Panasonic ideas for life

SPEC FILE



Product Number : PT-**FX400**

Product Name : LCD Projector

Specifications

Main unit

Power supply		100–240 V AC, 3.9–1.4 A, 50/60 Hz
Power consumption		330 W (0.3 W at 100–120 V AC, 0.4 W at 220–240 V AC when standby mode set to eco,*1 9 W 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)
	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 lamp
Screen size		0.84–7.62 m (33–300 inches) diagonally, 4:3 aspect ratio
Colors		Full color (16,777,216 colors)
Brightness*2		4,000 lumens
Center-to-corner uniformity*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)	f_H: 27.0 kHz–68.7 kHz, f_V: 24.0 Hz–85.0 Hz, dot clock: 25.2 MHz–148.5 MHz
	DVI-I (analog)/RGB	f_H: 15.6 kHz–91.1 kHz, f_V: 24.0 Hz–85.1 Hz, dot clock: 162 MHz or lower
	Y_PB_PR (YC_BC_R)	480i (525i): f_H 15.75 kHz; f_V 60 Hz, 576i (625i): f_H 15.63 kHz; f_V 50 Hz, 480p (525p): f_H 31.50 kHz; f_V 60 Hz, 576p (625p): f_H 31.25 kHz; f_V 50 Hz, 720 (750)/60p: f_H 45.00 kHz; f_V 60 Hz, 720 (750)/50p: f_H 37.50 kHz; f_V 50 Hz, 1080 (1125)/60i: f_H 33.75 kHz; f_V 60 Hz, 1080 (1125)/50i: f_H 28.13 kHz; f_V 50 Hz, 1080 (1125)/24p: f_H 27.00 kHz; f_V 24 Hz, 1080 (1125)/60p: f_H 67.50 kHz; f_V 60 Hz, 1080 (1125)/50p: f_H 56.25 kHz; f_V 50 Hz
	Video/S-Video	f_H: 15.75 kHz, f_V: 60 Hz [NTSC/NTSC4.43/PAL-M/PAL60] f_H: 15.63 kHz, f_V: 50 Hz [PAL/PAL-N/SECAM]
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)/50i, 1080 (1125)/24p, 1080 (1125)/60p, 1080 (1125)/50p VGA (640 × 480)–WSXGA+ (1,680 × 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)

	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 × 480) – WSXGA+ (1,680 × 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, P_B (C_B), P_R (C_R)	Y: 1.0 Vp-p (including sync signal); P_B (C_B), P_R (C_R): 0.7 Vp-p, 75 ohms
	COMPUTER (RGB) IN	D-sub HD 15-pin (female) × 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, P_B (C_B), P_R (C_R)	Y: 1.0 Vp-p (including sync signal); P_B (C_B), P_R (C_R): 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	M3 × 1 (L, R × 1), 0.5 Vrms, input impedance: 22 kilohms or more
	AUDIO IN 3	RCA × 2 (L, R × 1), 0.5 Vrms, input impedance: 22 kilohms or more
	AUDIO OUT	M3 × 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 × 1, for network connection, 100Base-TX/10Base-T, compliant with PJLink™
	WIRELESS MODULE	Connector for optional wireless module ET-WM200U/WM200E × 1
Power cord length		2.0 m (6 ft 7 in)
Cabinet materials		Molded plastic (PC + ABS)
Dimensions (W × H × 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 × 2)
Operation range*6	Approximately 15 m (49 ft 3 in) when operated from directly in front of the signal receptor
Dimensions (W × H × 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)

Wireless Manager ME 5.5 system requirements

To use network functions, a PC is required that meets the conditions given below.

	Microsoft®	
OS	Windows® XP:	Professional 32-bit, Home Edition 32-bit, Tablet PC Edition 2005 32-bit
	Windows Vista®:	Ultimate 32-bit/64-bit, Business 32-bit/64-bit, Home Premium 32-bit/64-bit, Home Basic 32-bit/64-bit
	Windows® 7:	Ultimate 32-bit/64-bit, Professional 32-bit/64-bit, Home Premium 32-bit/64-bit
	Apple Mac OS X*7:	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® 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-WM200 is required. IEEE 802.11b/g/n compatible (built-in wireless LAN system or external IEEE 802.11b/g/n LAN card must be installed and running normally.) **NOTE: Wireless connection may not be possible with some IEEE 802.11b/g/n wireless LAN systems. Macintosh computers must have a built-in wireless LAN adapter. For IEEE 802.11n connection, use a wireless LAN adapter, projector and access point that are 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.**

***6 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)).**

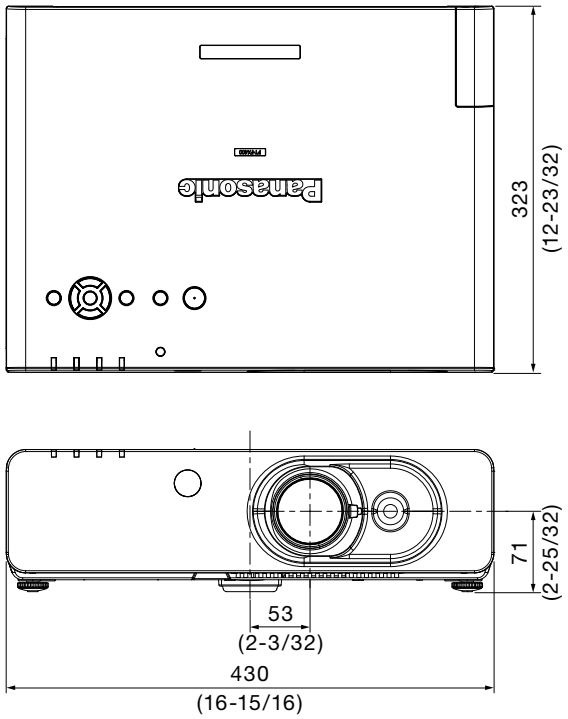
***7 The operation system must be pre-installed at the factory or clean installed.**

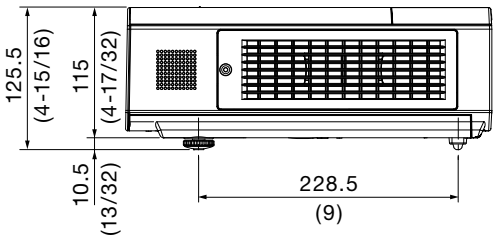
LCD Projector

PT-**FX400**

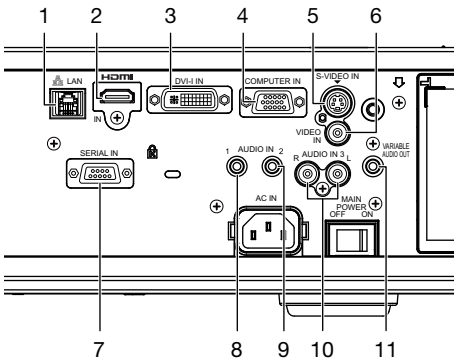
Dimensions

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



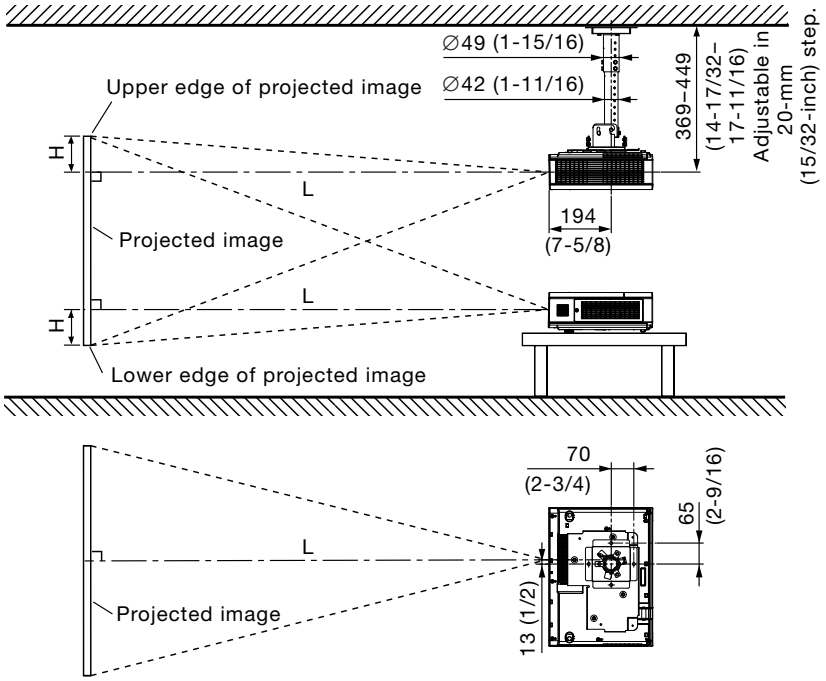


Terminals



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

Standard setting-up position



**** Adjustable in 20 mm (25/32˝) steps.**

NOTE:

Illustrations show the projector installed using optional ceiling mount bracket ET-PKF110H.

This illustration is not drawn to scale.

unit : mm (inch)

Projection distance for 4:3 aspect ratio screen

unit: meters (feet)

Projection size [diagonal]	Projection distance [L] Min [wide]		Max [telephoto]		Height from the edge of screen to center of lens [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.**

Calculation of the projection distance

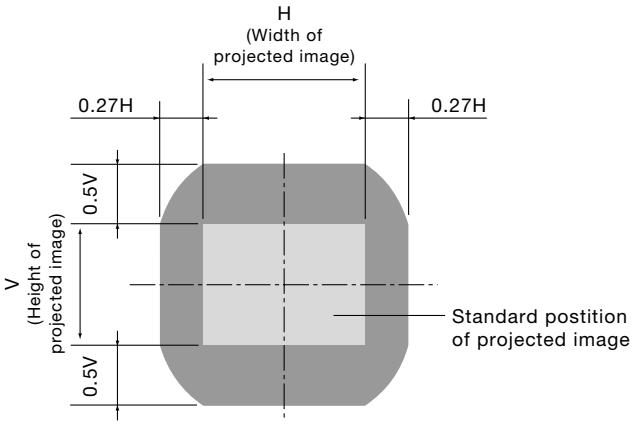
For a screen size different from the above, use the equation below to calculate the projection distance.

Aspect ratio 4:3
minimum L (m) = (diagonal screen size in inches) × 0.0305 – 0.049
maximum L (m) = (diagonal screen size in inches) × 0.0604 – 0.050

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.

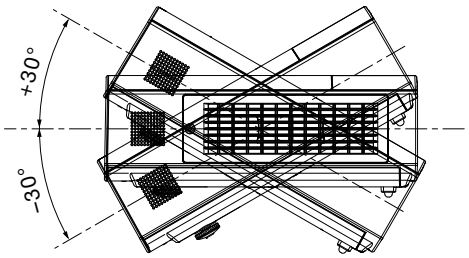


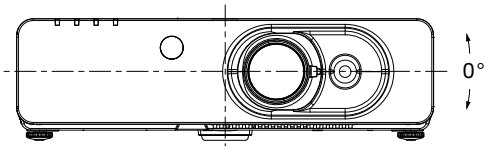
Installable angle

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

• Vertical direction
The projector may be installed at a vertical angle of 30°.

• Horizontal direction
The projector may not be angled horizontally.





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.

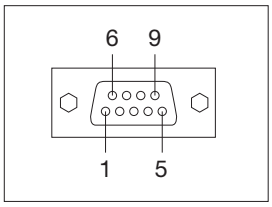
Display mode	Display resolution (dots)*1	Scanning frequency H (kHz)	Scanning frequency V (kHz)	Dot clock frequency (MHz)	Format	Plug and Play compatibility HDMI input	DVI-D input EDID1	DVI-D input EDID2	Computer/ DVI-I (analog)
NTSC/NTSC4.43/ PAL-M/PAL60	720 × 480i	15.7	59.9	–	VIDEO/S-VIDEO	No	No	No	No
PAL/PAL-N/SECAM	720 × 576i	15.6	50.0	–					
480i (525i)	720 × 480i	15.7	59.9	13.5	COMPUTER/YP_BP_R				
576i (625i)	720 × 576i	15.6	50.0	13.5					
480p (525p)	720 × 483	31.5	59.9	27.0	HDMI/DVI/COMPUTER/YP_BP_R	Yes	Yes		
576p (625p)	720 × 576	31.3	50.0	27.0					
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 × 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					
		68.7	85.0	94.5		No		No	No
WIDE750 (720)	1,280 × 720	44.8	59.9	74.5	COMPUTER				Yes
		37.1	49.8	60.5					No
WXGA768	1,280 × 768	39.6	49.9	65.3	HDMI/DVI/COMPUTER				
		47.8	59.9	79.5		Yes		Yes	Yes
WXGA800	1,280 × 800	41.3	50.0	68.0		No		No	No
		49.1	60.2	69.1	COMPUTER				
		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 × 900	55.9	59.9	106.5	COMPUTER	No		No	
UXGA	1,600 × 1,200	75.0	60.0	162.0					
WSXGA+	1,680 × 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



D-sub 9-pin (female)
Serial input

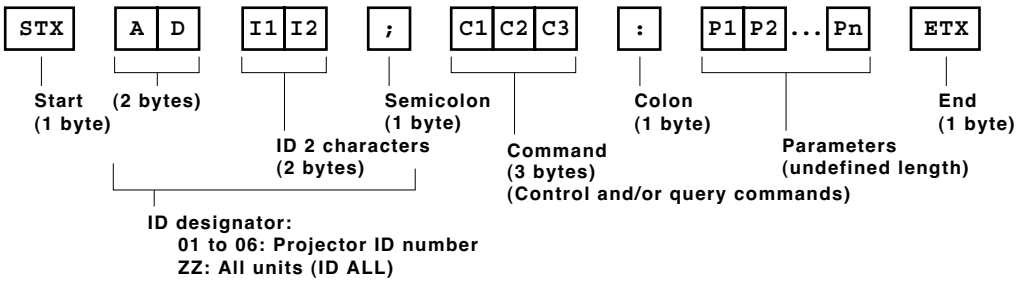
No.	Signal name	Description	No.	Signal name	Description
1	–	NC	6	–	Connected internally
2	TXD	Send data	7	RTS	Connected internally
3	RXD	Receive data	8	CTS	Connected internally
4	–	NC	9	–	NC
5	GND	Ground			

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

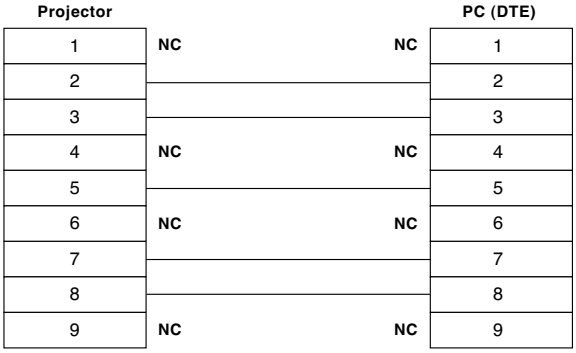
Transmission from the computer begins with STX, then the ID, command, parameter, and ETX are sent in this order. Add parameters according to the details of control.



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.**

Cable specifications



Control commands

Command: <Parameter>	Function	Callback: <Parameter>	Parameter value Min	Max
PON*1	Power on (standby mode on)	PON*1	–	–
POF*1	Power off (standby mode off)	POF*1	–	–
AVL:<pl>	Volume control	AVL:<pl>	0	63
IIS:<input signal>	Input signal selection	IIS:<input signal>	–	–
OST	The same function as “default” button	OST	–	–
OFZ:<off on>	Freeze	OFZ:<off on>	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>	Picture mode: Natural	VPM:<NAT>	–	–
VPM:<STD>	Picture mode: Standard	VPM:<STD>	–	–
VPM:<CIN>	Picture mode: Cinema	VPM:<CIN>	–	–
VPM:<DYN>	Picture mode: Dynamic	VPM:<DYN>	–	–
VPM:<BBD>	Picture mode: Blackboard	VPM:<BBD>	–	–
VPM:<WBD>	Picture mode: Whiteboard	VPM:<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	–	–
OSH*1/*2	AV mute	OSH*1/*2	–	–
OIX	Index window	OIX	–	–
DZU	Digital zoom: Enlargement	DZU	–	–
DZD	Digital zoom: Reduction	DZD	–	–
TSD:<date>	Date setting	TSD:<date>	–	–
TST:<time>	Time setting	TST:<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.**

Status request commands

Command	Description		Callback <Parameter>
QPW	Standby power status		<power condition>
Q$S	Lamp status		<lamp condition>
QIN	Input signal status		<input signal>
QAV	Volume adjustment value		<pl>
QVC	Color adjustment value		<pl>
QVT	Tint adjustent value		<pl>
QVB	Brightness adjustment value		<pl>
QVR	Contrast adjustment value		<pl>
QVS	Sharpness adjustment value		<pl>
QHP	Horizontal position adjustment value		<pl>
QVP	Vertical position adjustment value		<pl>
QCP	Clock phase adjustment value		<pl>
QDC	Dot clock adjustment value		<pl>
QSP	Projection method status		<pl>
QLG	On-screen menu language		<pl>
QXG	Wide mode status		<0>
			<1>
			<2>
QVX:DLVI0	Daylight View status	Off	<+00000>
		On	<+00001>
		Auto	<+00002>
QPM	Picture mode status	Off	<NAT>
		Auto	<STD>
		On	<CIN>
		Natural	<DYN>
		Standard	<BBD>
		Cinema	<WBD>
QFZ	Freeze status	Dynamic	<off_on>
Q$L	Lamp run time	Blackboard	<acctch>
QSH	AV mute function status	Whiteboard	<off_on>
QKS	Keystone correction status		<pl>
QTE	Color temperature adjustment status		<color temp>
QGD	Date setting status		<date>
QGT	Time setting status		<time>

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

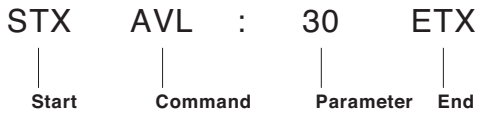
Parameter format

Parameter format	Size (Byte)	Definition
<pl>	3 (1 or 2 bytes also possible when under control)	Decimal without signs: 0–999 (000, 001, 002...999) Decimal with signs: -99 to +99 (-99...-01, +00, +01, +02...+99) Callback from the projector is 3 Byte.
<off on>	1	0 = off, 1 = on
<input signal>	3	HD1 = HDMI, DVI = DVI-I, RG1 = computer, NWP = network, VID = video, SVD = S-Video
<power condition>	3	000 = power off (standby mode off), 001 = power on (standby mode on)
<lamp condition>	1	0 = standby, 1 = lamp on under control, 2 = lamp off, 3 = lamp off under control
<acctch>	4	Dicimal without signs: 0000-9999 hours
<color temp>	1	0 = low, 1 = default, 2 = high
<date>	8	y1y2y3y4m1m2d1d2w = year (y) month (m) day (d) day of week (w) Day of week: Monday = 1, Tuesday = 2, ... Sunday = 7
<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.

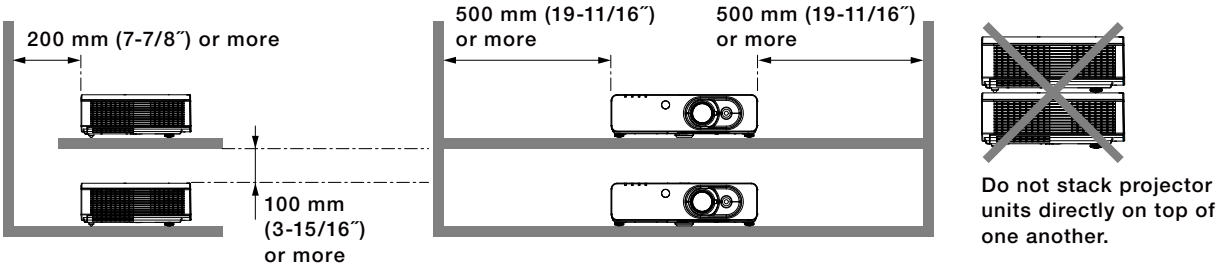


NOTE: When sending commands without parameters, a colon (:) is not necessary.

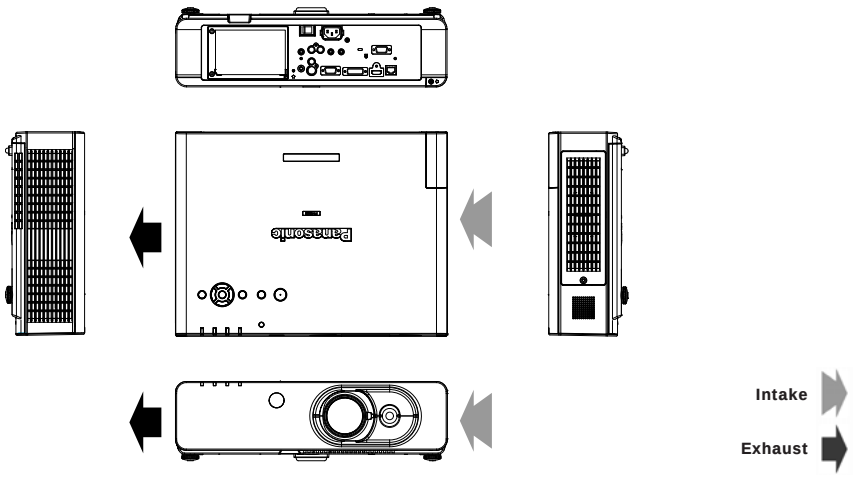
Notes on projector placement and operation

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″) 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.



Direction of air intake and exhaust



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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