# Panasonic ideas for life



A New Dimension in Reliability.

A New Experience in Picture Quality.

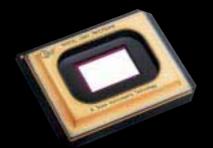






# Panasonic system projector

for bright, high-quality image projection in large spaces.



Panasonic system projector for stable performance over extended time periods. Panasonic has further improved the image quality.



#### High 2 000:1 Contrast Ratio

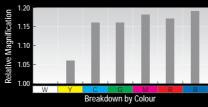
Even though the PT-DW5000E/DW5000EL is a 1-chip DLP™ projector, its liquid-cooling system and dual-lamp optical system team up to give it a brightness of 4 500 lumens. This enables bright, large-screen projection even in well-lit condition.

This high-contrast combines with an outstanding brightness for crisp, high-resolution images in virtually any viewing environment.

#### Vivid Colour Control

A new and unique control technology is used to maximise the colour segment areas of the colour wheel. Compared with our previous model, the brightness of each colour is increased by an average of about 15%. This results in sharper, clearer colour reproduction.

#### Luminance Comparison by Colour-Wheel Colour



\*Calculated by setting the previous model value to 1.00

#### 3D Colour Management System

Combined with Vivid Colour Control, this greatly improves the reproduction of natural midtones.

#### Previous model

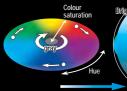
#### 2D Colour Correction

Corrects only colour saturation and hue.
The correction range is narrow, and the correction affects other colours.

#### DW5000

#### 3D Colour Correction

Corrects colour saturation, hue, and brightness. Correction is done automatically by the processor, resulting in natural image reproduction.







# PREMISSION The Reliability Value Chain Pall-Safe Operation The Reliability Value Chain

Panasonic system projectors have opened another new horizon. Their advanced imaging technologies have further enhanced the high image quality of the intricate DLP™ chip. In anticipation of the trend toward wider screens for PC displays and TV broadcasts, 4 500 lumens of brightness are able to render vivid images of wide 16:9 images in a variety of spaces. Original Panasonic technologies, such as our popular dual lamp system and liquid-cooling system, provide an ultra-reliable design to meet requests for 24/7\* operation.

\* Refer to "Operating the Projector Continuously" in the NOTES ON USE section on the back cover



Large-screen projection even in places with low ceilings. Wide, high-quality images ideal for cinema use as well.









Reporting

Protecting

**M**onitoring

## The Reliability Value Chain Supported by Panasonic Technology

#### **Protecting**

Withstands ambient temperatures up to 45°C, and protects against dust problem

#### **New Cooling Structure**

In order to further enhance the cooling efficiency, we completely revised the placement of various internal components and combined this with our popular cooling system to enable use in temperatures up to 45°C. This allows use in a wider variety of environments, and keeps the operation more stable even in harsh conditions.

#### μCut Filter 11

(World's First in a High-Brightness Projector\*)

A new filter in the air intake section traps dust particles that are 10 microns\*1 or larger. By capturing approximately 7 times\*2 as much dust as our previous filters, it guards against

Panasonic's original liquid-cooling system directly cools the DLP™ chip, which extends the PT-DW5000E/DW5000EL's performances

optical blocks and reduces the penetration of dust into to the interior to provide stable operation by, for example, preventing drops in brightness.



μ Cut Filter

\*1 10-micron dust = lint, pollen, etc. \*2 According to Panasonic in-house data

Liquid-cooling System 2

and attains a high level of reliability Cool directly

#### **Dustproof Design** with Sealed Optical Block 3

The effect of dust has been minimised by completely sealing the optical block. The dust-free design helps ensure that this DLP<sup>TM</sup> projector will continue to deliver crisp, sharp, high-resolution images over an extended service life

#### Dust-Tight Cover 4

The lens unit opening is fitted with rubber sealing.



**Monitoring**A more powerful sensing performance predicts problems with high accuracy.

#### Airflow Sensor 5 Temperature Sensors 6

An airflow sensor has been added to the air intake section to quickly detect reductions in the intake airflow due to a clogged filter or other reasons. Also, a temperature sensor has been mounted to the exhaust section in addition to the existing ones at the air intake section and DLP™ chip.

#### Reporting

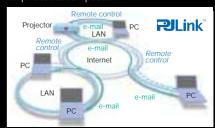
The user is alerted instantly if an operating problem should occur.

#### Warning LED and On-Screen Display **7**

The projector body is equipped with a temperature alarm LED and a burnt lamp (for lamp 1/lamp 2) alarm LED. Information on the location of the error is also given in the onscreen display

#### Web Browser Control/ Monitoring and E-mail Message Alert

Anybody can operate the PT-DW5000E/DW5000EL by remote control or monitor its status over a LAN network, because it is all done using the computer's familiar Web browser. Furthermore, the PT-DW5000E/DW5000EL sends an E-mail message to notify the operator when an error has occurred, or a lamp needs to be replaced.



#### Fail-Safe Operation

Projection can still continue even when a lamp burns out.

#### Dual Lamp System 8

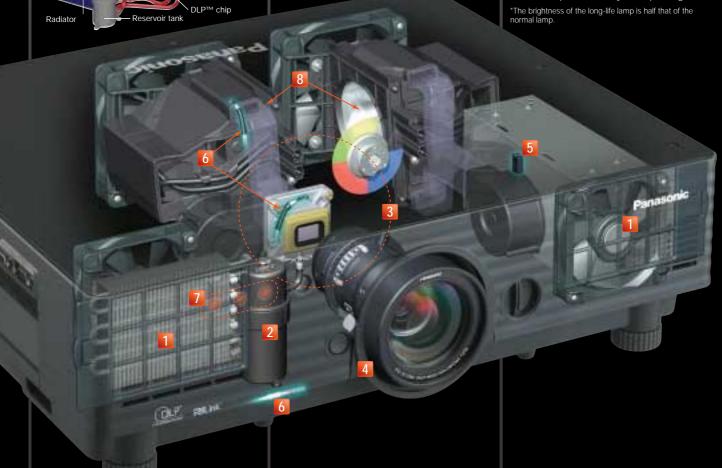
The use of the two lamp systems increases brightness

and eliminates the need to interrupt a presentation if a lamp burns out (in dual lamp operation mode).



#### Optional Long-Life Lamp

A long-life lamp that stretches lamp life to 4 000 hours is available as an option. In single lamp operation mode, the lamp relay function allows non-stop operation 24 hours a day for up to 47 weeks without replacing the lamps. The use of UHM<sup>TM</sup> lamps dramatically cuts operating costs.



### **Greatly Refined Functions and Installation Ease**



#### **High Picture Quality**

# High Uniformity of Brightness and Color

The PT-DW5000E/DW5000EL's outstanding brightness and contrast ratio assures high uniformity of brightness and colour, resulting in vivid and natural image.

#### 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

#### Dynamic Sharpness Control

The Dynamic Sharpness Control circuit adjusts the video signal waveforms based on the difference in brightness of adjacent pixels for a sharp, clear picture that is relatively unaffected by signal noise

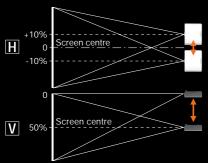
#### Flexible System **Applications**

#### Lens-Centred Design

A lens-centred, symmetrical design provides flexible system layout, eliminating the need for any special considerations when planning the installation site.

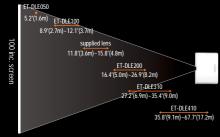
#### Horizontal/Vertical Lens Shift

A wide adjustment range of the horizontal/vertical lens shift assures distortion free images and adds convenience and versatility. (Horizontal: manual, Vertical powered)



#### Optional Lenses for Various Venues

Five optional lenses with different throw distances are available in addition to the supplied lens. These powered zoom/focus lenses enable the projectors to perform superbly in an array of projection environments.



\*Projection Range Example

#### Easy Lens Replacement

The PT-DW5000E/DW5000EL uses the bayonet system, so lenses attach and detach with one-touch ease



#### Multiple Terminals Including DVI-D

The PT-DW5000E/DW5000EL has an array of terminals-two RGB inputs including a 5-BNC connector, serial in/out, one S-video inputs, two remote in, one remote out, DVI-D and control capability-to support a broad range of projection needs HDCP (High-Bandwidth Digital Content Protection) compliant.



#### **Control Panel and** Wireless Remote Control

The rear control panel allows for easy operation when the PT-DW5000E/DW5000EL is set on a desk or floor. A Multi-function wireless remote control with mouse control also comes supplied with each projector.

\*Requires the optional ET-RMRC2



#### Quiet Operation, 29dB\*

The unique Panasonic silent design ensures that the audience is not disturbed by projector noise

with lamp mode:low

#### Other Valuable Features

#### Mechanical Lens Shutter

A mechanical lens shutter minimises annoying light leakage when the PT-DW5000E/DW5000EL is on standby or temporarily not in use, such as during a meeting.

#### **Direct Power Off**

Built-in capacitor provides power to cool the internal parts. This means that you can switch off the room's main power as soon as the presentation ends. PT-DW5000E/DW5000EL doesn't make you wait around and helps minimise lamp damage.

#### Anti-Theft Features with Chain Opening

Anti-theft features help protect the PT-DW5000E/DW5000EL from unauthorised use, including a password protection function and an operation key lock function that disables the control buttons on the main unit. It also features a Kensington lock and an additional security chain opening.

#### Flexible Angle Setting

The PT-DW5000E/DW5000EL can be rotated vertically. This means you can install it at any up-and-downangle

you wish to accommodate different installation conditions



# Easy Replacement of Dust Filter and Lamp

Dust filter is replaced from the side and lamps are replaced from the back panel.

Both of them are replaced very easily even if PT-DW5000E/DW5000EL is installed

#### **Others**

- 6 colours-matching function (red, green, blue, cyan, magenta, yellow)
- •ID assignment for up to 65 units
- Coordinated group control for up to 26 groups (A-Z)

  • Digital vertical keystone correction
- •3x digital zoom
- ·Built-in test pattern
- Selectable 9-language on-screen menu (English, German, French, Spanish, Italian, Russian, Japanese, Chinese, Korean)

The PT-DW5000EL delivers the same performance as the PT-DW5000E, but comes without a lens. Combine it with an optional lens to get the exact performance you need according to usage and operating conditions

#### **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-DW5000E/DW5000EL reflects the following ecological considerations.

- Lead-free solder is used to mount components to the printed circuit boards.
- The non-coated cabinet enables easy recycling.
- Lamp power switching further reduces power consumption
- · Auto Power Save activates standby mode when no signal is input.
- · The packing case and operating manual are made from recycled paper.

#### **Specifications**

System

0.7" (diagonal) DLP™ (x 1), 15:9 983,040 (1,280 x 768) x 1 300 W UHM™ lamp x 2 (Dual Lamp System) Pixels

Lamp 4,500 lumens (dual lamp, high power mode) 2,250 lumens (dual lamp) 2,000:1 (full on/full off, contrast mode: high) Brightness (normal lamp) Brightness (long life lamp)

Contrast ratio

Resolution RGB 1,280 x 768 pixels 560 TV lines Video

PT-DW5000E Powered zoom/focus lens (1:1.8-1:2.5) F 1.7-2.0, f 25.6-33.8 mm Optional powered zoom/focus lenses 50 - 600 inches PT-DW5000EL

Screen size Vertical, horizontal Lens shift RGB input scanning

frequency

fH 15-91 kHz, fv 50-85 Hz Dot clock 108 MHz or lower 480i, 480p, 576i, 576p, 720/60p, 720/50p, 1035/60i, 1080/60i, 1080/50i NTSC, PAL, SECAM, NTSC4.43, PAL60, PAL-M, PAL-N Component signal

Video signal

Terminals

BNC Mini DIN 4-pin VIDEO IN S-VIDEO IN RGB1/YPBPR IN RGB2 IN DVI-D IN D-sub HD 15-pin 24 pin D-sub 9-pin female RS-232C IN RS-232C OUT D-sub 9-pin male REMOTE 1 IN REMOTE 1 OUT M3 jack M3 jack

D-sub 9-pin female (parallel) RJ-45 (10 Base-T/100 Base-TX) ±30' (with standard lens) REMOTE 2 IN LAN Keystone correction range Installation Front/rear, ceiling/floor 3.0m (9.9') 120 V AC, 50/60Hz Power cord length

Power supply Power consumption 770 W (770 VA) (10 W during standby mode with fan stopped) 530 x 167 x 429 mm (20-7/8' x 6-9/16' x 16-7/8') (without lens) Dimensions (W x H x D)

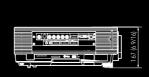
Weiaht

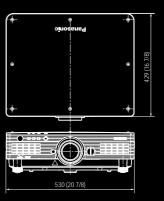
PT-DW5000E 14.5 kg (32.0 lbs) with supplied lens PT-DW5000EL 13.7 kg (30.2 lbs) without lens 32 -113 F (0 -45 C) Operating temperature Operating humidity 20-80% (no condensation)

Supplied accessories Power cord, Wireless/wired remote control unit,

Batteries for remote control (x 2)

#### **Dimensions**





#### Optional accessories



Normal Lamp Replacement Unit ET-LAD55 ET-LAD55W (twin pack)



Long Life Lamp Replacement Unit ET-LAD55L ET-LAD55LW (twin pack)



Zoom Lens (1.3-1.8:1):**ET-DLE100** Zoom Lens (2.5-4.0:1):**ET-DLE200** Zoom Lens (3.4-4.5:1):**ET-DLE310** Zoom Lens (4.5-8.4:1):**ET-DLE410** Fixed Focus Lens (0.8:1):**ET-DLE050** 



Wireless Mouse Receiver ET-RMRC2

Ceiling Mount Bracket ET-PKD56H

Low-Ceiling Mount Bracket **ET-PKD55S** 

#### **Projection distance**

50'(42')         2.88'         4.85'         6.58'         6.49'         8.63'         2.90'         14.68'         12.76'         16.76'         16.95'         32.0'           80'(6.7')         4.68'         7.85'         10.63'         10.52'         13.93'         14.37'         23.63'         20.62'         27.02'         27.39'         51.5'           2.0 m         1.43m         2.39m         3.24m         3.21m         4.25m         4.38m         7.20m         6.29m         8.24m         8.35m         15.73'           100'(8.3')         5.88'         9.86'         13.32'         13.20'         17.47'         18.02'         29.60'         25.86'         33.86'         34.35'         64.6'           150'(12.5')         3.8 m         2.71m         4.53m         5.49m         9.02m         7.88m         10.22m         10.47m         19.6'           200'(16.7')         3.8 m         2.71m         4.53m         6.12m         6.07m         8.02m         8.27m         13.57m         11.88m         15.54m         15.74m         29.6'           200'(16.7')         11.89'         19.86'         26.62'         35.15'         36.26'         59.45'         5.207'         68.07'         20.5	Screen size	(16:9)	Throw distance									
S0'(4.2')   2.88'   4.85'   6.58'   6.49'   8.63'   2.71m   4.47m   3.89m   5.11m   5.17m   9.78i					1.7-2.1:1							
1.3 m   0.88m   1.48m   2.01m   1.98m   2.63m   2.71m   4.47m   3.89m   5.11m   5.17m   9.78			min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
2.0 m         1.43m         2.39m         3.24m         3.21m         4.25m         4.38m         7.20m         6.29m         8.24m         8.35m         15.73m           100"(8.3')         5.88'         9.86'         13.32'         13.20'         17.47'         18.02'         29.60'         25.86'         33.86'         34.35'         64.6           150"(12.5')         8.89'         14.86'         20.06'         19.91'         26.31'         27.14'         44.52'         38.96'         50.97'         51.75'         97.15'         11.89'         19.86'         26.62'         35.15'         36.26'         59.45'												32.08' 9.78m
2.5 m         1.79m         3.00m         4.06m         4.03m         5.33m         5.49m         9.02m         7.88m         10.32m         10.47m         19.65           150°(12.5°)         8.89°         14.86°         20.06°         19.91°         26.31°         27.14°         44.52°         38.96°         50.97°         51.75°         97.1°           200°(16.7°)         11.89°         19.86°         26.60°         26.62°         35.15°         36.26°         59.45°         52.07°         68.07°         69.15°         12.296°           5.1 m         3.62m         6.05m         8.12m         10.72m         11.05m         18.12m         12.75m         20.75m         20.												51.59' 15.73m
3.8 m   2.71m   4.53m   6.12m   6.07m   8.02m   8.27m   13.57m   11.88m   15.54m   15.78m   29.61												64.6' 19.69m
5.1 m         3.62m         6.05m         8.17m         8.12m         10.72m         11.05m         18.12m         15.87m         20.75m         21.08m         39.52           300°(25.0°)         -         29.86°         40.29°         40.03°         52.83°         54.49°         89.30°         78.27°         102.28°         103.95°         194.6           400°(33.3°)         -         39.87°         53.77°         53.45°         70.51°         72.73°         119.14°         104.48°         136.50°         138.75°         259.7°           1.3 m         -         12.15m         16.30m         21.50m         22.17m         36.32m         31.85m         41.61m         42.30m         79.18°           500°(41.7°)         -         49.87°         67.25°         66.86°         88.19°         90.97°         148.99°         130.69°         170.71°         173.55°         324.7           12.7 m         -         15.20m         20.50m         20.39m         26.89m         27.73m         45.42m         39.84m         52.04m         52.91m         99.01°												97.12' 29.61m
7.6 m - 9.10m 12.28m 12.21m 16.11m 16.61m 27.22m 23.86m 31.18m 31.69m 59.35 400"(33.3") - 39.87" 53.77" 53.45" 70.51" 72.73" 119.14" 104.48" 136.50" 138.75" 259.7 13.3 m - 12.15m 16.39m 16.30m 21.50m 22.17m 36.32m 31.85m 41.61m 42.30m 79.18 500"(41.7") - 49.87" 67.25" 66.86" 88.19" 29.99" 148.99" 130.69" 170.71" 173.55" 324.7 12.7 m - 15.20m 20.50m 20.39m 26.89m 27.73m 45.42m 39.84m 52.04m 52.91m 99.01												129.64' 39.52m
1.3 m     -     12.15m     16.39m     16.30m     21.50m     22.17m     36.32m     31.85m     41.61m     42.30m     79.18       500"(41.7')     -     49.87'     67.25'     66.86'     88.19'     90.97'     148.99'     130.69'     170.71'     173.55'     324.7       12.7 m     -     15.20m     20.50m     20.39m     26.89m     27.73m     45.42m     39.84m     52.04m     52.91m     99.01		÷										194.68' 59.35m
12.7 m - 15.20m 20.50m 20.39m 26.89m 27.73m 45.42m 39.84m 52.04m 52.91m 99.01												259.73' 79.18m
												324.77' 99.01m
	600"(50.0') 15.2 m		59.88' 18.25m	80.73' 24.61m	80.28' 24.48m	105.87' 32.28m	109.21' 33.29m	178.84' 54.52m	156.89' 47.83m	204.92' 62.47m	208.35' 63.52m	389.81' 118.84m

#### **NOTES ON USE**

#### 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 or more around the projector's exhaust openings.
- Do not slack 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 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 openings.

#### Operating the Projector Continuously:

- 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 day if the using the dual-lamp mode.
- 2. The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods
- 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 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

#### Please contact Panasonic or your dealer for a demonstration.





