### **Panasonic ideas for life**



#### SPEC FILE



Product Number :

PT-**FX400** 

Product Name : LCD Projector

As of March 2011. Specifications and appearance are subject to change without notice.

#### Specifications

Power supply         100-240 V AC, 3.9-1.4 A, 50/60 Hz           Power consumption         30 W           Power consumption         Name           Auge of the state of the sta	Main unit		
LCD panel         Panel size         (0.3 W at 100-120 V AC, 0.4 W at 220-240 V AC when standby mode set to normal and audio monitor out)           LCD panel         Panel size         20.3 mm (0.8 inches) diagonal (4.3 aspect ratio)           Pixel         Pixel some         786,432 (1.024 × 768) × 3, total of 2,359,296 pixels           Pixel         786,432 (1.024 × 768) × 3, total of 2,359,296 pixels           Lens         Manual (2× zoom), manual focus F 1.7-2.6, f 24.0-47.2 mm           Throw ratio         1.48 - 2.96:1           Lamp         20.0 W UHM lamp           Screen size         0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio           Colors         N.47.26 k (24 × 768) × 3, total of 2,359,296 pixels           Brightness**         4,000 lumens           Contrast**         80%           Contrast**         80%           Contrast**         80%           Contrast**         80%           Scanning frequency         HDM/DVI-1 (digital)           H/L (natalog)/RGB         fre: 17.6 kHz - 68.7 kHz, fre: 24.0 Hz - 85.0 Hz, dot clock: 25.2 MHZ - 148.5 MHz           Got clock: 25.2 MHZ - 68.7 kHz, fre: 60 Hz, 72.0 kHz, fre: 60 Hz, 72.0 (fre: 75.0 kHz; fre: 60 Hz, 72.0 (fre:	Power supply		100–240 V AC, 3.9–1.4 A, 50/60 Hz
LCD panel         Panel size         (0.3 W at 100-120 V AC, 0.4 W at 220-240 V AC when standby mode set to normal, 20 W when standby mode set to normal and audio monitor out)           LCD panel         Panel size         20.3 mm (0.8 inches) diagonal (4.3 aspect ratio)           Display method         Transparent LCD panel (* 3, R/G/B)           Pixel configuration         Stripe           Lens         Manual (2× zoom), manual focus F 1.7-2.6, f 24.0-47.2 mm           Throw ratio         1.48 - 2.96:1           Lamp         Stripe           Screen size         0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio           Colors         V (uld color (16,777,216 colors)           Brightness**         4.000 lumens           Contrast**         80%           Contrast**         80%           Contrast**         80%           Scanning frequency         HDM/DVI-1 (digital)           Hit         1.024 × 768 pixels (Input signals that exceed this resolution will be converted to 1.024 × 768 pixels.)           Scanning frequency         HDM/DVI-1 (digital)         fr:: 15.6 kHz.2 +011 kHz.1/v 24.0 Hz.85.1 Hz.           VPBPR (YCaCR)         480 (525):         fr 15.75 kHz; fv 60 Hz, 72.0 KHz, 76 0 Hz, 72.0 (750/50; fr 13.50 kHz; fv 60 Hz, 72.0 (750/50; fr 13.50 kHz; fv 60 Hz, 72.0 (750/50; fr 13.50 kHz; fv 50 Hz, 72.0 (750/50; fr 13.50 kHz; fv 50 Hz, 72.0 (750/50; fr 13.50 kHz; fv 50 Hz, 72.0 (750/50	11 5		
LCD panel     Panel size     20.3 mm (0.8 inches) diagonal (4:3 aspect ratio)       LCD panel     Panel size     20.3 mm (0.8 inches) diagonal (4:3 aspect ratio)       Display method     Transparent LCD panel (× 3, R/G/8)       Pixel     768/432 (1.024 × 768) × 3, total of 2.359,296 pixels       Pixel     Manual (2× zoom), manual focus F 1.7–2.6, f 24.0–47.2 mm       Lens     Manual (2× zoom), manual focus F 1.7–2.6, f 24.0–47.2 mm       Lamp     250 W UHM lamp       Screen size     0.81 × 3.00 inches) diagonally, 4:3 aspect ratio       Colors     Full color (16,777,216 colors)       Brightness*2     4000 lumens       Contrast*2     600:1 (lui on/full of)       Resolution     10.024 × 768 pixels)       Scanning frequency     HDM/DVI-I (digital       Fit: 5.6 kHz-91.1     KHz, fre 2.40 Hz as5.0 Hz, dot clock: 22.3 HHz-148.5 MHz       Scanning frequency     HDM/DVI-I (digital       Fit: 5.6 kHz-91.1     KHz, fre 04 Hz, Ket 04 Hz, 24.0 KHz aspect Ket 04 Ket	·		(0.3 W at 100-120 V AC, 0.4 W at 220-240 V AC when standby mode
LCD panel     Panel size     20.3 mm (0.8 incl+sc) diagonal (4:3 aspect ratio)       Pixel     Transparent LCD panel (x 3, R/G/B)       Pixel configuration     Stripe       Ens     Nanual (2x 2000), manual focus F 1.7-2.6, f 24.0-47.2 mm       Constripe     148-2.96:1       Corrent size     0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio       Colors     600:1 (full orf), 77.7.16 colors)       Brightness*2     80%       Contrast*2     600:1 (full onfull off)       Center-to-corner uniformitry     80%       Contrast*2     600:1 (full onfull off)       Resolution     1.024 × 768 pixels (input signals that exceed this resolution will be converted to 1.024 × 768 pixels.)       Scanning frequency     HDM/DVI-I (digital)     fr: 15.6 kHz-91.1 kHz, fix: 24.0 Hz-85.0 Hz, dot clock: 122 MHZ or Hz       Vielock: 25.2 MHZ -148.5 MHZ     0.01 clock: 25.2 MHZ -148.5 MHZ       DVI-I (analog)/RGB     fr: 15.6 kHz-91.1 kHz, fix: 24.0 Hz-85.0 Hz, dot clock: 122 MHZ or Hz       Vielock: 25.2 (for (55)):     fr: 15.6 kHz-91.1 kHz, fix: 40.0 Hz, 57.0 Hz, 57.0 Hz, 57.0 Hz       Vielock: 25.2 (for (55)):     fr: 15.6 kHz-91.1 kHz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz; fix: 60.1 Hz, 72.			
LCD panel     Panel size     20.3 mm (0.8 incl+sc) diagonal (4:3 aspect ratio)       Pixel     Transparent LCD panel (x 3, R/G/B)       Pixel configuration     Stripe       Ens     Nanual (2x 2000), manual focus F 1.7-2.6, f 24.0-47.2 mm       Constripe     148-2.96:1       Corrent size     0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio       Colors     600:1 (full orf), 77.7.16 colors)       Brightness*2     80%       Contrast*2     600:1 (full onfull off)       Center-to-corner uniformitry     80%       Contrast*2     600:1 (full onfull off)       Resolution     1.024 × 768 pixels (input signals that exceed this resolution will be converted to 1.024 × 768 pixels.)       Scanning frequency     HDM/DVI-I (digital)     fr: 15.6 kHz-91.1 kHz, fix: 24.0 Hz-85.0 Hz, dot clock: 122 MHZ or Hz       Vielock: 25.2 MHZ -148.5 MHZ     0.01 clock: 25.2 MHZ -148.5 MHZ       DVI-I (analog)/RGB     fr: 15.6 kHz-91.1 kHz, fix: 24.0 Hz-85.0 Hz, dot clock: 122 MHZ or Hz       Vielock: 25.2 (for (55)):     fr: 15.6 kHz-91.1 kHz, fix: 40.0 Hz, 57.0 Hz, 57.0 Hz, 57.0 Hz       Vielock: 25.2 (for (55)):     fr: 15.6 kHz-91.1 kHz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz, fix: 60.1 Hz, 72.0 (Hz-68.5 Hz; fix: 60.1 Hz, 72.			standby mode set to normal and audio monitor out.)
Display method Pixels         Transparent LCD panel (x 3, R/G/B)           Pixels         786,432 (1,024 × 768) × 3, total of 2,359,296 pixels           Lens         Manual (2x zoom), manual focus F 1.7–2.6, f 24.0–47.2 mm           Throw ratio         250 W UHM Iamp           Screen size         0.84–7.62 m (33–300 inches) diagonally, 4:3 aspect ratio           Colors         810 color (1/77,216 colors)           Brightness*?         0.84–7.62 m (33–300 inches) diagonally, 4:3 aspect ratio           Contrast**         600:1 (full con/full of/           Contrast**         80%           Contrast**         80%           Contrast**         600:1 (full con/full of/           Resolution         fmit 27.0 kHz -68.7 kHz, fr; 24.0 Hz -85.0 Hz, dot clock: 25.2 MHz -148.5 MHz           Scanning frequency         HDM//DVI-I (digital)         fr: 27.0 kHz -68.7 kHz, fr; 24.0 Hz -85.1 Hz, dot clock: 162 MHz or lower           VPaPR (YCaCR)         480 (625):         fr 15.6 kHz / ro 10 Hz, 576 (625):         fr 15.6 kHz / ro 0 Hz, 576 (625):           VPaPR (YCaCR)         480 (625):         fr 15.3 kHz; rv 60 Hz, 720 (750/60p: fr 45.0 kHz; rv 60 Hz,	LCD panel	Panel size	
Pixels         786,432 (1,024 × 768) × 3, total of 2,359,296 pixels           Pixel configuration         Stripe           Lens         Manual (2× zoom), manual focus F 1.7–2.6, f 24.0–47.2 mm           Throw ratio         1.48–2.96:1           Lamp         250 W UHM Iamp           Screen size         0.84–7.62 m (33–300 inches) diagonally, 4:3 aspect ratio           Colors         Full color (16,777.216 colors)           Brightness**         6000 lumons           Center-to-corner uniformity**         80%           Contrast*         60001 (full on/full off)           Resolution         File color (16,777.216 colors)           Scanning frequency         HDM/DVI-I (digital)           MU/DVI-I (digital)         ff: 27.0 kHz - 68.7 kHz, for: 24.0 Hz - 85.0 Hz, dot clock: 25.2 MHz - 148.5 MHz           Scanning frequency         HDM//DVI-I (digital)         ff: 15.6 kHz; fv 50 Hz, fv 50 Hz, dot clock: 162 MHz - 11 kHz, fv: 24.0 Hz - 85.1 Hz, dot clock: 162 MHz - 11 kHz, fv: 24.0 Hz - 85.1 Hz, dot clock: 162 Siz; fr 11 5.75 kHz; fv 60 Hz,		Display method	
Pixel configuration         Stripe           Lens         Manual (2x zoom), manual focus F 1.7-2.6, f 24.0-47.2 mm           Throw ratio         1.48-2.96:1           Lamp         250 W UHM lamp           Screen size         0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio           Colors         Full color (16,777,216 colors)           Brightness**         4.000 lumens           Contrast**         6006:1 (full on/full off)           Resolution         1.024 x 768 pixels (mot signals that exceed this resolution will be converted to 1.024 x 768 pixels).           Scanning frequency         HDM/DVI-I (digital)         fri: 51.6 kHz-91.1 kHz, fr: 24.0 Hz-85.0 Hz, dot clock: 25.2 MHz-148.5 MHz           VI-I (analog)/RGB         fri: 51.6 kHz-91.1 kHz, fr: 24.0 Hz-85.1 Hz, dot clock: 25.2 MHz-148.5 MHz         OHz, fri:400 Hz, fri:400 H			
Lens         Maiual (2× zoom), manual focus F 1.7–2.6, f 24.0–47.2 mm           Throw ratio         1.48–2.96:1           Lamp         Screen size           Screen size         0.84–7.62 m (33–300 inches) diagonally, 4:3 aspect ratio           Colors         Full color (16,777,216 colors)           Brightness**         4.000 lumens           Center-to-corner uniform!ty**         80%           Contrast**         80%           Contrast**         80%           Contrast**         600:1 (full on/full off)           Resolution         1.024 × 768 pixels (Input signals that exceed this resolution will be converted to 1.024 × 768 pixels.)           Scanning frequency         HDMI/DVI-I (digital)         fit: 71.6 kHz-91.1 kHz, fit: 24.0 Hz-85.0 Hz, dot clock: 25.2 MHz-148.5 MHz           DVI-I (analog)/RGB         fit: 51.6 kHz-91.1 kHz, fit: 24.0 Hz-85.1 Hz, dot clock: 120 MHz or lower           YPsPR (YCsCR)         480 (525):         fit 15.75 kHz; fit 60 Hz, 72.0 (750)/50 Hz, 15.0 KHz; fit 50 Hz, 720 (750)/50 Hz, 15.0 KHz; fit 50 Hz, 720 (750)/50 Hz, 15.0 KHz; fit 50 Hz, 720 (750)/50 Hz, 15.0 KHz; fit 60 Hz, 72.0 (750)/50 Hz, 1080 (1125)/20 Hz, 16.3 Street (Fit 60 Hz, 72.0 KHz, 15.0 KHz; fit 60 Hz, 72.0 KHz, 1080 (1125)/20 Hz, 1080 Hz, 1080 Hz, 1080 Hz, 1080		Pixel configuration	•
Lamp         250 W UHM lamp           Screen size         0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio           Colors         Full color (16,777,216 colors)           Brightness**         4,000 lumens           Center-to-correr uniformity**         80%           Contrast**         80%           Contrast**         80%           Scanning frequency         HDMI/DVI-I (digital)         fit: 270.44× 768 pixels.           Scanning frequency         HDMI/DVI-I (digital)         fit: 270.44× 768 pixels.           VI-I (analog)/RGB         fit: 25.6 kHz-91.1 kHz, fo: 24.0 Hz-85.0 Hz, dot clock: 25.2 MHz-148.5 MHz           VI-I (analog)/RGB         fit: 15.6 kHz-91.1 kHz, fo: 24.0 Hz-85.1 Hz, dot clock: 162 MHz or lower           YPsPR (YCsCR)         480 (525):         fit 15.75 kHz; fo 60 Hz, 576i (625):           Statistic (255):         fit 31.50 kHz; for 60 Hz, 576i (625):         fit 31.50 kHz; for 60 Hz, 120 (750/560):           Video/S-Video         fit 35.75 kHz; for 60 Hz, 120 (750/560):         fit 83.15 kHz; for 50 Hz, 1080 (1125)/560):           Video/S-Video         fit 15.75 kHz; for 60 Hz, 1080 (1125)/560):         fit 81.3 kHz; for 50 Hz, 1080 (1125)/560):           Optical axis shift         Video/S-Video         fit 15.75 kHz; for 60 Hz, 1080 (1125)/560; fit 43.20 kHz; for 50 Hz, 1080 (1125)/560; fit 45.02 kHz; for 50 Hz, 1080 (1125)/560; fit 45.02 kHz; for 0 Hz, 1080 (1125)/660	Lens	5	•
Screen size         0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio           Colors         Full color (16,777,216 colors)           Brightness**         4.000 lumens           Center-to-corner uniformity*3         80%           Contrast*3         6001 (full on/full on/full off)           Resolution         1.024 × 768 pixels.)           Scanning frequency         HDMI/DVI-I (digital)           HIM.1001-I (digital)         Fit: 15.6 kHz-91.1 kHz, fv: 24.0 Hz-85.0 Hz, for 40 Hz, for 40 Hz, for 40 Hz, for 40 Hz, for 50 Hz, for 60 H	Throw ratio		1.48 – 2.96:1
Screen size         0.84-7.62 m (33-300 inches) diagonally, 4:3 aspect ratio           Colors         Full color (16,777,216 colors)           Brightness**         4.000 lumens           Center-to-corner uniformity*3         80%           Contrast*3         6001 (full on/full on/full off)           Resolution         1.024 × 768 pixels.)           Scanning frequency         HDMI/DVI-I (digital)           HIM.1001-I (digital)         Fit: 15.6 kHz-91.1 kHz, fv: 24.0 Hz-85.0 Hz, for 40 Hz, for 40 Hz, for 40 Hz, for 40 Hz, for 50 Hz, for 60 H	Lamp		250 W UHM lamp
Colors       Full color (16,777,216 colors)         Brightness*2       4,000 lumens         Contrast*2       80%         Contrast*2       600:1 (full on/full off)         Resolution       1,024 × 768 pixels. (Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.)         Scanning frequency       HDMI/DVI-I (digital)         DVI-I (analog)/RGB       fH: 27.0 kHz - 68.7 kHz, fv: 24.0 Hz - 85.1 Hz, dot clock: 25.2 MHz - 148.5 MHz         fH: 15,6 kHz=91.1 kHz, fv: 24.0 Hz, 85.1 Hz, dot clock: 162 MHz or lower         YBEPR (YCBCR)       400 (525):         YBEPR (YCBCR)       400 (525):         FH 31.50 kHz; fv 50 Hz, 720 (750)/50p;         TH 31.50 kHz; fv 60 Hz, 720 (750)/50p;         TH 45.00 kHz; fv 60 Hz, 720 (750)/50p;         TH 45.00 kHz; fv 60 Hz, 720 (750)/50p;         TH 31.50 kHz; fv 60 Hz, 720 (750)/50p;         TH 45.00 kHz; fv 60 Hz,			
Brightness*2       4,000 lumens         Center-to-correr uniformity*2       80%         Contrast*2       600.1 (full on/full of/standard standard standar	Colors		
Contrast*2         600:1 (full on/full off)           Resolution         1,024 × 768 pixels (Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.)           Scanning frequency         HDMI/DVI-I (digital)         fH: 27.0 kHz - 68.7 kHz, fv: 24.0 Hz - 85.0 Hz, dot clock: 25.2 MHz - 148.5 MHz           DVI-I (analog)/RGB         fH: 15.6 kHz - 91.1 kHz, fv: 24.0 Hz - 85.0 Hz, dot clock: 25.2 MHz - 148.5 MHz         full           VPBPR (YCBCR)         480i (525):         fH 15.75 kHz; fv 60 Hz, 576i (625):         fH 15.75 kHz; fv 50 Hz, 480p (525):           720 (750)/60p:         fH 31.50 kHz; fv 60 Hz, 720 (750)/60p:         fH 31.50 kHz; fv 50 Hz, 720 (750)/50p; fH 33.75 kHz; fv 50 Hz, 720 (750)/50p; fH 33.75 kHz; fv 50 Hz, 720 (750)/50p:         fH 33.75 kHz; fv 50 Hz, 720 (750)/50p; fH 33.75 kHz; fv 50 Hz, 720 (750)/50p; fH 63.50 kHz; fv 50 Hz, 720 (712)/24p; fH 27.00 kHz; fv 50 Hz, 720 (712)/24p; fH 27.00 kHz; fv 50 Hz, 720 (712)/750 (712	Brightness*2		
Contrast*2         600:1 (full on/full off)           Resolution         1,024 × 768 pixels (Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.)           Scanning frequency         HDMI/DVI-I (digital)         fH: 27.0 kHz - 68.7 kHz, fv: 24.0 Hz - 85.0 Hz, dot clock: 25.2 MHz - 148.5 MHz           DVI-I (analog)/RGB         fH: 15.6 kHz - 91.1 kHz, fv: 24.0 Hz - 85.0 Hz, dot clock: 25.2 MHz - 148.5 MHz         full           VPBPR (YCBCR)         480i (525):         fH 15.75 kHz; fv 60 Hz, 576i (625):         fH 15.75 kHz; fv 50 Hz, 480p (525):           720 (750)/60p:         fH 31.50 kHz; fv 60 Hz, 720 (750)/60p:         fH 31.50 kHz; fv 50 Hz, 720 (750)/50p; fH 33.75 kHz; fv 50 Hz, 720 (750)/50p; fH 33.75 kHz; fv 50 Hz, 720 (750)/50p:         fH 33.75 kHz; fv 50 Hz, 720 (750)/50p; fH 33.75 kHz; fv 50 Hz, 720 (750)/50p; fH 63.50 kHz; fv 50 Hz, 720 (712)/24p; fH 27.00 kHz; fv 50 Hz, 720 (712)/24p; fH 27.00 kHz; fv 50 Hz, 720 (712)/750 (712	Center-to-corner uniform	ity*2	80%
Scanning frequency         HDMI/DVI-I (digital)         fm: 27.0 kHz - 68.7 kHz, fx: 24.0 Hz - 85.0 Hz, dot clock: 25.2 MHz - 148:5 MHz dot clock: 25.2 MHz - 148:5 MHz           DVI-I (analog)/RGB         fm: 15.6 kHz - 91.1 kHz, fr: 24.0 Hz - 85.1 Hz, dot clock: 162 MHz or lower           VPBPR (YCBCR)         480i (525):         fm 15.75 kHz; fv 60 Hz, 576i (625):           Fm 15.6 kHz - 91.1 kHz, fr: 24.0 Hz - 85.1 Hz, dot clock: 162 MHz or lower         Yeb Hz, 576i (625):           VPBPR (YCBCR)         480i (525):         fm 15.63 kHz; fv 50 Hz, 720 (750)/50p: fm 31.50 kHz; fv 60 Hz, 720 (750)/50p: fm 31.50 kHz; fv 50 Hz, 720 (750)/50p: fm 37.50 kHz; fv 50 Hz, 720 (750)/50p: fm 37.50 kHz; fv 50 Hz, 720 (750)/50p: fm 37.50 kHz; fv 50 Hz, 720 (750)/50p: fm 47.50 kHz; fv 50 Hz, 720 (750)/50p: fm 47.50 kHz; fv 50 Hz, 720 (750)/50p: fm 67.50 kHz; fv 60 Hz, 1080 (1125)/50i: fm 28.13 kHz; fv 50 Hz, 1080 (1125)/50i: fm 28.13 kHz; fv 50 Hz, 1080 (1125)/50i: fm 56.25 kHz; fv 60 Hz, 1080 (1125)/50i: fm 56.25 kHz; fv 50 Hz, 1080 (1125)/50i, 1080 (1125)/50i		5	600:1 (full on/full off)
Scanning frequency         HDMI/DVI-I (digital)         fH: 27.0 kHz-68.7 kHz, fv: 24.0 Hz-85.0 Hz, dot clock: 25.2 MHz-148.5 MHz           VI-I (analog)/RGB         fH: 15.6 kHz-91.1 kHz, fv: 24.0 Hz-85.1 Hz, dot clock: 162 MHz         or lower           YPBPR (YCBCR)         480i (525):         fH 15.75 kHz; fv 60 Hz, 576i (625)):         fH 15.75 kHz; fv 60 Hz, 576i (625)):           720 (750)/60p:         fH 31.05 kHz; fv 60 Hz, 576i (625)):         fH 31.50 kHz; fv 60 Hz, 720 (750)/50p:         fH 31.05 kHz; fv 60 Hz, 720 (750)/50p:           720 (750)/50p:         fH 31.50 kHz; fv 60 Hz, 720 (750)/50p:         fH 33.75 kHz; fv 60 Hz, 720 (750)/50p:         fH 33.75 kHz; fv 60 Hz, 720 (750)/50p:           720 (750)/50p:         fH 33.75 kHz; fv 60 Hz, 720 (750)/50p:         fH 33.75 kHz; fv 60 Hz, 720 (750)/50p:         fH 37.50 kHz; fv 50 Hz, 1080 (1125)/24p:           720 (750)/50p:         fH 37.50 kHz; fv 50 Hz, 1080 (1125)/50p:         fH 37.50 kHz; fv 50 Hz, 1080 (1125)/24p:         fH 27.00 kHz; fv 50 Hz, 1080 (1125)/50p:           751 fs 15.75 kHz, fv: 50 Hz         fr: 15.75 kHz, fv: 50 Hz, 1080 (1125)/50p:         fH 67.50 kHz; fv 50 Hz, 1080 (1125)/50p:         fH 67.50 kHz; fv 50 Hz, 1080 (1125)/50p:           751 fs 15.75 kHz, fv: 50 Hz         fr: 15.63 kHz, fv: 50 Hz, 1080 (1125)/50p:         fH 67.50 kHz; fv 60 Hz, 1080 (1125)/50p:         fH 67.50 kHz; fv 60 Hz, 1080 (1125)/50p:           771 fr 15.63 kHz, fv: 50 Hz, 1080 (1125)/50p:         fH 67.50 kHz; fv 50 Hz, 1080 (1125)/50p:         fH 67.50	Resolution		1,024 × 768 pixels (Input signals that exceed this resolution will be
dot clock: 25.2 MHz-148.5 MHz           DVI-I (analog)/RGB         fi: 15.6 kHz-91.1 kHz, fv: 24.0 Hz-85.1 Hz, dot clock: 162 MHz or lower           YPBPR (YCBCR)         480i (525i): fi 15.75 kHz; fv 60 Hz, 576i (625i): fi 15.75 kHz; fv 60 Hz, 576i (625c): fi 31.50 kHz; fv 60 Hz, 720 (750)/60p: fi 43.00 kHz; fv 60 Hz, 720 (750)/50p: fi 43.00 kHz; fv 60 Hz, 1080 (1125)/60p: fi 45.00 kHz; fv 60 Hz, 1080 (1125)/50p: fi 56.3 kHz; fv 50 Hz, 1080 (1125)/50p; fi 56.2 kHz; fv 50 Hz, 1080 (1125)/50p, 720 (750)/60p, 720 (750)/50p, 1080 (1125)/50p; 1080 (1125)/50p;			converted to $1,024 \times 768$ pixels.)
DVI-1 (analog)/RGB         fit: 15.6 kHz-9'.1 kHz, fv: 24.0 Hz-85.1 Hz, dot clock: 162 WHz           VPBPR (YCBCR)         4801 (525): 5761 (625): 761 (625): 760 (625): 760 (625): 720 (750)/60p: 720 (750)/60p; 720 (750)/60p;	Scanning frequency	HDMI/DVI-I (digital)	fH: 27.0 kHz-68.7 kHz, fv: 24.0 Hz-85.0 Hz,
dot clock: 162 MHz or lower           VPBPR (YCBCR)         480 (525):         fH 15.75 kHz; fv 60 Hz,           576i (625):         fH 31.50 kHz; fv 50 Hz,           480p (525p):         fH 31.50 kHz; fv 50 Hz,           576p (625p):         fH 31.50 kHz; fv 60 Hz,           720 (750)/60p:         fH 35.50 kHz; fv 50 Hz,           720 (750)/50p:         fH 33.75 kHz; fv 50 Hz,           1080 (1125)/50i:         fH 33.75 kHz; fv 50 Hz,           1080 (1125)/50i:         fH 28.13 kHz; fv 50 Hz,           1080 (1125)/50i:         fH 67.50 kHz; fv 50 Hz,           1080 (1125)/50i:         fH 67.50 kHz; fv 50 Hz,           1080 (1125)/50i:         fH 67.50 kHz; fv 50 Hz, <td></td> <td></td> <td>dot clock: 25.2 MHz-148.5 MHz</td>			dot clock: 25.2 MHz-148.5 MHz
kgbi (525):         fk 15.75 kHz; fv 60 Hz,           576i (625):         fk 15.63 kHz; fv 50 Hz,           480p (525):         fk 31.50 kHz; fv 60 Hz,           576i (625):         fk 31.50 kHz; fv 60 Hz,           576i (625):         fk 31.50 kHz; fv 60 Hz,           570p (625p):         fk 31.50 kHz; fv 60 Hz,           720 (750)/50p:         fk 37.50 kHz; fv 50 Hz,           720 (750)/50p:         fk 37.50 kHz; fv 50 Hz,           1080 (1125)/60:         fk 33.75 kHz; fv 60 Hz,           1080 (1125)/60:         fk 33.75 kHz; fv 50 Hz,           1080 (1125)/60:         fk 28.13 kHz; fv 50 Hz,           1080 (1125)/60:         fk 28.13 kHz; fv 50 Hz,           1080 (1125)/60:         fk 27.50 kHz; fv 60 Hz,           1080 (1125)/50:         fk 28.13 kHz; fv 50 Hz,           1080 (1125)/50:         fk 27.50 kHz; fv 60 Hz,           1080 (1125)/50:         fk 28.13 kHz; fv 50 Hz,           1080 (1125)/50:         fr 28.03 kHz; fv 50 Hz,           1080 (1125)/50:         fr 28.03 kHz; fv 50 Hz,           10		DVI-I (analog)/RGB	fн: 15.6 kHz-91.1 kHz, fv: 24.0 Hz-85.1 Hz,
576i (625i):       fH 15.63 kHz; fv 50 Hz,         480p (525p):       fH 31.50 kHz; fv 60 Hz,         576p (625p):       fH 31.25 kHz; fv 50 Hz,         720 (750)/60p:       fH 37.50 kHz; fv 60 Hz,         720 (750)/50p:       fH 37.50 kHz; fv 50 Hz,         1080 (1125)/600:       fH 33.75 kHz; fv 50 Hz,         1080 (1125)/500:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 47.00 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 50 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 50 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz;			dot clock: 162 MHz or lower
576i (625i):       fH 15.63 kHz; fv 50 Hz,         480p (525p):       fH 31.50 kHz; fv 60 Hz,         576p (625p):       fH 31.25 kHz; fv 50 Hz,         720 (750)/60p:       fH 37.50 kHz; fv 60 Hz,         720 (750)/50p:       fH 37.50 kHz; fv 50 Hz,         1080 (1125)/600:       fH 33.75 kHz; fv 50 Hz,         1080 (1125)/500:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 47.00 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 37.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 50 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 50 Hz,         1080 (1125)/600:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/600:       fH 67.50 kHz;		YРвPr (YCвCr)	480i (525i): fн 15.75 kHz; fv 60 Hz,
576p (625p):       fH 31.25 kHz; fv 50 Hz,         720 (750)/60p:       fH 45.00 kHz; fv 60 Hz,         720 (750)/50p:       fH 37.50 kHz; fv 50 Hz,         1080 (1125)/60i:       fH 33.75 kHz; fv 60 Hz,         1080 (1125)/50i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/60i:       fH 27.00 kHz; fv 50 Hz,         1080 (1125)/60i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/60i:       fH 27.00 kHz; fv 60 Hz,         1080 (1125)/60p:       fH 56.25 kHz; fv 50 Hz,         1080 (1125)/50p:       fH 56.25 kHz; fv 60 Hz,         1080 (1125)/50p:       fH 56.25 kHz; fv 60 Hz,         1080 (1125)/50p:       fH 56.25 kHz; fv 60 Hz,         1080 (1125)/50p;       fresto at			576i (625i): fн 15.63 kHz; fv 50 Hz,
720 (750)/60p:       fH 45.00 kHz; fv 60 Hz,         720 (750)/50p:       fH 37.50 kHz; fv 50 Hz,         720 (750)/50p:       fH 37.50 kHz; fv 50 Hz,         1080 (1125)/50i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/24p:       fH 27.00 kHz; fv 50 Hz,         1080 (1125)/50i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/50i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/50p:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/50p:       ff 157.5 kHz; fv 60 Hz,         1080 (1125)/50p:       ff 157.5 kHz; fv 60 Hz,         1080 (1125)/50p:       ff 157.5			480p (525p): fн 31.50 kHz; fv 60 Hz,
720 (750)/50p:       fH 37.50 kHz; fv 50 Hz,         1080 (1125)/60i:       fH 33.75 kHz; fv 60 Hz,         1080 (1125)/50i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/24p:       fH 27.00 kHz; fv 24 Hz,         1080 (1125)/60p:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/60p:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/50p:       fH 56.25 kHz; fv 50 Hz,         1080 (1125)/60p, from center of screen (manual),       horizontal: ±27% from center of screen (manual),         1081 lin       Vertical: ±30°         Installation       Ceiling/desk, front/rear (menu selection)         Built-in speaker       Size       4 cm (1-9/16 inches) (round) × 1         Output power       5.0 W (monaural)			576p (625p): fн 31.25 kHz; fv 50 Hz,
1080 (1125)/60i:       fH 33.75 kHz; fv 60 Hz,         1080 (1125)/50i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/24p:       fH 27.00 kHz; fv 24 Hz,         1080 (1125)/50p:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/50p:       fH 67.50 kHz; fv 50 Hz         1080 (1125)/50p:       fH 56.25 kHz; fv 50 Hz         1080 (1125)/50p:       fH 56.25 kHz; fv 50 Hz         1080 (1125)/50p:       fH 56.25 kHz; fv 50 Hz         1080 (1125)/60i, from center of screen (manual),       horizontal: ±27% from center of screen (manual)         Keystone correction range       Vertical: ±30°         Installation       Ceiling/desk, front/rear (menu selection)         Built-in speaker       Size       4 cm (1-9/16 inches) (round) × 1         Output power       5.0 W (monaural)       1         Terminals       HDMI IN       HDMI 19-pin × 1, Deep Color, HDCP compatible			720 (750)/60p: fн 45.00 kHz; fv 60 Hz,
1080 (1125)/50i:       fH 28.13 kHz; fv 50 Hz,         1080 (1125)/24p:       fH 27.00 kHz; fv 24 Hz,         1080 (1125)/60p:       fH 67.50 kHz; fv 60 Hz,         1080 (1125)/50p:       fH 67.50 kHz; fv 50 Hz         1080 (1125)/50p:       fH 56.25 kHz; fv 50 Hz         0ptical axis shift       Vertical: ±27% from center of screen (manual),         horizontal: ±27% from center of screen (manual)       Norizontal: ±27% from center of screen (manual)         Keystone correction range       Vertical: ±30°         Installation       Ceiling/desk, front/rear (menu selection)         Built-in speaker       Size       4 cm (1-9/16 inches) (round) × 1         0utput power       5.0 W (monaural)         Terminals			720 (750)/50p: fн 37.50 kHz; fv 50 Hz,
1080 (1125)/24p: fH 27.00 kHz; fv 24 Hz,         1080 (1125)/60p: fH 67.50 kHz; fv 60 Hz,         1080 (1125)/50p: fH 56.25 kHz; fv 50 Hz         1080 (1125)/50p: fH 56.25 kHz; fv 50 Hz         1080 (1125)/50p: fH 56.25 kHz; fv 50 Hz         161: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60]         161: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM]         Optical axis shift         Vertical: ±50% from center of screen (manual),         horizontal: ±27% from center of screen (manual)         horizontal: ±27% from center of screen (manual)         Norizontal: ±27% from center of			1080 (1125)/60i: fн 33.75 kHz; fv 60 Hz,
1080 (1125)/60p: fH 67.50 kHz; fv 60 Hz,         1080 (1125)/50p: fH 56.25 kHz; fv 50 Hz         1080 (1125)/50p: fH 56.25 kHz; fv 50 Hz         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         Vertical: ±50% from center of screen (manual),         horizontal: ±27% from center of screen (manual)         horizontal: ±27% from center of screen (manual)         Keystone correction range         Vertical: ±30°         Installation         Size       4 cm (1-9/16 inches) (round) × 1         Output power       5.0 W (monaural)         Terminals       HDMI IN         HDMI 19-pin × 1, Deep Color, HDCP compatible         480p (525p), 576p (625p), 720 (750)/50p,         1080 (1125)/60i, 1080 (1125)/24p, 1080 (1125)/60p,         1080 (1125)/50p			1080 (1125)/50i: fн 28.13 kHz; fv 50 Hz,
Video/S-Video1080 (1125)/50p: fH 56.25 kHz; fv 50 HzFH: 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 shiftVertical: ±50% from center of screen (manual), horizontal: ±27% from center of screen (manual)Keystone correction rangeVertical: ±30°InstallationVertical: ±30°Built-in speakerSize Output powerSize4 cm (1-9/16 inches) (round) × 1 5.0 W (monaural)TerminalsHDMI INHDMI 19-pin × 1, Deep Color, HDCP compatible 480p (525p), 576p (625p), 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p			1080 (1125)/24p: fн 27.00 kHz; fv 24 Hz,
Video/S-VideofH: 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 shiftVertical: ±50% from center of screen (manual), horizontal: ±27% from center of screen (manual)Keystone correction rangeVertical: ±30°InstallationCeiling/desk, front/rear (menu selection)Built-in speakerSize Output powerSize4 cm (1-9/16 inches) (round) × 1 5.0 W (monaural)TerminalsHDMI INHDMI 19-pin × 1, Deep Color, HDCP compatible 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p			
Optical axis shiftfH: 15.63 kHz, fV: 50 Hz [PAL/PAL-N/SECAM]Optical axis shiftVertical: ±50% from center of screen (manual), horizontal: ±27% from center of screen (manual)Keystone correction rangeVertical: ±30°InstallationCeiling/desk, front/rear (menu selection)Built-in speakerSizeOutput power5.0 W (monaural)TerminalsHDMI INHDMI 19-pin × 1, Deep Color, HDCP compatible 480p (525p), 576p (625p), 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p			1080 (1125)/50p: fн 56.25 kHz; fv 50 Hz
Optical axis shift       Vertical: ±50% from center of screen (manual), horizontal: ±27% from center of screen (manual)         Keystone correction range       Vertical: ±30°         Installation       Ceiling/desk, front/rear (menu selection)         Built-in speaker       Size       4 cm (1-9/16 inches) (round) × 1         Output power       5.0 W (monaural)         Terminals       HDMI IN       HDMI 19-pin × 1, Deep Color, HDCP compatible 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p		Video/S-Video	fh: 15.75 kHz, fv: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60]
horizontal: ±27% from center of screen (manual)Keystone correction rangeVertical: ±30°InstallationCeiling/desk, front/rear (menu selection)Built-in speakerSize4 cm (1-9/16 inches) (round) × 1Output power5.0 W (monaural)TerminalsHDMI INHDMI 19-pin × 1, Deep Color, HDCP compatible 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p			fh: 15.63 kHz, fv: 50 Hz [PAL/PAL-N/SECAM]
Keystone correction range       Vertical: ±30°         Installation       Ceiling/desk, front/rear (menu selection)         Built-in speaker       Size       4 cm (1-9/16 inches) (round) × 1         Output power       5.0 W (monaural)         Terminals       HDMI IN       HDMI 19-pin × 1, Deep Color, HDCP compatible         480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p	Optical axis shift		Vertical: ±50% from center of screen (manual),
Installation Ceiling/desk, front/rear (menu selection) Built-in speaker Size 4 cm (1-9/16 inches) (round) × 1 Output power 5.0 W (monaural) Terminals HDMI IN HDMI 19-pin × 1, Deep Color, HDCP compatible 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p			horizontal: ±27% from center of screen (manual)
Built-in speaker         Size         4 cm (1-9/16 inches) (round) × 1           Output power         5.0 W (monaural)           Terminals         HDMI IN           HDMI IN         HDMI 19-pin × 1, Deep Color, HDCP compatible 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p	Keystone correction rang	e	
Output power         5.0 W (monaural)           Terminals         HDMI IN           HDMI IN         HDMI 19-pin × 1, Deep Color, HDCP compatible           480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p,           1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/24p, 1080 (1125)/60p,           1080 (1125)/50p	Installation		
Terminals         HDMI IN         HDMI 19-pin × 1, Deep Color, HDCP compatible           480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p,         1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/24p, 1080 (1125)/60p,           1080 (1125)/50p         1080 (1125)/50p	Built-in speaker	Size	4 cm (1-9/16 inches) (round) × 1
480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p		Output power	
1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p	Terminals	HDMI IN	
1080 (1125)/50p			
VGA (640 $\times$ 480) – WSXGA+ (1,680 $\times$ 1,050), compatible with non-			
interlaced signals only, dot clock: 25.2 MHz-146.25 MHz			
Audio signal: linear PCM (sampling frequencies: 48 kHz, 44.1 kHz,			
32 kHz)			32 KHZ)

#### **S P E C** FILE

LCD Projector

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	DVI-I IN*3	DVI-I 29-pin × 1
	Digital	DVI 1.0 compliant, compatible with HDCP, compatible with single link only
		480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p
		VGA (640 $\times$ 480)–WSXGA+ (1,680 $\times$ 1,050), compatible with non- interlaced signals only, dot clock: 25.2 MHz–146.25 MHz
	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) NOTE: SYNC/HD and VD terminals do not accept tri-level sync signals.
	Y, Pв (Cв), Pr (Cr)	Y: 1.0 Vp-p (including sync signal); Рв (Св), Рг (Сг): 0.7 Vp-p, 75 ohms
	COMPUTER (RGB) IN	D-sub HD 15-pin (female) $\times$ 1
	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) NOTE: SYNC/HD and VD terminals do not accept tri-level sync signals.
	Y, Pв (Cв), Pr (Cr)	Y: 1.0 Vp-p (including sync signal); Рв (Св), Рг (Сг): 0.7 Vp-p, 75 ohms
	VIDEO IN	RCA pin × 1, 1.0 Vp-p, 75 ohms
	S-VIDEO IN	Mini DIN 4-pin × 1, Y: 1.0 Vp-p; C: 0.286 Vp-p, 75 ohms
	AUDIO IN 1	M3 × 1 (L, R × 1), input impedance: 22 kilohms or more
	AUDIO IN 2 AUDIO IN 3	M3 $\times$ 1 (L, R $\times$ 1), 0.5 Vrms, input impedance: 22 kilohms or more RCA $\times$ 2 (L, R $\times$ 1), 0.5 Vrms, input impedance: 22 kilohms or more
	AUDIO OUT	$M3 \times 1$ (L, R × 1) (monitor out: 0–2.0 Vrms, variable)
	SERIAL IN	D-sub 9-pin × 1, for external control (parallel)
	LAN	RJ-45 $\times$ 1, for network connection, 100Base-TX/10Base-T, compliant with PJLink <sup>TM</sup>
Power cord length	WIRELESS MODULE	Connector for optional wireless module ET-WM200U/WM200E $\times$ 1 2.0 m (6 ft 7 in)
Cabinet materials		Molded plastic (PC + ABS)
Dimensions (W $\times$ H $\times$ D)		430 mm × 125.5 mm*4 × 323 mm (16-15/16 × 4-15/16*4 × 12-23/32 inches) (including the lens)
Weight		Approximately 6.0 kg (13.2 lbs)
Operation noise		33 dB (lamp mode: NORMAL), 29 dB (lamp mode: ECO)
Operating temperature		0°-40°C (32°-104°F)*5
Operating humidity		20%-80% (no condensation)
Remote control unit		
Power supply		3 V DC (R6/LR6/AA type battery $\times$ 2)
Operation range*6		Approximately 15 m (49 ft 3 in) when operated from directly in front of the signal receptor
Dimensions (W $\times$ H $\times$ D)		48 × 163 × 24.5 mm (1-13/32" × 6-5/8" × 31/32")
Weight		Approx. 117 g (4.1 oz) (including batteries)
Supplied accessories		
		Power cord with security lock (× 1) Wireless remote control unit (× 1)
		Batteries for remote control (AA/R6/LR6 type × 2)
		Software CD-ROM (Logo Transfer Software, Multi Projector Monitoring
		and Control Software Ver. 2.5, Wireless Manager ME 5.5) (× 1)

### Panasonic

#### FILE **S** P E C

#### LCD Projector

Wireless Manager ME 5	5.5 system requirements	To use network fu given below. Microsoft®	unctions, a PC is required that meets the conditions
	OS	Windows <sup>®</sup> XP:	Professional 32-bit, Home Edition 32-bit, Tablet PC Edition 2005 32-bit : Ultimate 32-bit/64-bit, Business 32-bit/64-bit, Home Premium 32-bit/64-bit, Home Basic 32-bit/64-bit
		Windows <sup>®</sup> 7:	Ultimate 32-bit/64-bit, Professional 32-bit/64-bit, Home Premium 32-bit/64-bit
		Apple Mac OS X*	<sup>7</sup> : v10.4, v10.5, v10.6
	Web browser	Windows®:	Internet Explorer 6.0/7.0/8.0
		Mac OS:	Safari 2.0/3.0/4.0
	CPU	Windows®:	1 GHz or higher Intel® Pentium® III or higher, or other compatible processor
		Mac OS X:	1 GHz or higher PowerPC G4, or 1.8 GHz or higher Intel <sup>®</sup> Core™ processor
	Memory	256 MB or more	(512 MB or higher is recommended for Mac OS X)
	Free hard disk space	60 MB or more	
	CD-ROM drive	CD-ROM drive or	DVD drive (required for installation)
	Wireless LAN	The optional ET-V	VM200 is required.
		IEEE 802.11b/g/n	compatible (built-in wireless LAN system or external
		NOTE: Wireless conno LAN systems. For IEEE 802.1	LAN card must be installed and running normally.) ection may not be possible with some IEEE 802.11b/g/n wireless Macintosh computers must have a built-in wireless LAN adapter. In connection, use a wireless LAN adapter, projector and access IEEE 802.11n compatible, and connect with Infrastructure mode.
	Wired LAN connector	RJ-45	
Optional accessories			
Replacement lamp unit		ET-LAF100A	
Replacement filter unit		ET-EMF100	
Ceiling mount bracket		ET-PKF110H (for	high ceilings)
		ET-PKF110S (for	low ceilings)
Wireless module		ET-WM200U (for	North America)

ET-WM200E (for Europe and Asia)

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

\*1 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.
\*2 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.
\*3 The DVI-I IN terminal also accepts analog signals.

\*4 With legs at shortest position.

\*5 Operation range differs depending on environments.

The operating temperature range is 0°C-35°C (32°F-95°F) when used in High-Altitude mode (1,400 m (4,593 ft) to 2,700 m (8,858 ft)).

As of March 2011



PT-FX400

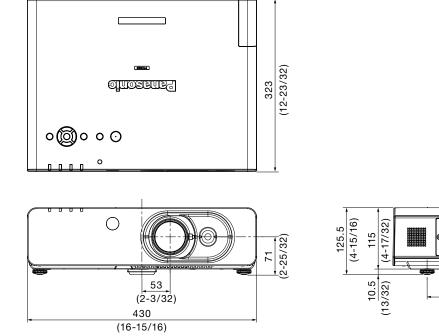
#### SPEC FILE

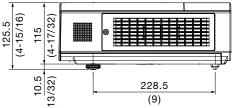
#### LCD Projector

#### Dimensions

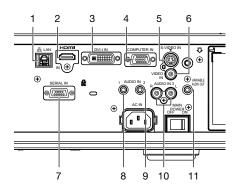
unit : mm (inch) NOTE: This illustration is not drawn to scale.

PT-FX400





#### Terminals

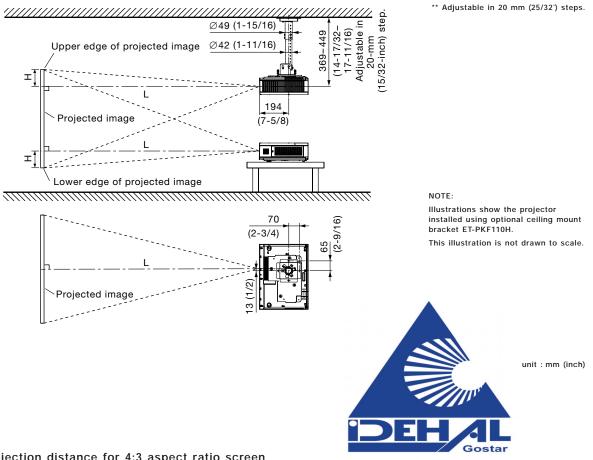


- 1 LAN connector
- 2 HDMI input
- 3 DVI-I input
- 4 Computer input
- 5 S-Video input
- 6 Video input
- 7 Serial input
- 8 Audio input 1
- 9 Audio input 2
- 10 Audio input 3
- 11 Audio output

## PT-FX400

unit: meters (feet)

#### Standard setting-up position



#### Projection distance for 4:3 aspect ratio screen

Projection size		Projection	distance [L]		Height from the edg	je of screen
[diagonal]	Min [	wide]	Max [tel	ephoto]	to center of le	ns [H]
0.84 m / 33″	-	(-)	1.9	(6.4)	0 - 0.50	(0 - 1.7)
1.02 m / 40"	1.2	(3.8)	2.4	(7.8)	0 - 0.61	(0 - 2.0)
1.27 m / 50″	1.5	(4.8)	3.0	(9.7)	0 - 0.76	(0 - 2.5)
1.52 m / 60″	1.8	(5.8)	3.6	(11.7)	0 - 0.91	(0 - 3.0)
1.78 m / 70″	2.1	(6.8)	4.2	(13.7)	0 - 1.07	(0 - 3.5)
2.03 m / 80″	2.4	(7.8)	4.8	(15.7)	0 - 1.22	(0 - 4.0)
2.29 m / 90″	2.7	(8.9)	5.4	(17.7)	0 - 1.37	(0 - 4.5)
2.54 m / 100"	3.0	(9.9)	6.0	(19.7)	0 - 1.52	(0 - 5.0)
3.05 m / 120"	3.6	(11.9)	7.2	(23.6)	0 - 1.83	(0 - 6.0)
3.81 m / 150″	4.5	(14.9)	9.0	(29.6)	0 - 2.29	(0 - 7.5)
5.08 m / 200″	6.1	(19.9)	12.0	(39.5)	0 - 3.05	(0 - 10.0)
6.35 m / 250″	7.6	(24.9)	15.1	(49.4)	0 - 3.81	(0 - 12.5)
7.62 m / 300"	9.1	(29.9)	18.1	(59.3)	0 - 4.57	(0 - 15.0)

#### NOTE:

• The value for H (the height from the edge of the screen to the centre of the lens) is the value when the horizontal optical axis shift function is not used. The value decreases when the horizontal optical axis shift function is used. For details, see Shift range on page 7.

· 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.

• When vertical keystone correction is used, the image is corrected in the direction that reduces its projected size.

· The brightness varies depending on the zoom setting.

#### SPEC FILE

#### LCD Projector

#### Calculation of the projection distance

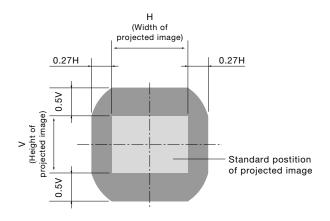
For a screen size different from the above, use the equation below to calculate the projection distance.

NOTE:

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

#### Shift range

Optical axis shift function allows to shift the position of a projected image as shown below.



#### Installable angle

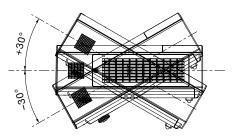
Install the projector at an angle within the range shown below.

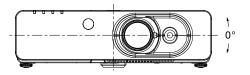
#### • Vertical direction

The projector may be installed at a vertical angle of  $30^\circ$ .

#### · Horizontal direction

The projector may not be angled horizontally.





### PT-FX400

#### List of compatible signals

The signals that can be input to this projector are shown in the table below. Horizontal scanning frequencies of 15.6 kHz to 91.1 kHz, vertical scanning frequencies of 24.0 Hz to 85.1 Hz, and a dot clock of 162 MHz maximum can be input.

NOTE: The native resolution of this projector is 1,024 × 768 pixels. If the display resolution of the input signal is different from the native resolution, image compression or expansion will be used to convert the input signal to a level within the native resolution.

Display mode	Display resolution		lg frequency	Dot clock frequency	Format			mpatibilit	
	(dots)*1	H (kHz)	v (kHz)	(MHz)		HDMI input	DVI-D i EDID1	nput EDID2	Computer/ DVI-I (analog
NTSC/NTSC4.43/	720 × 480i	15.7	59.9	-	VIDEO/S-VIDEO	No	No	No	No
PAL-M/PAL60	700 570	15.0	50.0						
PAL/PAL-N/SECAM 480i (525i)	720 × 576i 720 × 480i	15.6 15.7	50.0 59.9	12 5	COMPUTER/YPBPR	_			
576i (625i)	720 × 4801 720 × 576i	15.7	59.9	13.5	COMPOTER/TEBER				
480p (525p)	720 × 5781 720 × 483	31.5	59.9	27.0	HDMI/DVI/COMPUTER/YPBPR	Yes	Yes	_	
576p (625p)	720 × 483 720 × 576	31.3	50.0	27.0		165	165		
720 (750)/60p	1,280 × 720	45.0	60.0	74.3					
720 (750)/50p	1,280 × 720	37.5	50.0	74.3	-				
1080 (1125)/60i	1,920 × 1,080i	33.8	60.0	74.3	-				
1080 (1125)/50i		28.1	50.0	74.3					
1080 (1125)/24p	1,920 × 1,080	27.0	24.0	74.3					
1080 (1125)/60p	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	67.5	60.0	148.5					
1080 (1125)/50p		56.3	50.0	148.5					
1920 × 1080		66.6	59.9	138.5	COMPUTER	No	No	_	
		55.6	49.9	141.5					
VESA	640 × 400	31.5	70.1	25.2					
		37.9	85.1	31.5	-				
VGA	640 × 480	31.5	59.9	25.2	HDMI/DVI/COMPUTER	Yes	_	Yes	Yes
		35.0	66.7	30.2	COMPUTER	No		No	
		37.9	72.8	31.5					
		37.5	75.0	31.5	-				
		43.3	85.0	36.0					No
SVGA	$800 \times 600$	35.2	56.3	36.0			_		Yes
		37.9	60.3	40.0	HDMI/DVI/COMPUTER	Yes	_	Yes	_
		48.1	72.2	50.0	COMPUTER	No		No	
		46.9	75.0	49.5					
		53.7	85.1	56.3					No
MAC	832 × 624	49.7	74.6	57.3		_			Yes
XGA	1,024 × 768	39.6	50.1	51.9	HDMI/DVI/COMPUTER				No
		48.4	60.0	65.0	-	Yes		Yes	Yes
		56.5	70.1	75.0					
		60.0	75.0	78.8		Ne		Na	Ne
WIDE750 (720)	1,280 × 720	68.7 44.8	85.0	94.5	COMPLITER	No		No	No
WIDE/30 (720)	1,200 × 720	37.1	59.9 49.8	74.5	COMPUTER				Yes No
WXGA768	1,280 × 768	39.6	49.0	65.3	HDMI/DVI/COMPUTER				NU
WAGATOO	1,200 × 700	47.8	59.9	79.5		Yes	_	Yes	Yes
WXGA800	1,280 × 800	41.3	50.0	68.0		No	_	No	No
in Adribuou	1,200 × 000	49.1	60.2	69.1	COMPUTER	_ 10		110	110
		49.7	59.8	83.5	HDMI/DVI/COMPUTER	Yes	_	Yes	Yes
MXGA	1,152 × 864	64.0	71.2	94.2	COMPUTER	No	_	No	
	.,	67.5	74.9	108.0					No
		76.7	85.0	121.5	-				
MAC	1,152 × 870	68.7	75.1	100.0	-				Yes
MSXGA	1,280 × 960	60.0	60.0	108.0					
SXGA	1,280 × 1,024	64.0	60.0	108.0	HDMI/DVI/COMPUTER	Yes		Yes	No
		80.0	75.0	135.0	COMPUTER	No		No	Yes
		91.1	85.0	157.5					No
SXGA60+	1,400 × 1,050	64.0	60.0	108.0	- 		_		
		65.1	59.9	122.4	HDMI/DVI/COMPUTER	Yes	_	Yes	Yes
WXGA+	$1,440 \times 900$	55.9	59.9	106.5	COMPUTER	No		No	
UXGA	$1,600 \times 1,200$	75.0	60.0	162.0					
WSXGA+	$1,680 \times 1,050$	65.3	60.0	146.3					
WUXGA	1,920 × 1,200	74.6	59.9	154.0					No

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

#### 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

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

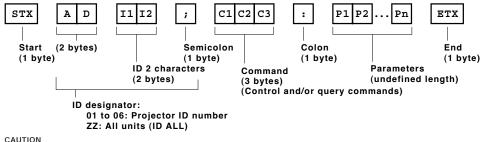
Serial input

#### Communication conditions (factory setting)

Signal level	RS-232C-compliant
Synchronization method	Start-stop synchronization
Baud rate	9,600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
X parameter	None
S parameter	None

#### 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.



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.

· When using two or more units, set different IDs for each unit.

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#### Cable specifications

Projector		PC (DTE)
1	NC N	C 1
2		2
3		3
4	NC N	C 4
5		5
6	NC N	<b>c</b> 6
7		- 7
8		- 8
9	NC N	<b>c</b> 9

#### Control commands

Command: <parameter></parameter>	Function	Callback: <parameter></parameter>	Parameter value	
			Min	Max
<b>PON</b> *1	Power on (standby mode on)	<b>PON</b> *1	-	-
POF*1	Power off (standby mode off)	POF <sup>*1</sup>	-	-
AVL: <pl></pl>	Volume control	AVL: <pl></pl>	0	63
IIS: <input signal=""/>	Input signal selection	IIS: <input signal=""/>	-	-
OST	The same function as "default" button	OST	-	-
OFZ: <off on=""></off>	Freeze	OFZ: <off on=""></off>	0	1
OEN	Enter	OEN	-	-
OXG: 0	Wide mode: Off	OXG: 0	-	-
OXG: 1	Wide mode: On	OXG: 1	-	-
OXG: 2	Wide mode: Auto	OXG: 2	-	-
VPM: <nat></nat>	Picture mode: Natural	VPM: <nat></nat>	-	-
VPM: <std></std>	Picture mode: Standard	VPM: <std></std>	-	-
VPM: <cin></cin>	Picture mode: Cinema	VPM: <cin></cin>	-	-
VPM: <dyn></dyn>	Picture mode: Dynamic	Picture mode: Dynamic VPM: <dyn></dyn>		-
VPM: <bbd></bbd>	Picture mode: Blackboard	VPM: <bbd></bbd>	-	-
VPM: <wbd></wbd>	Picture mode: Whiteboard	VPM: <wbd></wbd>	-	-
VXX:DLVI0=<+00000>	Daylight View: Off	VXX:DLVI0=<+00000>	-	-
VXX:DLVI0=<+00001>	Daylight View: Auto	VXX:DLVI0=<+00001>	-	-
VXX:DLVI0=<+00002>	Daylight View: On	VXX:DLVI0=<+00002>	-	-
AUU	Volume up	AUU	-	-
AUD	Volume down	AUD	-	-
OMN	Menu	OMN	-	-
OCU	Cursor up	OCU	-	-
OCD	Cursor down	OCD	-	-
OCL	Cursor left	OCL	-	-
OCR	Cursor right	OCR	-	-
OAS	Auto setup	OAS	-	-
<b>OSH</b> *1/*2	AV mute	<b>OSH</b> *1/*2	-	-
OIX	Index window	OIX	-	-
DZU	Digital zoom: Enlargement	DZU	-	-
DZD	Digital zoom: Reduction	DZD	-	_
TSD: <date></date>	Date setting	TSD: <date></date>	-	-
TST: <time></time>	Time setting	TST: <time></time>	_	_

\*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. \*2 When a command that cannot be executed during standby mode is sent, the projector will send an ER401 command in reply.

# PT-FX400

#### Status request commands

Command	Description	Callback
		<parameter></parameter>
QPW	Standby power status	<power condition=""></power>
Q\$S	Lamp status	<lamp condition=""></lamp>
QIN	Input signal status	<input signal=""/>
QAV	Volume adjustment value	<pl></pl>
QVC	Color adjustment value	<pl></pl>
QVT	Tint adjustent value	<pl></pl>
QVB	Brightness adjustment value	<pl></pl>
QVR	Contrast adjustment value	<pl></pl>
QVS	Sharpness adjustment value	<pl></pl>
QHP	Horizontal position adjustment value	<pl></pl>
QVP	Vertical position adjustment value	<pl></pl>
QCP	Clock phase adjustment value	<pl></pl>
QDC	Dot clock adjustment value	<pl></pl>
QSP	Projection method status	<pl></pl>
QLG	On-screen menu language	<pl></pl>
QXG	Wide mode status	<0>
		<1>
		<2>
QVX:DLVI0	Daylight View status Off	< + 0 0 0 0 0 >
	On	<+00001>
	Auto	< + 0 0 0 0 2 >
QPM	Picture mode status Off	< NAT >
	Auto	<std></std>
	On	<cin></cin>
	Natural	<dyn></dyn>
	Standard	<bbd></bbd>
	Cinema	<wbd></wbd>
QFZ	Freeze status Dynamic	<off on=""></off>
Q\$L	Lamp run time Blackboard	
QSH	AV mute function status/Whiteboard	<off on=""></off>
QKS	Keystone correction status	<pl><pl></pl></pl>
QTE	Color temperature adjustment status	<pre><color temp=""></color></pre>
2 QGD	Date setting status	<date></date>
QGT	Time setting status	<time></time>

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

#### Parameter format

Parameter format	Size (Byte)	Definition
<pl></pl>	3 (1 or 2 bytes also	Decimal without signs: 0-999 (000, 001, 002999)
	possible when	Decimal with signs: -99 to +99 (-9901, +00, +01, +02+99)
	under control)	Callback from the projector is 3 Byte.
<off on=""></off>	1	0 = off, 1 = on
<input signal=""/>	3	HD1 = HDMI, DVI = DVI-I, RG1 = computer,
		NWP = network, VID = video, SVD = S-Video
<power condition=""></power>	3	000 = power off (standby mode off), 001 = power on (standby mode on)
<lamp condition=""></lamp>	1	0 = standby, 1 = lamp on under control, 2 = lamp off,
		3 = lamp off under control
<acctch></acctch>	4	Dicimal without signs: 0000-9999 hours
<color temp=""></color>	1	0 = low, 1 = default, 2 = high
<date></date>	8	y1y2y3y4m1m2d1d2w = year (y) month (m) day (d) day of week (w)
		Day of week: Monday = 1, Tuesday = 2, Sunday = 7
<time></time>	6	h1h2m1m2s1s2 = hour (h) minute (m) second (s)

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

#### Command example

To set the volume to +30, send the command as shown below.

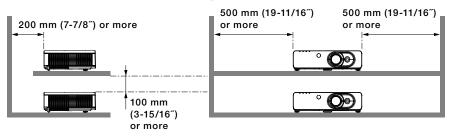
omman		arameter F	nd
	command	command Pa	command Parameter E

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

#### Notes on projector placement and operation

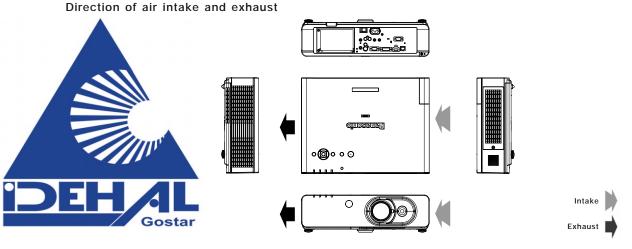
The projector uses a high-wattage lamp that becomes very hot during operation. Please observe the following precautions.

- 1. Never place objects on top of the projector while it is operating.
- 2. Make sure there is an unobstructed space of 500 mm (19-11/16<sup>°</sup>) 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, filter and other parts.
- 3. 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.
- 3. If the projector is installed in an enclosed space, 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.





Do not stack projector units directly on top of one another.



#### Operating the projector continuously

- 1. If the projector is to be operated continuously 10 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 March 2011
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