

Panasonic

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

PT-L712NTE
PT-L712E
PT-L702SDE
PT-L702E
PT-L512E
PT-L502E
Portable LCD Projectors

Simple, Smart, Stylish

- Wireless multiple presentation capability (PT-L712NTE)
- One-Touch Full Auto Setup with digital keystone correction
- Extra short-throw lens allows display of larger images in smaller rooms
- Quiet fans (28dB) and 4,000-hour lamp life* * in low power mode
- Index Window makes presentations easier to understand
- SD Memory Card support for convenient PC-free presentations (PT-L702SDE)



XGA model with wireless card slot



PT-L712NTE

Wireless multiple presentation capability

- 1600 ANSI lumens
- XGA (UXGA max.) resolution
- Micro Lens Array (MLA)



New networking technology gives the PT-L712NTE a host of exciting new application possibilities. For example, the supplied wireless card* lets you conduct wireless presentations. With no need for a cable connection, you can smoothly and easily control continuous presentations from multiple PCs.

Also, a single PT-L712NTE can be connected to and receive data from several PCs, with no need to switch input settings. This greatly expands usability by allowing for "participatory" presentations—with executives taking part in the presentation on their own PCs.

* A wireless card is supplied with the PT-L712NTE. An optional wireless card for PC is required to use the wireless presentation function. Wireless LAN technology for the wireless presentation function is compliant with IEEE802.11b.



The PT-L712NTE accepts data from two or more computers without need for changing connection, which allows multiple participatory presentations.

Easy-to-Use Software Supplied

The PT-L712NTE comes supplied with a CD-ROM which includes "Wireless Manager" and "JPEG Converter" utility software.

Wireless Manager

Wireless Manager features Capture and Image List functions. **Capture Function** allows to save images displayed from a connected PC and send them to the projector during your presentations. **Image List** provides an index-type display of all the images captured. The



Capture



Image list

listed images can be sent to the PT-L712NTE continuously.

JPEG Converter

This utility software converts BMP or TIFF images and entire Microsoft® PowerPoint files into JPEG images for easy storage onto your PC harddisk.

Choose the One that Suits Your Style

XGA models



PT-L712E

Ultra-bright model, with the Micro Lens Array

- 1600 ANSI lumens
- XGA (UXGA max.) resolution
- Micro Lens Array (MLA)

PT-L702E

High resolution

- 1200 ANSI lumens
- XGA (UXGA max.) resolution

SVGA models



PT-L512E

Superb brightness and easy operation

- 1500 ANSI lumens
- SVGA (SXGA max.) resolution

PT-L502E

Easy to use

- 1200 ANSI lumens
- SVGA (SXGA max.) resolution

XGA model with SD card slot



PT-L702SDE

SD card slot for PC-free presentations

- 1200 ANSI lumens
- XGA (UXGA max.) resolution
- SD memory card support



The PT-L702SDE comes supplied with a 16MB SD Memory Card and a PC card adapter.



One-Touch "Full" Auto Setup



One-Touch Auto Setup provides a wide range of automatic adjustments, from phasing to dot clocks, to vertical sizing and horizontal blocking. The list goes on to include *keystone correction* and RGB input signal selection. Panasonic's original *built-in gravity sensor* detects the projector angle relative to the floor (up to 30 degrees), then corrects for keystone distortion accordingly. A new IC also minimizes picture degradation. Simply press the Auto Setup button to automatically tune and adjust the image for optimal viewing.



Before auto setup



After auto setup

Extra Short-Throw Lens



Each model is equipped with a large-diameter, extra short-throw lens that shortens the necessary projection

distance by 25%. Conventional projectors often have to be positioned in the middle of the meeting table, with considerable distance between the lens and the screen. The shorter projection distance of the new Panasonic



Conventional



Panasonic

Panasonic projectors provide larger, brighter images than conventional models do at the same projection distance.

models saves space, allowing the projector to be placed at the front of the table. This convenient feature enables comfortable presentations with large, easy-to-see images even in small rooms.

Quiet Cooling Fan—Only 28 dB

Four new, quiet-design cooling fans greatly reduce operating noise to 28 dB in Low power mode. A rotary air outlet louver lets the user control the direction of exhaust air and aim leakage light away from the audience's eyes.

4,000-Hour Lamp Life

The user can select from Standard and Low lamp power modes. Designed for use in dark rooms, Low mode uses a lower lamp power that minimizes energy consumption and lengthens the lamp life up to 4,000 hours.

Note: Brightness is reduced 20% in low mode.

Unique Index Window

Any image in the presentation, RGB or video input, can be frozen, stored in memory, and displayed on the left side of the screen as an Index Window, while the display of subsequent images continues on the right. This can make presentations much easier to understand. For example, the outline of a plan can be displayed in the Index Window to the left, while details are displayed to the right. The result is a multi-window effect from a single presentation source,



Index window (frozen image)

Normal window

with no special preparations necessary.

Attractive Styling

The stylish design helps to enhance your presentation, creating a positive impression the moment the projector is in place. The footprint is a compact A4 size, and the unit weighs only 3.8 kg (8.4 lbs.)*. The design is practical, too, with a protrusion-free body that makes carrying easy. The PT-L712NTE and PT-L702SDE come in a silver cabinet while the PT-L712E, PT-L702E, PT-512E and PT-L502E are available in metallic white.



Top view

* PT-L712NTE: 4.0 kg/8.8 lbs.
PT-L702SDE: 3.9 kg/8.6 lbs.

DTV-Ready Design

All models accommodate the major digital TV formats. The PT-L712NTE, PT-L712E, PT-L702SDE and PT-L702E also feature a Digital Cinema Reality circuit, which greatly improves viewing quality from film-based video sources.

Two RGB Inputs

Two RGB input terminals are provided for greater connection flexibility.

Options for more mobility and flexible installation



Ceiling Mount Bracket
ET-PK701

Photo shows the PT-L712E mounted on the ET-PK701 bracket.

Wide Conversion Lens
ET-LEC701



Photo shows the PT-L712E with the ET-LEC701 wide conversion lens attached.



Full-Function Remote Control Unit
ET-RM100



Replacement Lamp Unit
ET-LA702



10-Bit Digital Gamma Correction

The 10-bit gamma correction circuitry featured on all models optimizes the non-linear imaging characteristics of their LCD panels. Far superior to conventional analogue gamma processing, this circuitry delivers naturally vibrant colours with smooth shading and image gradation.

High Resolution and Intelligent Image Resizing

The PT-L712NTE, PT-L712E, PT-L702SDE and PT-L702E offer native XGA resolution (UXGA max.). The PT-L512E and PT-L502E support native SVGA resolution (SXGA max.). When displaying images of other types, the signals are expanded or compressed by a digital processing system that ensures smooth outlines and outstanding picture definition.

Ultrahigh Brightness

The 165-W UHM™ lamp delivers an ultrahigh level of brightness. The PT-L712NTE and PT-L712E features a Micro Lens Array (MLA) for even greater brightness.

UHM is a trademark of Matsushita Electric Industrial Co., Ltd.

Other Important Features

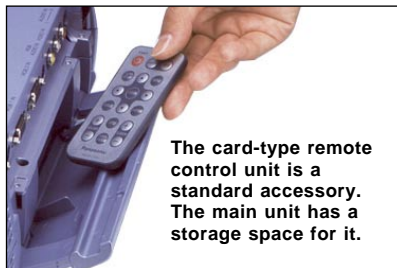
- RGB signal input indication
- Optional wide conversion lens (ET-LEC701) shortens the throw distance by 12%
- 9x digital zoom
- Advanced shutter function
- Card-type remote control
- Compatible with six video systems: NTSC, M-NTSC, PAL, PAL-M, PAL-N, SECAM
- Component video signal compatibility: 1080i, 720p, 480p, 480i, 625i
- S-Video compatibility
- Full 16.7-million colour palette
- 3-Dimensional Y/C separation for NTSC signal
- RS-232C computer interface
- Ceiling mount capability
- Mute/freeze for video and RGB
- Selectable 7-language on-screen menu (English, German, French, Spanish, Italian, Chinese, Japanese)
- VGA expansion on/off selectable
- Video expansion on/off selectable

- 4:3/16:9 screen aspect ratio selectable
- Rear screen projection
- Universal AC power supply (auto-voltage: 100 to 240 V)



Each model comes supplied with a carrying bag.

The brightness of each model is measured in compliance with "Guidelines for LCD Projector Measuring Procedures and Measuring Conditions" by the Japan Business Machine Makers Association (JBMA). Fan noise is measured in compliance with the ISO7779 standard.



The card-type remote control unit is a standard accessory. The main unit has a storage space for it.

PC-Free Presentations from the PT-L702SDE with SD Memory Card Slot

SD Memory Card Presentation

Simply store your data onto an SD Memory Card, then grab the PT-L702SDE for a PC-free presentation anywhere, anytime.

Capture Function

Use this function to save images displayed from a connected PC or VTR directly onto an SD Memory Card. You can save information during the meeting for future reference.

Auto Slide Show

This function automatically shows

the data from an SD Memory Card in succession. The intervals of slides can be set to between 5 and 60 seconds in 5-second steps. Auto Slide Show is useful for demonstrations in a shop or convention.

Easy-to-Use Software Supplied

The "JPEG Converter" utility software converts BMP or TIFF images and entire Microsoft® PowerPoint files into JPEG images for easy storage onto an SD Memory Card. Operation couldn't be easier. Just drag &

drop the desired file or folder onto the JPEG Converter icon.

Thumbnail Display

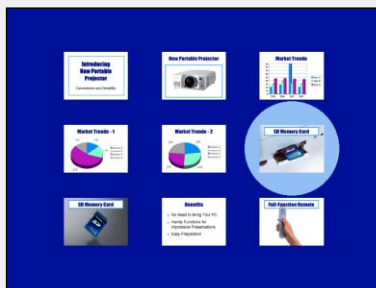
This function provides an index-type display of all the images on an SD Memory Card, and lets the user move and delete desired images.

16MB SD Memory Card and PC Card Adapter Included

The PT-L702SDE also comes complete with a 16MB SD Memory Card and a PC card adapter for it.



The PT-L702SDE comes supplied with file conversion software.



Thumbnail Display for easy editing on the spot.



Supplied 16MB SD Memory Card (right) and PC card adapter (left)

Specifications

Power supply: 100–240 V AC, 50/60 Hz
Power consumption: 240 W (standby mode*: 5 W) * with fan stopped.

Color system: PAL/ PAL-M/PAL-N/NTSC/ M-NTSC/SECAM

Scanning frequency:
RGB
PT-L712NTE/L712E/L702SDE/L702E: fh 24–97 kHz, fv 50–120 Hz
PT-L512E/L502E: fh 24–81 kHz, fv 50–120 Hz

YPbPr: 480i: fh 15.7 kHz, fv 59.9 Hz
 625i: fh 15.6 kHz, fv 50.0 Hz
 480p: fh 31.5 kHz, fv 59.9 Hz
 720p: fh 45 kHz, fv 60.0 Hz
 1080i: fh 33.75 kHz, fv 60.0 Hz

Video/S-Video: PAL/PAL-N/SECAM: fh 15.6 kHz, fv 50.0 Hz
 PAL-M/NTSC/M-NTSC: fh 15.7 kHz, fv 59.9 Hz

LCD panel: 0.9" (diagonal) polysilicon TFT LCD panels (x 3)

Drive method: Active matrix

Pixels:
PT-L712NTE/L712E/L702SDE/L702E: 786,432 (1,024 x 768) x 3
PT-L512E/L502E: 480,000 (800 x 600) x 3
Stripe

Pixel configuration: Stripe
Screen aspect ratio: 4:3 (16:9 compatible)
Lens: Manual zoom/focus lens (1:1–1:1.3), F 1.8–2.1, f 28.7–36.0 mm

Lamp: AC 165 W UHM™ lamp
Colours: Full colour (16,777,216 colours)

Brightness:
PT-L712NTE/L712E: 1600 ANSI lumens
PT-L702SDE/L702E: 1200 ANSI lumens
PT-L512E: 1500 ANSI lumens
PT-L502E: 1200 ANSI lumens

Contrast ratio:
PT-L712NTE/L712E: 400:1
PT-L702SDE/L702E: 500:1
PT-L512E: 350:1
PT-L502E: 200:1

Resolution:
PT-L712NTE/L712E/L702SDE/L702E:
RGB: 1024 x 768 pixels
Video: 760 TV lines
PT-L512E/L502E:
RGB: 800 x 600 pixels
Video: 600 TV lines

Screen size: 30"–300" diagonal (aspect ratio: 4:3)

Lens shift: 9:1 (fixed)
Installation: Ceiling/desk, front/rear (menu selection)

Built-in speaker:
Size: 28 mm (1.1") round type
Output power: 1 W x 2 (stereo)

Terminals:
RGB1/YPbPr in: D-sub HD 15-pin
RGB2/YPbPr in: D-sub HD 15-pin
S-Video in: Mini DIN 4-pin
Video in: RCA jack
Audio in: RGB: Stereo mini jack
 Video: RCA jack (L/R)
Audio out: Stereo mini jack
RS-232C: D-sub 9-pin

Wireless card slot: For supplied wireless card
SD memory card slot: JPEG compliant/EXIF2.1 (Featured on the PT-L702SDE only)

Security lock: Kensington MicroSaver Security System

Dimensions (W x H x D):
PT-L712NTE: 233 x 111 x 330 mm (9-3/16" x 4-3/8" x 12-15/16")
PT-L712E/L702SDE/L702E/L512E/L502E: 233 x 98 x 330 mm (9-3/16" x 3-7/8" x 12-15/16")

Weight:
PT-L712NTE: 4.0 kg (8.8 lbs.)
PT-L702SDE: 3.9 kg (8.6 lbs.)
PT-L712E/L702E/L512E/L502E: 3.8 kg (8.4 lbs.)

Operating temperature: 0°–40°C (32°–104°F)
Operating humidity: 20%–80% (no condensation)

Safety regulations: EN60950, IEC60950, EN55022 (B), EN55024, EN61000-3-2, EN61000-3-3, VDE, CB Certificate, C-tick, MIC, GOST

Supplied accessories:
Common: Remote control unit, Batteries for remote control unit, Power cord, RGB cable, AV cable, Carrying bag
For the PT-L712NTE only: Wireless Card, application software CD-ROM (Wireless Manager, JPEG Converter)
For the PT-L702SDE only: SD memory card (16 MB), PC card adapter for SD memory card, application software CD-ROM (JPEG Converter)

Optional accessories: Replacement lamp unit: ET-LA702
 Ceiling mount bracket: ET-PK701
 Full function wireless remote control: ET-RM100
 Wide conversion lens: ET-LEC701
 D-sub 15-pin/BNC adapter cable: ET-ADBNC
 Wireless card for PC: ET-CDWL1

Compatible Signals

PT-L712NTE/L712E/L702SDE/L702E					
VGA 400	fh	fv	MXGA	fh	fv
640 x 400	31.5	70.1	1152 x 864	64.0	71.2
				67.5	75.0
VGA 480	fh	fv			
640 x 480	31.5	59.9		76.7	85.0
			Mac 21"	fh	fv
			1152 x 870	68.7	75.1
			SXGA	fh	fv
Mac 13"	fh	fv	1280 x 1024	52.4	50.0
640 x 480	35.0	66.7		64.0	60.0
				72.3	66.3
SVGA	fh	fv			
800 x 600	32.1	51.1		78.2	72.0
				80.0	75.0
			1280 x 1024i	46.4	86.9
				47.6	89.1
			UXGA	fh	fv
			1600 x 1200	75.0	60.0
				87.5	70.0
Mac 16"	fh	fv		93.8	75.0
832 x 624	49.7	74.6			
XGA	fh	fv	Video/S-Video	fh	fv
1024 x 768	48.4	60.0	PAL/PAL-N/SECAM		
				15.7	50.0
			NTSC/M-NTSC/PAL-M		
				15.6	59.9
			YPbPr	fh	fv
			480i	15.7	59.9
			625i	15.6	50.0
			480p	31.5	59.9
1024 x 768i	35.5	87.0	720p	15.0	60.0
Mac 19"	fh	fv	1080i	33.75	60.0
1024 x 768	60.2	74.9			

fh : Horizontal frequency (kHz)
 fv : Vertical frequency (Hz)
 The display resolution of the PT-L712NTE, PT-L712E, PT-L702SDE and PT-L702E is 1024 x 768 dots. If the display resolution indicated in the above data does not match this resolution, the input signal will be converted to 1024 x 768.

PT-L512E/L502E					
VGA 400	fh	fv	Mac 19"	fh	fv
640 x 400	31.5	70.1	1024 x 768	60.2	74.9
VGA 480	fh	fv	MXGA	fh	fv
640 x 480	31.5	59.9	1152 x 864	64.0	71.2
				67.5	75.0
			37.9	72.8	
			37.5	75.0	
			43.3	85.0	
			SXGA	fh	fv
			1280 x 1024	52.4	50.0
Mac 13"	fh	fv		64.0	60.0
640 x 480	35.0	66.7			
			Video/S-Video	fh	fv
			PAL/PAL-N/SECAM		
				15.7	50.0
			NTSC/M-NTSC/PAL-M		
				15.6	59.9
			YPbPr	fh	fv
			480i	15.7	59.9
			625i	15.6	50.0
			480p	31.5	59.9
Mac 16"	fh	fv	720p	15.0	60.0
832 x 624	49.7	74.6	1080i	33.75	60.0
XGA	fh	fv			
1024 x 768	48.4	60.0			
				64.0	60.0
				60.0	75.0
				65.5	81.6
				68.7	85.0
				80.0	100.0
1024 x 768i	35.5	87.0			

fh : Horizontal frequency (kHz)
 fv : Vertical frequency (Hz)
 The display resolution of the PT-L512E and PT-L502E is 800 x 600 dots. If the display resolution indicated in the above data does not match this resolution, the input signal will be converted to 800 x 600.

Projection setting example

Projection size*	with supplied lens		with ET-LEC701 (option)	
40 inches	118	– 151 cm (3.9' – 5.0')	103	– 131 cm (3.4' – 4.3')
80 inches	243	– 308 cm (8.0' – 10.1')	213	– 271 cm (7.0' – 9.0')
120 inches	368	– 465 cm (12.7' – 15.3')	323	– 410 cm (10.6' – 13.5')
160 inches	492	– 622 cm (16.1' – 20.4')	434	– 549 cm (14.2' – 18.0')
200 inches	617	– 779 cm (20.2' – 25.6')	544	– 688 cm (17.8' – 22.6')
240 inches	742	– 936 cm (24.3' – 30.7')	655	– 827 cm (21.5' – 27.1')
300 inches	929	– 1172 cm (30.5' – 38.5')	820	– 1036 cm (26.9' – 34.0')

* diagonally



Terminals

Panasonic

Panasonic is the brandname of Matsushita Electric.

Weights and dimensions shown are approximate. Specifications subject to change without notice. This product may be subject to export control regulations. UHM is a trademark of Matsushita Electric Industrial Co., Ltd. PS/2, VGA and XGA are trademarks of International Business Machines Corporation. Macintosh is a registered trademark of Apple Computer, Inc. SVGA is a registered trademark of the Video Electronics Standards Association. Windows is a registered trademark of Microsoft Corporation. All other trademarks are the property of the various trademark owners. Projection images simulated.