# Panasonic ideas for life

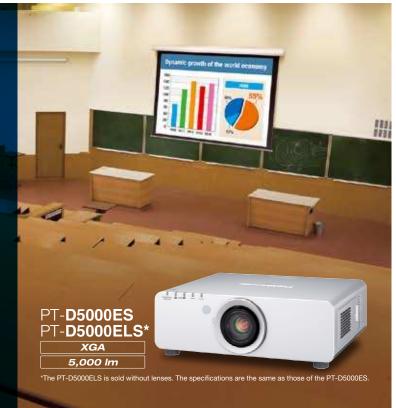






A New Standard for 1-chip DLP<sup>™</sup> Projectors Refined Image Quality with Reliablility and Easy Maintenance

Panasonic's PT-D5000ES/D5000ELS\* 1-chip DLP<sup>™</sup> projectors bring excellent image quality and natural, lifelike colours to your images. They also have a wealth of unique technologies, like our newly developed RGB Booster, which combines high brightness with superb colour reproduction, a Dual-Lamp System for solid reliability, and the Auto Cleaning Filter, which eliminates the need for filter maintenance for approximately 10,000 hours. These all-round projectors are extremely well suited to use in schools or training facilities, presentations, and business meetings or conferences.



## **Vivid Picture Quality with High Brightness**

#### **RGB Booster Significantly Improves Colour Reproduction**

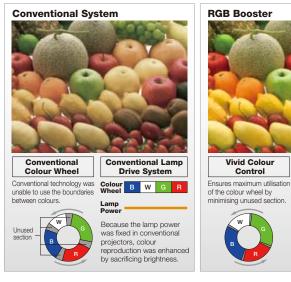
The RGB Booster achieves high image quality with levels of colour reproduction (up to 145% that of conventional models) and brightness that make each colour stand out. It combines Panasonic's proprietary Vivid Colour Control technology with a newly engineered Lamp Modulation Drive System for a 1-chip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

#### Vivid Color 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.



## High Brightness with AC Lamp

High-efficiency light convergence technology and a colour wheel work together to achieve an outstanding 5,000 lm of brightness. It reproduces clear, crisp images 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

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.

Lamp Modulation

**Drive System** 

Colour B W

By modulating the lamp

ach colour without

acrificing brightness

power, we can maximise

the colour reproduction of

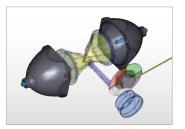
amp



## Easy Maintenance and Superior Reliability

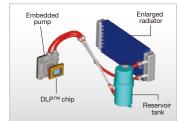
#### **Dual-Lamp System Prevents Image Interruptions**

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.



#### ACF 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.

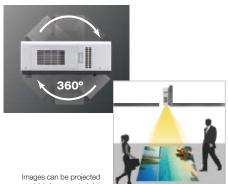
**PJLink**<sup>®</sup>

\*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.



straight down or straight up

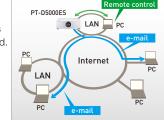
#### **Mechanical Lens Shutter**

The mechanical lens shutter completely blocks annoying light leakage when the PT-D5000ES is on standby or temporarily not in use, such as during a meeting.

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

The PT-D5000ES 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.



#### **PJLink™** Compatibility

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.

#### Eco Standby Mode\*

The PT-D5000ES 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.

\* In Eco standby mode, LAN-based network functions such as the standby ON function 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 •30m Long Range Wireless Remote Control Direct Power Off

#### **Ecology-conscious Design**

- 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-D5000ES reflects the following ecological considerations.
- No halogenated flame retardants are used in the cabin
- Lamp power switching further reduces power consumption.
- Auto Power Save activates standby mode when no signal is input.
  Standby power consumption of only 0.2 W\*\* has been achieved.

#### **Recommended Applications**



The PT-D5000ES 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

| Power supp                    | ly             | 220–240 V AC 50/60 Hz  |  |  |  |  |  |  |
|-------------------------------|----------------|--|--|--|--|--|--|--|
| Power consumption             |                | 600 W (670 VA)   |  |  |  |  |  |  |
|                               |                | (Eco standby mode*1: 0.3 W, Standby mode normal: 9 W. Both with fan stopped.)          |  |  |  |  |  |  |
| DLP <sup>™</sup> chip         | Panel size     | 0.7" diagonal (4:3 aspect ratio)   |  |  |  |  |  |  |
|                               | Display method | DLP <sup>™</sup> chip x 1, DLP <sup>™</sup> system                                     |  |  |  |  |  |  |
|                               | Pixels         | 786,432 (1,024 x 768) x 1, total of 786,432 pixels                                     |  |  |  |  |  |  |
| Lens                          | PT-D5000ES     | Powered zoom/focus lenses (1.8-2.4:1), F 1.7-2.0, f 25.6-33.8 mm                       |  |  |  |  |  |  |
|                               | PT-D5000ELS    | Optional powered zoom/focus lenses   |  |  |  |  |  |  |
| Lamp                          |                | 240 W UHM lamps (x 2) (dual-lamp system)   |  |  |  |  |  |  |
| Screen size                   |                | 50-600 inches (50-200 inches with the ET-DLE055), 4:3 aspect ratio                     |  |  |  |  |  |  |
| Brightness*2                  |                | 5,000 lumens (dual-lamp)   |  |  |  |  |  |  |
| Centre-to-corner uniformity*2 |                | 90 %   |  |  |  |  |  |  |
| Contrast*2                    |                | 1,000:1 (full on/full off)   |  |  |  |  |  |  |
| Resolution                    |                | 1,024 x 768 pixels   |  |  |  |  |  |  |
|                               |                | (Input signals that exceed this resolution will be converted to 1,024 x 768 pixels.)   |  |  |  |  |  |  |
| Scanning<br>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)  | 525i (480i), 625i (576i), 525p (480p), 625p (576p), 750 (720)/60p,                     |  |  |  |  |  |  |
|                               |                | 750 (720)/50p, 1035/60i, 1125 (1080)/60i, 1125 (1080)/50i, 1080/25p, 1080/24p,         |  |  |  |  |  |  |
|                               |                | 1080/24sF, 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: +50 % (powered), horizontal: ±10 % (powered)                                 |  |  |  |  |  |  |
| Keystone correction range     |                | Vertical: ±40° (±30° with the ET-DLE055)   |  |  |  |  |  |  |
| Installation                  |                | Ceiling/floor, front/rear  |  |  |  |  |  |  |
| Terminals*3                   | 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™              |  |  |  |  |  |  |
| Power cord length             |                | 3.0 m (9'10")  |  |  |  |  |  |  |
| Cabinet material              |                | Molded plastic   |  |  |  |  |  |  |
| Dimensions                    | PT-D5000ES     | 498 mm x 175 mm*4 x 440 mm*5 (19-19/32" x 6-7/8" *4 x 17-5/16" *5) (with supplied lens |  |  |  |  |  |  |
| (W x H x D)                   | PT-D5000ELS    | 498 mm x 175 mm*4 x 432 mm (19-19/32" x 6-7/8" *4 x 17") (without lens)                |  |  |  |  |  |  |
| Weight*6                      | PT-D5000ES     | Approx. 16.0 kg (35.3 lbs) (with supplied lens)  |  |  |  |  |  |  |
|                               | PT-D5000ELS    | Approx. 15.2 kg (33.5 lbs) (without lens)  |  |  |  |  |  |  |
| Operating temperature         |                | 0–45°C (32–113°F)  |  |  |  |  |  |  |
| Operating humidity            |                | 20–80 % (no condensation)  |  |  |  |  |  |  |
| Supplied ac                   |                | Power cord, Wireless/wired remote control unit,  |  |  |  |  |  |  |
|                               |                | Batteries for remote control (x 2), Wire rope  |  |  |  |  |  |  |
|                               |                | I network functions such as the standby ON function will not operate.                  |  |  |  |  |  |  |

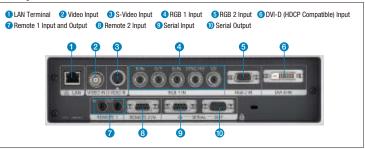
In ECU Stainuby mode, LAN-based network functions such as the standby ON function will not operate.
 2 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
 3 The HD/SYNG and VD inputs to not accept the tri-level sync signal.
 4 With leg at shortest position.
 5 including the supplied lens.
 6 Average value. May differ depending on models.

#### **Optional accessories**

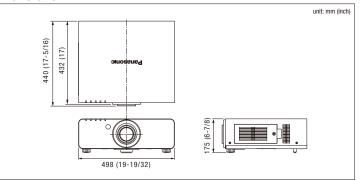


## **Panasonic**

#### **Multiple terminals**



#### Dimensions



#### **Projection distance**

| Screen   | Screen size (4:3) |                   |                    |                   |                   |                    |                    |                    |                    |                     |           |  |  |  |
|----------|-------------------|-------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|---------------------|-----------|--|--|--|
| Diagonal | With ET-DLE150    |                   | With supplied lens |                   | With ET-DLE250    |                    | With ET-DLE350     |                    | With ET-DLE450     |                     | With      |  |  |  |
| image    | 1.3-2.0:1         |                   | 1.8-2.4:1          |                   | 2.4-3.7:1         |                    | 3.7-5.6:1          |                    | 5.5-8.9:1          |                     | ET-DLE055 |  |  |  |
| size     | min.              | max.              | min.               | max.              | min.              | max.               | min.               | max.               | min.               | max.                | 0.8:1     |  |  |  |
| 50"      | 1,344mm           | 1,967mm           | 1,785mm            | 2,376mm           | 2,361mm           | 3,777mm            | 3,713mm            | 5,681mm            | 5,525mm            | 8,912mm             | 808mm     |  |  |  |
|          | 4.5'              | 6.5'              | 5.9'               | 7.8'              | 7.8'              | 12.4'              | 12.2'              | 18.7'              | 18.2'              | 29.3'               | 2.7'      |  |  |  |
| 80"      | 2,183mm           | 3,177mm           | 2,895mm            | 3,840mm           | 3,826mm           | 6,090mm            | 6,023mm            | 9,170mm            | 9,020mm            | 14,438mm            | 1,322mm   |  |  |  |
|          | 7.2'              | 10.5'             | 9.5'               | 12.6'             | 12.6'             | 20.0'              | 19.8'              | 30.1'              | 29.6'              | 47.4'               | 4.4'      |  |  |  |
| 100"     | 2,742mm           | 3,983mm           | 3,635mm            | 4,816mm           | 4,803mm           | 7,633mm            | 7,562mm            | 11,496mm           | 11,351mm           | 18,123mm            | 1,664mm   |  |  |  |
|          | 9.0'              | 13.1'             | 12.0'              | 15.9'             | 15.8'             | 25.1'              | 24.9'              | 37.8'              | 37.3'              | 59.5'               | 5.5'      |  |  |  |
| 150"     | 4,140mm           | 6,000mm           | 5,485mm            | 7,256mm           | 7,244mm           | 11,489mm           | 11,411mm           | 17,312mm           | 17,177mm           | 27,333mm            | 2,519mm   |  |  |  |
|          | 13.6'             | 19.7'             | 18.0'              | 23.9'             | 23.8'             | 37.7'              | 37.5'              | 56.8'              | 56.4'              | 89.7'               | 8.3'      |  |  |  |
| 200"     | 5,537mm           | 8,016mm           | 7,335mm            | 9,696mm           | 9,686mm           | 15,344mm           | 15,259mm           | 23,127mm           | 23,004mm           | 36,544mm            | 3,375mm   |  |  |  |
|          | 18.2'             | 26.3'             | 24.1'              | 31.9'             | 31.8'             | 50.4'              | 50.1'              | 75.9'              | 75.5'              | 119.9'              | 11.1'     |  |  |  |
| 300"     | 8,333mm<br>27.4'  | 12,049mm<br>39.6' | 11,035mm<br>36.3'  | 14,576mm<br>47.9' | 14,568mm<br>47.8' | 23,056mm<br>75.7'  | 22,956mm<br>75.4'  | 34,758mm<br>114.1' | 34,656mm<br>113.8' | 54,966mm<br>180.4'  | _         |  |  |  |
| 400"     | 11,129mm<br>36.6' | 16,082mm<br>52.8' | 14,735mm<br>48.4'  | 19,456mm<br>63.9' | 19,451mm<br>63.9' | 30,768mm<br>101.0' | 30,653mm<br>100.6' | 46,389mm<br>152.2' | 46,309mm<br>152.0' | 73,387mm<br>240.8'  | _         |  |  |  |
| 500"     | 13,924mm<br>45.7' | 20,115mm<br>66.0' | 18,435mm<br>60.5'  | 24,336mm<br>79.9' | 24,334mm<br>79.9' | 38,480mm<br>126.3' | 38,350mm<br>125.9' | 58,020mm<br>190.4' | 57,961mm<br>190.2' | 91,809mm<br>301.3'  | _         |  |  |  |
| 600"     | 16,720mm<br>54.9' | 24,148mm<br>79.3' | 22,135mm<br>72.7'  | 29,216mm<br>95.9' | 29,217mm<br>95.9' | 46,192mm<br>151.6' | 46,047mm<br>151.1' | 69,651mm<br>228.6' | 69,614mm<br>228.4' | 110,231mm<br>361.7' | =         |  |  |  |

#### **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. Do not install the projector in locations that are subject to excessive water, furningly, steam, or oily smoke. Joing so may result in the, matunction, or electric short.
 The projector uses a high-wattage 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 in 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 at
- provide the amount of space indicated between them. These space requirements also apply to installation where only one projector unit is operating a one time and the other unit is used as a backyo. 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 in the intake openings. Even when the ambient temperature near the intake opening is 40 °C (104 °F) or lower, an accumulation of hot air indicate the cabinet may cause the
- \* 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. 4. If the projector is to be operated continuously 24 hours a day, use the dual-lamp optical system's alternating lamp operation (lamp change) 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. 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.

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

Please contact Panasonic or your dealer for a demonstration.



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