

Panasonic

ideas for life

PT-DW6300ES
PT-DW6300ELS
PT-D6000ES
PT-D6000ELS

1-Chip DLP™ Projectors

Brilliant pictures for effective
visual communication



PT-DW6300ES
PT-DW6300ELS

WXGA

6,000 lm

PT-D6000ES
PT-D6000ELS

XGA

6,500 lm



A New Standard for 1-chip DLP™ Projectors

Refined Image Quality with Reliability and Easy Maintenance

Panasonic 1-chip DLP™ projectors are brighter and better than ever with a compilation of numerous Panasonic proprietary technologies. The wide-aspect PT-DW6300ES/DW6300ELS* with a brightness of 6,000 lumens, and PT-D6000ES/D6000ELS* with a brightness of 6,500 lumens produce vivid colourful images with the aid of the newly engineered RGB Booster. The Dual-Lamp System makes sure that presentations aren't interrupted even if a lamp suddenly burns out. This is joined by the Auto Cleaning Filter, which makes filter cleaning unnecessary for approximately 10,000 hours, for high reliability. Both models offer easy and flexible system configuration.

PT-DW6300ES
PT-DW6300ELS*

WXGA
6,000 lm



PT-D6000ES
PT-D6000ELS*

XGA
6,500 lm



*The PT-DW6300ELS and PT-D6000ELS are sold without lenses.
The specifications are the same as those of the PT-DW6300ES and PT-D6000ES.

Vivid Picture Quality with High Brightness

RGB Booster Significantly Improves Colour Reproduction

The RGB Booster achieves high image quality with levels of colour reproduction (up to 145% that of conventional models) and brightness that make each colour stand out. It combines Panasonic's proprietary Vivid Colour Control technology with a newly engineered Lamp Modulation Drive System for a 1-chip DLP™ projector that produces bright and vivid colours.

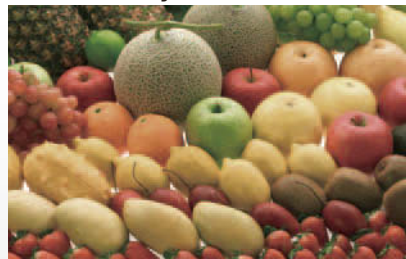
■ Vivid Colour Control

This unique control technology optimises the use of the colour segment areas of the colour wheel. It increases the brightness of each RGB colour by minimising the unallocated portions between the colours, to achieve truly vivid colouring.

■ Lamp Modulation Drive System

With the new lamp modulation technology, the projector is now able to control the lamp intensity for each of the red, green, blue, and white segments of the colour wheel separately. Because the actual light output is controlled in relation to each colour segment, light usage is optimised and colour balance is obtained without lowering the brightness. This results in bright vivid images with increased colour fidelity.

Conventional System



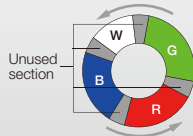
Conventional

Conventional technology was unable to use the boundaries between colours.

Conventional Lamp Drive System

Colour Wheel B W G R

Lamp Power ————
Because the lamp power was fixed in conventional projectors, colour reproduction was enhanced by sacrificing brightness.



RGB Booster



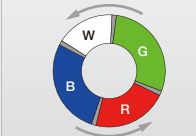
Vivid Colour Control

Ensures maximum utilization of the colour wheel by minimising unused section.

Lamp Modulation Drive System

Colour Wheel B W G R

Lamp Power ————
By modulating the lamp power, we can maximise the colour reproduction of each colour without sacrificing brightness.

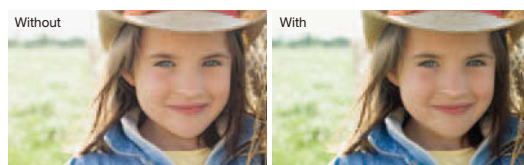


High Brightness with New AC Lamp

Our newly-developed 300-watt AC lamps are used in the PT-DW6300ES/D6000ES. The high-efficiency light convergence technology and the colour wheel work together to achieve the high brightness of 6,000 lm for the PT-DW6300ES and 6,500 lm for the PT-D6000ES. Clear, crisp images are reproduced even in bright rooms.

Detail Clarity Processor Brings Depth and Clarity to Details

This advanced image-processing circuit analyses the video signal frequency range for each scene by extracting data on the distribution of high, mid, and low-frequency components, and brings out fine details accordingly. The resulting images have a more natural, three-dimensional appearance with crisp, clear detail.

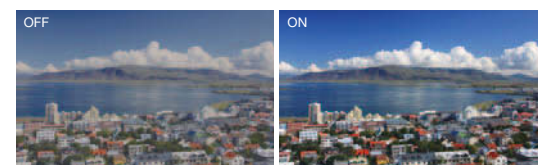


Conventional sharpness control: Sharpness is applied uniformly, which can cause a halo or ring effect and diminish the sense of depth.

Detail Clarity Processor: Signal frequency is extracted real-time and necessary sharpness is applied at varying degrees for natural, life-like images.

System Daylight View 2 for Enhanced Colour Perception

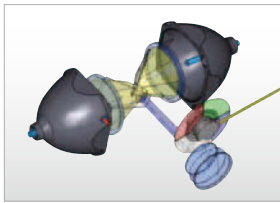
Image details are less clear when a projector is used in a room with the lights on. Panasonic's System Daylight View 2 improves brightness perception by adjusting sharpness, gamma curves, and colour corrections. This produces crisper, more stunning images with vivid colours even under bright conditions.



Easy Maintenance and Superior Reliability

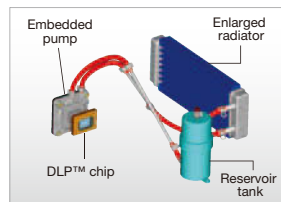
Dual-Lamp System Prevents Image Interruptions

The Dual-Lamp System increases brightness and eliminates the need to interrupt a presentation if a lamp should burn out (in dual-lamp operation mode). The Lamp Relay mode also operates the lamps alternately to enable 24/7 projector operation.



Liquid Cooling System Attains a High Level of Reliability

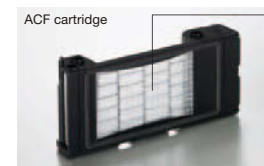
The liquid cooling system directly cools the DLP™ chip to improve performance and enable operation up to 45°C/113°F. This allows use in a wider variety of environments, while stabilising performance and keeping the unit quiet even in harsh conditions.



Auto Cleaning Filter Reduces Maintenance Hassles



The Auto Cleaning Filter (ACF) provides a clean filter surface whenever it senses clogging, and brushes dust from the filter. This enhances the Micro Cut Filter's performance, so no filter replacement is needed for over 10,000 hours*, reducing maintenance.



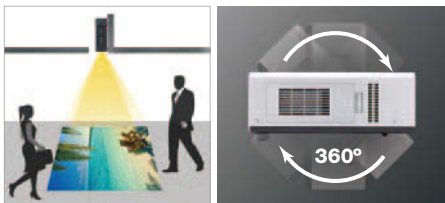
Micro Cut Filter
An electrostatic filter in the air intake section traps particles that are 1 micron or larger. It guards the optical block and keeps dust from entering the interior to provide stable operation.

*The replacement cycle given here is a guideline. It may differ depending on the usage environment.

System Integration Flexibility

Flexible Installation

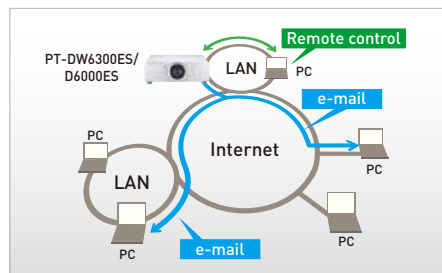
The wide adjustment range of the powered horizontal/vertical lens shift function assures virtually distortion-free images and adds convenience and versatility. It lets you easily make adjustments with the remote control. The unit can also be rotated 360° vertically. This means you can install it at any angle you want, to accommodate different installation conditions.



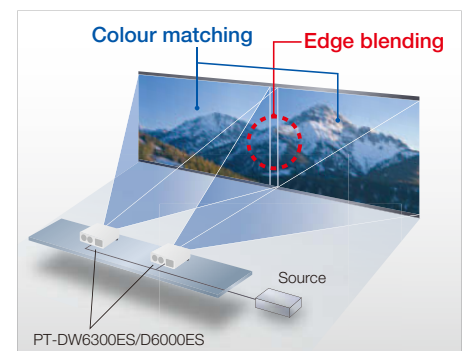
Images can be projected straight down or straight up.

Web Browser Control/Monitoring and E-mail Message Alert

The PT-DW6300ES/D6000ES can be easily operated remotely over a LAN network, because it is all done using the computer's familiar web browser. Furthermore, the projector sends an e-mail message to notify the operator when an error has occurred, or a lamp needs to be replaced.



Multi-Screen Support System Seamlessly Connects Multiple Screens



■ Edge Blending

The edges of adjacent screens can be blended and their luminance controlled.

■ Colour Matching

This function corrects for slight variations in the colour reproduction range of individual projectors.

■ Multi-screen Processor

The PT-DW6300ES/D6000ES can project large, multi-screen images without any additional equipment. Up to 100 units (10 x 10) can be edge-blended at a time.

Side-by-Side Function PT-DW6300ES/DW6300ELS

The PT-DW6300ES can simultaneously display images from two sources* onto a single screen. For example, you can display a PC image on the left and a video image on the right. Taking advantage of the wide-screen projection, this function gives you a host of new application possibilities to explore.

*Some source combinations are not supported.



With the wide-aspect-ratio capability, you can project two large 4:3 images side-by-side.

PJLink™ Compatibility PJLink™

The LAN terminals support PJLink™ Class 1 connection, which is highly convenient for system construction.

Multi Projector Monitoring & Control Software

Panasonic's original "Multi Projector Monitoring & Control" freeware allows the user to control and monitor multiple projectors at the same time via LAN. Projectors can be scheduled to turn on and off at a certain hour everyday. When a problem occurs, an alarm message is sent to the monitoring/controlling PC.

Standby Mode: eco*

The PT-DW6300ES/D6000ES has attained a low standby power level of 0.3 W, which is a top-class level in its class. It also helps to slash running costs, and reduces environmental impact.

*During eco standby mode operation, network functions such as standby-on from a LAN network and the serial output terminal will not operate.

Other Features

- Full 10-bit Signal Processing
- 3D Colour Management System
- HD IP Converting Circuitry
- Digital Signal Noise Reduction Circuitry
- Dynamic Sharpness Control Circuitry
- Mechanical Lens Shutter
- 30m Long Range Wireless Remote Control
- Direct Power Off

Ecology-conscious Design

Panasonic works from every angle to minimise environmental impact in the product design, production and delivery processes, and in the performance of the product during its life cycle. The PT-DW6300ES/D6000ES reflects the following ecological considerations.

- No halogenated flame retardants are used in the cabinet.
- Lamp power switching further reduces power consumption.
- Auto Power Save activates standby mode when no signal is input.
- Standby power consumption of only 0.3 W has been achieved.

Recommended Applications



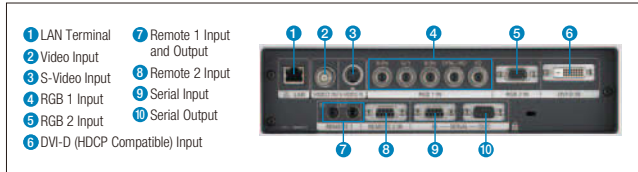
The PT-DW6300ES/D6000ES boasts superior image quality, flexible installation, and easy maintenance, making either model an ideal choice for use in classrooms, auditoriums, houses of worship, museums, and much more.

Specifications

Models	PT-DW6300ES/DW6300ELS	PT-D6000ES/D6000ELS
Power supply	220-240 V AC 50/60 Hz	
Power consumption	750 W (840 VA), (Standby mode eco ¹): 0.3W, (Standby mode normal: 9 W. Both with fan stopped.)	
DLP™ chip	Panel size	0.65" diagonal (16:10 aspect ratio)
	Display method	DLP™ chip x 1, DLP™ system
Pixels	Horizontal	1,024,000 (1,280 x 800) x 1, total of 1,024,000 pixels
	Vertical	786,432 (1,024 x 768) x 1, total of 786,432 pixels
Lens	Powered zoom/focus lenses (1.8-2.4:1), F 1.7-2.0, f 25.6-33.8 mm	
PT-DW6300ES/D6000ES	Optional powered zoom/focus lenses	
PT-DW6300ELS/D6000ELS	300 W UHM lamps (x 2) (dual-lamp system)	
Lamp	300 W UHM lamps (x 2) (dual-lamp system)	
Screen size	50-600 inches (50-200 inches with the ET-DLE055), 16:10 aspect ratio	50-600 inches (50-200 inches with the ET-DLE055), 4:3 aspect ratio
Brightness ²	6,000 lumens (dual-lamp, high power mode)	6,500 lumens (dual-lamp, high power mode)
Centre-to-corner uniformity ²	90%	
Contrast ²	2,000:1 (full on/full off, contrast mode: high) ³	
Resolution	1,280 x 800 pixels (Input signals that exceed this resolution will be converted to 1,280 x 800 pixels). 1,024 x 768 pixels (Input signals that exceed this resolution will be converted to 1,024 x 768 pixels).	
Scanning frequency	DVI-D	Horizontal: 15-91 kHz, Vertical: 50-85 Hz, Dot clock: 162 MHz or lower
	RGB	Horizontal: 15-91 kHz, Vertical: 50-85 Hz, Dot clock: 150 MHz or lower
	YPbPr (YCbCr)	525 (480), 625 (576), 525 (480), 625 (576), 750 (720), 600, 750 (720)/60p, 1035/60i, 1125 (1080)/60i, 1125 (1080)/50i, 1080/25p, 1080/24p, 1080/24f, 1080/30p, 1080/60p, 1080/50p
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: +60% (powered), horizontal: ±10% (powered) Vertical: +50% (powered), horizontal: ±10% (powered)	
Keystone correction range	Vertical: ±40° (±30° with the ET-DLE055)	
Installation	Ceiling/floor, front/rear	
Terminals ⁴	DVI-D IN	DVI-D 24-pin
	RGB 1/YPbPr IN	BNC x 5
	RGB 2/YPbPr IN	D-sub HD 15-pin
	VIDEO IN	BNC
	S-VIDEO IN	Mini DIN 4-pin
	SERIAL IN	D-sub 9-pin (RS-232C compliant)
	SERIAL OUT	D-sub 9-pin
	REMOTE 1 IN	M3 jack
	REMOTE 1 OUT	M3 jack
	REMOTE 2 IN	D-sub 9-pin
	LAN	RJ-45 for network connection, 10Base-T/100Base-TX, compliant with PjLink™ ⁵
	Power cord length	3.0 m (9'10")
Cabinet material	Molded plastic	
Dimensions (W x H x D)	PT-DW6300ES/D6000ES	498 mm x 175 mm x 440 mm (19-19/32" x 6-7/8" x 17-5/16") (with supplied lens)
	PT-DW6300ELS/D6000ELS	498 mm x 175 mm x 432 mm (19-19/32" x 6-7/8" x 17") (without lens)
	Weight ⁶	Approx. 16.0 kg (35.3 lbs) (with supplied lens)
PT-DW6300ES/D6000ES	Approx. 15.2 kg (33.5 lbs) (without lens)	
Operating temperature	0-45°C (32-113°F)	
Operating humidity	20-80% (no condensation)	
Supplied accessories	Power cord, Wireless/wired remote control unit, Batteries for remote control (6/LR6 type x 2), Wire rope	

*1 During eco standby mode operation, network functions such as standby-on from a LAN network and the serial output terminal will not operate. *2 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards. *3 Brightness: 3,000 lumens (PT-DW6300ES/DW6300ELS), 3,250 lumens (PT-D6000ES/D6000ELS). *4 The HD/SYNC and VD inputs do not accept the tri-level sync signal. *5 Average value. May differ depending on models.

Multiple terminals



Optional accessories

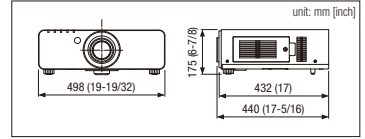
Lens	Lamp	Filter
Zoom lens ET-DLE080 (0.82-1.03:1) PT-DW6300 (0.81-1.01:1) PT-D6000	Replacement lamp unit ET-LAD60A ET-LAD60AW (twin pack)	Replacement filter unit ET-ACF100
Zoom lens ET-DLE150 (1.4-2.0:1) PT-DW6300 (1.3-2.0:1) PT-D6000		
Zoom lens ET-DLE250 (2.4-3.8:1) PT-DW6300 (2.4-3.7:1) PT-D6000		
Zoom lens ET-DLE350 (3.8-5.7:1) PT-DW6300 (3.7-5.6:1) PT-D6000		
Zoom lens ET-DLE450 (5.6-9.0:1) PT-DW6300 (5.5-8.9:1) PT-D6000		
Fixed-focus lens ET-DLE055 (0.8:1)		
	Ceiling mount bracket ET-PKD56H (for high ceilings) ET-PKD55S (for low ceilings)	
	ET-PKD55S	
	ET-PKD56H	

Black colour models

Models	PT-DW6300EK/D6000EK	PT-DW6300ELK/D6000ELK
Colour variation	Black	Black
Lens	Included	Not included
Special order	Yes	Yes

*The specifications are the same as those of the PT-DW6300ES and PT-D6000ES.

Dimensions



Projection distance

Diagonal image size	PT-DW6300E screen size (16:10)						Throw distance							
	With ET-DLE080 0.82-1.03:1		With ET-DLE150 1.4-2.0:1		With supplied lens		With ET-DLE250 2.4-3.8:1		With ET-DLE350 3.8-5.7:1		With ET-DLE450 5.6-9.0:1		With ET-DLE055 0.8:1	
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
50"	868mm 2.8'	1,083mm 3.6'	1,447mm 4.8'	2,116mm 7.0'	1,922mm 6.4'	2,557mm 8.4'	2,542mm 8.4'	2,063mm 6.8'	3,909mm 12.8'	6,112mm 20.1'	9,597mm 31.5'	9,595mm 31.5'	871mm 2.9'	871mm 2.9'
80"	1,418mm 4.7'	1,769mm 5.8'	2,348mm 7.8'	3,416mm 11.3'	3,114mm 10.3'	4,130mm 13.6'	4,116mm 13.6'	3,434mm 11.3'	6,479mm 21.3'	9,860mm 32.4'	15,531mm 51.0'	15,531mm 51.0'	1,423mm 4.7'	1,423mm 4.7'
100"	1,784mm 5.9'	2,222mm 7.3'	2,949mm 9.7'	4,282mm 14.1'	3,909mm 12.9'	5,178mm 17.0'	5,165mm 17.0'	4,204mm 13.8'	8,133mm 26.7'	12,359mm 40.6'	19,489mm 64.1'	19,489mm 64.1'	2,191mm 7.2'	2,191mm 7.2'
150"	2,699mm 8.9'	3,356mm 11.0'	4,450mm 14.6'	6,448mm 21.2'	5,896mm 19.4'	7,799mm 25.6'	7,787mm 25.6'	6,436mm 21.2'	12,266mm 40.3'	18,650mm 61.1'	29,382mm 96.4'	29,382mm 96.4'	2,710mm 8.9'	2,710mm 8.9'
200"	3,615mm 11.9'	4,489mm 14.7'	5,952mm 19.6'	8,614mm 28.3'	7,884mm 25.9'	10,420mm 34.2'	10,410mm 34.2'	8,204mm 27.0'	16,400mm 54.0'	24,852mm 81.8'	42,731mm 140.2'	42,731mm 140.2'	3,629mm 12.0'	3,629mm 12.0'
300"	5,446mm 18.0'	6,755mm 22.2'	8,955mm 29.4'	12,946mm 42.5'	11,858mm 39.0'	15,662mm 51.4'	15,654mm 51.4'	12,477mm 40.8'	24,668mm 81.3'	37,345mm 122.5'	67,248mm 220.3'	67,248mm 220.3'	5,446mm 18.0'	5,446mm 18.0'
400"	7,277mm 23.9'	9,022mm 29.6'	11,958mm 39.3'	17,278mm 57.0'	15,832mm 52.0'	20,930mm 68.8'	20,899mm 68.8'	16,305mm 53.5'	32,936mm 108.0'	49,838mm 163.8'	93,764mm 308.7'	93,764mm 308.7'	7,277mm 23.9'	7,277mm 23.9'
500"	9,108mm 29.9'	11,286mm 37.0'	14,960mm 49.1'	21,610mm 70.9'	19,807mm 65.0'	26,145mm 85.8'	26,144mm 85.8'	20,338mm 66.9'	41,203mm 135.2'	62,331mm 204.4'	120,200mm 394.9'	120,200mm 394.9'	9,108mm 29.9'	9,108mm 29.9'
600"	10,939mm 35.9'	13,555mm 44.5'	17,963mm 58.2'	25,942mm 85.2'	23,781mm 78.1'	31,387mm 103.0'	31,389mm 103.0'	24,622mm 81.2'	49,471mm 162.4'	74,824mm 245.5'	144,255mm 473.5'	144,255mm 473.5'	10,939mm 35.9'	10,939mm 35.9'

Diagonal image size	PT-D6000E screen size (4:3)					
	With ET-DLE080 0.81-1.01:1		With ET-DLE150 1.3-2.0:1		With supplied lens	
	min.	max.	min.	max.	min.	max.
50"	805mm 2.6'	1,011mm 3.3'	1,344mm 4.5'	1,967mm 6.5'	1,785mm 5.9'	2,376mm 7.8'
80"	1,317mm 4.3'	1,644mm 5.4'	2,183mm 7.2'	3,177mm 10.5'	2,895mm 9.5'	3,840mm 12.6'
100"	1,658mm 5.4'	2,066mm 6.8'	2,742mm 9.0'	3,983mm 13.1'	3,635mm 12.0'	4,816mm 15.9'
150"	2,510mm 8.2'	3,121mm 10.2'	4,140mm 13.6'	6,000mm 19.7'	5,485mm 18.0'	7,256mm 23.9'
200"	3,362mm 11.0'	4,176mm 13.7'	5,537mm 18.2'	8,016mm 26.3'	7,335mm 24.1'	9,696mm 31.9'
300"	5,067mm 16.6'	6,286mm 20.6'	8,333mm 27.4'	12,049mm 39.6'	11,035mm 36.3'	14,576mm 47.9'
400"	6,771mm 22.2'	8,396mm 27.5'	11,129mm 36.6'	16,082mm 52.8'	14,735mm 48.4'	19,456mm 63.9'
500"	8,476mm 27.8'	10,566mm 34.5'	13,924mm 45.7'	20,115mm 66.0'	18,435mm 60.5'	24,336mm 79.9'
600"	10,181mm 33.4'	12,616mm 41.4'	16,720mm 54.9'	24,148mm 79.3'	22,135mm 72.7'	29,216mm 95.9'

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.
- The projector uses a 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 operation.
 - Make sure there is an unobstructed space of 500 mm (1.64 feet) 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 alone 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 (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.
 - Even when the ambient temperature near the intake opening is 40°C (104°F) or lower, an accumulation of hot air inside the cabinet may cause the protective circuit to activate and shut down the projector. Please give ample consideration to the design with regard to ambient temperature conditions.
- If the projector is to be operated continuously 24 hours a day, use the dual-lamp optical system's alternating lamp operation (lamp changer) function. The projector cannot be operated continuously 24 hours a day in dual-lamp mode. Allow a minimum of two hours per day of non-operation time per lamp if using the dual-lamp mode.
- 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.

Panasonic®

For more information about Panasonic projectors
<http://panasonic.net/avc/projector>



Factories of Systems Business Group have received ISO14001:2004 - the Environmental Management System certification. (Except for 3rd party's peripherals.)

Weights and dimensions shown are approximate. Specifications are subject to change without notice. This product may be subject to export regulations. An application has been filed for trademark rights, or trademark rights have been granted, for PjLink in Japan, United States of America and other countries and area. JQA is a trademark of International Business Machines Corporation. All other trademarks are the property of their respective trademark owners. Projection images simulated. DLP, DLP logo and DLP Medallion logo are trademarks or registered trademarks of Texas Instruments. (C) 2011 Panasonic Corporation All rights reserved.

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