# Panasonic ideas for life

DT-DW100

Highly Reliable Wide 10,000 lm Projector





# 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:

**VXGA** 1,366 x 768 pixels

# Incredible Brightness & High Picture Quality

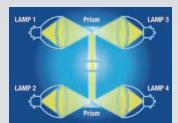
Panasonic Technologies Assure Spectacular Image Performance

#### **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

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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					



<sup>\*</sup> 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

## 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

#### 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.



FT-MD100SD4

## High Reliability & Stability

## A Host of Functions to Assure Stable, Long-Time Operation

#### **Auto Cleaning Robot**

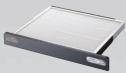
Panasonic's Auto Cleaning Robot automatically cleans the air filter to help keep the projector running smoothly. When the projector is switched on\*1, the robot uses a brush to clear away any dust adhering to the filter, helping to prevent clogs that can impair operation or cause malfunctions. The projector 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.

#### 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 DLPTM chips to absorb heat. This Panasonic's technology is made possible by the reflective nature of the DLPTM 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

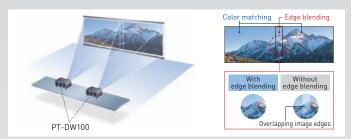
hung from the ceiling. Information on the error is also given in the on-screen display. A self-diagnosis function is also provided. Error codes displayed on the 3-digit, 7-segment LED on the side of the projector tell the operator what the problem is.



## Excellent System Functions

## Adapts to a Variety of Environments

#### **Built-in Multi-screen Support System**



#### • 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  $(10 \times 10)$  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

Opoonio	auons						
Power supply		North America: 120–240 V AC, 16 – 9.0 A, 50/60 Hz (3-wire single-phase)					
Power consumption		Europe, Asia: 220–240 V AC, 9.5 A, 50/60 Hz (3-wire single-phase)					
		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 signa	ı	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,					
	00011000	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 S-VIDEO IN	BNC x 1, 1.0 Vp-p					
		Mini DIN 4-pin x 1					
	CEDIAL IN	RJ-45 (10 Base-T/100 Base-TX) x 1, compatible with PJLink™					
	SERIAL IN SERIAL OUT	D-sub 9-pin female x 2 (RS232C x 1, RS422 x 1) 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)					
Ontional board clot	With ET-MD77SD1	SERIAL IN: BNC x 1, SD-SDI signal (YC <sub>8</sub> C <sub>8</sub> 4:2:2 10-bit): SMPTE 259M compliant: 480i, 576i					
Optional board Siot	installed*3	SERIAL OUT: BNC x 1, 30-301 signal (1080) 4.2.2 10-big. SNIFTE 239W compilant. 4801, 37 01					
	With ET-MD77SD3						
	installed*3	SERIAL IN: BNC x 1, SD-SDI signal (YC <sub>8</sub> C <sub>8</sub> 4:2:2 10-bit): SMPTE 259M compliant: 480i, 576i Single-link HD-SDI signal (YC <sub>8</sub> C <sub>8</sub> 4:2:2 10-bit): SMPTE 292M compliant: 720/50p, 720/60p,					
	motalieu	1035/60i, 1080/50i, 1080/60i, 1080/25p, 1080/24p, 1080/24sF, 1080/30p					
		SERIAL OUT: BNC x 1, active through					
	With ET-MD100SD4	Link A/Link B IN: BNC x 1 for each, SD-SDI signal (YC <sub>0</sub> C <sub>0</sub> 4:2:2 10-bit): SMPTE 259M compliant: 480i, 576i					
	installed	Single-link HD-SDI signal (YC <sub>8</sub> C <sub>8</sub> 4:2:2 10-bit): SMPTE 292M compliant: 720/50p, 720/60p, 1080/50i,					
	motaliou	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	Specifications are the same as those for the DVI-D IN terminal on the main unit.					
	installed	openious are the dame as those for the ST S III terminal of the main time.					
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,					
orthographica accepton	1100	Batteries for remote control (3V AA battery x2), Eye bolt x4, Wire rope					

- nethod of notation all comply with ISO 21118 international standards

- ¹ Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
  ¹ Only when using VESA OVT-RB(Reduced Blanking) signals.
  ¹ The LAN terminal on each board, when mounted, cannot be used because the LAN terminal on the main unit has priority.
  ¹ Measurement was differed depending on models.
  ¹ Also with the preparature range is or 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**

Fixed focus lens ET-D75LE5 (0.8:1)

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)

Lamp

SD-SDI input signal board ET-MD77SD1 9 . . . HD/SD-SDI input signal board ET-MD77SD3



Input signal board

Dual link HD/HD-SDI input signal board ET-MD100SD4 **d** =





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

Frame ET-PFD100



Carrying handle



Ceiling mount bracket

High-ceiling mount bracket ET-PKD100H

mount bracket ET-PKD100S



FT-PKD100H

#### **Ecological-conscious design**

ET-D75LE1

nt lamp unit

ET-LAD12K ET-LAD12KF (four pack)

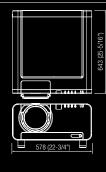
Panasonic works from every angle to minimize environmental impact in the product design, production and delivery processes, and in the performance of the product during its life cycle. The PT-DW100 reflects the following ecological considerations.

- Lead-free solder is used to mount components to the printed circuit boards.
- •Lamp power switching further reduces power consumption.
  •Auto Power Save activates standby mode when no signal is input

#### 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**





#### **Projection distance**

Throw distance													
Diagonal image size (aspect raio: 16:9)	ET-D7		ET-D7		ET-D7			75LE3	ET-D:	75LE4	ET-D	75LE8	ET-D75LE5
(aspect raio: 16:9)	1.0-1.2:1 min. max.		min.	1.5-2.0:1 2.1-3.1:1 nin. max. min. max.		3.1-5.2:1 min. max.		5.2-8.2:1 min. max.		8.2-15.4:1 min. max.		0.8:1 fixed	
		max.		max.	IIIII.	max.		max.		max.		max.	
70"	1,560 mm	1,865 mm	2,322 mm	3,103 mm	3,137 mm	4,719 mm	4,730 mm	7,937 mm	7,943 mm	12,713 mm	12,430 mm	23,652 mm	1,151 mm
	5.1'	6.1'	7.6'	10.2	10.3	15.5'	15.5'	27.9'	27.9'	41.7'	40.8'	77.6'	3.8'
100"	2,253 mm	2,696 mm	3,349 mm	4,476 mm	4,516 mm	6,787 mm	6,798 mm	11,391 mm	11,397 mm	18,206 mm	17,923 mm	33,943 mm	1,681 mm
	7.4'	8.8'	11.0'	14.7'	14.8'	22.3'	22.3'	39.9'	39.9'	59.7'	58.8'	111.4'	5.5'
150"	3,408 mm	4,081 mm	5,062 mm	6,765 mm	6,814 mm	10,234 mm	10,244 mm	17,147 mm	17,153 mm	27,359 mm	27,077 mm	51,095 mm	2,563 mm
	11.2'	13.4'	16.6'	22.2'	22.4'	33.6'	33.6'	59.9'	59.9'	89.8'	88.8'	167.6'	8.4'
200"	4,563 mm	5,466 mm	6,775 mm	9,053 mm	9,112 mm	13,680 mm	13,691 mm	22,904 mm	22,909 mm	36,512 mm	36,232 mm	68,246 mm	3,445 mm
	15.0'	17.9'	22.2'	29.7'	29.9'	44.9'	44.9'	79.9'	79.9'	119.8'	118.9'	223.9'	11.3'
300"	6,873 mm	8,236 mm	10,201 mm	13,630 mm	13,707 mm	20,574 mm	20,584 mm	34,416 mm	34,422 mm	54,819 mm	54,541 mm	102,549 mm	5,209 mm
	22.6'	27.0'	33.5'	44.7"	45.0'	67.5'	67.5'	119.9'	119.9'	179.9'	178.9'	336.4'	17.1'
400"	9,183 mm	11,006 mm	13,626 mm	18,206 mm	18,303 mm	27,467 mm	27,477 mm	45,929 mm	45,934 mm	73,126 mm	72,850 mm	136,852 mm	
	30.1'	36.1'	44.7'	59.7'	60.0'	90.1'	90.1'	159.9'	159.9'	239.9'	239.0'	449.0'	
600"	13,803 mm	16,546 mm	20,477 mm	27,360 mm	27,494 mm	41,254 mm	41,264 mm	68,954 mm	68,960 mm	109,740 mm	109,468 mm	205,458 mm	
600	45.3'	54.3'	67.2'	89.8'	90.2'	135.3'	135.4'	239.9'	239.9'	360.0'	359.1'	674.1'	_

### **NOTES ON USE**

- 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.
- 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.

- all 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.

  On ord 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's pleade in a box or endosure, 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.
- 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.
- 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.







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