Panasonic

PT-**VW340** Series

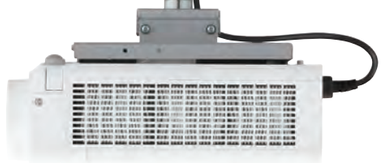
LCD Projectors

PT-**VW345NZ**
PT-**VW340Z**
PT-**VX415NZ**
PT-**VX410Z**
PT-**VX42Z**

A New Way to Share Your Ideas

Smaller, lighter, smarter. . . .
Multi-device wireless projection with Miracast™ support.

Wireless Has Gone Versatile. You Choose the Device.



Miracast™

Miracast™ Wireless Projection*1

Connect a Miracast™-compatible PC, tablet or Android phone and instantly mirror whatever is on your screen—from Full-HD video to websites, online video streams, and PowerPoint documents. You can connect tested Miracast™-compatible device directly to the projector, without having to access a Wi-Fi® network. This makes the next generation of high-quality wireless projection even easier to use.

Please visit our global website, http://panasonic.net/avc/projector/, for list of tested Miracast™ compatible devices.

for Smart Devices

Wireless Projection from iOS/Android Devices*2

The software allows wireless projection from an iPad, iPhone, iPod touch, and/or Android devices. Download the application from the App Store and/or Google Play.

- A wide range of projectable documents including Word, Excel, PowerPoint, JPEG, PDF, Text, Rich text, Keynote*3, and many more
- Marker function • Pointer function • Motion Capture projection • One Shot projection
- Multi-live mode

Wireless Manager ME 6.0.2

Wireless Projection from Windows/Mac PCs*2

The software provided with the projector allows easy transfer of data from the screen of a personal computer*4 through a PC's wireless LAN function.*5 It can also be used to transfer audio files.*6 Multi-Live mode allows the simultaneous projection of up to 16 computers. The software greatly shortens the set up time and the graphical user interface (GUI) has been redesigned for easier and simpler operation.

Easy Wireless Stick

Speedy Wireless Projection without App Installation

Simply plug Easy Wireless Stick*7 (ET-UW100) into the computer's USB port for easy wireless projection*8 of the computer screen.*4

USB Memory

Wireless Projection from a USB Memory Device*1

Not only still images, but full-HD video files can also be projected by simply inserting the USB memory device into the USB port of the projector. This makes it easy to give presentations without having to use a computer.

*1 For the PT-VW345NZ/VX415NZ.
*2 Wireless projection with devices that are not Miracast™-compatible or wireless projection from multiple devices requires the installation of dedicated software.
*3 For iOS devices only
*4 Supported by Windows®XP/Windows Vista®/Windows®7/Windows®8 and Macintosh (Mac OS X v10.6/v10.7/v10.8)
*5 If the computer is not equipped with a wireless LAN function, a wireless LAN card is required. In the case of Macintosh computers, only the built-in wireless LAN function is supported. Network functions such as Live mode and Multi-Live mode can also be used with a wired LAN.
*6 Windows®7 and Windows Vista® computers must be logged on to using the Administrator's account. The first time that a Windows®7 computer is used, the sound driver may require setting.
*7 The ET-UW100 is available in the following countries and regions as of October 2013. North America, England, Germany, France, Spain, Italy, Belgium, Austria, Sweden, Norway, Denmark, Switzerland, Holland, Finland, Portugal, Greece, Australia and Japan.
*8 The ET-UW100 will not transfer audio files. Firmware update is necessary for ET-UW100 in order to be able to use with the PT-VW345NZ/VX415NZ.

For more information, please visit projector global website:http://panasonic.net/avc/projector/

Easy-Going Wireless. Multi-Device, in Classrooms and Meeting Rooms.

Connect N Collaborate—Linking People, Devices & the World

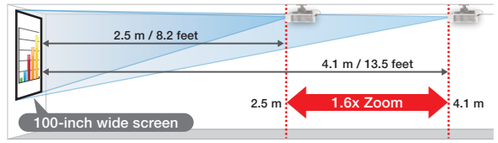
Superb Performance in a Compact Body

- A remarkable **4,200 lm**[*9]**/4,000 lm**[*9]**/3,700 lm**[*9] **of brightness** has been achieved for bright, clear images to enhance usage applications while maintaining the compact body.
- Incorporates a variable iris that produces **high contrast of 4,000:1**[*10] for sharp, crisp projection in any situation.
- Reduces maintenance hassle and ensures low TCO with a maximum lamp replacement cycle of **up to 6,000 hours** and long filter life of **up to 6,000 hours**[*11].
- **Panasonic's Daylight View Basic technology** achieves sharp, easy-to-see images by clearly reproducing the details in dark image areas, which were previously difficult to see in brightly lit rooms.

- The quiet design keeps noise levels down to **29 dB**[*12] as the sound of the cooling fan is hardly noticeable. No interruption of the speaker while in meetings or classes.

Convenient Functions for Portable and Ceiling-Mounted Applications

- The **1.6x zoom lens** supports a wide range of projection distances which allows flexible installation.
  * For the PT-VW345NZ/VW340Z/VX415NZ/VX410Z. 1.2x zoom for the PT-VX42Z.
- **Corner Keystone Correction** enables angled projection by simply designating four corners of the projected image.
  * For the PT-VW345NZ/VW340Z/VX415NZ/VX410Z. PT-VX42Z supports only vertical keystone correction



- **USB Display** outputs images and sounds from the computer by connecting to the USB port with a single USB cable. * For the PT-VW345NZ/VX415NZ.
- **Easy Setting Function** helps to reduce time and hassle for setting up the projector. Simply press the "Auto Setup" button to detect the condition of the projected image.
  * For the PT-VW345NZ/VX415NZ.

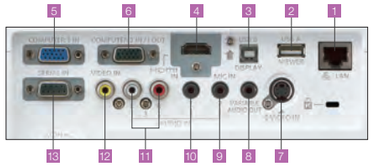
- **Side-by-Side and Picture-in-Picture functions** allow simultaneous projection of two different image sources[*13] onto a single screen. * For the PT-VW345NZ/VW340Z.
- High-output **10-watt speakers** and a microphone input enables audio playback directly from the projector for even more effective presentations.

Other Useful Features

- Easy remote monitoring and control over a LAN
- The standby power consumption is as low as 0.48 W
- Crestron Connected™ compliant
- AMX DD compliant
- Auto Input Signal Search
- Input Guidance function
- Real-time keystone correction[*14]
- Color-board and blackboard modes
- Easy lamp and filter replacement
- Direct power off
- Ecology-conscious design
- Projector identification system for up to 6 projectors

Extensive interfaces support a wide range of system architectures for portable or ceiling-mounted use.

1 LAN
2 USB (Type A) *1
3 USB (Type B) *1
4 HDMI Input
5 COMPUTER Input 1
6 COMPUTER Input 2/ MONITOR Output
7 S-VIDEO Input
8 AUDIO Output
9 AUDIO Input 2 (MIC IN)
10 AUDIO Input 1
11 AUDIO Input
12 VIDEO Input
13 SERIAL Input



- HDMI input terminal
- 2 sets of computer (RGB) input terminals
- LAN terminal
- serial (RS-232C) terminal for external control.

Featured image: PT-VW345NZ/VX415NZ.

PT-**VW345NZ**	WXGA	3,700 lm	Wireless
PT-**VW340Z**	WXGA	3,700 lm	
PT-**VX415NZ**	XGA	4,200 lm	Wireless
PT-**VX410Z**	XGA	4,200 lm	
PT-**VX42Z**	XGA	4,000 lm	

Optional accessories

ET-**UW100**
Easy Wireless Stick[*7]

ET-**PKV100S**
Ceiling mount bracket for low ceilings[*15]

ET-**PKV101B**
Bracket assembly

ET-**PKV100H**
Ceiling mount bracket for high ceilings[*15]

ET-**RFV300**
Replacement filter unit

ET-**LAV300**
Replacement lamp unit

Dimensions

unit: mm (inches)

PT-**VW345NZ/VW340Z/ VX415NZ/VX410Z**

PT-**VX42Z**

Projection distance

unit: feet [meters]

PT-VW345NZ/VW340Z
(16:10 aspect ratio; throw ratio 1.2–1.9:1)

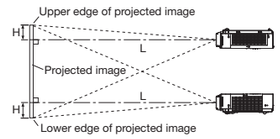
Diagonal image size	Projection distance (L) min. (wide)	Projection distance (L) max. (tele)	Height from the edge of screen to center of lens (H)
30" [0.76]	2.3 [0.7]	3.9 [1.2]	0.03 [0.01]
40" [1.02]	3.3 [1.0]	5.2 [1.6]	0.03 [0.01]
50" [1.27]	4.3 [1.3]	6.6 [2.0]	0.03 [0.01]
60" [1.52]	4.9 [1.5]	8.2 [2.5]	0.07 [0.02]
70" [1.78]	5.9 [1.8]	9.5 [2.9]	0.07 [0.02]
80" [2.03]	6.6 [2.0]	10.8 [3.3]	0.07 [0.02]
90" [2.29]	7.5 [2.3]	12.1 [3.7]	0.07 [0.02]
100" [2.54]	8.2 [2.5]	13.5 [4.1]	0.10 [0.03]
120" [3.05]	10.2 [3.1]	16.1 [4.9]	0.10 [0.03]
150" [3.81]	12.5 [3.8]	20.3 [6.2]	0.13 [0.04]
200" [5.08]	16.7 [5.1]	26.2 [8.0]	0.16 [0.05]
250" [6.35]	21.0 [6.4]	32.8 [10.0]	0.23 [0.07]
300" [7.62]	25.3 [7.7]	39.3 [12.0]	0.26 [0.08]

PT-VX415NZ/VX410Z
(4:3 aspect ratio; throw ratio 1.2–1.9:1)

Diagonal image size	Projection distance (L) min. (wide)	Projection distance (L) max. (tele)	Height from the edge of screen to center of lens (H)
30" [0.76]	2.3 [0.7]	3.6 [1.1]	0.16 [0.05]
40" [1.02]	3.0 [0.9]	4.9 [1.5]	0.20 [0.06]
50" [1.27]	3.9 [1.2]	6.2 [1.9]	0.26 [0.08]
60" [1.52]	4.6 [1.4]	7.5 [2.3]	0.30 [0.09]
70" [1.78]	5.6 [1.7]	8.9 [2.7]	0.36 [0.11]
80" [2.03]	6.2 [1.9]	10.2 [3.1]	0.39 [0.12]
90" [2.29]	7.2 [2.2]	11.5 [3.5]	0.46 [0.14]
100" [2.54]	7.9 [2.4]	12.8 [3.9]	0.49 [0.15]
120" [3.05]	9.5 [2.9]	15.4 [4.7]	0.59 [0.18]
150" [3.81]	11.8 [3.6]	19.0 [5.8]	0.75 [0.23]
200" [5.08]	15.7 [4.8]	25.6 [7.8]	1.02 [0.31]
250" [6.35]	19.7 [6.0]	31.8 [9.7]	1.25 [0.38]
300" [7.62]	23.6 [7.2]	38.4 [11.7]	1.51 [0.46]

PT-VX42Z
(4:3 aspect ratio; throw ratio 1.7–2.1:1)

Diagonal image size	Projection distance (L) min. (wide)	Projection distance (L) max. (tele)	Height from the edge of screen to center of lens (H)
40" [1.02]	4.6 [1.4]	5.6 [1.7]	0.20 [0.06]
50" [1.27]	5.6 [1.7]	6.9 [2.1]	0.26 [0.08]
60" [1.52]	6.9 [2.1]	8.2 [2.5]	0.30 [0.09]
70" [1.78]	8.2 [2.5]	9.5 [2.9]	0.36 [0.11]
80" [2.03]	9.2 [2.9]	11.2 [3.4]	0.40 [0.12]
90" [2.29]	10.5 [3.2]	12.5 [3.8]	0.46 [0.14]
100" [2.54]	11.5 [3.5]	13.8 [4.2]	0.50 [0.15]
120" [3.05]	13.8 [4.2]	16.4 [5.0]	0.59 [0.18]
150" [3.81]	17.4 [5.3]	20.9 [6.4]	0.75 [0.23]
200" [5.08]	23.3 [7.1]	27.9 [8.5]	1.02 [0.31]
250" [6.35]	28.9 [8.8]	36.1 [11.0]	1.25 [0.38]
300" [7.62]	36.1 [11.0]	42.7 [13.0]	1.51 [0.46]



- The value for L (distance to screen) varies slightly depending on the zoom lens characteristics.
- At the shortest projection distance, the zoom lens characteristics may cause slight image distortion.

*9 The PT-VX415NZ/VX410Z has 4,200 lm, PT-VX42Z 4,000 lm, and PT-VW345NZ/VW340Z has 3,700 lm of brightness.
*10 For the PT-VX415NZ/VX410Z/VX42Z. The PT-VW345NZ/VW340Z has 3,000:1 contrast ratio.
*11 The usage environment affects the duration of the filter.
*12 With the lamp power set to Eco1 or Eco2.
*13 The image sources must be a combination of an analog signal and a digital signal.
*14 Keystone correction is performed in the PT-VW345NZ and PT-VX415NZ when using the Easy Setting function.
*15 This product is used together with an optional bracket assembly (sold separately).

Specifications

Model		PT-**VW345NZ**	PT-**VW340Z**	PT-**VX415NZ**	PT-**VX410Z**	PT-**VX42Z**
Power supply		AC 100–240 V 50 Hz/60 Hz				
Power consumption		100–120 V: 300 W, 220–240 V: 280 W (0.4 W when Standby mode set to Eco*1, 5 W when Standby mode set to Network, 14 W when Standby mode set to Normal)	100–120 V: 300 W, 220–240 V: 280 W (0.4 W when Standby mode set to Eco*1, 1.3 W when Standby mode set to Network, 9 W when Standby mode set to Normal)	100–120 V: 300 W, 220–240 V: 280 W (0.4 W when Standby mode set to Eco*1, 5 W when Standby mode set to Network, 14 W when Standby mode set to Normal)	100–120 V: 300 W, 220–240 V: 280 W (0.4 W when Standby mode set to Eco*1, 1.3 W when Standby mode set to Network, 9 W when Standby mode set to Normal)	
LCD panel	Panel size	0.59 inches (1.50 cm) (16:10 aspect ratio)		0.63 inches (1.60 cm) (4:3 aspect ratio)		
	Display method	Transparent LCD panel (× 3, R/G/B)				
	Pixels	1,024,000 (1,280 × 800) × 3, total of 3,072,000 pixels		786,432 (1,024 × 768) × 3, total of 2,359,296 pixels		
Lens		Manual zoom (1.6×) (throw ratio: 1.2–1.9:1), manual focus F 1.60–2.12, f 15.30–24.64 mm				Manual zoom (1.2×) (throw ratio: 1.7–2.1:1), manual focus F 1.60–1.76, f 22.33–26.80 mm
Lamp		230 W x 1				
Screen size (diagonal)		30–300 inches				40–300 inches
Brightness*2		3,700 lm (ANSI) (input signals: PC, lamp power: normal, picture mode: dynamic)		4,200 lm (ANSI) (input signals: PC, lamp power: normal, picture mode: dynamic)		4,000 lm (ANSI) (input signals: PC, lamp power: normal, picture mode: dynamic)
Center-to-corner uniformity*2		85 %				
Contrast*2		3,000:1 (all white / all black) (input signals: PC, lamp power: normal, picture mode: dynamic, IRIS: on)		4,000:1 (all white / all black) (input signals: PC, lamp power: normal, picture mode: dynamic, IRIS: on)		
Resolution		1,280 × 800 pixels (Input signals that exceed this resolution will be converted to 1,280 × 800 pixels.)		1,024 × 768 pixels (Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.)		
Scanning frequency	HDMI	(f_H) 15–80 kHz, (f_V) 50–85 Hz, dot clock: 162 MHz or lower				
	RGB (analog)	(f_H) 15–100 kHz, (f_V) 50–100 Hz, dot clock: 162 MHz or lower (Signals exceeding the dot clock rate of 140 MHz are downsampled.)				
	Y_PB_PR (YC_BC_R)	(f_H) 15.75 kHz (f_V) 60 Hz [525i (480i)], (f_H) 45.00 kHz (f_V) 60 Hz [750 (720)/60p], (f_H) 28.13 kHz, (f_V) 25 Hz [1125 (1080)/25p], (f_H) 67.50 kHz, (f_V) 60 Hz [1125 (1080)/60p], (f_H) 15.63 kHz (f_V) 50 Hz [625i (576i)], (f_H) 37.50 kHz (f_V) 50 Hz [750 (720)/50p], (f_H) 27.00 kHz, (f_V) 24 Hz [1125 (1080)/24p], (f_H) 56.25 kHz, (f_V) 50 Hz [1125 (1080)/50p]		(f_H) 31.50 kHz (f_V) 60 Hz [525p (480p)], (f_H) 33.75 kHz (f_V) 60 Hz [1125 (1080)/60i], (f_H) 27.00 kHz, (f_V) 48 Hz [1125 (1080)/24sF], (f_H) 31.25 kHz (f_V) 50 Hz [625p (576p)], (f_H) 28.13 kHz (f_V) 50 Hz [1125 (1080)/50i], (f_H) 33.75 kHz, (f_V) 30 Hz [1125 (1080)/30p]	
	Video/S-Video	(f_H) 15.75 kHz, (f_V) 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60], (f_H) 15.63 kHz, (f_V) 50 Hz [PAL/SECAM/PAL-N]				
Optical axis shift		49:1 (fixed)		9:1 (fixed)		
Keystone correction range		Vertical: ±40° (when using EASY SETTING: ±30°) (for WXGA input, max) Horizontal: ±30° (when using EASY SETTING: ±20°) (for WXGA input, max)	Vertical: ±40° (when using AUTO: ±30°) (for WXGA input, max) Horizontal: ±30° (for WXGA input, max)	Vertical: ±40° (when using EASY SETTING: ±30°) (for XGA input, max) Horizontal: ±30° (when using EASY SETTING: ±20°) (for XGA input, max)	Vertical: ±40° (when using AUTO: ±30°) (for XGA input, max) Horizontal: ±30° (for XGA input, max)	Vertical: ±30° (when using AUTO: ±20°) (for XGA input, max)
Installation		Front ceiling / front desk / rear ceiling / rear desk				
Terminals	HDMI IN	(HDMI 19P) x 1, HDCP compatible [525p (480p)], [625p (576p)], [750 (720)/60p], [750 (720)/50p], [1125 (1080)/60i], [1125 (1080)/50i], [1125 (1080)/25p], [1125 (1080)/24p], [1125 (1080)/24sF], [1125 (1080)/30p], [1125 (1080)/60p], [1125 (1080)/50p] VGA size (640 dots × 480 dots)–WUXGA (1,920 dots × 1,200 dots), VESA CVT-RB compatible				
	COMPUTER IN 1	(D-sub15P, female) x 1 (RGB/Y/P_B(C_B)/P_R(C_R))				
	COMPUTER IN 2/ MONITOR OUT	(D-sub 15P, female) × 1 (RGB/monitor output (input/output switching))				
	VIDEO IN	(Pin-Jack) × 1				
	S-VIDEO IN	(Mini DIN 4P) × 1				
	AUDIO IN 3	(L-R, Pin-Jack pin × 2) × 1				
	AUDIO IN 1	(L-R, M3 jacks) × 1				
	AUDIO IN 2 (MIC IN)	(L-R, M3 jacks) × 1 *The audio 2 terminals are compatible with MIC input				
	AUDIO OUT	(L-R, M3 jack) × 1 (Monitor output variable)				
	SERIAL IN	(D-Sub 9P, female) × 1 for external control (RS-232C compatible)				
	LAN	(RJ-45) × 1 for network connections 10Base-T/100Base-TX PJLink™ compatible				
	USB A	Type A × 1 for USB Memory Viewer Functions	—	Type A × 1 for USB Memory Viewer Functions	—	—
	USB B	Type B × 1 for USB Display Functions	—	Type B × 1 for USB Display Functions	—	—
Built-in speaker		Size: 4.0 cm (1-9/16 inches) (round) × 1, output power: 10 W (monaural)				
Noise level*2		35 dB (lamp power: Normal), 29 dB (lamp power: Eco 1 / Eco 2)				
Cabinet materials		Molded plastic				
Dimensions (W × H × D)		352 × 98.0*3 × 279.4*4 mm (13-27/32 × 3-27/32*3 × 11*4 inches)				352 × 98.0*3 × 255*4 mm (13-27/32 x 3-27/32*3 × 10-1/32*4 inches)
Weight*5		Approximately 3.4 kg (7.5 lbs)	Approximately 3.3 kg (7.3 lbs)	Approximately 3.4 kg (7.5 lbs)	Approximately 3.3 kg (7.3 lbs)	Approximately 3.2 kg (7.1 lbs)
Operating environment		Operating temperature: 0–40 °C (at altitudes less than 1400 m, high altitude mode: OFF) Operating temperature: 0–30 °C (at altitudes of 1400 m to 2000 m, high altitude mode: HIGH1) Operating temperature: 0–30 °C (at altitudes of 2000 m to 2700 m, high altitude mode: HIGH2) Operating humidity: 10–80% (no condensation)				
Supplied accessories		• Wireless remote control unit (× 1) • Power cord (× 1) (× 2 for UK and Asia only) • The PT-VW345NZ/VX415NZ comes supplied with Wireless Manager ME 6.0. • R03/LR03/AAA type battery (× 2) • RGB signal cable • Lens Cap (× 1)				

* 1 When the Standby mode is set to Eco, network functions such as standby on via LAN are not available. Also, only certain commands can be received for external control using the serial terminal.
* 2 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
* 3 With legs retracted to minimum.
* 4 Including protruding parts.
* 5 Average value. May differ depending on the actual unit.

Built-in wireless LAN function

Model	PT-**VW345NZ**	PT-**VX415NZ**
Standard	2.4GHz: IEEE802.11b/g/n	5.0GHz: IEEE602.11a/n
Infrastructure mode	WPA2-PSK (TKIP/AES), WPA-PSK (TKIP/AES), WEP (64bit/128bit) WPA-EAP/WPA2-EAP (PEAP [MS-CHAPv2/GTC]/EAP-FAST [MS-CHAPv2/GTC]/EAP-TTLS [MD5/MS-CHAPv2]) 128bit/64bit	

Caution

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.

NOTES ON USE

1. The projector uses a high-voltage mercury lamp under high internal pressure. This lamp may break, emitting a popping sound, or fail to illuminate, due to impact or extended use.
2. The high-wattage lamp 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 39-3/8 inches (1,000 mm) or more around the projector's exhaust openings.
   - If stacking projector units, care must be taken to provide the recommended space between units. 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, the temperature of the air surrounding the projector must match the operating temperature listed in the specifications table during use. Also, make sure the projector's intake and exhaust openings are not blocked. Ensure there is sufficient ventilation to prevent hot air from the exhaust openings being recirculated into the intake opening.
3. The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.
   - The lamp replacement cycle varies greatly depending on individual lamp characteristics and usage conditions.
   - The brightness of the lamp will gradually decrease with use.
4. Due to natural characteristics of lamps, screen brightness may fluctuate. This is not an indication of faulty lamp performance.

Panasonic®

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Projector Global Web Site – **panasonic.net/avc/projector**
Facebook – **www.facebook.com/panasonicprojector**
YouTube – **www.youtube.com/user/PanasonicProjector**

All information included here is valid as of October 2013.

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