Panasonic

ideas for life

PT-D4000E

DLP™-Based Projector

The 4,000-lumen, 1-chip DLP™ system has further increased image quality and overall system efficiency.
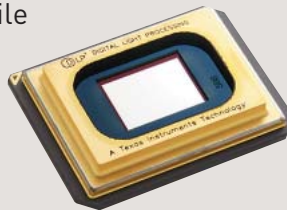

4,000lm

XGA

PICTURE BY

DLP™

A TEXAS INSTRUMENTS TECHNOLOGY

Further expanding reliability and picture quality

Panasonic's DLP™ system projectors have taken another step forward. Now they produce even better images while maintaining all of their highly reliable functions. Visibility has been improved in rooms with the lights turned on, and durability has been increased with the new AC lamp.

High power brightness

4,000 lm NEW

DLP™ Projector
PT-D4000E

High brightness and high picture quality

Ultra bright 4,000-lm NEW

The PT-D4000E offers 4,000 lumens of brightness, thanks to the newly developed AC lamp and more efficient reflectors and synthetic mirror. Real-life images are also produced in rooms with the lights turned on.

System daylight view NEW

The system daylight view function uses an image processing circuit to compensate for the loss of colour saturation that occurs when light reflects onto the screen from bright surroundings. It is especially effective for producing crisp, sharp images in dark portions containing gradation. The function can be adjusted in three steps.

Off | On
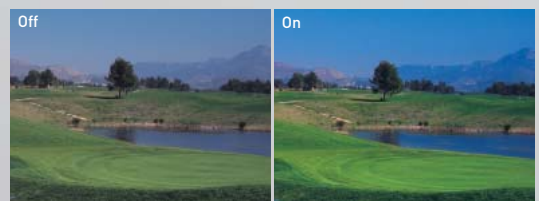
Full 10-bit picture processing NEW

The use of a full 10-bit image processing system provides smooth tonal expression. For example, skin tones appear natural and true to life.

New IP conversion circuit NEW

The PT-D4000E features a new IP conversion circuit that produces more detailed images than our previous models.

More effective noise reduction NEW

Images are noticeably clearer, thanks to higher-performance frame noise reduction, which lowers image graininess, and improved MPEG noise reduction, which suppresses the block noise and mosquito noise that are common in fast-action scenes.

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.

3D colour management system

Compensation provides optimal levels of colour saturation, hue, and brightness that were not possible with conventional projectors. Colours approach those of the original image, even on large-screen displays.

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.

Excellent reliability

Dual lamp system

The use of two lamp systems increases brightness and eliminates the need to interrupt a presentation if a lamp burns out (in dual lamp operation mode).

AC lamp   (NEW)

Newly developed AC lamps with full 210 watts of power offer excellent brightness and greater reliability than other types. A new lamp drive system also lowers the stress on the lamp electrodes while the lamps are lit. The new lamps have a lifetime of approximately 3,000 hours, which is reassuring for applications where the projector is frequently used. The AC lamps also minimise colour irregularities.

Liquid-cooling system

Panasonic's original liquid-cooling system directly cools the DLP™ chip, which extends PT-D4000E performance and attains a high level of reliability. It also enables operation in temperatures up to 45˚C/113 ˚F for use in a wider variety of environments, and maintains a more stable performance even in harsh conditions while keeping the operating sound down to a quiet 29 dB*.

*with lamp mode: low

Cooling directly

Radiator

DLP™ chip

Reserver tank
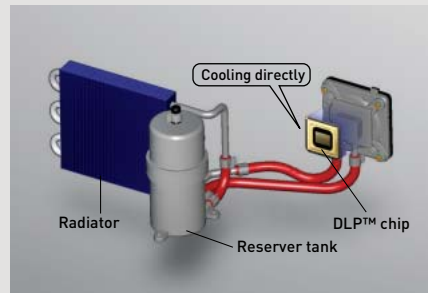
Micro cut filter

A filter in the air intake section traps dust particles that are 10 microns* or larger. By capturing approximately 7 times as much dust as conventional filters, it guards against optical blocks and reduces the penetration of dust into to the interior to provide stable operation by, for example, preventing drops in brightness.

*10-micron dust = lint, pollen, etc.

Micro cut filter

Dustproof design with sealed optical block

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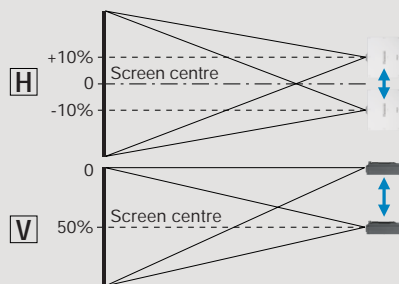
Flexible system installation

Lens-centred design

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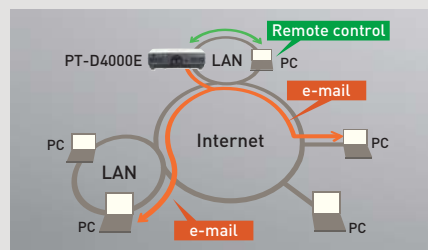
Horizontal/Vertical lens shift

A wide adjustment range of the horizontal/vertical lens shift assures distortion free images and adds convenience and versatility. (Horizontal : manual, Vertical : powered)
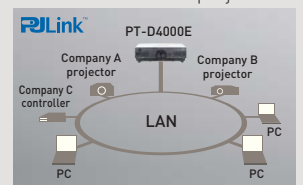
H   +10% 0 -10%   Screen centre

V   0 50%   Screen centre

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.

Web browser control/monitoring and e-mail message alert

Anybody can operate the PT-D4000E 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-D4000E sends an E-mail message to notify the operator when an error has occurred, or a lamp needs to be replaced.

PT-D4000E   LAN   Remote control   PC

e-mail

PC   Internet   PC

LAN

PC   e-mail   PC

Control panel and wireless remote control   (NEW)

The rear control panel allows for easy operation when the PT-D4000E is set on a desk or floor. New wireless remote control with longer transmission capacity of 30 m.

PJLink™ compatibility

The LAN terminals support PJLink™ class 1 connection. Control with the same specifications is also possible when used in a multi-projector system with projectors of another brand.

PJLink   PT-D4000E

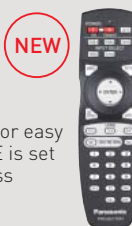Company A projector   Company B projector

Company C controller

LAN

PC

PC   PC

Easy lens replacement

The PT-D4000E uses the bayonet system, so lenses attach and detach with one-touch ease.

Other features

- Mechanical lens shutter
- Direct power off
- Flexible angle setting
- Easy replacement of dust filter and lamp
- ID assignment for up to 65 units
- Coordinated group control for up to 26 groups (A-Z)
- Digital vertical keystone correction
- Built-in test pattern
- Selectable 9-language on-screen menu (English, German, French, Spanish, Italian, Russian,Japanese, Chinese, Korean)
- Anti-theft features with chain opening

Multiple terminals

The PT-D4000E 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. Using the serial terminal(RS232C),it is also possible to connect and operate AMX and Crestron control systems with ease.

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-D4000E reflects the following ecological considerations.

- No halogenated flame retardants are used in the cabinet.
- The packing case and operating manual are made from recycled paper.
- Auto Power Save activates standby mode when no signal is input.

AMX DEVICE DISCOVERY

CERTIFIED CRESTRON Integrated Partner

Specifications

System	DLP™ Projection system
Device	0.7" (diagonal) DLP™ chip 4:3
Pixels	786,432 (1,024 x 768) x 1 total of 786,432 pixels
Lamp	210 W UHM™ lamp x 2 (Dual Lamp System)
Brightness (normal lamp)	4,000 lumens (dual lamp, high power mode)
Contrast ratio	1,600:1 (full on/full off, contrast mode: high)
Resolution	1,024 x 768 pixels
Lens	Powered zoom/focus lens, Supplied lens: (1.8-2.4:1) F = 1.7-2.0, f = 25.6-33.8 mm
Screen size	50 - 600 inches
Lens shift	Vertical (powered), horizontal (manual)
RGB input scanning frequency	f_H 15-91 kHz, f_V 50-85 Hz Dot clock 150 MHz or lower
Component signal	480i, 480p, 576i, 576p, 720/60p, 720/50p, 1080/60i, 1080/60p 1080/50i, 1080/50p
Video signal	NTSC, NTSC4.43, PAL, PAL60, PAL-N, PAL-M, SECAM
Terminals	
VIDEO IN	BNC
S-VIDEO IN	Mini DIN 4-pin
RGB1/YPBPR IN	BNC x 5
RGB2 IN	D-sub HD 15-pin
DVI-D IN	24pin DVI 1.0 compliant, HDCP compatible, for single link
RS-232C IN	D-sub 9-pin female
RS-232C OUT	D-sub 9-pin male
REMOTE 1 IN	M3 jack
REMOTE 1 OUT	M3 jack
REMOTE 2 IN	D-sub 9-pin female (parallel)
LAN	RJ-45x1, compliant with PJLink™ (class 1), 10Base-T/100Base-TX
Keystone correction range	±30˚ (with standard lens)
Installation	Front/rear, ceiling/floor
Power cord length	3.0m (9.10')
Power supply	220-240 V AC, 50 / 60 Hz
Power consumption	520 W (570 VA) (15 W during standby mode with fan stopped)
Dimensions (W x H x D)	530 x 167 x 441 mm (20-7/8' x 6-9/16' x 17-3/8')
Weight	13.7 kg (30.2 lbs) with supplied lens
Operating temperature	0 -45 ˚C (32 -113 ˚F)
Operating humidity	20-80% (no condensation)
Supplied accessories	Power cord, Wireless/wired remote control unit, AA Batteries (x 2) for remote control, Wire rope

Dimensions

unit: mm [inch]

429 (16-7/8)
167 (6-9/16)
530 (20-7/8)
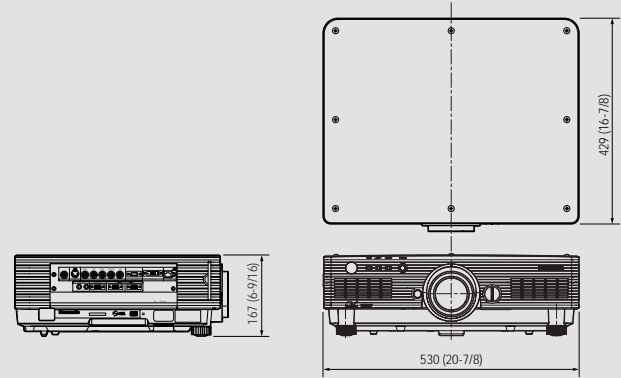
Optional accessories

Replacement Lamp Unit
ET-LAD40
ET-LAD40W (twin pack)

Zoom Lens (1.3-1.8:1)
ET-DLE100
Zoom Lens (2.4-4.0:1)
ET-DLE200
Zoom Lens (3.8-6.0:1)
ET-DLE300
Zoom Lens (5.8-8.1:1)
ET-DLE400
Fixed Focus Lens (0.8:1)
ET-DLE050

Ceiling Mount Bracket for high ceiling
ET-PKD56H

Ceiling Mount Bracket for low ceiling
ET-PKD55S

Projection distance

[meters / feet]

Screen size (4:3)	Throw distance										
Diagonal image size	With ET-DLE050 0.8:1 L	With ET-DLE100 1.3-1.8:1		With supplied lens 1.8-2.4:1		With ET-DLE200 2.4-4.0:1		With ET-DLE300 3.8-6.0:1		With ET-DLE400 5.8-8.1:1	
		min.	max.	min.	max.	min.	max.	min.	max.	min.	max.
50"	0.7m 2.6	1.4m 4.4	1.8m 5.9	1.9m 6.0	2.4m 7.8	2.5m 8.1	4.0m 13.2	3.9m 12.6	6.0m 19.7	6.0m 19.4	8.2m 27.2
80"	1.2m 4.2	2.2m 7.1	2.9m 9.6	3.0m 9.6	3.8m 12.6	4.0m 13.1	6.5m 21.3	6.3m 20.5	9.7m 31.9	9.5m 31.0	13.2m 43.4
100"	1.6m 5.3	2.8m 9.0	3.6m 12.0	3.7m 12.1	4.8m 15.9	5.0m 16.4	8.1m 26.7	7.9m 25.7	12.1m 39.9	11.8m 38.7	16.5m 54.2
150"	2.4m 8.0	4.1m 13.5	5.5m 18.1	5.6m 18.1	7.3m 23.9	7.5m 24.6	12.2m 40.3	11.8m 38.7	18.3m 60.2	17.7m 58.0	24.7m 81.2
200"	3.2m 10.7	5.5m 18.0	7.3m 24.2	7.4m 24.2	9.7m 31.9	10.1m 32.9	16.4m 53.8	15.8m 51.8	24.5m 80.4	23.6m 77.3	32.9m 108.2
300"	— —	8.3m 27.1	11.1m 36.4	11.1m 36.4	14.6m 48.0	15.1m 49.4	24.6m 80.8	23.8m 77.8	36.8m 120.8	35.4m 115.9	49.4m 162.2
400"	— —	11.0m 36.1	14.8m 48.6	14.8m 48.6	19.5m 64.1	20.1m 66.0	32.8m 107.8	31.7m 103.9	49.1m 161.2	47.1m 154.5	65.9m 216.2
500"	— —	13.8m 45.2	18.5m 60.8	18.5m 60.7	24.4m 80.2	25.2m 82.5	41.1m 134.9	39.7m 130.0	61.4m 201.6	58.9m 193.0	82.3m 270.2
600"	— —	16.6m 54.2	22.2m 73.0	22.3m 72.9	29.3m 96.2	30.2m 99.0	49.3m 161.9	47.6m 156.1	73.7m 242.0	70.6m 231.6	98.8m 324.2

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.
3. Do not stack projector units directly on top of one another. If two units must be stacked for backup use in ordinary projection, use a method as shown below and provide ample space between the units to ensure that exhaust heat does not accumulate near the intake opening or around the units. Dual stacked projection of the PT-D4000E is not recommended.
4. If the projector is placed in a box or enclosure, ensure the temperature of the air surrounding the projector is 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.

Operating the Projector Continuously:
1. 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 us age conditions.
• The brightness of the lamp will gradually decrease with use.

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For more information about Panasonic projectors. Visit —

http://panasonic.co.jp/pavc/global/projector/

Please contact Panasonic or your dealer for a demonstration.