Panasonic

ideas for life

PT-**D4000U**

DLP™ -Based Projector

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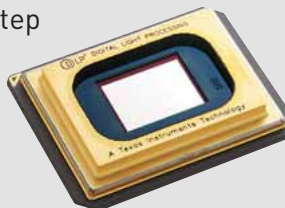
*4,000*lm

XGA

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

DLP™ Projector

PT-**D4000U**

High brightness and high picture quality

Ultra bright 4,000-lm

The PT-D4000U offers 4,000 lumens of brightness, thanks to the newly developed AC lamp, more efficient reflectors and a 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 color 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
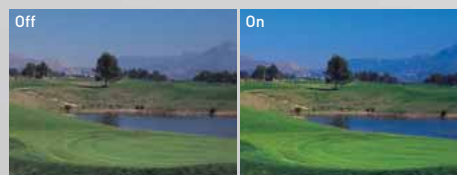
Full 10-bit picture processing `NEW`

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-D4000U 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 color management system

Compensation provides optimal levels of color saturation, hue, and brightness that were not possible with conventional projectors. Colors 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 system 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 minimize color irregularities.

*The indicated figure is the maximum value when two lamps are used in Lamp Low mode, with operating cycles of 3.5 hours ON and 0.5 hour OFF. If the frequency of operation increases, the lamp replacement cycle will become shorter. [It is recommended that the mechanical shutter be used to turn images off for a short period.]

Liquid-cooling system

Panasonic's original liquid-cooling system directly cools the DLP™ chip, which extends PT-D4000U performance and attains a high level of reliability. It also enables operation in temperatures up to 113 °F/45°C 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

Reserver tank

DLP™ chip
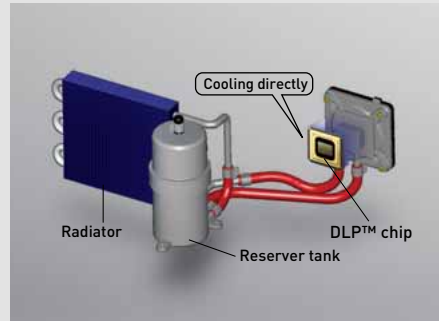
Micro cut filter

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 the interior to provide stable operation by, for example, preventing drops in brightness.

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

Micro cut filter

Dust-resistant optical block

The dust-resistant design of the optical block helps ensure that projectors with DLP™ technology will continue to deliver crisp, sharp, high resolution images over an extended service life.


Flexible system installation

Lens-centered design

A lens-centered, 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 center

V 0 / 50% Screen center
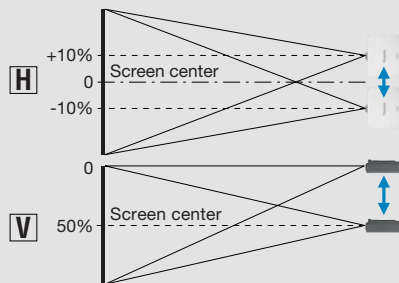
Optional lenses for various venues

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.

Multiple terminals

The PT-D4000U 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.

Web browser control/monitoring and e-mail message alert

Anybody can operate the PT-D4000U 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-D4000U sends an E-mail message to notify the operator when an error has occurred, or a lamp needs to be replaced.

PT-D4000U
Remote control
LAN
PC
e-mail
PC
PC
Internet
LAN
PC
PC
e-mail
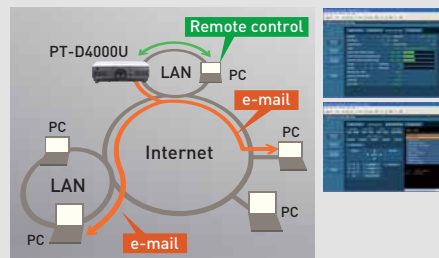
Control panel and wireless remote control

NEW

The rear control panel allows for easy operation when the PT-D4000U is set on a desk or floor. New wireless remote control with longer transmission capacity of 98 feet (30 m).

PJLink™ compatibility

PJLink

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.

Multi projector monitoring & control software

NEW

Panasonic's original "Multi Projector Monitoring & Control Software"* freeware allows the user to control and monitor multiple projectors via LAN. When a problem occurs, an alarm message is sent to the controlling/monitoring PC.

* This software is available at http://panasonic.net/avc/projector/download/.

Easy lens replacement

The PT-D4000U uses the bayonet system, so lenses attach and detach with one-touch ease.

Other features

- Mechanical lens shutter
- Direct power off
- Flexible angle setting (It can be rotated vertically)
- 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

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-D4000U reflects the following ecological considerations.

- No halogenated flame retardants are used in the cabinet.
- Auto Power Save activates standby mode when no signal is input.

DEVICE DISCOVERY AMX

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)*1	4,000 lumens (dual lamp, high power mode)
Contrast ratio*1	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: +50% (powered), Horizontal: ±10% (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/YP$_B$P$_R$ 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	9.10' (3.0m)
Power supply	120 V AC, 50 / 60 Hz
Power consumption	540 W (540 VA) (10 W during standby mode with fan stopped)
Dimensions (W x H x D)	20-7/8' x 6-9/16' x 17-3/8' (530 x 167 x 441 mm)
Weight*2	Approx. 30.2 lbs (13.7 kg) with supplied lens
Operating temperature	32 -113 °F (0 -45 °C)
Operating humidity	20-80% (no condensation)
Supplied accessories	Power cord, Wireless/wired remote control unit,
	AA Batteries (x 2) for remote control, Wire rope

*1: Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
*2 Average value. May differ depending on models.

Projection distance

Screen size (4:3) — Throw distance

Diagonal image size	With ET-DLE150 1.3-2.0:1		With supplied lens* 1.8-2.4:1		With ET-DLE250 2.4-3.7:1		With ET-DLE350 3.7-5.6:1		With ET-DLE450 5.5-8.9:1		WithET-DLE055 0.8:1
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	L
50"	1,344mm 4.5'	1,967mm 6.5'	1,804mm 6.0'	2,400mm 7.9'	2,361mm 7.8'	3,777mm 12.4'	3,713mm 12.2'	5,681mm 18.7'	5,525mm 18.2'	8,912mm 29.3'	808mm 2.7'
80"	2,183mm 7.2'	3,177mm 10.5'	2,917mm 9.6'	3,870mm 12.7'	3,826mm 12.6'	6,090mm 20.0'	6,023mm 19.8'	9,170mm 30.1'	9,020mm 29.6'	14,438mm 47.4'	1,322mm 4.4'
100"	2,742mm 9.0'	3,983mm 13.1'	3,659mm 12.1'	4,850mm 16.0'	4,803mm 15.8'	7,633mm 25.1'	7,562mm 24.9'	11,496mm 37.8'	11,351mm 37.3'	18,123mm 59.5'	1,664mm 5.5'
150"	4,140mm 13.6'	6,000mm 19.7'	5,514mm 18.1'	7,300mm 24.0'	7,244mm 23.8'	11,489mm 37.7'	11,411mm 37.5'	17,312mm 56.8'	17,177mm 56.4'	27,333mm 89.7'	2,519mm 8.3'
200"	5,537mm 18.2'	8,016mm 26.3'	7,369mm 24.2'	9,750mm 32.0'	9,686mm 31.8'	15,344mm 50.4'	15,259mm 50.1'	23,127mm 75.9'	23,004mm 75.5'	36,544mm 119.9'	3,375mm 11.1'
300"	8,333mm 27.4'	12,049mm 39.6'	11,079mm 36.4'	14,650mm 48.1'	14,568mm 47.8'	23,056mm 75.7'	22,956mm 75.4'	34,758mm 114.1'	34,656mm 113.8'	54,966mm 180.4'	— —
400"	11,129mm 36.6'	16,082mm 52.8'	14,789mm 48.6'	19,550mm 64.2'	19,451mm 63.9'	30,768mm 101.0'	30,653mm 100.6'	46,389mm 152.2'	46,309mm 152.0'	73,387mm 240.8'	— —
500"	13,924mm 45.7'	20,115mm 66.0'	18,499mm 60.7'	24,450mm 80.3'	24,334mm 79.9'	38,480mm 126.3'	38,350mm 125.9'	58,020mm 190.4'	57,961mm 190.2'	91,809mm 301.3'	— —
600"	16,720mm 54.9'	24,148mm 79.3'	22,209mm 72.9'	29,350mm 96.3'	29,217mm 95.9'	46,192mm 151.6'	46,047mm 151.1'	69,651mm 228.6'	69,614mm 228.4'	110,231mm 361.7'	— —

Dimensions

unit: inch [mm]

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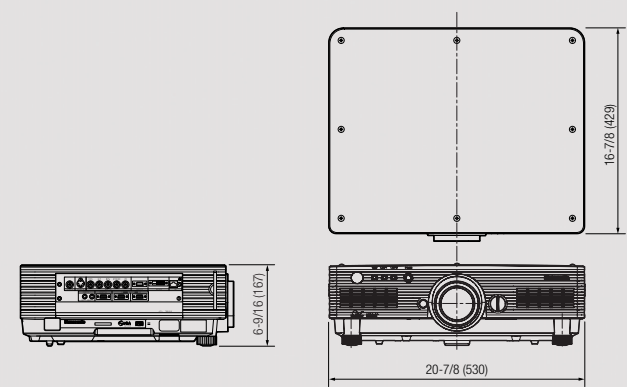
Optional accessories

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

Zoom Lens (1.3-2.0:1)
ET-DLE150
Zoom Lens (2.4-3.7:1)
ET-DLE250
Zoom Lens (3.7-5.6:1)
ET-DLE350
Zoom Lens (5.5-8.9:1)
ET-DLE450
Fixed Focus Lens (0.8:1)
ET-DLE055

Ceiling Mount Bracket
for high ceiling
ET-PKD56H

Ceiling Mount Bracket
for low ceiling
ET-PKD55S

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.
2. 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.
3. The projector uses of 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 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 one time 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 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.
   * 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 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.
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.
6. Please clean the filter regularly. As for details, please refer to the operation manual.