Panasonic
ideas for life

PT-**DW100**
3-chip DLP™ Projector

Highly Reliable Wide 10,000 lm Projector

4 3 2 1
LAMP

DLP
PICTURE BY
TEXAS INSTRUMENTS

PJLink™

AUTO CLEANING ROBOT · FILTER CLEANING

PICTURE BY
DLP™
A TEXAS INSTRUMENTS TECHNOLOGY

A 3-chip DLP™ Projector with High Reliability and Excellent System Expandability

Panasonic's unique 4-lamp optical system gives the PT-DW100 a brightness of 10,000 lm and stable operation. The DLP™ system, which exhibits virtually no image degradation over time and a long list of unique Panasonic technologies provide outstanding images and solid reliability.

High brightness:
10,000 lumens

High picture quality:
WXGA *1,366 x 768 pixels*

Incredible Brightness & High Picture Quality
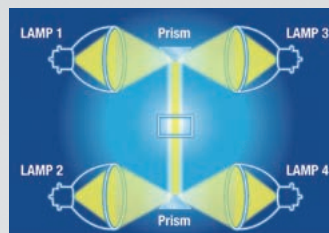## Panasonic Technologies Assure Spectacular Image Performance

New AC Lamp and Multi-Lamp System

Panasonic's innovative 4-lamp optical system uses newly developed 300-watt AC lamps to deliver remarkable 10,000-lumen brightness. The 4-lamp system means superb reliability too – the projector keeps working even if one lamp goes out. 24/7 continuous operation is possible in Lamp Relay mode.

Lamp replacement cycle and brightness guidelines

Lamp mode	Light output (lumens)	Lamp replacement cycle (hours)
Four lamps	10,000	2,000
Three lamps	7,500	2,600
Two lamps	5,000	4,000
One lamp	2,500	8,000

* The values above are maximum values when all 4 lamps are replaced simultaneously, and when they are used in cycles of being turned on for 3.5 hours and off for 0.5 hour. When the lamps are turned on and off more frequently, the lamp replacement cycle is shortened. (It is recommended that the mechanical shutter be used to turn images off for a short period.)

Dynamic Iris

Panasonic's Dynamic Iris uses a scene-linking aperture mechanism to achieve a remarkable 5,000:1 contrast at 10,000-lumen brightness. It helps reproduce deeper, richer blacks and gives images more detailed textures.

Full 10-Bit Processing

Use of a full 10-bit picture processing system helps achieve smooth tonal expression. Complexions and other flesh tones look natural and true-to-life, with accurate gradation.

3D Color Management System

Some people like to view large-screen images from relatively close up to get the maximum viewing impact. But at close range, the colors perceived by the human eye tend to differ slightly from the original colors. The 3D Color Management System solves this problem by enabling fine adjustment of colors so they appear faithful to the originals when projected onto a large screen.

Progressive Cinema Scan (3/2 pulldown)

This interlace/progressive conversion technology automatically detects when the input signal is derived from filmed material and selects the optimum progressive processing method to assure faithful reproduction of the original image.

Dual Link HD-SDI Signal Support (Optional)

Just add the ET-MD100SD4 expansion board and the projector supports Dual Link HD-SDI signals. HD-SDI signals use two cables to achieve twice the color resolution of the conventional single link system.

ET-MD100SD4

High Reliability & Stability
A Host of Functions to Assure Stable, Long-Time Operation

Auto Cleaning Robot

Panasonic's Auto Cleaning Robot automatically cleans the air filter to help keep the projector running smoothly. When the projector is switched on*[1], the robot uses a brush to clear away any dust adhering to the filter, helping to prevent clogs that can impair operation or cause malfunctions. The projector can be used for around 2,000 hours before the filter needs to be cleaned, making it a good choice for installation in tight spaces or for ceiling-mounted applications. Also, the Micro-Cut Air Filter traps particles as small as 10 microns*[2]. This greatly reduces the amount of dust entering the projector, helping maintain high brightness and stable operation.
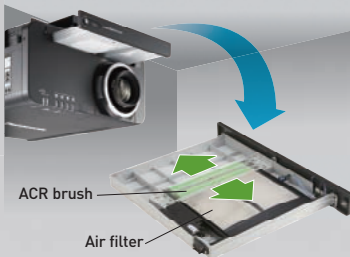
*[1] Cleaning time can be set by a timer from 00:00 to 23:50 in 10-minute intervals, or controlled manually. The cleaning process is done only once per 24 hours. When the set time is reached, the cleaning process will begin if the projector is on or in cooling mode.

*[2] Such as lint particles and pollen.

ACR brush
Air filter

• Smoke Cut Filter
The optional ET-SFD100 Smoke Cut Filter can be mounted in place of the Auto Cleaning Robot's tray. This optional smoke filter must be used when using the projector at events where smoke or fog is dispersed.
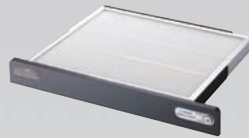
Liquid Cooling System

This advanced system uses a pump to circulate a cooling liquid behind the DLP™ chips to absorb heat. This Panasonic's technology is made possible by the reflective nature of the DLP™ system, which enables an airtight chip structure that minimizes image-quality loss due to dust adherence. In addition, it allows operation within a wide ambient temperature range of 0°C (32°F) to 45°C (113°F)*[3] and reduces operating noise to 43 dB*[4].

*[3] The operating temperature range is 0°C (32°F) to 40°C (104°F) when used in High-Altitude mode (1,400 m [4,593 feet] to 2,700 m [8,858 feet]). Also, if the ambient temperature exceeds 40°C (104°F) (35°C [95°F] in High-Altitude mode) when using all four lamps, the light output may be reduced by approximately 30% to protect the projector.

*[4] Average value at time products are shipped from the factory, in accordance with JIS X 6911:2003 data projector specifications. Measurement methods and conditions are based on Article 2 of JIS X 6911:2003 data projector specifications.

Lamp LED Indicator and Self-Diagnosis Function

The projector body is equipped with a temperature alarm LED and a burnt-lamp alarm LED (for lamps 1 to 4). In the PT-DW100, the LEDs are visible from both front and top, so you can see it easily even if the unit is hung from the ceiling. Information on the error is also given in the on-screen display. A self-diagnosis function is also provided. Error codes displayed on the 3-digit, 7-segment LED on the side of the projector tell the operator what the problem is.

Excellent System Functions
Adapts to a Variety of Environments

Built-in Multi-screen Support System

Color matching
Edge blending

With edge blending
Without edge blending

Overlapping image edges

PT-DW100

• Edge blending
The edges of adjacent screens can be blended and their luminance controlled. For example, the adjoining edges in a 2-screen system can be blended to create a smooth, seamless image.

• Color matching
When several units are used together, this function corrects for slight variations in the color reproduction range of individual projectors. The PC software assures easy, accurate control. Independent, 7-axis adjustment (red, green, blue, yellow, magenta, cyan, white) ensures high precision colors and minimizes color variations.

• Multi-screen processor
The PT-DW100 can project large, multi-screen images without any additional equipment. Up to 100 units (10 x 10) can be edge-blended at a time.

* Image uniformity over the entire screen may be affected by the type of screen used or the lamp mode selected. Also, due to differences in the manner in which the lamp brightness decreases with time, some fluctuation may appear in overall screen brightness. When this occurs, the unit must be readjusted, which is a service that is offered for a fee.
For details, please contact the store where you purchased the product, or a sales representative.

Lens Shift

The optical axis can be adjusted both vertically and horizontally by a remote control, giving you greater setup ease and flexibility.

Flexible Angle Setting

Flexible mounting allows a 360° vertical rotation range*. Dramatic showroom displays can be achieved by projecting directly downward or upward.

* A special fixture must be attached to the lamp unit when the projector is placed at an angle within ±45° of the vertical.

* The horizontal range is ±15°.

Multiple Terminals Include DVI-D and LAN Slot

The PT-DW100 comes equipped with DVI-D and LAN (PJ-Link™) slots. It also features an array of terminals, including two RGB inputs and D-sub HD 15-pin, a 5-BNC connector, serial in/out, S-video input, two remote inputs, and one remote out. In addition to offering DVI-D control, the PT-DW100 is HDCP*-compliant and thus meets a broad range of projection needs.

* High-Bandwidth Digital Content Protection

A Wide Selection of Lenses

Choose from a wide lineup of lenses for your system, including short-throw, long-throw zoom and fixed-throw lenses for rear projection use. The additional lenses make it easy to adapt your projector to the installation site. The lens cover opens completely for easy mounting.

Other Features

- Web browser control   • PJLink™ compatibility   • Mechanical lens shutter
- Picture in Picture (The Picture in Picture function cannot be used with some input signals and selected inputs.)
- Anti-theft features with chain opening
- ID assignment for up to 64 units   • Built-in test pattern
- Selectable 9-language on-screen menu (English, German, French, Spanish, Italian, Russian, Japanese, Chinese, Korean)

Specifications

Power supply		North America: 120–240 V AC, 16 – 9.0 A, 50/60 Hz (3-wire single-phase)
		Europe, Asia: 220–240 V AC, 9.5 A, 50/60 Hz (3-wire single-phase)
Power consumption		North America: 1,600–1,500 W (10-15 W in standby mode with fan stopped)
		Europe, Asia: 1,500 W (15 W in standby mode with fan stopped)
DLP™ chip	Panel size	0.85" diagonal (16:9 aspect ratio)
	Display method	DLP™ chip x 3 (R, G, B), DLP™ projection system
	Pixels	1,049,088 (1,366 x 768) x 3, total of 3,147,264 pixels
Lens		Optional powered zoom/focus lenses
Lamp		300 W UHM lamp x 4 (four lamp system)
Screen size		70 - 600 inches,16:9 aspect ratio
		(70-300 inches, 16:9 aspect ratio with the ET-D75LE5)
Brightness*1		10,000 lumens (four-lamp operation mode)
Contrast ratio*1		5,000:1 (full on/full off, in Dynamic iris 3 mode)
Resolution		1,366 x 768 pixels (Input signals that exceed this resolution will be converted to 1,366 x 768 pixels.)
RGB input scanning frequency		fH 15-100 kHz, fV 24-120 Hz
		Dot clock 20-162 MHz
Component signal		480i, 480p, 576i, 576p, 720/60p, 720/50p, 1035/60i, 1080/25p, 1080/24p,
		1080/24sF, 1080/30p, 1080/60i, 1080/50i, 1080/50p, 1080/60p
Video signal		fH 15.75/15.63 kHz, fV 50/60Hz
		(NTSC,NTSC4.43,PAL,PAL60,PAL-N,PAL-M,SECAM)
Lens shift		Vertical: ±70% (±60% with the ET-D75LE6) (powered)
		Horizontal: ±30% (±20% with the ET-D75LE6) (powered)
Keystone correction range		Vertical: ±40° (±22° with the ET-D75LE5, ±28° with the ET-D75LE6)
Terminals	DVI-D IN	DVI-D 24-pin x 1, DVI 1.0 compliant, compatible with HDCP, single link
		480p, 576p, 1080/60i, 1080/50i, 1080/24p, 1080/24sF, 1080/25p, 1080/30p, 1080/60p, 1080/50p,
		720/60p, 720/50p
		VGA (640 x 480) – WUXGA*2 (1,920 x 1,200), compatible with non-interlaced signals only,
		Dot clock: 25–162 MHz
	RGB1/YPBPR IN	BNC x 5
	RGB2 IN	D-sub HD 15-pin x 1
	VIDEO IN	BNC x 1, 1.0 Vp-p
	VIDEO OUT	BNC x 1, 1.0 Vp-p
	S-VIDEO IN	Mini DIN 4-pin x 1
	LAN	RJ-45 (10 Base-T/100 Base-TX) x 1, compatible with PJLink™
	SERIAL IN	D-sub 9-pin female x 2 (RS232C x 1, RS422 x 1)
	SERIAL OUT	D-sub 9-pin male x 1 (RS422 x 1)
	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 female x 1 for external control (parallel)
Optional board slot	With ET-MD77SD1 installed*3	SERIAL IN: BNC x 1, SD-SDI signal (YCBCR 4:2:2 10-bit): SMPTE 259M compliant: 480i, 576i
		SERIAL OUT: BNC x 1, active through
	With ET-MD77SD3 installed*3	SERIAL IN: BNC x 1, SD-SDI signal (YCBCR 4:2:2 10-bit): SMPTE 259M compliant: 480i, 576i
		Single-link HD-SDI signal (YCBCR 4:2:2 10-bit): SMPTE 292M compliant: 720/50p, 720/60p,
		1035/60i, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p
		SERIAL OUT: BNC x 1, active through
	With ET-MD100SD4 installed	Link A/Link B IN: BNC x 1 for each, SD-SDI signal (YCBCR 4:2:2 10-bit): 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
		Dual-link HD-SDI signal (RGB 4:4:4 12-bit/10-bit): SMPTE 372M compliant: 1920 x 1080/50i,
		1920 x 1080/60i, 1920 x 1080/25p, 1920 x 1080/24p, 1920 x 1080/24sF, 1920 x 1080/30p
		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	Specifications are the same as those for the DVI-D IN terminal on the main unit.
Installation		Front/rear, ceiling/floor
Power cord length		3.0 m (9.8')
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*4		Approx. 35 kg (77.2 lbs) without lens
Operating temperature		0 -45 °C (32 -113 °F)*5
Operating humidity		10-80% (no condensation)
Supplied accessories		Power cord, Wireless/wired remote control unit,
		Batteries for remote control (3V AA battery x2), Eye bolt x4, Wire rope

*1 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
*2 Only when using VESA CVT-RB(Reduced Blanking) signals.
*3 The LAN terminal on each board, when mounted, cannot be used because the LAN terminal on the main unit has priority.
*4 Average value. May differ depending on models.
*5 The operating temperature range is 0°C (32°F) to 40°C (104°F) when used in High-Altitude mode (1,400 m [4,593 feet] to 2,700 m [8,858 feet]).
   Also, if the ambient temperature exceeds 40°C (104°F) (35°C [95°F] in High-Altitude mode) when using all four lamps, the light output may be
   reduced approximately 30% to protect the projector.

Optional Accessories

Lens
Zoom lens
ET-D75LE6 (1.0-1.2:1)
ET-D75LE1 (1.5-2.0:1)
ET-D75LE2 (2.1-3.1:1)
ET-D75LE3 (3.1-5.2:1)
ET-D75LE4 (5.2-8.2:1)
ET-D75LE8 (8.2-15.4:1)
Fixed focus lens
ET-D75LE5 (0.8:1)

ET-D75LE1

Lamp
Replacement lamp unit
ET-LAD12K
ET-LAD12KF (four pack)

Input signal board
SD-SDI input signal board
ET-MD77SD1

HD/SD-SDI input signal board
ET-MD77SD3

Dual link HD/HD-SDI input signal board
ET-MD100SD4

DVI-D input signal board
ET-MD77DV

Smoke cut filter
ET-SFD100

This optional smoke filter must be used for staging events where smoke or fog is dispersed.

Frame
ET-PFD100

Carrying handle
ET-HAD100

Ceiling mount bracket
High-ceiling mount bracket
ET-PKD100H
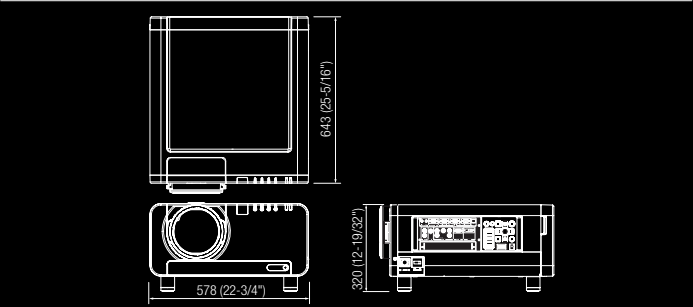
Low-ceiling mount bracket
ET-PKD100S

ET-PKD100S

ET-PKD100H

Made in Japan
PT-DW100 projector is carefully manufactured at the Panasonic factory in Japan under strict quality control. This is another very important advantage of Panasonic projectors.

Dimensions

unit: mm (inch)

643 (25-5/16")
320 (12 -19/32")
578 (22-3/4")

Projection distance

Diagonal image size (aspect raio: 16:9)	ET-D75LE6 1.0-1.2:1		ET-D75LE1 1.5-2.0:1		ET-D75LE2 2.1-3.1:1		ET-D75LE3 3.1-5.2:1		ET-D75LE4 5.2-8.2:1		ET-D75LE8 8.2-15.4:1		ET-D75LE5 0.8:1
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	fixed
70"	1,560 mm 5.1'	1,865 mm 6.1'	2,322 mm 7.6'	3,103 mm 10.2'	3,137 mm 10.3'	4,719 mm 15.5'	4,730 mm 15.5'	7,937 mm 27.9'	7,943 mm 27.9'	12,713 mm 41.7'	12,430 mm 40.8'	23,652 mm 77.6'	1,151 mm 3.8'
100"	2,253 mm 7.4'	2,696 mm 8.8'	3,349 mm 11.0'	4,476 mm 14.7'	4,516 mm 14.8'	6,787 mm 22.3'	6,798 mm 22.3'	11,391 mm 39.9'	11,397 mm 39.9'	18,206 mm 59.7'	17,923 mm 58.8'	33,943 mm 111.4'	1,681 mm 5.5'
150"	3,408 mm 11.2'	4,081 mm 13.4'	5,062 mm 16.6'	6,765 mm 22.2'	6,814 mm 22.4'	10,234 mm 33.6'	10,244 mm 33.6'	17,147 mm 59.9'	17,153 mm 59.9'	27,359 mm 89.8'	27,077 mm 88.8'	51,095 mm 167.6'	2,563 mm 8.4'
200"	4,563 mm 15.0'	5,466 mm 17.9'	6,775 mm 22.2'	9,053 mm 29.7'	9,112 mm 29.9'	13,680 mm 44.9'	13,691 mm 44.9'	22,904 mm 79.9'	22,909 mm 79.9'	36,512 mm 119.8'	36,232 mm 118.9'	68,246 mm 223.9'	3,445 mm 11.3'
300"	6,873 mm 22.6'	8,236 mm 27.0'	10,201 mm 33.5'	13,630 mm 44.7'	13,707 mm 45.0'	20,574 mm 67.5'	20,584 mm 67.5'	34,416 mm 119.9'	34,422 mm 119.9'	54,819 mm 179.9'	54,541 mm 178.9'	102,549 mm 336.4'	5,209 mm 17.1'
400"	9,183 mm 30.1'	11,006 mm 36.1'	13,626 mm 44.7'	18,206 mm 59.7'	18,303 mm 60.0'	27,467 mm 90.1'	27,477 mm 90.1'	45,929 mm 150.9'	45,934 mm 150.9'	73,126 mm 239.9'	72,850 mm 239.0'	136,852 mm 449.0'	—
600"	13,803 mm 45.3'	16,546 mm 54.3'	20,477 mm 67.2'	27,360 mm 89.8'	27,494 mm 90.2'	41,254 mm 135.3'	41,264 mm 135.4'	68,954 mm 239.9'	68,960 mm 239.9'	109,740 mm 360.0'	109,468 mm 359.1'	205,458 mm 674.1'	—

Throw distance

NOTES ON USE

1. 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.

2. The projector uses a high-voltage mercury lamp that contains high internal pressure. This lamp may break, emitting a large sound, or fail to illuminate, due to impact or extended use.

3. The projector uses high-wattage lamp that 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 500 mm or more around the projector's exhaust openings.
   • 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 between them. 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, temperature of the air surrounding the projector must be between 0°C and 35°C. 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.

4. If the projector is to be operated continuously 24 hours a day, use the multi-lamp optical system's alternating lamp operation (lamp changer) function. The projector can be operated continuously 24 hours a day in four-lamp operation mode, but it will automatically operate with three lamps for 8 hours of the 24 hours.

5. The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.
   • The length of time that it takes for the lamp to break or fail to illuminate varies greatly depending on individual lamp characteristics and usage conditions.
   • The brightness of the lamp will gradually decrease with use.

6. Because the ET-D75LE5 is a fixed short-throw lens, the lens shift function cannot be used with it.

7. Due to natural characteristics of lamps, screen brightness may vary (flicker). This is not an indication of faulty lamp performance.

Panasonic®

For more information about Panasonic projector —
http://panasonic.net/avc/projector

Please contact Panasonic or your dealer for a demonstration.

JQA-1617 ISO 9001 CERTIFIED MANAGEMENT SYSTEM

ISO 14001 JACO JAPAN AUDIT AND CERTIFICATION ORGANIZATION FOR ENVIRONMENT AND QUALITY EC98J2010

UKAS ENVIRONMENTAL MANAGEMENT 051

All information included here is valid as of October 2008.