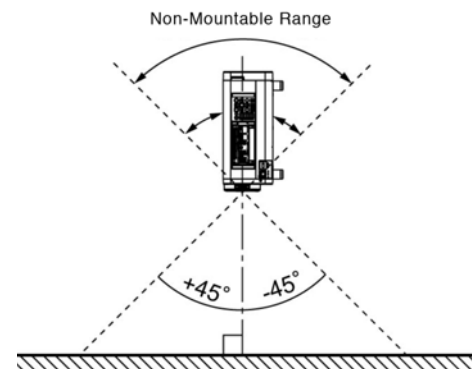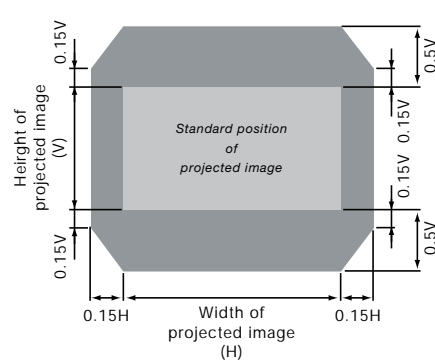

Shift range

Optical axis shift function allows to shift the position of a projected image as shown below.

ET-D75LE1/D75LE2/D75LE3/D75LE4/D75LE8
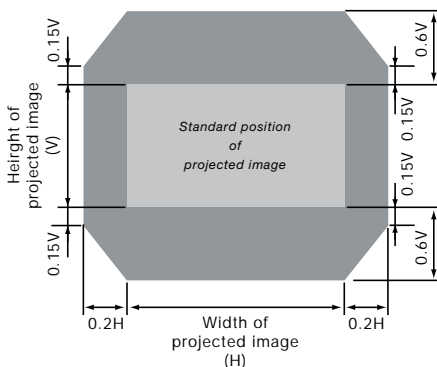
ET-D75LE6

- **Because the ETD75LE5 is a fixed short-throw lens, the lens shift function cannot be used with it.**

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List of compatible signals

This projector supports RGB signals with horizontal frequencies of 15 to 100 kHz, vertical frequencies of 24 to 120 Hz and dot clock frequencies of 20 MHz to 162 MHz.

NOTE: The native resolution of this projector is 1,920 x 1,080 pixels. If the display resolution of the input signal is different from the native resolution, image compression or expansion will be used to convert the input signal to a level within the native resolution.

Display mode	Display resolution (dots)[1]	Scanning frequency H (kHz)	V (kHz)	Dot clock frequency (MHz)	Format
NTSC/NTSC4.43/PAL-M/PAL60	720 x 480i	15.7	59.9	-	VIDEO/S-VIDEO
PAL/PAL-N/SECAM	720 x 576i	15.6	50.0	-	
525i (480i)	720 x 480i	15.7	59.9	13.5	YPBPR/RGB
625i (576i)	720 x 576i	15.6	50.0	13.5	
525p (480p)	720 x 483	31.5	59.9	27.0	YPBPR/RGB/DVI (EDID1)
625p (576p)	720 x 576	31.3	50.0	27.0	
750 (720)/60p	1,280 x 720	45.0	60.0	74.3	
750 (720)/50p	1,280 x 720	37.5	50.0	74.3	
1125 (1080)/60i	1,920 x 1,080i	33.8	60.0	74.3	
1125 (1080)/50i		28.1	50.0	74.3	
1125 (1080)/24p	1,920 x 1,080	27.0	24.0	74.3	
1125 (1080)/24sF	1,920 x 1,080i	27.0	24.0	74.3	
1125 (1080)/25p	1,920 x 1,080	28.1	50.0	74.3	
1125 (1080)/30p		33.8	60.0	74.3	
1125 (1080)/60p		67.5	60.0	148.5	
1125 (1080)/50p		56.3	50.0	148.5	
VGA70	640 x 400	31.5	70.1	25.2	RGB/DVI (EDID2)
VGA85		37.9	85.1	31.5	
VGA60	640 x 480	31.5	59.9	25.2	RGB/DVI (EDID1/2)
VGA67		35.0	66.7	30.2	RGB/DVI (EDID2)
VGA73		37.9	72.8	31.5	
VGA75		37.5	75.0	31.5	
VGA85		43.3	85.0	36.0	
SVGA56	800 x 600	35.2	56.3	36.0	
SVGA60		37.9	60.3	40.0	
SVGA72		48.1	72.2	50.0	
SVGA75		46.9	75.0	49.5	
SVGA85		53.7	85.1	56.3	
MAC16	832 x 624	49.7	74.6	57.3	
XGA50	1,024 x 768	39.6	50.0	51.9	
XGA60		48.4	60.0	65.0	
XGA70		56.5	70.1	75.0	
XGA75		60.0	75.0	78.8	
XGA82		65.5	81.6	86.0	
XGA85		68.7	85.0	94.5	
XGA87i	1,024 x 768i	35.5	87.0	44.9	RGB
XGA100	1,024 x 768	80.0	100.0	105.0	RGB/DVI (EDID2)
XGA120		96.7	120.0	130.0	
WIDE76860	1,280 x 768	47.8	59.9	79.5	
WXGA80050	1,280 x 800	41.3	50.0	68.0	
WXGA80060		49.7	59.8	83.5	
MXGA71	1,152 x 864	64.0	71.2	94.2	
MXGA75		67.5	74.9	108.0	
MXGA85		76.7	85.0	121.5	
MAC21	1,152 x 870	68.7	75.1	100.0	
MSXGA60	1,280 x 960	60.0	60.0	108.0	
SXGA50	1,280 x 1,024	52.4	50.0	88.0	
SXGA60		64.0	60.0	108.0	
SXGA66		72.3	66.3	125.0	
SXGA72		78.2	72.0	135.1	
SXGA75		80.0	75.0	135.0	
SXGA85		91.1	85.0	157.5	
SXGA+60	1,400 x 1,050	65.2	60.0	122.6	
SXGA+72		78.8	72.0	149.3	
SXGA+75		82.2	75.0	155.9	
UXGA60	1,600 x 1,200	75.0	60.0	162.0	

1. The "i" appearing after the resolution indicates an interlaced signal.
   Line flicker occurs when an interlaced signal is input.

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3-Chip DLP™ Projector

Serial connector

The serial connector complies with RS-232C. To control the projector from a personal computer, commands must be input through communication software, based on the format and satisfying the communication conditions shown below.
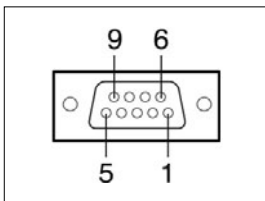
Pin assignments and signal names
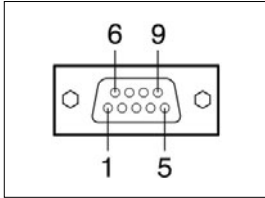
D-sub 9-pin (female)
Serial input

No.	Signal name	Description	No.	Signal name	Description
1	–	NC			
2	TXD	Send data	6	–	NC
3	RXD	Receive data	7	CTS	Connected internally
4	–	Connected internally	8	RTS	Connected internally
5	GND	Ground	9	–	NC

Pin assignments and signal names

D-sub 9-pin (male)
Serial output

No.	Signal name	Description	No.	Signal name	Description
1	–	NC			
2	RXD	Receive data	6	–	NC
3	TXD	Send data	7	RTS	Connected internally
4	–	Connected internally	8	CTS	Connected internally
5	GND	Ground	9	–	NC

Communication conditions (factory setting)

Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	9,600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

Basic format

Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.
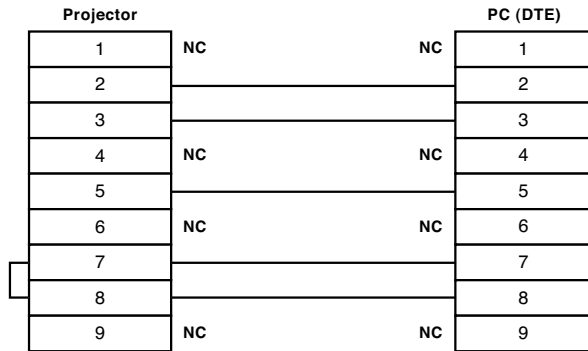
STX	A	D	I1	I2	;	C1	C2	C3	:	P1	P2	...	Pn	ETX

Start
(1 byte)

ID 2 characters
(2 bytes)

Semicolon
(1 byte)

Command
(3 bytes)
(Control and/or query commands)

Colon
(1 byte)

Parameters
(undefined length)

End
(1 byte)

ID designator:
01 to 64: Address number
0A to 0Z: Group ID
ZZ: All units (ID ALL)
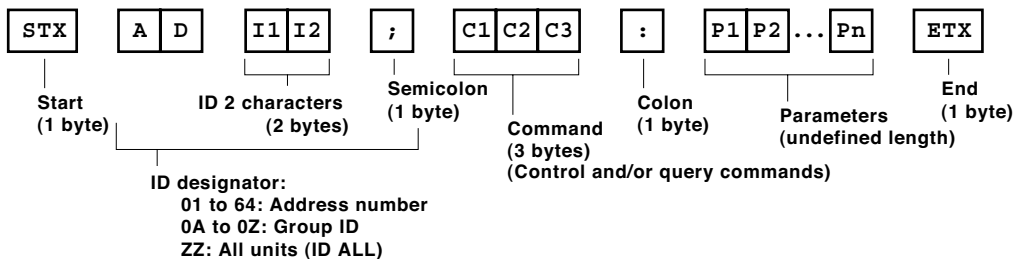
CAUTIION
- **It may not be possible to send or receive commands for about 10 to 60 seconds when the lamp is first turned on. If this occurs, wait for 60 seconds, then try sending or receiving again.**
- **When sending multiple commands, be sure to wait for at least 0.5 second after receiving a response from the projector before sending the next command.**
- **Additional time is sometimes required for response due to processing inside the projector. Set the time-out period for command response to 10 seconds or more.**

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Panasonic

3-Chip DLP™ Projector

PT-**DW10000**

Cable specifications

Projector				PC (DTE)
1	NC	NC		1
2				2
3				3
4	NC	NC		4
5				5
6	NC	NC		6
7				7
8				8
9	NC	NC		9

Control commands

Command : Parameter	Function		Callback
`PON`	POWER (STANDBY)	Standby power on	`PON`
`POF`		Standby power off	`POF`
`IIS:RG1`	INPUT SELECT	RGB 1	`IIS:RG1`
`IIS:RG2`		RGB 2	`IIS:RG2`
`IIS:VID`		Video	`IIS:VID`
`IIS:SVD`		S-Video	`IIS:SVD`
`IIS:DVI`		DVI	`IIS:DVI`
`IIS:AUX`		AUX	`IIS:AUX`
`LPM:0`	LAMP SELECT	Quad (four lamps)	`LPM:0`
`LPM:1`		Lamp 1 + 4	`LPM:1`
`LPM:2`		Lamp 2 + 3	`LPM:2`
`LPM:3`		Dual (two lamps)	`LPM:3`
`LPM:4`		Lamp 1 + 2 + 3	`LPM:4`
`LPM:5`		Lamp 1 + 2 + 4	`LPM:5`
`LPM:6`		Lamp 1 + 3 + 4	`LPM:6`
`LPM:7`		Lamp 2 + 3 + 4	`LPM:7`
`LPM:8`		Triple (three lamps)	`LPM:8`
`LPM:9`		Lamp 1	`LPM:9`
`LPM:10`		Lamp 2	`LPM:10`
`LPM:11`		Lamp 3	`LPM:11`
`LPM:12`		Lamp 4	`LPM:12`
`LPM:13`		Single lamp	`LPM:13`
`OSH:1`	SHUTTER	Shutter on	`OSH:1`
`OSH:0`		Shutter off	`OSH:0`
`OPP:0`	P IN P SELECT	P in P off	`OPP:0`
`OPP:1`		User 1	`OPP:1`
`OPP:2`		User 2	`OPP:2`
`OPP:3`		User 3	`OPP:3`
`OAS`	AUTO SETUP		`OAS`
`VPM:NAT`	PICTURE MODE	Natural	`VPM:NAT`
`VPM:STD`		Standard	`VPM:STD`
`VPM:DYN`		Dynamic	`VPM:DYN`
`VPM:CIN`		Cinema	`VPM:CIN`
`VPM:GRA`		Graphic	`VPM:GRA`
`OTE:0`	COLOR TEMPERATURE	Low	`OTE:0`
`OTE:1`		Middle	`OTE:1`
`OTE:2`		High	`OTE:2`
`OTE:4`		User 1	`OTE:4`
`OTE:9`		User 2	`OTE:9`
`OTE:10`		Default	`OTE:10`
`TSD:y1y2y3y4m1m2d1d2w`	DATE	Date setting	`TSD:y1y2y3y4m1m2d1d2w`
`TST:h1h2m1m2s1s2`	TIME	Time setting	`TST:h1h2m1m2s1s2`
`OOS:1`	ON SCREEN	On-screen display on	`OOS:1`
`OOS:0`		On-screen display off	`OOS:0`

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Status asking commands

Command:Parameter	Function	Callback	Description
QPW	Main power status	001	On
		000	Off
QSH	Shutter function status	1	On
		0	Off
QIN	Input signal status	RG1	RGB 1
		RG2	RGB 2
		VID	Video
		SVD	S-Video
		DVI	DVI
		AUX	AUX
QOS	On-screen display status	1	On
		0	Off
QST	Projector run time	00000–99999	00000h–99999h
Q$L:p1	Lamp 1 run time	0000–9999	0000h–9999h
Q$L:p2	Lamp 2 run time	0000–9999	0000h–9999h
Q$L:p3	Lamp 3 run time	0000–9999	0000h–9999h
Q$L:p4	Lamp 4 run time	0000–9999	0000h–9999h
QSL	Lamp operation mode status	0	Quad (four lamps)
		1	Lamp 1 + 4
		2	Lamp 2 + 3
		3	Dual (two lamps)
		4	Lamp 1 + 2 + 3
		5	Lamp 1 + 2 + 4
		6	Lamp 1 + 3 + 4
		7	Lamp 2 + 3 + 4
		8	Triple (three lamps)
		9	Lamp 1
		10	Lamp 2
		11	Lamp 3
		12	Lamp 4
		13	Single lamp
QIB	Optional board slot status	MD95SD1	ET-MD95SD1
		MD95SD3	ET-MD95SD3
		MD75DV	ET-MD75DV
		NONE	Uninstalled
		UNKNOWN	Unknown
		NOT SUPPORT	Not supported
	P in P status	0	Off
		1	User 1
		2	User 2
		3	User 3
QGD	Date setting status	y1y2y3y4m1m2d1d2w	yyyymmdd (day of week) [1]
QGT	Time setting status	h1h2m1m2s1s2	hhmmss [2]

[1] Day of week: Monday = 1, Tuesday = 2, ... Sunday = 7
[2] Set the date and time to UTC (universal time coordinated).

Command example

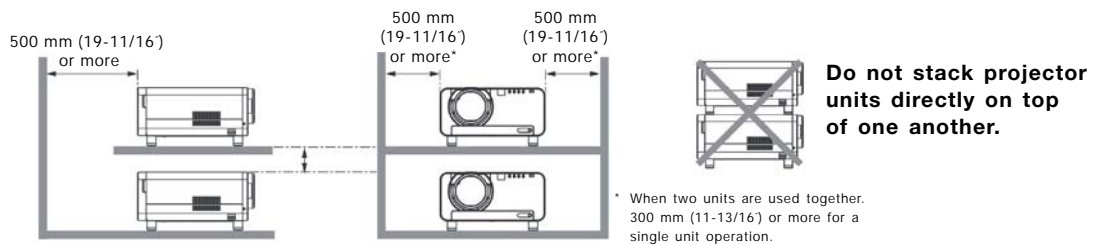To set the on-screen display off, send the command as shown below.

```
STX    ADZZ  ;   OOS   :   0      ETX
 |        |        |        |        |
Start  ID Address  Command  Parameter  End
Character code 02  ZZ: ID ALL                Character code 03
```
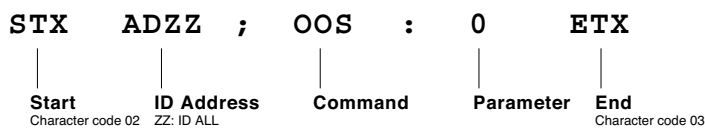
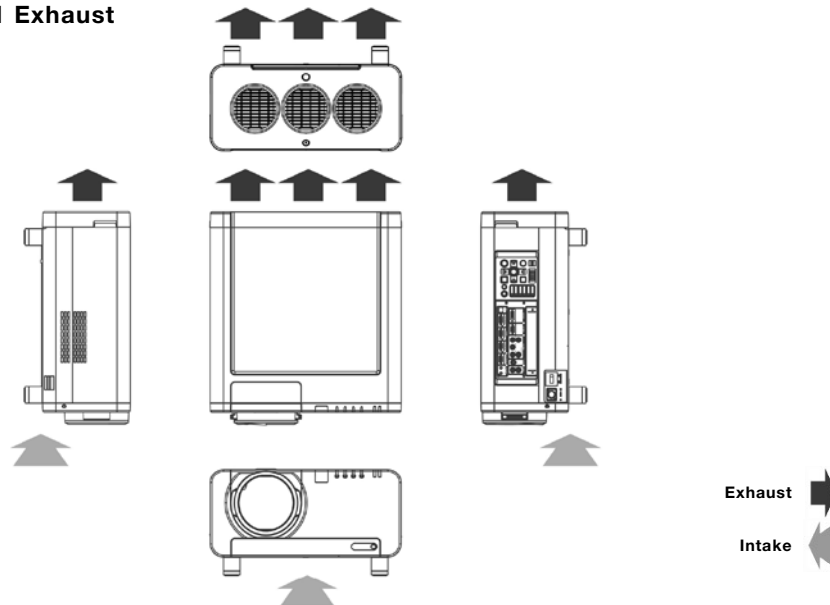**NOTE: When sending commands without parameters, a colon (:) is not necessary.**

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Notes on Projector Placement and Operation:

The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the following precautions.

1. Never place objects on top of the projector while it is operating.

2. Make sure there is an unobstructed space of 500 mm (19-11/16˝) or more around the projector's exhaust openings.

3. Do not stack projector units directly on top of one another for the purpose of multiple (stacked) projection. When stacking projector units, be sure to provide the amount of space indicated below between them. These space requirements also apply to installations where only one projector unit is operating at one time and the other unit is used as a backup.

4. If the projector is placed in a box or enclosure, ensure the temperature of the air surrounding the projector is between 0°C/32°F and 40°C/104°F. Also make sure the projector's intake and exhaust openings are not blocked. Take particular care to ensure that hot air from the exhaust openings is not sucked into the intake openings.

500 mm (19-11/16˝)
or more

500 mm
(19-11/16˝)
or more*

500 mm
(19-11/16˝)
or more*

Do not stack projector units directly on top of one another.

* When two units are used together.
300 mm (11-13/16˝) or more for a single unit operation.

Direction of Air Intake and Exhaust

Exhaust

Intake

Operating the Projector Continuously

1. If the projector is to be operated continuously 24 hours, use the lamp relay mode. The projector cannot be operated continuously 24 hours in quad-lamp mode. Allow a minimum of two hours per day of non-operation time if the projector is to be operated continuously more than 22 hours.

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

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