Panasonic

As of August 2013. Specifications and appearance are subject to change without notice.

FILE

S P E C

DLP[™] Projector

Product Number : PT-LW321

Product Name :

Specifications

Power consumption 245 W (05 W whon Strasser waces at 0 acor', 6.0 W when Strasser Waces at 0 acor', 6.0 W	Main unit		
Power consumption 245 W (0.5 W when statuse woots set to scot", 6.0 W when statuser woots set to neckt, 6.0 W when pixels DLP™ chip Pixels 16.5 mm (0.65 inches) diagonal (16:10 aspect ratio) 1.2024 (001 (280 × 800) pixels F 2.5-2.5 (7 21.8 - 24.0 mm Lamp Screen size 1.024 (001 (280 × 800) pixels F 2.5-2.5 (7 21.8 - 24.0 mm Canter-to-corner uniformitors 0.76-7.62 m (03-300 inches), 16:10 aspect ratio 3.200 lumans (Lamp Power: Normal, Color Mode: Dynamic) Resolution 1.280 × 800 pixels (Input signals that exceed this resolution will be converted to 1.280 × 800 pixels.) Center-to-corner uniformitor 1.280 × 800 pixels (Input signals that exceed this resolution will be converted to 1.280 × 800 pixels.) Scanning frequency HDMI fx 15 kHz-91.1 kHz, fx 24 Hz-95.1 Hz, dot clock 25-162 MHz RGB fx 15 kHz-91.1 kHz, fx 24 Hz-95.1 Hz, dot clock 25-162 MHz F 26 (260) (560): fx 125 kHz, 150 kHz; to 0 Hz, 125 (1080)/500: Scanning frequency HDMI fx 15 kHz-91.1 kHz, fx 24 Hz-95.1 Hz, dot clock 25-162 MHz K 12 (12 (12 (12 (12 (12 (12 (12 (12 (12			100–240 V AC, 50/60 Hz
DLP ¹¹⁴ clip Part elize 16.5 mm (0.65 inches) (diagnal (16:10 aspect ratio) Display method DLP ¹¹⁴ chip × 1, DLP ¹¹⁴ system Pixels 1.024,000 (1.280 × 800) pixels Lens F2.5-2.67, 12.1.8-24.0 mm Lamp 109 // UMI lamp × 1 Screen size 0.76-7.52 m (30-300 inches), 16:10 aspect ratio Brightness ¹¹⁴ 3.200 lumens (Lamp Power: Normal, Color Mode: Dynamic) Contrast ¹¹⁴ 3.200 lumens (Lamp Power: AUTO, input signal: RGB, Color Mode: Dynamic) Contrast ¹¹⁴ 7.50001 (full on/off, Lamp Power: AUTO, input signal: RGB, Color Mode: Dynamic) Contrast ¹¹⁴ F2.52.267, (f21.48, s00 pixels) Scanning frequency HDMI He: 15 KHz-911.1 KHz, tr.24 Hz-26.51 Hz, dot clock f25-162 MHz RGB f6:15 fkHz-91.1 KHz, tr.24 Hz-26.51 Hz, dot clock f20 Mz or lower YPaPe (YCaCa) 525 (480): fr 15.75 kHz; tr 60 Hz, f22 kHz f50 Hz, f22 kHz f50 Hz, f22 kHz f50 Hz, f50 Hz, f50 (720)(50): YPaPe (YCaCa) 525 (480): fr 3.150 kHz; tr 50 Hz, f50 Hz, f			245 W (0.5 W when STANDBY MODE set to ECO*1, 6.0 W when
Display method Pixels DLPP* chip x 1, DLP th sygtam Lens Pixels 1,024,000 (1,280 x 800) pixels Lamp F2.5-2.67, 121.8-24.0 mm Screen size 19.0 W UHM lamp x 1 Screen size 0.76-7.82 m (30-300 inches), 16:10 aspect ratio Brightness** 32.000 linches), 16:10 aspect ratio Center-to-corner uniformity** 7500:1 (full on/off, Lamp Power: AUTO, input signal: RGS, Color Mode: Dynamic) Resolution 1,280 x 800 pixels (Input signals that exceed this resolution will be converted to 1,280 x 800 pixels (AD pixels). Scanning frequency HDMI fr: 15 kHz -91.1 kHz, fr: 24 Hz -85.1 Hz, dot clock: 25-162 MHz RGB fr: 15 kHz -91.1 kHz, fr: 24 Hz -85.1 Hz, dot clock: 25-162 MHz YPsPa (YCsCa) 625(480); fr: 15.76 kHz; fv: 60 Hz, clock: 162 MHz or lower Scanning frequency HDMI fr: 15 KHz -91.1 kHz, fv: 24 Hz -85.1 Hz, dot clock: 25-162 MHz KegB fr: 15.75 kHz; fv: 00 Hz, clock: 162 MHz or lower 625(1676); Sc25(480); fr: 15.76 kHz; fv: 00 Hz, clock: 162 MHz or lower Sc25(1000)/Gob: fr: 31.00 KHz; fv: 00 Hz, clock: 162 MHz or lower Sc25(1000)/Gob: fr: 31.00 KHz; fv: 00 Hz, clock: 162 MHz or lower YPsPa (YCsC			
Pixels 1,024,000 (1,280 × 800) pixels Lens F 2.5-2.67, 121.6 -2.4.0 mm Lamp 190 W UHM lamp × 1 Screen size 0.76-7.6 2 m (30-300 inches), 16:10 aspect ratio Brightness*1 3.200 lumens (Lamp Power: Normal, Color Mode: Dynamic) Center-to-corner uniformity* 80% Contrast*1 7,500:1 (full on/off, Lamp Power: AUTO, input signal: RGB, Color Mode: Dynamic) Resolution 1,280 x 800 pixels (Dup tisgnals that exceed this resolution will be converted to 1.280 x 800 pixels). Scanning frequency HDMI ft: 15 kHz -91.1 kHz, fr: 24 Hz -85.1 Hz, dot clock: 25-162 MHz RGB ft: 15 kHz -91.1 kHz, fr: 24 Hz -85.1 Hz, dot clock: 162 MHz or lower Scanning frequency HDMI ft: 15 kHz -91.1 kHz, fr: 24 Hz -85.1 Hz, dot clock: 162 MHz or lower YP3Pn (YCaCri) 526 (480): ft: 15.63 KHz; fr: 50 Hz, (52.65 KHz; fr: 50 Hz, (52	DLP™ chip	Panel size	16.5 mm (0.65 inches) diagonal (16:10 aspect ratio)
Lens Manual zoom 1,1x (1,56-1,70:1 throw ratio), manual focus,		Display method	DLP™ chip × 1, DLP™ system
Lamp F 2.5-2.67, f 21.8-24.0 mm Screen size 090 W UHM lamp × 1 Screen size 0.76-7.62 m (30-300 inches), 16:10 aspect ratio Brightness** 3,200 lumens (Lamp Power: Normal, Color Mode: Dynamic) Center-to-corner uniformity** 80% Contrast** 7,500:1 f(ull on/off, Lamp Power: AUTO, input signal: RGB, Color Mode: Dynamic) Resolution .1,280 × 800 pixels (Input signals that exceed this resolution will be converted to 1,280 × 800 pixels). Scanning frequency HDMI ft: 15 kHz -91.1 kHz, fr: 24 Hz-85.1 Hz, dot clock: 25-162 MHz RGB ft: 15 kHz -91.1 kHz, fr: 24 Hz-85.1 Hz, dot clock: 26-162 MHz RGB ft: 15 kHz -91.1 kHz, fr: 24 Hz-85.1 Hz, dot clock: 162 MHz or lower YPePn (YC8CR) 525 (4800): ft: 13.50 kHz; fr: 60 Hz, 626 (576i): ft: 15.75 kHz, fr: 16 Hz, 525 (4800): ft: 31.25 kHz; fr: 60 Hz, 750 (720/50p: ft: 43.50 kHz; fr: 50 Hz, 125 (1080)/601: ft: 31.25 kHz; fr: 60 Hz, 125 (1080)/601: ft: 31.25 kHz; fr: 60 Hz, 125 (1080)/602: ft: 31.25 kHz; fr: 60 Hz, 125 (1080)/602: ft: 35.6 kHz; fr: 60 Hz, 125 (1080)/602: ft: 31.25 kHz; ft: 60 Hz, 125 (1080)/602:		Pixels	1,024,000 (1,280 × 800) pixels
Lamp 190 W UHN lamp × 1 Screen size 0.76-7.62 m (30-300 inches), 16:10 aspect ratio Brightness ¹⁴ 3.200 lumens (Lamp Power: Normal, Color Mode : Dynamic) Centrast ¹⁴ 80% Contrast ¹⁵ 80% Contrast ¹⁴ 7.500 l full on/off, Lamp Power: AUTO, input signal: RGB, Color Mode : Dynamic) Resolution 1.280 x 800 pixels (input signals that exceed this resolution will be converted to 1.280 x 800 pixels) Scanning frequency HDMI ft: 15 kHz -91.1 kHz, fr: 24 Hz-85.1 Hz, dot clock: 162 MHz or lower YBsPn (YCaCn) 525i (480)): ft 15.55 kHz; fv 60 Hz, VPsPn (YCaCn) 525i (480): ft 15.75 kHz; fv 60 Hz, VPsPn (YCaCn) 525i (480): ft 15.75 kHz; fv 60 Hz, VPsPn (YCaCn) 525i (480): ft 3.50 kHz; fv 60 Hz, VPsPn (YCaCn) 525i (480): ft 3.50 kHz; fv 60 Hz, VPsPn (YCaCn) 525i (480): ft 3.50 kHz; fv 60 Hz, VPsPn (YCaCn) 525i (480): ft 4.50 kHz; fv 60 Hz, VECo ft 5.55 kHz, fv 60 Hz, ft 5.50 kHz, VECo ft 5.55 kHz, fv 60 Hz, ft 5.50 kHz, VECo ft 5.55 kHz	Lens		Manual zoom 1.1× (1.55-1.70:1 throw ratio), manual focus,
Scrien size 0.76-7.62 m (30-300 inches), 16:10 aspect Mato Brightness** 3.200 lumens (Lamp Power: Normal, Color Mode : Dynamic) Contrast** 80% Contrast** 7,500:1 (full on/off, Lamp Power: AUTO, input signal: RGB, Color Mode : Dynamic) Resolution 1.280 x 800 pixels (Input signal: that exceed this resolution will be converted to 1,280 x 800 pixels). Scanning frequency HDMI fr: 15 kHz - 91.1 kHz, fr: 24 Hz - 85.1 Hz, dot clock: 162 MHz or lower YBePR (YCBCR) 525 (4800): fr: 15 kHz - 91.1 kHz, fr: 24 Hz - 85.1 Hz, dot clock: 162 MHz or lower YBePR (YCBCR) 525 (4800): fr: 15.78 kHz; fr: 0 Hz, 525 Hz, dot clock: 162 MHz or lower YBePR (YCBCR) 525 (4800): fr: 15.78 kHz; fr: 0 Hz, 525 Hz, fr: 0 Hz, 525 Hz, 175 0 Hz, 525 Hz, 175 0 Hz, 525 Hz, 175 0 Hz, 750 (720)/50p: YBePR (YCBCR) 525 (1400)(50): fr: 43.53 KHz; fr: 50 Hz, 125 (1080)/50p: 16 43.50 KHz; fr: 50 Hz, 1125 (1080)/50p: 16 43.50 KHz; fr: 50 Hz, 1125 (1080)/50p: 16 45.25 KHz; fr: 50 Hz, 1125 (1080)/50p: 16 45.25 KHz; fr: 50 Hz, 1125 (1080)/50p: 155 (1080)/50p; 155 (1080)/50p			F 2.5–2.67, f 21.8–24.0 mm
Brightnese** 3.200 lumens (Lamp Power: Normal, Color Mode: Dynamic) Centrest** 80% Contrast** 7.500:1 (full on/off, Lamp Power: AUTO, input signal: RGB, Color Mode: Dynamic) Resolution 280 x800 pixels.) Scanning frequency HDMI RGB ft: 15 kHz = 91.1 kHz, ft: 24 Hz = 85.1 Hz, dot clock 25-162 MHz RGB ft: 15 kHz = 91.1 kHz, ft: 24 Hz = 85.1 Hz, dot clock 25-162 MHz YPBPR (YCeCe) 525 (480): Sc25 (576): ft 15.75 kHz; ft: 60 Hz, dot clock 25-162 MHz or lower YPBPR (YCeCe) 525 (480): Sc25 (576): ft 3.50 kHz; ft: 50 Hz, dot clock 25-162 MHz or lower YPBPR (YCeCe) 525 (480): Sc25 (576): ft 3.50 kHz; ft: 50 Hz, dot clock 25-162 MHz or lower YPBPR (YCeCe) 525 (480): Sc25 (576): ft 3.50 kHz; ft: 50 Hz, dot clock 25-162 MHz or lower YPBPR (YCeCe) 525 (480): Sc25 (576): ft 3.50 kHz; ft: 50 Hz, dot clock 25-162 MHz or lower YPBPR (YCeCe) 525 (4800): YPBPR (YCeCe) 125 (1080/050): YPBPR (YCeCe) 750 (720)/500; YPBPR (YCeCe) 750 (720)/500; <	Lamp		190 W UHM lamp × 1
Center-to-corner uniformity** Contrast** Contrast** Contrast** Contrast** Contrast** Contrast** Contrast** Color Mode: Dynamic) Resolution Canning frequency HDMI RGB Fit: 15 kHz = 91.1 kHz, fx: 24 Hz = 85.1 Hz, dot clock 25–162 MHz RGB Fit: 15 kHz = 91.1 kHz, fx: 24 Hz = 85.1 Hz, dot clock 25–162 MHz RGB Fit: 15 kHz = 91.1 kHz, fx: 24 Hz = 85.1 Hz, dot clock 25–162 MHz RGB Fit: 15 kHz = 91.1 kHz, fx: 24 Hz = 85.1 Hz, dot clock: 162 MHz or lower YPaPR (YCaCa) SoSi (480): Fit 31.50 kHz; fv 50 Hz, 6256 (766): Fit 31.50 kHz; fv 50 Hz, 750 (720)/500: Fit 31.50 kHz; fv 50 Hz, 750 (720)/500: Fit 33.75 kHz; fv 50 Hz, 750 (720)/500: Fit 33.75 kHz; fv 50 Hz, 750 (720)/500: Fit 33.75 kHz; fv 50 Hz, 750 (720)/500: Fit 35.05 kHz; fv 50 Hz, 1125 (1080)/200: Fit 33.75 kHz; fv 50 Hz, 1125 (1080)/200: Fit 35.05 kHz; fv 50 Hz, 1125 (1080)/200, Fit 35.05 kHz; Fit 35 kHz, 100: Fit 35.75 kH	Screen size		0.76-7.62 m (30-300 inches), 16:10 aspect ratio
Contrast** 7,500:1 fluil on/off, Lamp Power: AUTO, input signal: RGB, Color Mode: Dynamic) Resolution 1,280 x 800 pixels (Input signals that exceed this resolution will be converted to 1,280 x 800 pixels,) Scanning frequency HDMI fr: 15 kHz-91.1 kHz, fr: 24 Hz-85.1 Hz, dot clock 25–162 MHz RGB fr: 15 kHz-91.1 kHz, fr: 24 Hz-85.1 Hz, dot clock 25–162 MHz YBPR (YCsCR) 525 (480); 625 (576); fr: 15.75 kHz; fr: 50 Hz, 525 (576); 750 (720)/60p: fr: 43.05 NHz; fr: 50 Hz, 525 (1480); 750 (720)/60p: fr: 43.05 NHz; fr: 50 Hz, 750 (720)/60p: 750 (720)/60p: fr: 43.05 NHz; fr: 50 Hz, 750 (720)/60p: 7125 (1080)/20p: fr: 45.05 NHz; fr: 50 Hz, 750 (720)/50p: 7125 (1080)/20p: fr: 45.05 NHz; fr: 50 Hz, 1125 (1080)/20p: 7125 (1080)/20p: fr: 65.25 KHz; fr: 50 Hz, 1125 (1080)/20p: 7125 (1080)/20p: fr: 65.25 KHz; fr: 50 Hz, 1125 (1080)/20p: 7125 (1080)/50p: fr: 65.25 KHz; fr: 50 Hz, 1125 (1080)/50p: 7125 (1080)/50p: fr: 65.25 KHz; fr: 50 Hz, 1125 (1080)/50p, 750 (720)/50p, 750 (720)/50p, 750 (720)/50p, 750 (720)/50p, 750 (720)/50p, 1125 (1080)/50p, 125 (1080)/50p, 1125 (1080)/50p, 1125 (1080)/50p, 1125 (1080)/50p, 1125 (1080)/5	Brightness*3		3,200 lumens (Lamp Power : Normal, Color Mode : Dynamic)
Color Mode: Dynamic) 1,280 x 800 pixels (input signals that exceed this resolution will be converted to 1,280 x 800 pixels.) Scanning frequency HDMI fr: 15 kHz-91.1 kHz, fv: 24 Hz-85.1 Hz, dot clock 25-162 MHz RGB fr: 15 kHz-91.1 kHz, fv: 24 Hz-85.1 Hz, dot clock 25-162 MHz RGB fr: 15 kHz-91.1 kHz, fv: 24 Hz-85.1 Hz, dot clock 25-162 MHz RGB fr: 15 kHz-91.1 kHz, fv: 24 Hz-85.1 Hz, dot clock 25-162 MHz RGB fr: 15 kHz-91.1 kHz, fv: 24 Hz-85.1 Hz, dot clock 25-162 MHz RGB fr: 15 kHz-91.1 kHz, fv: 24 Hz-85.1 Hz, dot clock 25-162 MHz VPaPR (YCaCR) S251 (4800): fri 15.75 kHz; fv 60 Hz, 6259 (576): fri 15.05 kHz; fv 50 Hz, frieto Hz, 6259 (576): fri 33.75 kHz; fv 60 Hz, frieto Hz, 6122 (1080)/500: frie 33.75 kHz; fv 60 Hz, frieto Hz, 1125 (1080)/501: friez 31.5 kHz; fv 60 Hz, frieto Hz, 1125 (1080)/501: friez 31.5 kHz; fv 60 Hz, frieto Hz, 1125 (1080)/501: friez 31.5 kHz; fv 60 Hz, frieto Hz, 1125 (1080)/501: friez 31.5 kHz; fv 60 Hz, frieto Hz, 1125 (1080)/501: friez 31.5 kHz; fv 60 Hz, frieto Hz, <t< th=""><td>Center-to-corner unifor</td><td>mity*³</td><td>80%</td></t<>	Center-to-corner unifor	mity* ³	80%
Resolution 1,280 x 800 pixels (Input signals that exceed this resolution will be converted to 1,280 x 800 pixels.) Scanning frequency HDMI Int 15 kHz -91.1 kHz, fx 24 Hz -85.1 Hz, dot clock 25-162 MHz RGB fir: 15 kHz -91.1 kHz, fx 24 Hz -85.1 Hz, dot clock: 162 MHz or lower YBePn (YCaCn) 525 (4800): fir 15.75 kHz, fv 60 Hz, 5250 (4800): fir 31.50 kHz; fv 60 Hz, 5250 (720)/600: fir 31.50 kHz; fv 60 Hz, 750 (720)/600: fir 31.50 kHz; fv 60 Hz, 750 (720)/600: fir 37.50 kHz; fv 60 Hz, 1125 (1080)/500: fir 37.50 kHz; fv 60 Hz, 1125 (1080)/500: fir 43.50 kHz; fv 50 Hz, 1125 (1080)/500: fir 43.50 kHz; fv 50 Hz, 1125 (1080)/500: fir 43.50 kHz; fv 50 Hz, 1125 (1080)/500: fir 5.75 kHz, fv: 50 Hz, 1125 (1080)/500: fir 5.75 kHz, fv: 50 Hz, 1125 (1080)/500: fir 5.55 kHz, fv: 50 Hz, Nideo fir 15.75 kHz, fv: 50 Hz, 1125 (1080)/600; fir 5.63 kHz; fv 50 Hz, Instalation Ceiling/floor, front/rear Terminals HDMI IN HDMI 19-pin (firmale) x 1 Keystone correction range	Contrast*3		7,500:1 (full on/off, Lamp Power: AUTO, input signal: RGB,
Scanning frequency HDMI fit: 15 kHz - 91.1 kHz, ft: 24 Hz - 85.1 Hz, dot clock 25 - 162 MHz RGB fit: 15 kHz - 91.1 kHz, ft: 24 Hz - 85.1 Hz, dot clock: 162 MHz or lower YPePR (YCeCR) 525i (480): fit 15 SKH - 91.1 kHz, ft: 24 Hz - 85.1 Hz, dot clock: 162 MHz or lower YPePR (YCeCR) 525i (480): fit 15.5 kHz; fty 60 Hz, 625i (576): fit 13.52 kHz; fty 50 Hz, 750 (720)/50p: fit 31.55 kHz; fty 60 Hz, 750 (720)/50p: fit 37.50 kHz; fty 60 Hz, 750 (720)/50p: fit 37.50 kHz; fty 60 Hz, 750 (720)/50p: fit 37.50 kHz; fty 60 Hz, 1125 (1080)/50p: fit 67.50 kHz; fty 60 Hz, 1125 (1080)/50p: fit 57.5 kHz; fty 60 Hz, 1125 (1080)/50p: fit 57.5 kHz; fty 60 Hz, 1125 (1080)/50p:<			Color Mode: Dynamic)
Scanning frequency HDMI fit: 15 kHz - 91.1 kHz, fv: 24 Hz - 85.1 Hz, dot clock 25-162 MHz RGB fit: 15 kHz - 91.1 kHz, fv: 24 Hz - 85.1 Hz, dot clock: 162 MHz or lower YPaPR (YCBCR) \$251 (480)[: fit 15.75 kHz; fv 60 Hz, 6259 (576)[: fit 15.35 kHz; fv 50 Hz, 6259 (576)[: fit 31.50 kHz; fv 50 Hz, 750 (720)/60p: fit 31.50 kHz; fv 50 Hz, 750 (720)/60p: fit 33.75 kHz; fv 50 Hz, 750 (720)/60p: fit 33.75 kHz; fv 50 Hz, 750 (720)/60p: fit 33.75 kHz; fv 50 Hz, 1125 (1080)/60i: fit 33.75 kHz; fv 60 Hz, 1125 (1080)/60i: fit 33.75 kHz; fv 60 Hz, 1125 (1080)/60p: fit 67.50 kHz; fv 60 Hz, fit 15.73 kHz, fv 60 Hz, fit 67.50 kHz; fv 60 Hz, 1125 (1080)/60p. fromtorar fit 67.50 kHz; fv 60 Hz, fit 15.73 kHz, fv 60 Hz, fit 67.50 kHz; fv 60 Hz, fit 15.75 kHz, fv 60 Hz, fit 67.50 kHz; fv 60 Hz,	Resolution		
YPaPa (YCaCa) 525i (480): i 1 5.75 kHz; fv 60 Hz, 625i (676): i 1 5.63 kHz; fv 50 Hz, 625 (576): i 1 3.05 kHz; fv 50 Hz, 625 (576): i 1 3.05 kHz; fv 50 Hz, 750 (720)/500: i 1 3.55 kHz; fv 50 Hz, 750 (720)/500: i 1 3.75 kHz; fv 50 Hz, 750 (720)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 5.55 kHz, fv; 50 Hz, 1125 (1080)/500: i 1 5.55 kHz, fv; 50 Hz, 1125 (1080)/500: i 1 5.55 kHz, fv; 50 Hz, 1125 (1080)/500; i 525 (576); fv; 525 (480), i 1 52 (1080)/50, i 1 52 (10	Scanning frequency	HDMI	
YPaPa (YCaCa) 525i (480): i 1 5.75 kHz; fv 60 Hz, 625i (676): i 1 5.63 kHz; fv 50 Hz, 625 (576): i 1 3.05 kHz; fv 50 Hz, 625 (576): i 1 3.05 kHz; fv 50 Hz, 750 (720)/500: i 1 3.55 kHz; fv 50 Hz, 750 (720)/500: i 1 3.75 kHz; fv 50 Hz, 750 (720)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 3.75 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 6.52 kHz; fv 50 Hz, 1125 (1080)/500: i 1 5.55 kHz, fv; 50 Hz, 1125 (1080)/500: i 1 5.55 kHz, fv; 50 Hz, 1125 (1080)/500: i 1 5.55 kHz, fv; 50 Hz, 1125 (1080)/500; i 525 (576); fv; 525 (480), i 1 52 (1080)/50, i 1 52 (10		RGB	fH: 15 kHz-91.1 kHz, fv: 24 Hz-85.1 Hz, dot clock: 162 MHz or lower
525p (480p): fH 31.50 kHz; fv 60 Hz, 625p (576p): fH 31.20 kHz; fv 50 Hz, 750 (720)/50p: fH 45.00 kHz; fv 60 Hz, 750 (720)/50p: fH 37.50 kHz; fv 50 Hz, 1125 (1080)/601: fH 33.75 kHz; fv 50 Hz, 1125 (1080)/501: fH 33.75 kHz; fv 50 Hz, 1125 (1080)/501: fH 28.13 kHz; fv 50 Hz, 1125 (1080)/500: fH 67.50 kHz; fv 60 Hz, ferding/floor, front/rear ferding/floor, front/rear ferminals HDMI IN		YРвРк (YCвCr)	525i (480i): fH 15.75 kHz; fv 60 Hz,
625p (576): fH 31.25 kHz; fv 50 Hz, 750 (720)/50p: fH 45.00 Hz, 750 (720)/50p: fH 37.50 kHz; fv 60 Hz, 750 (720)/50p: fH 33.75 kHz; fv 50 Hz, 1125 (1080)/60i: fH 33.75 kHz; fv 50 Hz, 1125 (1080)/50i: fH 23.75 kHz; fv 50 Hz, 1125 (1080)/50i: fH 27.00 kHz; fv 24 Hz, 1125 (1080)/50p: fH 56.25 kHz; fv 50 Hz, Video fH: 15.75 kHz, fv: 50 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fH: 15.63 kHz, fv: 50 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fH: 15.63 kHz, fv: 50 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fremials 10:-1.2 Vertical: ±40° (manual) Installation Ceiling/floor, front/rear 1125 (1080)/500; VESA CVT-RB compliant VGA (640 × 480) - UXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) Terminals HDMI IN D-sub HD 15-pin (female) × 2, R, G, B G: 0.7 Vp-p (10 Vp-p for synce on G), 75 ohms; HDV/D, SYNC: high impedance, TTL (positive/nega			625i (576i): fн 15.63 kHz; fv 50 Hz,
750 (720)/60p: ft 45.00 kHz; fv 60 Hz, 750 (720)/50p: ft 37.50 kHz; fv 60 Hz, 1125 (1080)/60i: ft 43.50 kHz; fv 60 Hz, 1125 (1080)/60p: ft 28.13 kHz; fv 50 Hz, 1125 (1080)/60p: ft 67.50 kHz; fv 60 Hz, 1125 (1080)/60p: ft 67.50 kHz; fv 50 Hz, Video ft: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] ft: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM] 10:-1.2 Keystone correction range Vertical: ±40° (manual) Installation Colling/floor, front/rear Terminals HDMI IN HDMI IN HDMI IN HDMI IN HDMI IN Keystone correction range Vertical: ±40° (manual) Installation ColMPUTER 1/2 IN Freminals HDMI IN HDMI IN HDMI IN Keystone -125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/50			525p (480p): fн 31.50 kHz; fv 60 Hz,
750 (720)/50p: fH 37.50 kHz; fv 50 Hz, 1125 (1080)/60i: fH 37.50 kHz; fv 60 Hz, 1125 (1080)/60i: fH 28.13 kHz; fv 60 Hz, 1125 (1080)/60p: fH 67.50 kHz; fv 60 Hz, 1125 (1080)/50p: fH 70.00 kHz; fv 24 Hz, 1125 (1080)/50p: fH 67.50 kHz; fv 60 Hz, 1125 (1080)/50p; fH 67.50 kHz; fv 60 Hz, 1125 (1080)/50p; fH 67.50 kHz; fv 60 Hz, 1125 (1080)/50p; fH 67.50 kHz; fv 60 Hz, Instaltation Ceiling/floor, front/rear Terminals HDM IN HDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525(480)f*, 625(1670); f5250 (480), 625 (676), 750 (720)/60p, f50 (720)/50p, f125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 × 480) – VXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) R, G, B			625p (576p): fн 31.25 kHz; fv 50 Hz,
1125 (1080)/60: fH 33.75 kHz; fv 60 Hz, 1125 (1080)/24p: fH 27.00 kHz; fv 50 Hz, 1125 (1080)/24p: fH 27.00 kHz; fv 60 Hz, 1125 (1080)/500: fH 67.50 kHz; fv 50 Hz, 1125 (1080)/50p: fH 67.50 kHz; fv 60 Hz, 1125 (1080)/50p: fH 67.50 kHz; fv 60 Hz, 1125 (1080)/50p: fH 66.25 kHz; fv 50 Hz Video fH: 15.75 kHz, fv: 60 Hz [PAL/PAL-M/PAL60] fH: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM] 0:-1.2 Keystone correction range Vertical: ±40° (manual) Installation Ceiling/floor, front/rear Terminals HDMI IN HDMI 19-pin x 1 (Deep Color, compatible with HDCP) 526i(480) ⁺⁺ , 625i(576) ⁺⁺ , 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/50i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50i, 1125 (1080)/50i, 1125 (1080)/50i, VIDEQ IN D-sub HD 15-pin (female) × 2, R, G, B G: 0.7 Vp-p (10 Vp-p for sync on G), 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (Ca), PR (CR) Y, PB (Ca), PR (CR) Y: 1.0 Vp-p (including sync signal); PB (Ca), PR (CR); 0.7 Vp-p, 75 ohms VIDEO IN Pin jack x 1, 1.0 Vp-p, 75 ohms MONITOR OUT P-sub HD 15-pin			750 (720)/60p: fн 45.00 kHz; fv 60 Hz,
1125 (1080)/50i: fH 28.13 kHz; fv 50 Hz, 1125 (1080)/24p: fH 27.00 kHz; fv 24 Hz, 1125 (1080)/50p: fH 67.50 kHz; fv 50 Hz, 1125 (1080)/50p: fH 56.25 kHz; fv 50 Hz, 1125 (1080)/50p: fH 56.25 kHz; fv 50 Hz, Video fH: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fH: fH: 15.75 kHz, fv: 50 Hz Optical axis shift 10:-1.2 Keystone correction range Vertical: ±40° (manual) Installation Ceiling/floor, front/rear Terminals HDMI IN HDMI 1N HDMI 19-pin x 1 (Deep Color, compatible with HDCP) 526/(480)f*, 625(676)f*, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 x 480) – UXGA (1,600 x 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) R, G, B G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR) Y: 1.0 Vp-p (including sync signal); PB (CE), PR (CR); D: N (D- Vp-p, 75 ohms			750 (720)/50p: fн 37.50 kHz; fv 50 Hz,
1125 (1080)/24p: ft 27.00 kHz; fv 24 Hz, 1125 (1080)/60p: ft 67.50 kHz; fv 60 Hz, 1125 (1080)/50p: ft 65.25 kHz; fv 50 Hz Video ft: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] ft: 15.63 kHz, fv: 50 Hz ft: 15.63 kHz, fv: 50 Hz Optical axis shift 10:-1.2 Keystone correction range Vertical: ±40° (manual) Installation Ceiling/floor, front/rear Terminals HDMI IN HDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525i(480i)**, 625i(576i)**, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/50i, 1125 (1080)/50i, 1125 (1080)/50i, 1125 (1080)/24p, <			1125 (1080)/60i: fн 33.75 kHz; fv 60 Hz,
1125 (1080)/60p: fH 67.50 kHz; fv 60 Hz, 1125 (1080)/50p: fH 56.25 kHz; fv 50 Hz Video fH: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fH: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM] 10:-1.2 Keystone correction range Vertical: ±40° (manual) Installation Ceiling/floor, front/rear Terminals HDMI IN HDMI IN HDMI 19-pinx 1 (Deep Color, compatible with HDCP) 525i(480i)*4, 625i(576i)*4, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 × 480) = UXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) COMPUTER 1/2 IN D-sub HD 15-pin (female) × 2, R, G, B G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y. Ps (CB), PR (CR) Y, Ps (CB), PR (CR) Y: 1.0 Vp-p (including sync signal); P (CB), PR (CR) Y: 1.0 Vp-p, 75 ohms MONITOR OUT D-sub HD 15-pin (female) × 1 AUDIO 1 IN M3 (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 IN M3 (L, R) × 1, 0.5 Vrms (for COMPUTER) <td></td> <td></td> <td></td>			
1125 (1080)/50p: fH 56.25 kHz; fv 50 HzVideo1125 (1080)/50p: fH 56.25 kHz; fv 50 HzVideofH: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60]fH: 15.63 KHz, fv: 50 Hz [PAL/PAL-N/SECAM]Optical axis shift10:-1.2Vertical: ±40° (manual)InstallationCeiling/floor, front/rearTerminalsHDMI INHDMI 19-pin x 1 (Deep Color, compatible with HDCP) s25i(480) ^{1+*} , 625i(576) ^{+*} , 525p (480p), 625p (576p), 750 (720)/60p, 525 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/60p, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/60i, 1125 (1080)/60i, 1125 (1080)/60p, 1125 (1080)/60p, 1125 (1080)/60i, 1125 (1080)/60p, 1125 (1080)/60p, 1125 (1080)/60i, 1125 (1080)/60p, 1125 (1080)/60p, 1125 (1080)/60i, 1125 (1080)/60i, 1125 (1080)/60i, 1125 (1080)/60i, 1125 (1080)/60i, 1125			
Video fH: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] fH: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM] Optical axis shift 10:-1.2 Keystone correction range Vertical: ±40° (manual) Installation Ceiling/floor, front/rear Terminals HDMI IN HDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525i(480i)**, 625i(576i)**, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 × 480) – UXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) COMPUTER 1/2 IN D-sub HD 15-pin (female) × 2, R, G, B K, G, B G: 0.7 Vp-p, f1.0 Vp-p for sync on G), 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR) Y: 1.0 Vp-p, 75 ohms VIDEO IN Pin jack × 1, 1.0 Vp-p, 75 ohms MONITOR OUT D-sub HD 15-pin (female) × 1 AUDIO 1 IN M3 (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 IN M3 (L, R) × 1, 0.5 Vrms (for VIDEO) AUDIO 2 IN M3 (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 IN M3 (L, R) × 1, 0.5 Vrms (for CoMPUTER) AUDIO 2 IN M3 (L, R) × 1, 0.5 Vrms (for CoMPUTER) AUDIO 2 IN M3 (L, R) × 1, 0.5 Vrms (for CoMPUTER)			
fH: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM]Optical axis shift10:-1.2Keystone correction rangeVertical: ±40° (manual)InstallationCeiling/floor, front/rearTerminalsHDMI INHDMI INHDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525i(480i)*4, 625i(576i)*4, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 × 480) – UXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)COMPUTER 1/2 IND-sub HD 15-pin (female) × 2, R, G, BR, G, BG: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y; PB (CB), PR (CR)Y, PB (CB), PR (CR)Y: 1.0 Vp-p, 75 ohms; Pb (CB), PR (CR)VIDEO INPin jack × 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) × 1AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 INAUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 INAUDIO 0UTMini jack × 1 (monitor out: 0-2.0 Vrms, variable) SERIAL INSERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant) LANLANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,			
Optical axis shift10:-1.2Keystone correction rangeVertical: ±40° (manual)InstallationCeiling/floor, front/rearTerminalsHDMI INHDMI INHDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525i(480))*, 625ip (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 × 480) – UXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)COMPUTER 1/2 IND-sub HD 15-pin (female) × 2, R, G, BR, G, BG: 0.7 Vp-p for sync on G), 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR)Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR)VIDEO INPin jack × 1, 1.0 Vp-p, 75 ohms MONITOR OUTAUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 INAUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for CMPUTER) AUDIO 2 INAUDIO 2 INMsi (L, R) × 1, 0.5 Vrms (for VIDEO) AUDIO 0 UTAUDIO 2 INMsi (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 INAUDIO 2 INMsi (L, R) × 1, 0.5 Vrms (for VIDEO) AUDIO 0 UTAUDIO 2 INMsi (L, R) × 1, 0.5 Vrms (for VIDEO) AUDIO 2 INAUDIO 2 INMsi (L, R) × 1, 0.5 Vrms (for VIDEO) AUDIO 0 UTAUDIO 2 INMsi (L, R) × 1 for network connection, 100Base-TX/10Base-T,		Video	
Keystone correction rangeVertical: ±40° (manual)InstallationCeiling/floor, front/rearTerminalsHDMI INHDMI INHDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525i(480i)*, 625i(576i)*, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 × 480) – UXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)COMPUTER 1/2 IND-sub HD 15-pin (female) × 2, R, G, BR, G, BG: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR)Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR)VIDEO INPin jack × 1, 1.0 Vp-p, 75 ohms MONITOR OUTAUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for CMPUTER) AUDIO 2 INAUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO) AUDIO 2 INAUDIO 2 INM3 (L, R) × 1 (monitor out: 0- 2.0 Vrms, variable) SERIAL INLANBJ-45 × 1 for network connection, 100Base-TX/10Base-T,	Optional avia abift		
InstallationCeiling/floor, front/rearTerminalsHDMI INHDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525i(4801)*4, 625i(576i)*4, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60i, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 x 480) - UXGA (1,600 x 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)COMPUTER 1/2 IND-sub HD 15-pin (female) x 2, R, G, BG: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR)VIDEO INPin jack x 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) x 1 AUDIO 1 INAUDIO 1 INM3 (L, R) x 1, 0.5 Vrms (for COMPUTER) AUDIO 2 INAUDIO 2 INM3 (L, R) x 1, 0.5 Vrms (for VIDEO)AUDIO 0 UTMini jack x 1 (monitor out: 0 - 2.0 Vrms, variable) D-sub 9-pin (female) x 1 for external control (RS-232C compliant) LAN	•		
TerminalsHDMI INHDMI 19-pin x 1 (Deep Color, compatible with HDCP) 525i(480i)*4, 625i(576i)*4, 525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50i, 1125 (1080)/24p, 1125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant VGA (640 × 480) – UXGA (1,600 × 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)COMPUTER 1/2 IN R, G, BD-sub HD 15-pin (female) × 2, G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR)Y, PB (CB), PR (CR)Y: 1.0 Vp-p, for sync signal); PB (CB), PR (CR): 0.7 Vp-p, 75 ohmsVIDEO INPin jack × 1, 1.0 Vp-p, 75 ohms Pin jack × 1, 1.0 Vp-p, 75 ohmsMONITOR OUT AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER) AUDIO 2 INAUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO 0UT AUDIO 0UTMini jack × 1 (monitor out: 0– 2.0 Vrms, variable) D-sub 9-pin (female) × 1 for external control (RS-232C compliant) LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,	•	ige	
$\begin{array}{cccccc} 525i(480i)^{*4}, 625i(576i)^{*4}, 525p (480p), 625p (576p), 750 (720)/60p, \\ 750 (720)/50p, 1125 (1080)/60i, 1125 (1080)/50i, 1125 (1080)/24p, \\ 1125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant \\ VGA (640 \times 480) - UXGA (1,600 \times 1,200), Audio signal: linear \\ PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) \\ \hline COMPUTER 1/2 IN \\ R, G, B \\ G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; \\ B, R: 0.7 Vp-p, 75 ohms; \\ HD/VD, SYNC: high impedance, TTL (positive/negative) \\ Y, PB (CB), PR (CR) \\ VIDEO IN \\ VIDEO IN \\ VIDEO IN \\ MONITOR OUT \\ AUDIO 1 IN \\ AUDIO 2 IN \\ AUDIO 2 IN \\ AUDIO 2 IN \\ AUDIO OUT \\ AUDIO AUDIO OUT \\ AUDIO AUDIO OUT \\ AUDIO AUDIO AUDIO \\ AUDIO OUT \\ AUDIO AUDIO AUDI \\ AUDIO AUDIO AUDI \\ AUDIO AUDIO AUDI \\ AUDIO $			5
$\begin{array}{cccc} 1125 (1080)/60p, 1125 (1080)/50p, VESA CVT-RB compliant \\ VGA (640 \times 480) - UXGA (1,600 \times 1,200), Audio signal: linear \\ PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz) \\ \hline COMPUTER 1/2 IN \\ R, G, B \\ G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; \\ B, R: 0.7 Vp-p, 75 ohms; \\ HD/VD, SYNC: high impedance, TTL (positive/negative) \\ Y, PB (CB), PR (CR) \\ VIDEO IN \\ MONITOR OUT \\ AUDIO 1 IN \\ AUDIO 2 IN \\ AUDIO 2 IN \\ AUDIO 0UT \\ SERIAL IN \\ LAN \\ \hline HD \\ AUD $	Terrinais		525i(480i)*4, 625i(576i)*4, 525p (480p), 625p (576p), 750 (720)/60p,
$VGA (640 \times 480) - UXGA (1,600 \times 1,200), Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)$ $COMPUTER 1/2 IN D-sub HD 15-pin (female) \times 2, R, G, B G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR) Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR) Y: 1.0 Vp-p, 75 ohms VIDEO IN Pin jack \times 1, 1.0 Vp-p, 75 ohms MONITOR OUT D-sub HD 15-pin (female) \times 1 AUDIO 1 IN M3 (L, R) \times 1, 0.5 Vrms (for COMPUTER) AUDIO 2 IN M3 (L, R) \times 1, 0.5 Vrms (for VIDEO) AUDIO OUT Mini jack \times 1 (monitor out: 0-2.0 Vrms, variable) SERIAL IN D-sub 9-pin (female) \times 1 for external control (RS-232C compliant) LAN RJ-45 \times 1 for network connection, 100Base-TX/10Base-T,$			
PCM (sampling frequencies: 48 kHz, 44.1 kHz, 32 kHz)COMPUTER 1/2 IN R, G, BD-sub HD 15-pin (female) $\times 2$, G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR)Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR): 0.7 Vp-p, 75 ohmsVIDEO INPin jack $\times 1$, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) $\times 1$ AUDIO 1 INM3 (L, R) $\times 1$, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) $\times 1$, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack $\times 1$ (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) $\times 1$ for external control (RS-232C compliant)LANRJ-45 $\times 1$ for network connection, 100Base-TX/10Base-T,			
COMPUTER 1/2 IN R, G, BD-sub HD 15-pin (female) × 2, G: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative)Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR): 0.7 Vp-p, 75 ohmsVIDEO INPin jack × 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) × 1AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,			
R, G, BG: 0.7 Vp-p (1.0 Vp-p for sync on G), 75 ohms; B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative)Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR): 0.7 Vp-p, 75 ohmsVIDEO INPin jack × 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) × 1AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,		COMPLITER 1/2 IN	
B, R: 0.7 Vp-p, 75 ohms; HD/VD, SYNC: high impedance, TTL (positive/negative)Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR): 0.7 Vp-p, 75 ohmsVIDEO INPin jack × 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) × 1AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,			
HD/VD, SYNC: high impedance, TTL (positive/negative) Y, PB (CB), PR (CR) VIDEO IN MONITOR OUT AUDIO 1 IN AUDIO 2 IN AUDIO OUT SERIAL IN LAN HD/VD, SYNC: high impedance, TTL (positive/negative) Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR): 0.7 Vp-p, 75 ohms Pin jack × 1, 1.0 Vp-p, 75 ohms D-sub HD 15-pin (female) × 1 O-sub HD 15-pin (female) × 1 M3 (L, R) × 1, 0.5 Vrms (for COMPUTER) M3 (L, R) × 1, 0.5 Vrms (for VIDEO) AUDIO OUT Mini jack × 1 (monitor out: 0- 2.0 Vrms, variable) D-sub 9-pin (female) × 1 for external control (RS-232C compliant) RJ-45 × 1 for network connection, 100Base-TX/10Base-T,		,, _	
Y, PB (CB), PR (CR)Y: 1.0 Vp-p (including sync signal); PB (CB), PR (CR): 0.7 Vp-p, 75 ohmsVIDEO INPin jack x 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) x 1AUDIO 1 INM3 (L, R) x 1, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) x 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack x 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) x 1 for external control (RS-232C compliant)LANRJ-45 x 1 for network connection, 100Base-TX/10Base-T,			• •
VIDEO INPin jack × 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) × 1AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,		Y, Рв (Св), Рг (Сг)	Y: 1.0 Vp-p (including sync signal);
VIDEO INPin jack × 1, 1.0 Vp-p, 75 ohmsMONITOR OUTD-sub HD 15-pin (female) × 1AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,		,	
AUDIO 1 INM3 (L, R) × 1, 0.5 Vrms (for COMPUTER)AUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,		VIDEO IN	Pin jack × 1, 1.0 Vp-p, 75 ohms
AUDIO 2 INM3 (L, R) × 1, 0.5 Vrms (for VIDEO)AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,		MONITOR OUT	D-sub HD 15-pin (female) × 1
AUDIO OUTMini jack × 1 (monitor out: 0- 2.0 Vrms, variable)SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,		AUDIO 1 IN	
SERIAL IND-sub 9-pin (female) × 1 for external control (RS-232C compliant)LANRJ-45 × 1 for network connection, 100Base-TX/10Base-T,		AUDIO 2 IN	M3 (L, R) \times 1, 0.5 Vrms (for VIDEO)
LAN RJ-45 × 1 for network connection, 100Base-TX/10Base-T,		AUDIO OUT	
compliant with PJLink™ (class 1)		LAN	
			compliant with PJLink™ (class 1)

SPEC FILE

DLP[™] Projector

Built-in speaker Power cord length Cabinet materials Dimensions ($W \times H \times D$) Weight Operation noise^{*3} Operating temperature

Operating humidity

Remote control unit

Power supply Operation range*7

Dimensions (W \times H \times D) Weight

Supplied accessories

Optional accessories

Ceiling mount bracket

Attachment for ceiling mount bracket Replacement lamp unit 7 × 4 cm Oval x1 output power 8 W (Monaural) 1.8 m (5 ft 11 in) (2.0m (6 ft 7 in) for PT-LW321U) Molded plastic (PC) 288 × 100*⁵ × 231*⁶ mm (11-11/32 × 3-15/16*⁵ × 9-3/32*⁶ inches) Approx. 2.5 kg (5.5 lbs) 34 dB (LAMP POWER: NORMAL), 29 dB (LAMP POWER: ECO) 5°C - 40°C (41°F - 104°F) [Less than 750 m (2,500 ft) above sea level]; 5°C - 35°C (41°F - 95°F) [750 - 1,500 m (2,500 - 5,000 ft) above sea level] 5°C - 30°C (41°F - 86°F) [1,500 - 3,000 m (5,000 - 10,000 ft) above sea level] 20%-80% (no condensation)

PT-LW3

3 V DC (Lithium coin cell battery x 1) Approx. 8 m (26 ft 3 in) when operated from directly in front of the signal receptor $40.6 \times 86.5 \times 7.2 \text{ mm} (1-19/32 \times 3-13/32 \times 9/32 \text{ inches})$ Approx. 23 g (0.8 oz) (including battery)

Power cord (x 1) (x 2 for PT-LW321EA) Wireless remote control unit (x 1) Battery for remote control (CR2025 type x 1) Computer cable (for VGA) (x 1)

ET-PKV100H (for high ceilings) ET-PKV100S (for low ceilings) ET-PKL300B ET-LAL330

Weights and dimensions shown are approximate. Specifications and appearance are subject to change without notice.

- *1 When [VGA Out (Standby)] / [In Standby Mode (Audio)] are all set to [Off].
- *2 When [VGA Out (Standby)] / [In Standby Mode (Audio)] are all set to [On].
- *3 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
- *4 Only compatible with dot clock frequency of 27 MHz (pixel repetition signal)

*5 With legs at shortest position.

- *6 With lens at shortest position.
- *7 Operation range differs depending on environments.

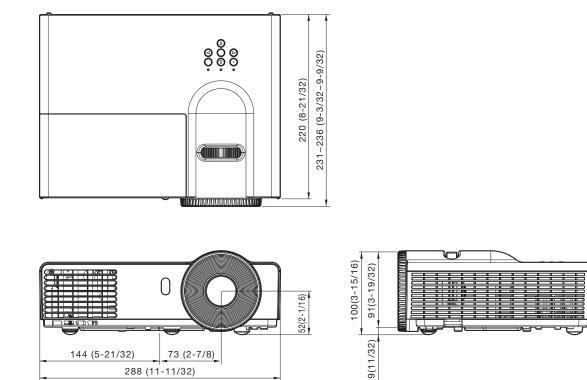
SPEC FILE

DLP[™] Projector

PT-LW321

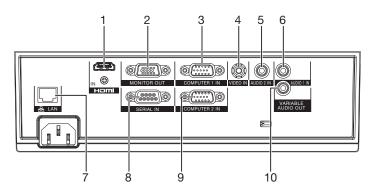
77(3-1/32)

Dimensions



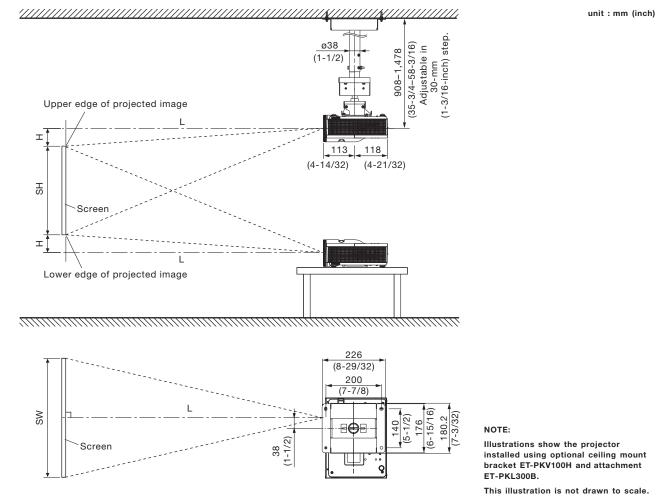
unit : mm (inch) NOTE: This illustration is not drawn to scale.

Terminals



- 1 HDMI input
- 2 Monitor output
- 3 Computer 1 input
- 4 Video input
- 5 Audio 2 input for VIDEO
- 6 Audio 1 input for COMPUTER
- 7 LAN connector
- 8 Serial input
- 9 Computer 2 input
- 10 Audio output

Standard setting-up position



- Caution:All construction work should be done by a qualified technician.
- When mounting to the ceiling, use the special mounting bracket. Furthermore, in order to prevent it from falling down from the ceiling, use the supplied wire on the mounting bracket.

PT-**LW321**

Projection distance for 16:10 aspect ratio screen

						unit: meters (feet)
Projection size	Projection size Projection distance [L]			Height from the edge of screen	edge of screen	
[diagonal]	Min	[wide]	Max [te	lephoto]	•	of lens [H]
0.76 m / 30″	1.0	(3.3)	1.1	(3.6)	-0.05	(-0.16)
1.02 m / 40″	1.3	(4.4)	1.5	(4.8)	-0.07	(-0.22)
1.27 m / 50″	1.7	(5.5)	1.8	(6.0)	-0.08	(-0.27)
1.52 m / 60″	2.0	(6.6)	2.2	(7.2)	-0.10	(-0.33)
1.78 m / 70″	2.3	(7.7)	2.6	(8.4)	-0.12	(-0.38)
2.03 m / 80″	2.7	(8.8)	2.9	(9.6)	-0.13	(-0.44)
2.29 m / 90″	3.0	(9.9)	3.3	(10.8)	-0.15	(-0.49)
2.54 m / 100"	3.3	(11.0)	3.7	(12.0)	-0.17	(-0.55)
3.05 m / 120″	4.0	(13.1)	4.4	(14.4)	-0.20	(-0.66)
3.81 m / 150″	5.0	(16.4)	5.5	(18.0)	-0.25	(-0.82)
5.08 m / 200″	6.7	(21.9)	7.3	(24.0)	-0.33	(-1.10)
6.35 m / 250″	8.3	(27.4)	9.2	(30.0)	-0.42	(-1.37)
7.62 m / 300″	10.0	(32.9)	11.0	(36.0)	-0.50	(-1.64)

Projection distance for 16:9 aspect ratio screen

						unit: meters (feet)
Projection size	Projection distance [L]			Height from the edge of screer		
[diagonal]	Min	[wide]	Max [te	lephoto]	0	of lens [H]
0.76 m / 30″	1.0	(3.4)	1.1	(3.7)	-0.07	(-0.24)
1.02 m / 40″	1.4	(4.5)	1.5	(4.9)	-0.10	(-0.32)
1.27 m / 50″	1.7	(5.6)	1.9	(6.2)	-0.12	(-0.39)
1.52 m / 60″	2.1	(6.8)	2.3	(7.4)	-0.14	(-0.47)
1.78 m / 70″	2.4	(7.9)	2.6	(8.6)	-0.17	(-0.55)
2.03 m / 80″	2.7	(9.0)	3.0	(9.9)	-0.19	(-0.63)
2.29 m / 90″	3.1	(10.1)	3.4	(11.1)	-0.22	(-0.71)
2.54 m / 100"	3.4	(11.3)	3.8	(12.4)	-0.24	(-0.79)
3.05 m / 120″	4.1	(13.5)	4.5	(14.8)	-0.29	(-0.95)
3.81 m / 150″	5.1	(16.9)	5.6	(18.5)	-0.36	(-1.18)
5.08 m / 200″	6.9	(22.5)	7.5	(24.7)	-0.48	(-1.58)
6.35 m / 250″	8.6	(28.1)	9.4	(30.9)	-0.60	(-1.97)
7.62 m / 300″	10.3	(33.8)	11.3	(37.1)	-0.72	(-2.37)

NOTE:

• 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.

PT-LW32

Calculation of the projection distance

For a screen size different from the above, use the equation below to calculate the projection distance.

Aspect ratio 16:10 minimum L (m) = (diagonal screen size in inches) × 0.03338 maximum L (m) = (diagonal screen size in inches) × 0.03660 Aspect ratio 16:9 minimum L (m) = (diagonal screen size in inches) × 0.03429 maximum L (m) = (diagonal screen size in inches) × 0.03764

NOTE: Distances calculated with the above equations will include a slight error.

Installable angle

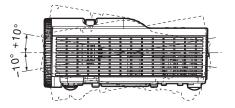
Install the projector at an angle within the range shown below.

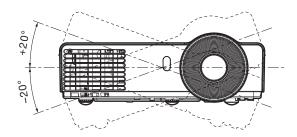
• Vertical direction

The projector may be installed at a vertical angle of 10° .

• Horizontal direction

The projector may be installed at a horizontal angle of 20° .





List of compatible signals

The signals that can be input to this projector are shown in the table below.

Display mode	Display			Dot clock	Format
	resolution (dots) ¹	H (kHz)	v (Hz)	frequency (MHz)	
NTSC/NTSC4.43/PAL-M/PAL60	720 × 480i	15.7	59.9	_	VIDEO
PAL/PAL-N/SECAM	720 × 576i	15.6	50.0	-	_
525i (480i)	720 × 480i	15.7	59.9	27.0	HDMI
		15.7	59.9	13.5	YCBCR
625i (576i)	720 × 576i	15.6	50.0	27.0	HDMI
		15.6	50.0	13.5	YCBCR
525p (480p)	720 × 483	31.5	59.9	27.0	HDMI/YP _B P _R
625p (576p)	720 × 576	31.3	50.0	27.0	
750(720)/60p	1280 × 720	45.0	60.0	74.3	
750(720)/50p	_	37.5	50.0	74.3	_
1125(1080)/60i	1920 × 1080i	33.8	60.0	74.3	
125(1080)/50i		28.1	50.0	74.3	_
1125(1080)/24p	1920 × 1080	27.0	24.0	74.3	_
1125(1080)/60p	_	67.5	60.0	148.5	_
125(1080)/50p	_	56.3	50.0	148.5	-
/GA	640 × 480	31.5	59.9	25.2	HDMI/RGB
		35.0	66.7	30.2	_
		37.5	75.0	31.5	_
		37.9	72.8	31.5	_
		43.3	85.0	36.0	_
SVGA	800 × 600	35.1	56.3	36.0	_
		37.9	60.3	40.0	_
		46.9	75.0	49.5	_
		48.1	72.2	50.0	_
		53.7	85.1	56.3	_
MAC16	832 × 624	49.7	74.6	57.3	_
KGA	1024 × 768	48.4	60.0	65.0	_
		56.5	70.1	75.0	_
		60.0	75.0	78.8	_
		68.7	85.0	94.5	_
WXGA	1280 × 720	44.8	60.0	74.5	-
	1280 × 768	47.8	59.9	79.5	_
	1280 × 768	60.3	74.9	102.3	_
	1280 × 800	49.7	59.8	83.5	_
	1366 × 768	47.7	59.8	84.8	_
MAC21	1152 × 870	68.7	75.1	100.0	_
MSXGA	1280 × 960	60.0	60.0	108.0	_
		75.2	75.0	130.0	_
SXGA	1280 × 1024	64.0	60.0	108.0	_
		80.0	75.0	135.0	_
		91.2	85.0	157.5	_
SXGA+	1400 × 1050	65.3	60.0	121.8	_
JXGA	1600 × 1200	75.0	60.0	162.0	-

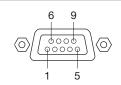
*1 The "i" appearing after the resolution indicates an interlaced signal.

PT-LW321

Serial connector

The serial connector complies with RS-232C. To control the projector from a personal computer, commands must be input through communication software, based on the format and satisfying the communication conditions shown below.

Pin assignments and signal names



No.	Signal name	Description	No.	Signal name	Description
1	-	NC	6	-	NC
2	TXD	Send data	7	CTS	Connected internally
3	RXD	Receive data	8	RTS	Connected internally
4	-	NC	9	-	NC
5	GND	Ground			

D-sub 9-pin (female) Serial input

Communication conditions (factory setting)

Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	19,200 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

Cable specifications

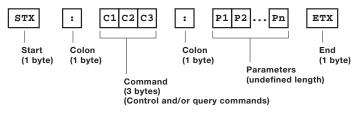
Projector		PC (DTE)
1	NC NC	1
2		- 2
3		- 3
4	NC NC	4
5		- 5
6	NC NC	6
7		- 7
8		- 8
9	NC NC	9
	1 2 3 4 5 6 7 8	1 NC NC 2

SPEC FILE

DLP[™] Projector

Basic format

Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



 $^{\star}\,$ STX and ETX are character chords. STX is 02 and ETX is 03 when expressed in hexadecimal.

CAUTION

- It may not be possible to send or receive commands for about 10 to 60 seconds when the lamp is first turned on. If this occurs, wait for 60 seconds, then try sending or receiving again.
- When sending multiple commands, be sure to wait for at least 0.5 second after receiving a response from the projector before sending the next command.
- Additional time is sometimes required for response due to processing inside the projector. Set the time-out period for command response to 10 seconds or more.

Control commands

Command : Parameter	Function		Callback	
PON	POWER (STANDBY)	Standby power on	PON	
POF		Standby power off	POF	
IIS:HD1	INPUT SELECT	HDMI	IIS:HD1	
IIS:RG1		Computer 1	IIS:RG1	
IIS:RG2		Computer 2	IIS:RG2	
IIS:VID		Video	IIS:VID	
OSH:0	AV MUTE	AV mute off	OSH:0	
OSH:1		AV mute on	OSH:1	

* Do not send PON, POF or OSH commands continuously in a short period of time. Doing so may burst the lamp or shorten the lamp replacement cycle.

* When a command that cannot be executed during standby mode is sent, the projector will send an ER401 command in reply.

PT-LW321

Status request commands

Command : Parameter	Function	Callback	Description
QPW	Main power status	000	Standby
		001	On
Q\$S	Lamp on status	0	Standby
		1	Lamp on control in progress
		2	Lamp on
		3	Lamp off control in progress
QSH	AV mute function status	0	Off
		1	On
QIN	Input signal status	HD1	HDMI
		RG1	Computer 1
		RG2	Computer 2
		VID	Video
QVX:RTMI0	Projector run time	p1p2p3p4p5	00000h-99999h
Q\$L	Lamp run time	p1p2p3p4	0000h-9999h
QTM:0	Temperature status	p1p2p3p4/p5p6p7p8 ^(*1)	p0 = Internal temperature

*1 p1p2p3p4: Celsius (°C), p5p6p7p8: Fahrenheit (°F)

NOTE: If a wrong command is received, the projector will send an ER401 or ER402 command to the computer.

Command example

To set the AV mute function off, send the command as shown below.

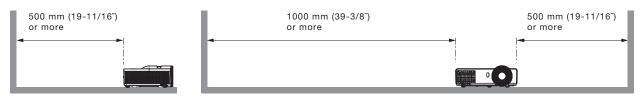
STX	OSH :	0	ETX
Start	Command	Paramet	er End

NOTE: When sending commands without parameters, a colon (:) is not necessary.

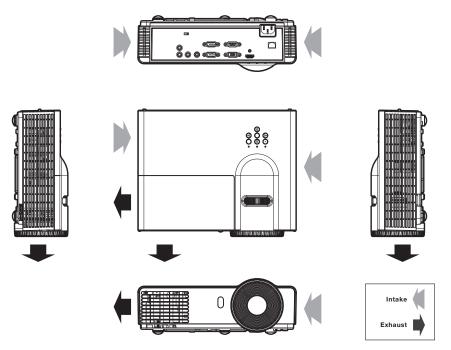
Notes on projector placement and operation

The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the following precautions.

- 1. Never place objects on top of the projector while it is operating.
- 2. Make sure there is the unobstructed space as shown below or more around the projector's exhaust openings. In addition to this space, also ensure that there is a sufficient work space for removing and installing the lamp, air filter and other parts.
- 3. 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.
- 4. 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 operation.



Direction of air intake and exhaust



Operating the projector continuously

- 1. If the projector is to be operated continuously 22 hours or more, lamp replacement cycle duration becomes shorter.
- 2. The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods (one hour or less).

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.

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As of August 2013

