Panasonic ideas for life

PT-**RZ370** PT-**RW330**



Many projector issues have been addressed with the new LED/Laser-combined light source. From the moment you turn on the projector, you'll notice the difference with the quick on and immediate full brightness. No more lamps







up to 100 meters (328 feet) over a single LAN cable.*2 System capabilities have also been improved with 2× zoom and an exceptionally wide lens shift range, thus providing superb flexibility for easy first time and replacement

and air filters, which lets you enjoy maintenance-free use for about 20,000 hours*1 while maintaining excellent brightness and picture quality. To enhance permanent installation use, we've added DIGITAL LINK support so you can transmit video, audio and control signals

installations. And the Total Cost of Ownership (TCO) has been reduced because you no longer have to keep replacement lamps on hand. The next-generation PT-RZ370/RW330 projectors have swept away the weak points of conventional projectors.

Start projecting as soon as you turn on the power



SOLID SHINE series uses the newly developed LED/Laser-combined light source



SOLID SHINE series projectors provide solid reliability and long-lasting brightness unprecedented by conventional lamp-based projectors.

Approximately 20,000 hours*1 of maintenance-free operation

No need to replace the light source or air filter, providing a dramatic reduction in the Total Cost of Ownership (TCO).

Long-lasting picture quality

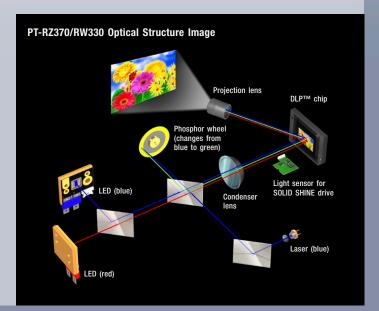
Excellent picture quality and brightness are maintained for a long time.

Superb color reproduction

Beautiful, vivid colors exceeding the levels of conventional projectors.

Quick start, quick off

The image appears almost instantly upon powering up, and there is no need for cooling after turning the power off. The power can be turned on immediately after being turned off, and it can be turned on/off as many times as you want.





Long-Lasting Reliability and High Picture Quality

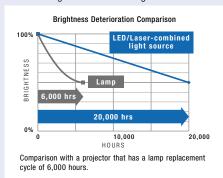
The LED/Laser-Combined Light Source Enables Approx. 20,000*1 Hours of **Continuous Operation**

This new light source requires no maintenance for approximately 20,000 hours.*1 In many cases, this means no maintenance until your next refresh cycle. Naturally, there are no lamp burnout problems during use, so reliability is further increased. There is also no filter to clean due to carefully engineered sealed optics. As a consequence, running cost is dramatically lowered because of the savings on lamp costs, maintenance labor and hassle of stocking lamps.



Bright, Beautiful Picture Quality for a Long Period of Time

The PT-RZ370/RW330 features 3,500 lumens of brightness. Rate of brightness deterioration in the LED/Laser-combined light source is extremely slow compared to lamp based projectors. The SOLID SHINE drive uses a built-in sensor to constantly detect the light intensity of the light source and correct corresponding changes in white balance. This all helps to maintain excellent picture quality for a long period of time. Contrast is outstanding too, at 10,000:1, and images are reproduced with a wide dynamic range. The PT-RZ370 features a Full-HD (1920 × 1080) DLP™ chip, allowing highly detailed Full-HD images without resizing.



Superior Color Reproduction

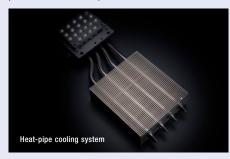
The LED/Laser-combined light source has a higher level of color purity than an ordinary lamp, allowing it to achieve color production with wider color space. Colors are more vibrant than those of conventional projectors.

30× Drive*3 Switching Prevents Color **Breaking**

In 1-chip DLP™ system projectors with conventional lamp, a color wheel is used for time-division multiplexing in a method where the human eve combines the result to achieve a full-color palette. In the PT-RZ370/RW330, this is done by on/off switching of the LED/Laser-combined light source. A unique Panasonic power supply circuit provides time-division multiplexing with ultrafast 30× drive.*3 The resulting, high-definition images exhibit virtually no color breaking.*4

Heat Pipe Cooling System Maintains Stable Operation up to 45 °C (113 °F)*5

Laser cooling is performed by releasing the heat to cooling fins, then cooling with a heat pipe cooling system. This suppresses temperature rises inside the projector and allows stable operation up to an ambient temperature of 45 °C (113 °F).*5 The use of this heat pipecooled system also achieves quiet operation of 29 dB,*6 enabling viewers to concentrate on the presentation or on quiet movie scenes.



Dust-Resistant Structure with an Airtight Optical Block

The area between the LED/Laser to the DLP™ chip and prism is hermetically sealed to form an airtight structure for the optical block, the heart of the projector. This resists the effects of dust and other particles in the air, and enables use of the projector in a wide range of environments.

The Daylight View Basic Ensures Clear **Images Even in Brightly Lit Rooms**

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. A built-in sensor measures the ambient light, and the Daylight View Basic function adjusts the halftone color and brightness level according to the surrounding illumination.



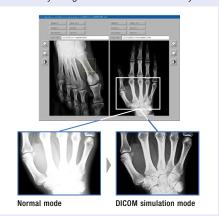
Without Daylight View Basic



With Daylight View Basic

DICOM Simulation Mode*7

This imaging mode is similar to DICOM part 14, which is a medical imaging standard. It reproduces X-ray images with remarkable clarity.



Rec. 709 Mode for HDTV Projection

Optimal color reproduction can be achieved by selecting this mode, compliant with ITU-R Recommendation BT.709, when images from an HDTV source are projected.

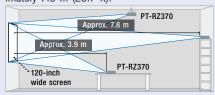
- A guideline for light source replacement. The maintenance-free period may be shortened due to environmental conditions. Use a CAT5e (STP) cable or higher.
- Picture mode: Dynamic. $10\times$ drive in other picture modes. The rate for each vertical sync/blanking interval, with R/G/B light source switching set to $1\times$.
- A condition in which incorrect color expression causes color flickering. The operating temperature range is 0 $^{\circ}$ C to 40 $^{\circ}$ C (32 $^{\circ}$ F to 104 $^{\circ}$ F) when used in locations from 1,400 m to 2,700 m (4,593 ft to 8,858 ft) above sea level. LIGHT POWER mode: ECO. 35 dB with LIGHT POWER mode set to NORMAL. This product is not a medical instrument. Do not use it for actual medical diagnosis.



Flexible Installation with Clean DIGITAL LINK Wiring

Versatile First-Time and Replacement Installations

2× Zoom Lens: For a 120-inch-diagonal wide screen, the projection distance extends from approximately 3.9 m (12.8 ft) to approximately 7.8 m (25.7 ft).



Horizontal/Vertical Lens Shift: The wide shift range accommodates various room sizes

and shapes. When lights or ventilation holes are located in the ceiling mounting site, you can simply relocate the projector to avoid them.



Flexible 360-Degree Installation: The projectors can be rotated vertically. This means you can install one at any up-and-down angle you want, to accommo-

360° date different installa-

Lens-Centered Design: A lens-centered, symmetrical design provides ease of

installation, eliminating the need for any special considerations when planning the installation site.

tion conditions.



DIGITAL LINK Transmits Digital Signals up to 100 m (328 ft) with a Single Cable*2

Optional ET-YFB100G Digital Interface Box for Easy Setup: By combining the optional ET-YFB100G Digital Interface Box, with its

HDMI and other input terminals, uncompressed HD digital video, audio and control signals can be transmitted up to 100 m (328 ft) over a single LAN cable.*2 It allows projector connection with only one cable, making it ideal for ceiling-mounted and other permanent installations. Also, because control signals can be simultaneously transmitted, the ET-YFB100G input signal can easily be switched with the wireless remote control that is included with the projector. The projector can be controlled by either serial or LAN communication.



ET-YFB100G terminals

Also Supports Other Manufacturers' Peripheral Equipment: DIGITAL LINK is an original function added to technology based on the transmission standards used in Crestron's DigitalMedia 8G+, Extron's XTP Systems, etc. Signals from the ET-YFB100G can also be relayed to a non-DIGITAL LINK-ready projector by using another manufacturer's equipment based on the same technology.*8

For details on other manufacturers' equipment, visit our Projector Global Web Site: panasonic.net/avc/projector

Abundant Connection Terminals, Including HDMI

Interfaces include HDMI and DVI-I inputs. The serial terminal (RS-232C) has an Emulate func-



tion that lets you continue using existing control systems when replacing previous Panasonic models. It is also possible to output audio during STANDBY MODE.*9 This is convenient when connecting an external audio system through the projector.*10 A closed caption decoder is built in.

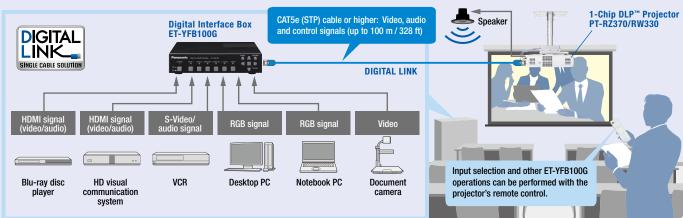
Easy Remote Monitoring and Control over a LAN

Web browser on a computer connected through a wired LAN system lets you remotely operate projectors and check their status. An e-mail messaging function can also notify you the overall projector status. In addition, Multi Projector Monitoring and Control Software Ver. 2.8 is available for monitoring and controlling multiple Panasonic projectors from a single PC. The wired LAN terminal is compatible with PJLink™ (class 1), an open protocol that is used by many manufacturers, to enable integrated control of systems that contain different brands of projectors.



Compatible with Crestron RoomView™

The LAN terminal allows a computer connected to the network to use Crestron RoomView™ application software to manage and control system devices.



Input selection and other ET-YFB100G operations can be performed only when connecting to a DIGITAL LINK compatible projector.

Requires menu selection. Audio monitoring requires external speakers and an audio amplifier.



Operation Friendly

Image Appears Immediately—No Need for Cooling after Use

Images do not appear quickly with lamp-based projectors because the projector requires time to warm up. With the PT-RZ370/RW330, the image appears almost instantly. There's also no cooling time required when turning the power off, so you can quickly turn the projector on and off as many times as needed.

24/7 Operation

Ordinary lamps are not well suited to continuous operation. Because the PT-RZ370/RW330 does not use a lamp, has efficient cooling system and uses $DLP^{\mbox{\tiny M}}$ chip that has a long life, they are capable of 24/7 operation.

Scheduling Function

Scheduled operation is possible using the builtin timer function, without having to use a PC and software.

Effective Theft Prevention with the Startup Logo

You can change the default Panasonic start up logo to any logo you want. A new logo can be easily uploaded by connecting a computer to the PT-RZ370/RW330 through the LAN or serial connection by using the Logo Transfer Software.* 11 An abundance of other security mea-

sures are also included, such as a security bar, Key lock, and Security Password. This is very effective for preventing theft.



15 m (49 ft) Long-Range Wireless Remote Control

A unique ID number can be assigned to each projector using the supplied wireless remote control unit. This allows operation of a desired projector when multiple units are set up at the same location. Three frequently



used functions can be assigned to the Function buttons for instant recall.

Eco Management Functions

A number of functions are provided to reduce power consumption. You can easily set the Eco Management functions according to operating conditions by using the "ECO" button on the remote control.

- Selectable light source modes:
 - NORMAL: Prioritizes brightness. ECO SAVE 1: Reduces power consumption by approximately 20% on average while leaving brightness almost unchanged. ECO SAVE 2: Minimizes brightness reduction while reducing power consumption by approximately 30% on average. LOW: Prioritizes low power consumption.
- Adjusts the brightness according to ambient light conditions, and reduces the light source power.
- Reduces the light source power when there is no signal input or the projector is in AV Mute mode.

Ecology-Conscious Design

- Lamp-free (no mercury)
- · Low heat dissipation
- RoHS Directive compliant
- No halogenated flame retardants are used in the cabinet.
- · Non-coated cabinet for easy recycling.
- Lead-free glass is used for the lens.
- Light source mode is selectable to reduce power consumption.
- "ECO" button on the remote control for easy setting up of Eco Management functions.
- Standby power consumption of only 0.5 W has been achieved. (STANDBY MODE: ECO)
- An Auto Off Timer switches the projector to standby mode when no input signal is received for a preset time.

Projection Distance

unit: meters (feet)

PT-RZ370 (16:9 aspect ratio)					
Projection size [diagonal] [m] [in]	Projection distance Min [wide] Max [telephoto]		Height from the edge of screen to center of lens		
1.02 / 40	1.3 (4.1)	2.6 (8.5)	-0.12 - 0.49	(-0.4 - 1.6)	
1.52 / 60	1.9 (6.3)	3.9 (12.8)	-0.17 – 0.73	(-0.6 - 2.4)	
2.03 / 80	2.6 (8.5)	5.2 (17.1)	-0.23 - 0.98	(-0.8 - 3.2)	
2.54 / 100	3.2 (10.6)	6.5 (21.4)	-0.29 – 1.22	(-0.9 - 4.0)	
3.05 / 120	3.9 (12.8)	7.8 (25.7)	-0.34 – 1.46	(-1.1 - 4.8)	
3.81 / 150	4.9 (16.0)	9.8 (32.1)	-0.43 – 1.83	(-1.4 - 6.0)	
5.08 / 200	6.5 (21.4)	13.1 (42.9)	-0.57 – 2.44	(-1.9 - 8.0)	
7.62 / 300	9.8 (32.2)	19.6 (64.4)	-0.86 - 3.66	(-2.8 - 12.0)	

PT-RW330 (16:10 aspect ratio)

Projection [diago			Projection Min [wide] N		e ephoto]	Height from the edge of screen to center of lens	
1.02 /	40	1.3	(4.2)	2.6	(8.7)	-0.10 - 0.52	(-0.3 - 1.7)
1.52 /	60	2.0	(6.4)	4.0	(13.1)	-0.15 – 0.78	(-0.5 - 2.5)
2.03 /	80	2.6	(8.6)	5.3	(17.5)	-0.21 – 1.03	(-0.7 - 3.4)
2.54 /	100	3.3	(10.9)	6.7	(21.8)	-0.26 – 1.29	(-0.8 - 4.2)
3.05 /	120	4.0	(13.1)	8.0	(26.2)	-0.31 – 1.55	(-1.0 - 5.1)
3.81 /	150	5.0	(16.4)	10.0	(32.8)	-0.38 – 1.94	(-1.3 - 6.4)
5.08 /	200	6.7	(21.9)	13.4	(43.8)	-0.51 – 2.59	(-1.7 - 8.5)
7.62 /	300	10.0	(32.9)	20.1	(65.8)	-0.77 – 3.88	(-2.5 – 12.7)

PT-RW330 (16:9 aspect ratio)

	The desired aspect rates						
	tion size gonal] [in]	Min	Projection [wide]	on distanc Max [tel		Height from the to center	
1.02	/ 40	1.3	(4.4)	2.7	(8.9)	-0.05 - 0.48	(-0.2 - 1.6)
1.52	/ 60	2.0	(6.6)	4.1	(13.4)	-0.08 – 0.71	(-0.2 - 2.3)
2.03	/ 80	2.7	(8.9)	5.5	(17.9)	-0.10 - 0.95	(-0.3 - 3.1)
2.54	/ 100	3.4	(11.2)	6.8	(22.4)	-0.13 – 1.19	(-0.4 - 3.9)
3.05	/ 120	4.1	(13.5)	8.2	(27.0)	-0.15 – 1.43	(-0.5 - 4.7)
3.81	/ 150	5.1	(16.9)	10.3	(33.7)	-0.19 – 1.79	(-0.6 - 5.9)
5.08	/ 200	6.9	(22.5)	13.7	(45.0)	-0.25 - 2.38	(-0.8 - 7.8)
7.62	/ 300	10.3	(33.9)	20.6	(67.6)	-0.37 – 3.57	(-1.2 – 11.7)

Options

ET-PKR100H

Ceiling mount bracket for high ceilings



ET-PKR100S

Ceiling mount bracket for low ceilings



ET-YFB100G

Digital interface box



Brackets included for various installation needs, including server rack (EIA standards) mounting.





^{*11} Still images that can be uploaded are limited to 1024 × 768 pixel bitmap files. Also, the application will reduce the number of colors to 191.

Specifications

Model		PT- RZ370	PT- RW330			
Power supply		100-240 V AC, 5.2-2.0 A, 50/60 Hz				
Power consumption		460 W (470 VA) (250 W ⁺¹ with LIGHT POWER set to NORMAL, 200 W ⁺¹ with LIGHT POWER set to Ecosave1, 178 W ⁺¹ with LIGHT POWER set to Ecosave2) (0.5 W with STANDBY MODE set to Ecosave1, 178 W ⁺¹ with LIGHT POWER set to Ecosave2)				
DLP™ chip	Panel size Display method Pixels	16.5 mm (0.65 in) diagonal (16:9 aspect ratio) DLP™ chip × 1, DLP™ projection system 2,073,600 (1,920 × 1,080) × 1, total of 2,073,600 pixels	16.5 mm (0.65 in) diagonal (16:10 aspect ratio) DLP™ chip × 1, DLP™ projection system 1,024,000 (1,280 × 800) × 1, total of 1,024,000 pixels			
Lens		Manual zoom (2.0×), manual focus, F 2.0 – 3.4, f 21.5 – 43.0 mm				
Throw ratio		1.46-2.94:1	1.5 – 3.1:1			
Light source		LED/Laser-combined (R, B: LED; G: Laser diode)				
Screen size (diagona	l)	1.02-7.62 m (40-300 inches) diagonally, 16:9 aspect ratio	1.02 - 7.62 m (40 - 300 inches) diagonally, 16:10 aspect ratio			
Brightness*3		3,500 lm				
Center-to-corner uni	formity*3	90 %				
Contrast*3		10,000:1 (full on/off)				
Resolution		$1,\!920\times1,\!080$ pixels (Input signals that exceed this resolution will be converted to $1,\!920\times1,\!080$ pixels.)	1,280 \times 800 pixels (Input signals that exceed this resolution will be converted to 1,280 \times 800 pixels.)			
Scanning frequency	HDMI/DVI-I (digital) DVI-I (analog)/RGB YPBPR (YCBCR) Video	fix: 27-100 kHz, fv: 24-120 Hz, dot clock: 25-162 MHz fix: 15-100 kHz, fv: 24-120 Hz, dot clock: 162 MHz or lower fix: 37.50 kHz, fv: 60 Hz fall (625) fix: 15.63 kHz, fv: 50 Hz [576] (625) fix: 31.50 kHz, fv: 60 Hz fix: 31.50 kHz, fv: 50 Hz fix: 31.50 kHz, fv: 50 Hz fix: 31.25 kHz, fv: 50 Hz	1035/60i) fri: 27.00 kHz, fv: 48 Hz [1080 (1125)/24sF] 1080 (1125)/60i] fri: 33.75 kHz, fv: 30 Hz [1080 (1125)/30p] 1080 (1125)/50ii fri: 67.50 kHz, fv: 60 Hz [1080 (1125)/60oi			
Optical axis shift		Vertical: +73%, -48% (manual), horizontal: +27%, -35% (manual)	Vertical: +69%, -46% (manual), horizontal: +28%, -37% (manual)			
Keystone correction	range	Vertical: ±40°				
Installation		Ceiling/floor, front/rear				
Terminals	HDMI IN DVI-D IN Digital RGB YPBPR/YCBCR COMPUTER (RGB) IN VIDEO IN AUDIO IN AUDIO OUT SERIAL IN LAN / DIGITAL LINK	HDMI 19-pin × 1 (Deep Color, compatible with HDCP) 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1126)/24p, 1080 (1129)-24p, 1080 (1126)/24p, 1080 (1126)/24p, 1080 (1126)/24p, 1080 (1125)/25p, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24p, 1080 (1125)/24p, 1080 (1125)/30p, 1080 (1125)/60p, 1080 (1125)/50p, VGA (640 × 480) − WUXGA*⁴ (1,920 × 1,200), compatible with non-interlaced signals only, dot clock: 25−162 Mbz R/B: 0.7 Vp-p, 75 ohms, G: 0.7 Vp-p (6: 1.0 Vp-p for sync on G), 75 ohms, HD/VD, SYNC: TTL, high impedance, positive/negative automatic V: 1.0 Vp-p (including sync signal), Pe/Pa (Cb/Ca): 0.7 Vp-p, 75 ohms D-sub HD 15-pin (female) × 1 (RGB/YPaPa/YCbCa × 1) Pin jack × 1 M3 (L, R) × 1 M3 (L, R) × 1 D-sub 9-pin (female) × 1 for external control (RS-232C compliant) BJ-45 × 1 (for network and DIGITAL LINK (video/audio/network/serial control) connection, 100Base-TX, compatible with PJLink™, HDCP compatible, Deep Color compatible) 1080 (1125)/50p, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24s, 1080 (1125)/30p, 1080 (1125)/50p, 1080 (1125)/50p, VGA (640 × 480) − WUXGA*⁴ (1,920 × 1,200), compatible with non-interlaced signals only, dot clock: 25−162 Mbz				
Cabinet materials		Molded plastic	<u> </u>			
Dimensions (W × H >	× D)	455 × 137*5 × 415 mm (17-29/32 × 5-13/32*5 × 16-11/32 in) (lens incuded)				
Weight*6		Approximately 11.0 kg (24.3 lbs)				
Operation noise*3		35 dB (LIGHT POWER mode: NORMAL), 29 dB (LIGHT POWER mode: LOW)				
Operating environme	nt	Operating temperature: 0-45 °C* ⁷ (32-113 °F* ⁷), operating humidity: 20-80 % (no condensation)				
Supplied accessories	3	Power cord (with secure lock) × 1*8, wireless remote control unit, batteries for remote control (R6/LR6/AA type × 2), software CD-ROM (Logo Transfer Software, Multi Projector Monitoring & Control Software)				

- ★1 In STANDARD/GRAPHIC picture mode. Measured based on the power consumption rate and a measurement method for the TV receiver
- When the STANDBY MODE is set to ECO, network functions such as power on over the LAN network will not operate. Also, only certain commands can be received for external control using the serial terminal.
- Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
- WUXGA resolution is supported only when the signals are compliant with VESA CVT-RB (Coordinated Video Timing-Reduced Blanking).
- *****5 With legs at shortest position.
- Average value. May differ depending on the actual unit.
- 0-40 °C (32-104 °F) between 1,400 m and 2,700 m (4,593 ft and 8,858 ft) above sea level. If the ambient temperature exceeds 35 °C (95 °F), the light output may be reduced to protect the projector.
- Power cords available (x 2) for the PT-RZ370EA/RW330EA.

NOTES ON USE

- 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. 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 (1 ft 8 in) 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 below between them. These space requirements also apply to installations where only one projector unit is operating at one time and the other unit is used as a backup.
- Make sure that nothing blocks the projector's air intake and exhaust openings. Also, install the projector so that cool or hot air from other air conditioning equipment does not flow directly
- toward the projector's air intake or exhaust openings

Dimensions

0

455 (17-29/32)

- Do not install the projector in an enclosed space. If it is necessary to install it in an enclosed space, add a separate ventilation system. If ventilation is insufficient, hot air will accumulate at the intake opening. This may cause the projector's protective circuit to interrupt projector opera-
- If the projector is placed in a box, ensure that 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.
- To install and use the projector via a method that does not use the adjustable feet in a floor standing installation, fix the projector using the four screw holes for ceiling mounting. (Screw diameter: M4, tapping depth inside the set: 7 mm, torque: 1.25 ± 0.2 N·m)



For more information about Panasonic projectors, please visit: Projector Global Web Site - panasonic.net/avc/projector Facebook - www.facebook.com/panasonicprojector YouTube - www.youtube.com/user/PanasonicProjector

137 (5-13/32

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice. Product availability differs depending on region and country. This product may be subject to export control regulations. DLP, DLP logo and DLP Medallion logo are trademarks or registered trademarks of Texas Instruments. The projection distances and throw ratios given in this leaflet are for use only as guidelines. For more detailed information, please consult the dealer from whom you are purchasing the product. The PLLInk trademark is an application trademark in Japan, the United States, and other countries and regions or registered trademarks. HDMI, I long, and High_Plefinition Multimedia Interface are trademarks or recipied trademarks or HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries. All other trademarks are the property of their respective trademark owners. Projection images simulated.

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All information included here is valid as of December 2012.

unit: mm (inches)

415 (16-11/32)