Panasonic

PT-D9610E
PT-D9510E

Large Venue DLP™-Based Projectors

PAL/PAL-M/PAL-N/SECAM/NTSC/M-NTSC

High-Fidelity Projectors

- Ultra-high contrast ratio of 1,000:1
- Built-in multi-screen edge blending technology
- Network functions including remote control and status monitoring
- Abundant options for versatile system configurations
- Low-noise design
- One-touch auto setup

Sophisticated High-Contrast, Multi-Screen Projection

The PT-D9610E and PT-D9510E debut as the latest flagship models for Panasonic's large-venue DLP™-based projectors. These exciting models inherit Panasonic's brilliant picture quality, advanced functions and easy maintenance, and add a host of new technologies, an extremely high contrast ratio, and a new wired-maintenance function. Panasonic's edge blending function also makes it easy to project high-quality images onto multiple screens. The PT-D9610E and PT-D9510E are fully equipped for either permanent or event applications, and are ideal for convention halls, sports arenas, control centers, and post production display for digital cinema. These exciting new projectors clearly show Panasonic's leadership position in DLP™-based systems.

Emmy Award-Winning Technology

At the core of the PT-D9610E and PT-D9510E is the unique format re-sizing technology used in our Emmy Award-winning universal format converter (UFC). This revolutionary technology automatically converts a multitude of image formats to the native resolution of the projector so that the maximum resolution for each format is displayed.

Edge Blending

The edge blending technology of the PT-D9610E and PT-D9510E makes it possible to display full-motion images over the entire span of a multi-screen projection without any discernible lines between projected images.

High Brightness, High Contrast

1,000:1 contrast ratio

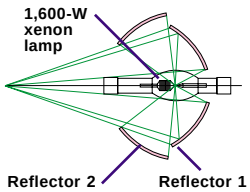
Panasonic's newly developed optical system and dynamic lamp control system with AI have achieved a remarkable 1,000:1 contrast ratio. This combines with a brightness of 12,000 (PT-D9610E)/ 10,000 (PT-D9510E) ANSI lumens to deliver crisp, high-resolution images in virtually any viewing environment. Contrast can be switched between Super, High and Normal as conditions require.

Bright 12,000/10,000 ANSI lumens

The PT-D9610E and PT-D9510E feature a DLP system equipped with three Digital Micromirror Device (DMD) chips. This joins with Panasonic's original optical system and 1,600-W xenon lamp to achieve 12,000 ANSI lumens for the PT-D9610E and 10,000 ANSI lumens for the PT-D9510E. The xenon lamp reproduces natural colours and stunning brightness.

High-efficiency optical system

Panasonic's unique optical system maximizes lamp light efficiency. Thanks to a highly condensing dual reflector system and wide convergence angle, the compact PT-D9610E and PT-D9510E offer a very bright light source.



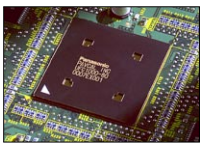
Dual reflector lamp system

Contrast mode and light output

contrast mode:	Super	High	Normal
brightness:	7,000 6,000	12,000 10,000	12,000 10,000
contrast ratio:	1,000:1 1,000:1	550:1 450:1	550:1 450:1
note:	Highest contrast ratio.	While the values are the same as those of Normal mode, the AI function gives the impression of higher contrast.	Used it is desired to turn AI off and project the source as it is.

upper: PT-L9610E
Lower: PT-L9510E

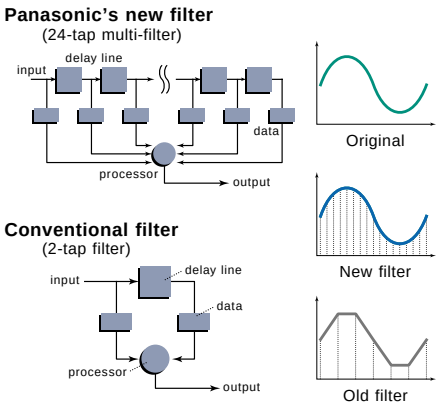
UFC for faithful moving pictures



High-performance original UFC chip

Each projector is equipped with Panasonic's Emmy Award-winning universal format converter (UFC), a high-precision digital filter that greatly improves the moving image smoothness. Projected images move smoothly and naturally, and viewers cannot perceive individual pixels.

Digital Filter Comparison



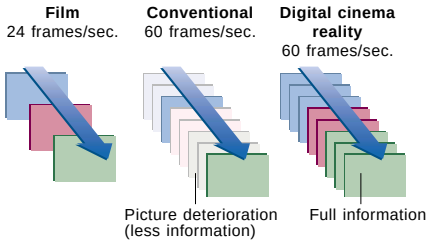
Panasonic's high-precision digital filter converts formats with a level of smoothness that is suitable for moving picture signals.

Digital processing

The PT-D9610E and PT-D9510E incorporate a host of Panasonic-developed video-processing technologies designed to ensure superior reproduction of moving pictures from a variety of sources. High-speed DSP chips enable interlaced-to-progressive (IP) conversion for HD sources, complete with digital cinema reality (DCR) and digital noise reduction (DNR).

- The built-in **digital detail enhancer** checks and corrects the quality of 368,000 pixels in each image to improve sharpness and clarity.
- The **digital cinema reality** circuit provides progressive processing optimized for a 24-frames/sec moving source, helping to reproduce the image with quality faithful to the original.
- Full compatibility with digital format (optional)
- High resolution: PT-D9610E: SXGA native, UXGA max., PT-D9510E: XGA native, UXGA max.

Digital Cinema Reality



Digital cinema reality circuit preserves full image quality as it converts each frame of a movie source to TV signals.

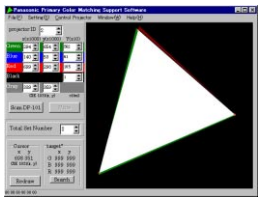
Artificial Intelligence (AI)

AI technology dynamically refreshes image settings like brightness, contrast and gamma for each individual scene. This ensures that details remain crisp and clear, even in dimly and brightly lit scenes.

Multi-Screen

Colour matching

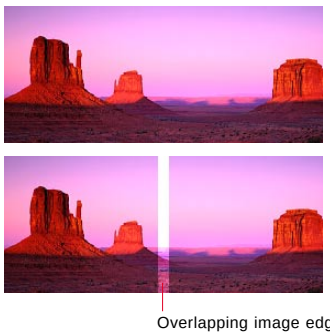
When several PT-D9610E or PT-D9510U units are used together, this function corrects for slight variations in the colour reproduction range of individual units. The PC software assures easy, accurate control. To simplify the setup process, you can adjust the units before delivery to the installation site. The colour-matching function is available (for up to 9 units) even when you're not conducting a multi-screen presentation.



Colour-matching software

Edge blending

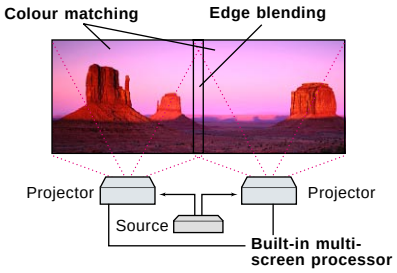
This function controls the brightness at overlapping image edges to assure uniform, natural-looking multi-screen images. When projecting HD sources with a single projector, part of the DMD



device is unused. In multi-screen projections with two projectors, the DMD device works fully to increase the image's horizontal resolution while maintaining the maximum vertical resolution.

Built-in multi-screen processor

The PT-D9610E and PT-D9510E can project large, multi-screen images without any additional equipment. Up to 100 units (10 x 10) can be used at a time.

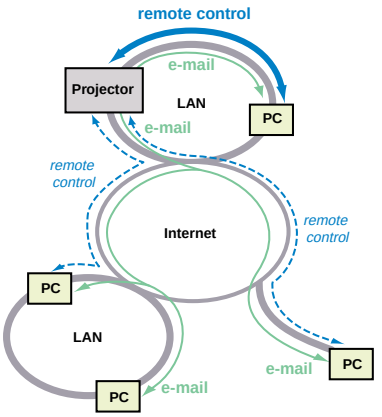


The built-in multi-screen processor enables enlarged multi-screen projection without using any additional special equipment. Colour matching and edge blending make it easier to obtain proper multi-screen picture quality.

Maintenance

Network functions

The PT-D9610E and PT-D9510E are network-ready, with interfaces for 10Base-T and 100Base-TX provided as standard equipment. All functions can be controlled from a personal computer on a local area network (LAN) via a standard Web browser without any additional application software. By assigning a TCP/IP address to the projectors, you can monitor their operation over LAN or the Internet. The PT-D9610E and PT-D9510E will even send an e-mail message to alert you of any operating errors or notify you when the lamp needs to be replaced, giving you an advanced level of maintenance ease and reliability.



Abundant Options

Lenses

A wide variety of optional lenses allow the user to project wide-screen images—100 to 600 inches diagonally— to accommodate a range of site conditions. Options include three types of zoom lenses and one fixed short-focus lens.

Boards

In addition to the supplied boards for network and remote control, up to three optional board modules can be installed to match a variety of input source signals, including digital serial component signals.

Two sets of terminal boards (network and remote control) are suppled. Up to three optional boads can be installed.

Installation

A ceiling bracket is available as an option. The dual stacking mount bracket allows the user to assemble a system that provides brightness of up to 24,000 ANSI lumens. The lens axis shift function helps eliminate image distortion by allowing the precise positioning of the projected images.

Low Noise Design

Using an Active Noise Control (ANC) technology and advanced design structure, the low and high frequency noises are effectively cancelled. Because the control effect is monitored by micro-phones, optimal silencing is obtained at all times. So, images are presented in a pleasant, quiet environment.

Other Features

- Auto setup
- Digital keystone correction
- Parallel remote connector
- RS-232C/RS-422 remote in/out connectors
- Wireless/wired remote control
- Motorized focus
- Ceiling/floor, front/rear projection
- Easy-handling frame

Specifications

Main Unit 200–240 V AC, 50/60 Hz
Power supply: 2,200 W (1,900 VA)(2.8 W at standby mode)
Power consumption:
Colour system: PAL/PAL-M/PAL-NNTSC/M-NTSC/SECAM (with opional ET-MD95VM2)

Scanning frequency:
- **RGB:** fH 15–100 kHz, fV 24–120 Hz
- **YPBPR:** 480i: fH 15.75 kHz, fV 60 Hz; 625i: fH 15.63 kHz, fV 50 Hz; 480p: fH 31.5 kHz, fV 60 Hz; 720p: fH 45 kHz, fV 60 Hz; 1035i: fH 33.75 kHz, fV 60 Hz; 1080i: fH 33.75 kHz, fV 60 Hz
- **Video/S-Video:** PAL/PAL-N/SECAM: fH 15.63 kHz, fV 50s Hz; PAL-M/NTSC/M-NTSC: fH 15.75 kHz, fV 60 Hz

DMD™: DLP™ system
- **PT-D9610E:** 1.1″ (diagonal) DMD™ (x 3),
- **PT-D9510E:** 0.9″ (diagonal) DMD™ (x 3),

Pixels:
- **PT-D9610E:** 1,310,720 (1,280 x 1,024) x 3
- **PT-D9510E:** 786,432 (1,024 x 768) x 3

Screen aspect ratio:
- **PT-D9610E:** 5:4 (16:9 compatible)
- **PT-D9510E:** 4:3 (16:9 compatible)

Lens: Optional
Lamp: 1,600 W xenon lamp
Colours: Full colour (16,777,216 colours)
Brightness:
- **PT-D9610E:** 12000 ANSI lumens (at high mode), 10000 ANSI lumens (at normal mode)
- **PT-D9510E:** 10000 ANSI lumens (at high mode), 9000 ANSI lumens (at normal mode)

Contrast ratio:
- **PT-D9610E:** 1000:1 (all white/all black) at contrast super mode (brightness switches to 7,000 ANSI lumens at super mode) 550:1 (all white/all black) at contrast high/normal mode
- **PT-D9510E:** 1000:1 (all white/all black) at contrast super mode (brightness switches to 6,000 ANSI lumens at super mode) 450:1 (all white/all black) at contrast high/normal mode

Resolution:
- **RGB: PT-D9610E:** 1280 x 1024 dots
- **PT-D9510E:** 1024 x 768 dots (with optional ET-MD95RGB)
- **Video:** 560 TV lines (with optional ET-MD95VM2)

Screen size: 100″–600″ diagonal (aspect ratio: 4:3) 100″–180″ diagonal with ET-D95LE9 (aspect ratio: 4:3)
Lens shift: Vertical: 10:0–0:10 (powered)
Horizontal: 8:2–2:8 (powered)
Installation: Ceiling/desk, front/rear (menu selection)
Keystone correction: ±10°
Terminals:
- **LAN:** RJ-45, 10Base-T/100Base-TX
- **Serial:** D-sub 9-pin
- **RS-232C/422 IN:** D-sub 9-pin x 1
- **RS-232C/422 OUT:** D-sub 9-pin x 1
- **REMOTE 1 IN:** D-sub 9-pin x 1
- **REMOTE 2 IN:** M3 jack x 1
- **REMOTE 2 OUT:** M3 jack x 1

Power cord length: 2.5 m (8′2″)
Cabinet material: Aluminum + PPE plastic
Dimensions (W x H x D): 753 x 428 x 1,051 mm
Weight: 100 kg
Operating temperature: 0°–40°C (32°–104°F), 0°–35°C (32°–95°F) at high mode
Operating humidity: 10%–80% (no condensation)
Safety regulations: UL1950, C-UL, EN60950, FCC class A, EN50082-1, EN55022 (B), EN61000-3-2, EN61000-3-3, VDE, CB Certificate, C-tick
Supplied accessories: Wireless/wired remote control unit, Batteries for remote control unit, Remote control cable
Optional accessories:
For PT-L9610E:
• Zoom lens (1.5-2.0:1): ET-D95LE5 • Zoom lens (2.0-2.5:1): ET-D95LE6 • Zoom lens (2.5-4.0:1): ET-D95LE7 • Zoom lens (4.0-7.0:1): ET-D95LE8
For PT-L9510E:
• Zoom lens (1.5-2.5:1): ET-D95LE1 • Zoom lens (2.5-4.0:1): ET-D95LE2 • Zoom lens (4.0-7.0:1): ET-D95LE3
Common:
• Replacement lamp unit: ET-LAD9610 • Ceiling mount bracket: ET-PKD95 • Dual stacking mount bracket: ET-DFD95 • RGB/YPBPR input board: ET-MD95RGB • Video/S-Video/YCBCR input board: ET-MD95VM • SDI (480i/576i) input board: ET-MD95SD1 • SDI (480i/576i/480p) input board: ET-MD95SD2 • SDI (720p/1035i/1080i/1080p) input board: ET-MD95SD3 • TMDS input board: ET-MD95T

PT-D9610E standard setting-up position examples (aspect ratio: 5:4)

Screen size	L									H			
	zoom								fixed	E1		E2	
	ET-D95LE5		ET-D95LE6		ET-D95LE7		ET-D95LE8		ET-D95LE9	zoom	fixed	zoom	fixed
	min.	max.	min.	max.	min.	max.	min.	max.		ET-D95LE5/D95LE6/D95LE7/D95LE8	ET-D95LE9	ET-D95LE5/D95LE6/D95LE7/D95LE8	ET-D95LE9
100″	3,203	4,194	4,226	5,172	5,033	7,927	8,066	13,905	1,927	0–1,587	793	0–-1,587	-793
120″	3,814	5,007	5,079	6,165	6,025	9,513	9,654	16,686	2,262	0–1,904	952	0–-1,904	-952
150″	4,732	6,226	6,299	7,655	7,512	11,891	12,035	20,858	2,765	0–2,380	1,190	0–-2,380	-1,190
180″	5,650	7,444	7,519	9,146	8,999	14,270	14,416	25,029	3,267	0–2,856	1,428	0–-2,856	-1,428
200″	6,261	8,257	8,332	10,139	9,991	15,855	16,004	27,810	3,602	0–3,173	1,587	0–-3,173	-1,587
250″	7,791	10,289	10,365	12,623	12,470	19,820	19,973	34,763	–	0–3,967	–	0–-3,967	–
300″	9,320	12,320	12,398	15,107	14,948	23,784	23,941	41,715	–	0–4,760	–	0–-4,760	–
350″	10,849	14,352	14,431	17,591	17,427	27,748	27,910	48,668	–	0–5,554	–	0–-5,554	–
400″	12,379	16,383	16,464	20,074	19,906	31,712	31,879	55,620	–	0–6,347	–	0–-6,347	–
450″	13,908	18,415	18,497	22,558	22,384	35,676	35,847	62,573	–	0–7,140	–	0–-7,140	–
500″	15,438	20,446	20,530	25,042	24,863	39,640	39,816	69,525	–	0–7,934	–	0–-7,934	–
600″	18,496	24,509	24,595	30,010	29,820	47,568	47,753	83,430	–	0–9,520	–	0–-9,520	–

PT-D9510E standard setting-up position examples (aspect ratio: 4:3)

Screen size	L							H			
	zoom						fixed	E1		E2	
	ET-D95LE1		ET-D95LE2		ET-D95LE3		ET-D95LE9	zoom	fixed	zoom	fixed
	min.	max.	min.	max.	min.	max.		ET-D95LE1/D95LE2/D95LE3	ET-D95LE9	ET-D95LE1/D95LE2/D95LE3	ET-D95LE9
100″	3,261	5,197	5,270	8,221	8,196	14,142	2,398	0–1,524	762	0–-1,524	-762
120″	3,870	6,203	6,279	9,833	9,820	16,976	2,827	0–1,829	914	0–-1,829	-914
150″	4,784	7,713	7,792	12,251	12,257	21,227	3,471	0–2,286	1,143	0–-2,286	-1,143
180″	5,698	9,223	9,305	14,669	14,693	25,478	4,114	0–2,743	1,372	0–-2,743	-1,372
200″	6,307	10,229	10,314	16,281	16,318	28,312	–	0–3,048	–	0–-3,048	–
250″	7,830	12,745	12,835	20,310	20,379	35,397	–	0–3,810	–	0–-3,810	–
300″	9,353	15,261	15,357	24,340	24,440	42,482	–	0–4,572	–	0–-4,572	–
350″	10,876	17,777	17,879	28,369	28,501	49,567	–	0–5,334	–	0–-5,334	–
400″	12,399	20,293	20,401	32,399	32,562	56,651	–	0–6,096	–	0–-6,096	–
450″	13,922	22,809	22,923	36,429	36,623	63,736	–	0–6,858	–	0–-6,858	–
500″	15,455	25,325	25,445	40,458	40,684	70,821	–	0–7,620	–	0–-7,620	–
600″	18,491	30,357	30,488	48,517	48,806	84,991	–	0–9,144	–	0–-9,144	–

L: Projection distance between the screen and the center of the front feet of the projector.
H: Height from the edge of screen to center of lens.

Options

Lenses

ET-D95LE1
Zoom lens (1.5-2.5 : 1)

ET-D95LE5
Zoom lens (1.5-2.0 : 1)

ET-D95LE2
Zoom lens (2.5-4.0 : 1)

ET-D95LE6
Zoom lens (2.0-2.5 : 1)

ET-D95LE3
Zoom lens (4.0-7.0 : 1)

ET-D95LE7
Zoom lens (2.5-4.0 : 1)

ET-D95LE9
Fixed short focus lens (for rear projection) (0.8 : 1)

ET-D95LE8
Zoom lens (4.0-7.0 : 1)

The PT-D9510E needs modification to attach the ET-D95LE9.

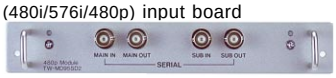
Boards

ET-MD95VM2
Video/S-Video/YCBCR input board

ET-MD95RGB
RGB/YPBPR input board

ET-MD95SD1
SDI (480i/576i) input board

ET-MD95SD2
SDI (480i/576i/480p) input board



ET-MD95SD3
SDI (720p/1035i/1080i/1080-24p) input board

ET-MD95T
TMDS input board

Brackets

ET-PKD95
Ceiling mount bracket

ET-DFD95
Dual stacking mount bracket

Lamp

ET-LAD9610
Replacement lamp unit

Panasonic
Panasonic is the brandname of Matsushita Electric.