Temperature indicator <TEMP>

Indicator status	Lighting in red	Blinking in red (2 times)	Blinking in red (3 times)
Status	Internal temperature is high (warning).	Internal temperature is high (standby status).	The internal cooling fan is not running.
Cause	• Is the air intake/exhaust port blocked? • Is the room temperature high? • Is [HIGH ALTITUDE MODE] set correctly?		—
Solution	• Remove any objects that are blocking the air intake/exhaust port. • Install the projector in a location with the operating environment temperature between 0 °C (32 °F) and 40 °C (104 °F)*1. • Make sure to set the [HIGH ALTITUDE MODE] to [HIGH1] when using the projector at altitudes between 1 000 m (3 281') and 2 000 m (6 562') above sea level, and set the [HIGH ALTITUDE MODE] (➡ page 70) to [HIGH2] when using the projector at altitude between 2 000 m (6 562') and 2 700 m (8 858'). • Do not use the projector at high altitudes of 2 700 m (8 858') or higher above sea level.		• Turn off the power supply of the interior wiring or disconnect the plug of the power cord from the outlet, and then consult your dealer.

*1   The operating environment temperature should be between 0 °C (32 °F) and 35 °C (95 °F) when using the projector at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level.

Note

• If the temperature indicator <TEMP> is still lighting or blinking after taking above measures, ask your dealer for repair.
• When using the projector at elevations lower than 1 000 m (3 281') above sea level, and the operating environment temperature becomes 35 °C (95 °F) or higher, the light output may be reduced to protect the projector. When using the projector at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level, and the operating environment temperature becomes 30 °C (86 °F) or higher, the light output may be reduced to protect the projector.

Inspection and maintenance

Before maintaining the projector

Attention

- Make sure to turn off the power before maintaining the projector. (➡ pages 40, 44)
- When switching off the projector, make sure to follow the procedures in "Turning off the projector" (➡ page 44).

WARNING
Be sure to turn off the power of the track system before maintaining the projector. Electric shocks can result.

Maintenance

Outer case

Wipe off dirt and dust with a soft, dry cloth.
- If the dirt is persistent, soak the cloth with water and wring it thoroughly before wiping. Dry off the projector with a dry cloth.
- Do not use benzene, thinner, or rubbing alcohol, other solvents, or household cleaners. Doing so may deteriorate the outer case.
- When using chemically treated dust cloths, follow the instructions written on its packaging.

Projection lens

Wipe off dirt and dust from the front surface of the lens with a soft clean cloth.
- Do not use a cloth that is fluffy, dusty, or soaked with oil/water.
- Since the lens is fragile, do not use excessive force when wiping the lens.

Attention

- The lens is made of glass. Hitting with a hard object or excessive force when wiping may scratch its surface. Handle with care.

Cleaning inside the projector

In certain environments, such as in dusty locations, dust accumulated around the intake and exhaust ports may degrade ventilation, cooling, and heat venting, and brightness may decrease as a result.
If brightness is noticeably reduced and the light source does not turn on, ask your dealer to clean inside the projector or replace the light source unit.

Inspection

Ask your dealer for inspection by an expert at least once every three years.
If the projector is used for prolonged periods without inspection, it may catch fire, cause an electric shock, or fall.
- For information about inspection costs, consult your dealer.

Attention

- Do not leave the product in place after use. Put it away immediately to prevent it falling in the event of an earthquake, etc.

Troubleshooting

Review the following points. For details, see the corresponding pages.

Problems	Points to be checked	Page
Power does not turn on.	● Is the power supply of the interior wiring turned on?	—
	● Is the plug of the power cord firmly inserted into the outlet?	—
	● Is the outlet where the plug of the power cord connected supplying electricity?	—
	● After executing [ALL USER DATA] in the [SETUP] menu → [INITIALIZE], is the power supply of the interior wiring turned back on or the plug of the power cord reconnected?	75
	● Is the temperature indicator <TEMP> or the light source indicator <LIGHT> lighting or blinking?	199
No image appears.	● Are connections to external devices correctly performed?	37
	● Is the input selection setting correct?	50, 72
	● Is the [BRIGHTNESS] adjustment setting at a minimum?	63
	● Is the external device that is connected to the projector working properly?	—
	● Is the AV mute function in use?	51
Image is fuzzy.	● Is the lens focus set correctly?	47
	● Is the projection distance appropriate?	34
	● Is the lens dirty?	21
Color is pale or grayish.	● Are [COLOR] and [TINT] adjusted correctly?	63
	● Is the external device connected to the projector adjusted correctly?	37
Remote control does not respond.	● Are the batteries depleted?	—
	● Is the battery polarity (+, −) correct?	27
	● Is there any obstruction between the remote control and the remote control signal receiver of the projector power supply unit?	24
	● Is the remote control being used beyond its effective operation range?	24
	● Are other forms of light, such as fluorescent light, affecting the projection?	24
	● Is the ID number setting operation correct?	51
Video from HDMI compatible device does not appear or it appears jumbled.	● Is the HDMI cable connected securely?	37
	● Turn the power of the projector and the external device off and on.	—
	● Is a signal which is not compatible with the projector being input?	214
No audio is coming from the HDMI compatible device.	● Set audio of the external device to Linear PCM.	—
Operation noise occurs during standby	● When the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [NORMAL], the internal cooling fan may operate even during standby.	71

Attention

● If problems persist even after checking the preceding points, consult your dealer.

FAQ

Refer to the following when you have problems with the wireless LAN connection.

The connection with the wireless LAN is lost.

- Under certain reception conditions, the image may be disrupted. In such a case, try the following.
  - Move the device connected over the wireless LAN closer to the projector.
  - Install the projector away from devices that emit electromagnetic radiation, such as microwave ovens, gaming consoles. If it does not improve, refrain from using other devices that emit electromagnetic radiation.
  - The bandwidth of the wireless may not be sufficient when multiple wireless devices are connected to a single router. Turn off or refrain from using other devices.
  - Where possible, try not use in a location where excessive static electricity is generated.
- When the connection with wireless LAN is not possible, set the [NETWORK] menu → [WIRELESS LAN] (➡ page 77) to [DISABLE], and perform the wireless LAN connection again. The resume process of the wireless module will operate.

Also, when there is a problem with the Miracast connection, refer to the following.

Connection with the Miracast is not possible.

- Is the [NETWORK] menu → [WIRELESS LAN] (➡ page 77) set to [DISABLE]?
- Is the input of the projector set to [Miracast]?
- Check the settings of the Miracast compatible device. Refer to the operating instructions of the Miracast compatible device for the connection method with the Miracast.
- Is there any obstacle between the Miracast compatible device and the projector? Also, is the Miracast compatible device too far away from the projector? Remove the obstacle and bring the Miracast compatible device closer.
- The connection information may be present in the "Paired devices" column of the Miracast compatible device, but it is not possible to reconnect from that screen. Connect instead from the list of connectable devices.
- Depending on the status of the Miracast compatible device in use, it may not connect correctly.

The connection is suddenly lost and image is not updated.

- If a problem occurs, such as the Miracast standby screen not being displayed, normal sound not being output, or not being able to connect, perform the following to restore.
  - Set [STANDBY MODE] in the [SETUP] menu → [ECO MANAGEMENT] (➡ page 71) to [ECO], and turn off/on the projector. (If it is already set to [ECO], the changing operation of [STANDBY MODE] is not necessary.)
  - Turn off the power, and then turn on the power supply of the interior wiring again or reconnect the plug of the power cord to the outlet.
  - Turn the Miracast compatible device and the projector off and then on again.

Image of the Miracast is disrupted.

- Set the [NETWORK] menu → [WIRELESS LAN] (➡ page 77) to [S-DIRECT] or [M-DIRECT].
- The connection of the Miracast is using wireless, so the image may be disrupted depending on the radio environment. In such a case, try the following.
  - Bring the Miracast compatible device closer to the projector.
  - Install the projector away from devices that emit electromagnetic radiation, such as microwave ovens, gaming consoles. If it does not improve, refrain from using other devices that emit electromagnetic radiation.
  - The bandwidth of the wireless may not be sufficient when multiple wireless devices are connected to a single router. Turn off or refrain from using other devices.
- The image may be disrupted when there is a problem with the content itself, so check the content.
- The image of the Miracast may be disrupted because of type of Miracast compatible device in use. In this case the problem is the processing performance or wireless transmission performance of the Miracast compatible device, and not a malfunction of the projector.

The connection was lost when no operation was performed after connecting with the Miracast.

- The connection may be disconnected after specific time due to the type of Miracast compatible device in use. Check the power save setting, etc., of the device.
- This may be improved by updating the wireless driver or the firmware. Contact the support service of the manufacturer of the device in use.

Other

- Depending on the Miracast compatible device in use, a confirmation screen for reconnection with connection name of "from UNKNOWN" may be displayed. In this case, however, reconnection will not be possible, so select CANCEL.
- Depending on the Miracast compatible device in use, it may be required to remove the device during connecting. In such a case, delete the device following the instruction of the device.

Chapter 7   Appendix

This chapter describes specifications and after-sales service for the projector.

Technical information

Using the PJLink protocol

The projector supports PJLink Class 1. This means a computer can use the PJLink protocol to operate the projector or query its status.

Control commands

The following table lists the PJLink protocol commands that can be used to control the projector.
● x characters in tables are non-specific characters.

Command	Control details	Parameter / return string	Remark		
POWR	Power supply control	0	Standby		
		1	Power on		
POWR?	Power supply status query	0	Standby condition		
		1	Power on condition		
		2	Preparing for switching off the projector		
INPT	Input selection	31	HDMI		
		41	MEMORY VIEWER		
		42	SIGNAGE		
INPT?	Input selection query	51	Panasonic APPLICATION		
		52	Miracast		
		53	LIGHTING		
AVMT	AV mute control	30	AV mute function off		
AVMT?	AV mute function query	31	AV mute function on		
ERST?	Error status query	xxxxxx	1st byte	Indicates fan errors, and returns 0 - 2.	● 0 = No error is detected
			2nd byte	Indicates light source errors, and returns 0 - 2.	● 1 = Warning
			3rd byte	Indicates temperature errors, and returns 0 - 2.	● 2 = Error
			4th byte	Indicates cover open errors, and returns 0 or 2.	
			5th byte	Returns 0.	
			6th byte	Indicates other errors, and returns 0 - 2.	
LAMP?	Light source status query	ERR1	Undefined command		
NAME?	Projector name query	xxxxx	Returns the name set in [PROJECTOR NAME] of [NETWORK].		
INF1?	Manufacturer name query	Panasonic	Returns manufacturer name.		
INF2?	Model name query	JW130FBU/JW130FWU	Returns model name.		
INF0?	Other information queries	xxxxx	Returns information such as version number.		
CLSS?	Class information query	1	Returns class for PJLink.		

PJLink security authentication

The password used for PJLink is the same as that of the password set for web control.
When using the projector without security authentication, do not set a password for web control.
● For specifications related to PJLink, refer to the website of Japan Business Machine and Information System Industries Association.
 URL http://pjlink.jbmia.or.jp/english/

Using Art-Net function

Since projector supports the Art-Net function, the projector settings can be performed via the Art-Net protocol on the DMX controller or using application software.

Channel definition

The following table lists the channel definitions used for controlling the projector with the Art-Net function.

Channel	Control details	Performance	Parameter	Remark
1	Light volume adjustment	100 %	0	Can be set in 256 steps between 100 % and 0 %.
		…	…	
		0 %	255	
2	Input/mode selection	No operation	0-7	—
		HDMI	8-15	
		Lighting	16-23	
		No operation	24-255	
6	Lens focus	Focus adjustment (-) fast	0-31	—
		Focus adjustment (-) moderate	32-63	
		Focus adjustment (-) slow	64-95	
		No operation	96-159	
		Focus adjustment (+) slow	160-191	
		Focus adjustment (+) moderate	192-223	
		Focus adjustment (+) fast	224-255	
7	Lens zoom	Zoom adjustment (-) fast	0-31	—
		Zoom adjustment (-) moderate	32-63	
		Zoom adjustment (-) slow	64-95	
		No operation	96-159	
		Zoom adjustment (+) slow	160-191	
		Zoom adjust (+) moderate	192-223	
		Zoom adjustment (+) fast	224-255	
8	Power supply control	Power standby	0-63	—
		No operation	64-191	
		Power on	192-255	
11	Lock	Operation not available	0-127	When "Operation not available" is set, operations of all channels become unacceptable.
		Operation available	128-255	

Note

● If the projector is operated with the remote control or by the control command while controlling the projector using the Art-Net function, the setting of the DMX controller and the computer application may be different from the projector status. In this case, set "Lock" of channel 11 to "Operation not available" and then set back to "Operation available" so that the controls of all channels are applied to the projector.

Control commands via LAN

When the projector is connected to a computer via a LAN, the computer can use control commands to operate the projector and query its status.

When web control administrator rights password is set (Protect mode)

Connecting

1) **Obtain the IP address and port number (Initial set value = 1024) of the projector and request a connection to the projector.**

   ● Both the IP address and the port number can be obtained from the menu screen of the projector.

IP address	Obtain from the main menu → [NETWORK] → [NETWORK STATUS]
Port number	Obtain from the main menu → [NETWORK] → [NETWORK CONTROL] → [COMMAND PORT]

2) **Check the response from the projector.**

	Data section	Blank	Mode	Blank	Random number section	Termination symbol
Command example	"NTCONTROL" (ASCII string)	' ' 0x20	'1' 0x31	' ' 0x20	"zzzzzzzz" (ASCII code hex number)	(CR) 0x0d
Data length	9 bytes	1 byte	1 byte	1 byte	8 bytes	1 byte

   ● Mode: 1 = Protect mode

3) **Generate a 32-byte hash value from the following data using MD5 algorithm.**

   ● "xxxxxx:yyyyy:zzzzzzzz"

xxxxxx	Administrator rights user name for the web control (default user name is "admin1")
yyyyy	Password of above administrator rights user (default password is "panasonic")
zzzzzzzz	8-byte random number obtained in Step 2)

Command transmission method

Transmit using the following command formats.

■ Transmitted data

	Header			Data section	Termination symbol
Command example	Hash value (Refer to "Connecting" above)	'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	32 bytes	1 byte	1 byte	Undefined length	1 byte

■ Received data

	Header		Data section	Termination symbol
Command example	'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	1 byte	1 byte	Undefined length	1 byte

■ Error response

	String	Details	Termination symbol
Message	"ERR1"	Undefined control command	(CR) 0x0d
	"ERR2"	Out of parameter range	
	"ERR3"	Busy state or no-acceptable period	
	"ERR4"	Timeout or no-acceptable period	
	"ERR5"	Wrong data length	
	"ERRA"	Password mismatch	
Data length	4 bytes	—	1 byte

When web control administrator rights password is not set (Non-protect mode)

Connecting

1) **Obtain the IP address and port number (Initial set value = 1024) of the projector and request a connection to the projector.**

   - Both the IP address and the port number can be obtained from the menu screen of the projector.

IP address	Obtain from the main menu → [NETWORK] → [NETWORK STATUS]
Port number	Obtain from the main menu → [NETWORK] → [NETWORK CONTROL] → [COMMAND PORT]

2) **Check the response from the projector.**

	Data section	Blank	Mode	Termination symbol
Command example	"NTCONTROL" (ASCII string)	' ' 0x20	'0' 0x30	(CR) 0x0d
Data length	9 bytes	1 byte	1 byte	1 byte

   - Mode: 0 = Non-protect mode

Command transmission method

Transmit using the following command formats.

■ **Transmitted data**

	Header		Data section	Termination symbol
Command example	'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	1 byte	1 byte	Undefined length	1 byte

■ **Received data**

	Header		Data section	Termination symbol
Command example	'0' 0x30	'0' 0x30	Control command (ASCII string)	(CR) 0x0d
Data length	1 byte	1 byte	Undefined length	1 byte

■ **Error response**

	String	Details	Termination symbol
Message	"ERR1"	Undefined control command	(CR) 0x0d
	"ERR2"	Out of parameter range	
	"ERR3"	Busy state or no-acceptable period	
	"ERR4"	Timeout or no-acceptable period	
	"ERR5"	Wrong data length	
	"ERRA"	Password mismatch	
Data length	4 bytes	—	1 byte

Control command

The following table lists the commands that can be used to control the projector using a computer.

■ Projector control command/query command

Command	Details	Parameter/response string	Remark (parameter)
PON	Power on	—	To check if the power is on, use the "Power supply status query" command.
POF	Power standby	—	
QPW	Power supply status query	000 001	STANDBY status Power on condition
IIS	Input/mode selection	HD1 MV1 MC1 PA1 SI1 LI1	HDMI MEMORY VIEWER Miracast Panasonic APPLICATION SIGNAGE LIGHTING
OLP	Light source power setting	0	NORMAL
QLP	Light source power setting query	1	ECO
QST	Runtime query	00000 - 99999	In hours
OSH	AV mute	0	AV mute function off
QSH	AV mute function query	1	AV mute function on
AUU	Volume up	—	—
AUD	Volume down	—	—

Glossary of network terms

Term	Description
Access point	This is a signal station for relaying signals between the wireless LAN and the computer. A computer connected to the access point can communicate via the network connected to the access point.
AES	Abbreviation for Advanced Encryption Standard. The next-generation encryption method of US government standardized by the National Institute of Standards and Technology (NIST). AES: Advanced Encryption System
Default gateway	This is equipment used to connect to a network using a different network standard from the network in use. It allows the connection between the networks by adjusting for the differences in the communication protocols. The data is sent to the host set in the default gateway when the gateway is not set in the IP address of the destination.
DHCP	Abbreviation for Dynamic Host Configuration Protocol. A protocol to automatically assign an IP address to the connected device. An IP address is automatically assigned to the device connected if a device with the DHCP server function is within the LAN.
EAP	Abbreviation for PPP Extensible Authentication Protocol. An authentication protocol expanding the PPP used during the user authentication by remote access. MD5, TLS, and S/Key are supported as the authentication method. This is the protocol supported by the wireless LAN authentication standard IEEE802.1X, and there are formats such as EAP-TLS/EAP-TTLS/EAPLEAP/EAP-PEAP/EAP-MD5.
EAP-FAST	Abbreviation for EAP-Flexible Authentication via Secure Tunneling. One of the wireless authentication methods supporting the IEEE802.1X. It enhances security by tunneling of the authentication process using a secret key encryption method not requiring a digital authentication, and mutually authenticating the tunnel. Proprietary method of Cisco Systems Inc.
EAP-TTLS	Abbreviation for EAP-Tunneled Transport Layer Security. One of the wireless authentication methods supporting the IEEE802.1X. An authentication server electronic certificate, client will perform mutual authentication by an ID/password. Authentication process will be tunneled. Developed by the Funk Software of US.
GTC (EAP-GTC)	Abbreviation for EAP-Generic Token Card. One of the wireless authentication methods supporting the IEEE802.1X. Authentication is performed using the ID password. A security token is used as the password.
IP address	IP (Internet Protocol) is a protocol to transmit data, and the IP address is the destination (address) when transmitting data on a network. The same IP address cannot be used within the same LAN.
LAN	Abbreviation for Local Area Network. This is a network with a relatively small range such as inside a company.
MAC address	An ID number unique to each network adapter. A unique number is assigned to network adapters throughout the world, and data is sent and received between the adapters based on this. This ID number is a combination of the unique number for the manufacturer managed and assigned by IEEE and the number assigned by each manufacturer to their adapter.
MD5 (EAP-MD5)	Abbreviation for EAP-Message digest algorithm 5. One of the wireless authentication methods supporting the IEEE802.1X. Authentication is performed using the ID password. Password is sent encrypted with the challenge & response format.
MS-CHAPv2 (EAP-MS-CHAPv2)	Abbreviation for EAP-Microsoft Challenge Handshake Authentication Protocol v2. One of the wireless authentication methods supporting the IEEE802.1X. Mutual authentication is performed using one way encryption password.
Open System/open	One of the wireless authentication methods using public key encryption.
PEAP	Abbreviation for EAP-Protected EAP. One of the wireless authentication methods supporting the IEEE802.1X. An authentication server electronic certificate, client will perform mutual authentication by an ID/password.
RADIUS server	RADIUS is an abbreviation of Remote Access Dial In User authentication Service, and it is a protocol used for authentication in a network such as wireless LAN. The authentication server supporting that protocol is called RADIUS server. It is not required to register the user information individually to each device even when there are multiple network devices by using the RADIUS server, allowing the integrated management of many network devices and users.
Shared Key/share	One of the wireless authentication methods using the secret key encryption, and it is a method to authenticate using the encryption key set in the WEP. This is the encryption method using same key for both encryption and decryption, and it is also called as "shared key encryption" or "common key encryption".
SSID	Abbreviation for Service Set ID. With the wireless LAN, it is necessary to set the identification code called as SSID to differentiate if it is the access point to communicate. It may be displayed as "ESSID" or "Network name" in the wireless LAN adapter depending on the manufacturer.
Subnet mask	The network may manage the large network by dividing it to multiple smaller network called as subnet. In such case, the value to delimit the IP address is called as subnet mask.
TKIP	Abbreviation for Temporal Key Integrity Protocol. This is an encryption protocol with enhanced security protection than the WEP by changing the encryption key every specified time.
WEP	Abbreviation for Wired Equivalent Privacy. This is the method to encrypt the data to communicate. By creating an encryption key and only notifying it to the person to communicate, the communication data will not be decrypted by a third party.

Term	Description
WPA-EAP WPA2-EAP	A standard of encryption method for wireless LAN. This is an encryption method for corporation, and encryption is performed using an external server.
WPA-PSK WPA2-PSK	A standard of encryption method for wireless LAN. This is advanced security than the WEP, and it has functions such as user authentication function and TKIP (encryption protocol) that will automatically change the encryption key every specified time. Also, this authentication method does not need an authentication server.

Specifications

The specifications of the projector are as follows.

Model No.		PT-JW130FBU/PT-JW130FWU
Power supply		AC 120 V, 50 Hz/60 Hz
Power consumption		125 W (1.2 A)
		In standby mode (when [STANDBY MODE] is set to [ECO]): 0.3 W[*1]
		In standby mode (when [STANDBY MODE] is set to [NETWORK]): 6 W[*2]
		In standby mode (when [STANDBY MODE] is set to [NORMAL]): 11 W
DLP chip	Size	11.4 mm (0.45") (aspect ratio 16:10)
	Display system	1-unit DLP chip, DLP type
	Number of pixels	1 039 680 pixels (WXGA comparable)
Lens	Electric zoom	1.5 to 3.3:1
	Electric focus	F = 2.0 to 2.7 f = 15.2 mm to 32.7 mm
Light source		Laser diode
Light output[*3]		1 000 lm (ANSI)
Contrast ratio[*3]		1 000:1
Projected image size		0.76 m (30") to 5.08 m (200")
Screen aspect ratio		16:10
Projection method		[FRONT]/[REAR] (On/off of vertical flip can be set with [VERTICAL FLIP])
Card slot		SD card slot[*4] x 1 (supports SDHC memory card)
Outer case		Molded plastic
Outer color		PT-JW130FBU: Black, PT-JW130FWU: White
Weight		3.3 kg (7.3 lbs.)
Noise level[*3]	When installing on the ceiling	When [LIGHT POWER] is set to [NORMAL]: 36 dB When [LIGHT POWER] is set to [ECO]: 30 dB
	When standing on the floor	When [LIGHT POWER] is set to [NORMAL]: 37 dB When [LIGHT POWER] is set to [ECO]: 32 dB
Operating environment	Temperature[*5]	0 °C (32 °F) to 40 °C (104 °F)
	Humidity	10 % to 80 % (no condensation)
Remote control	Power supply	DC 3 V (AAA/R03 or AAA/LR03 battery x 2)
	Operating range	Within approx. 7 m (22'11") (when operated directly in front of signal receiver)
	Weight	63 g (2.2 ozs.) (including batteries)
	Dimensions	Width: 44 mm (1-23/32"), Height: 105 mm (4-1/8"), Depth: 20.5 mm (13/16")

*1 When the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [ECO], the network function (both wireless LAN and wired LAN) cannot be used in standby mode.

*2 When the [SETUP] menu → [ECO MANAGEMENT] → [STANDBY MODE] is set to [NETWORK], the network function while in standby mode is restricted to the projector operations via wired LAN using the Wake on LAN function.

*3 Measurement, measuring conditions and method of notation all comply with ISO21118 international standards.

*4 Operations of the Panasonic SD memory card up to capacity of 2 GB and Panasonic SDHC memory card up to capacity of 32 GB are confirmed.

*5 The operating environment temperature should be between 0 °C (32 °F) and 35 °C (95 °F) when using the projector at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level.
When using the projector at elevations lower than 1 000 m (3 281') above sea level, and the operating environment temperature becomes 35 °C (95 °F) or higher, the light output may be reduced to protect the projector. When using the projector at elevations between 1 000 m (3 281') and 2 700 m (8 858') above sea level, and the operating environment temperature becomes 30 °C (86 °F) or higher, the light output may be reduced to protect the projector.

■ Applicable scanning frequency/terminal/wireless LAN

Model No.		PT-JW130FBU/PT-JW130FWU
Applicable scanning frequency*1	HDMI signal	525p (480p), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1125 (1080)/60p, 1125 (1080)/50p
		VGA60, SVGA56, SVGA60, XGA60, SXGA60, 1280 x 720/50, 1280 x 720/60, 1280 x 768/50, 1280 x 768/60, 1280 x 800/50, 1280 x 800/60, 1600 x 900/50, 1600 x 900/60
Terminal	<HDMI IN> terminal	1 set, HDMI 19 pins, HDCP compatible Audio signal: Linear PCM (Sampling frequency: 48 kHz/44.1 kHz/32 kHz)
	<AUDIO OUT> terminal	1 set, M3 stereo mini jack (monitor output, stereo compatible) 0 V [rms] to 2.0 V [rms] (variable), output impedance 2.2 kΩ or less
	<LAN> terminal	1 set, RJ-45, for network connection, PJLink compatible, 10Base-T/100Base-TX
	<DC OUT> terminal	USB connector (type A) x 1, for power supply (DC 5 V, maximum 900 mA)
Wireless LAN	Compliance standards	IEEE802.11b/g/n, IEEE802.11a/n (wireless LAN standard protocol)
	Used wireless channel	1 to 11: 2.412 GHz - 2.462 GHz 36/40/44/48: 5.180 GHz - 5.240 GHz 52/56/60/64: 5.260 GHz - 5.320 GHz 100/104/108/112/116/132/136/140: 5.500 GHz - 5.700 GHz (except 5.600 - 5.650 GHz) 149/153/157/161/165: 5.745 GHz - 5.825 GHz
	Communication distance	Approx. 30 m (98'5") (depends on the usage environment)

*1 Refer to "List of compatible signals" (➡ page 214) for details of the types of video signals that can be used with the projector.

Note

● The model numbers of accessories, etc. are subject to change without prior notice.

Dimensions

Unit: mm

Ball joint movable range: Approx. 90°

360°
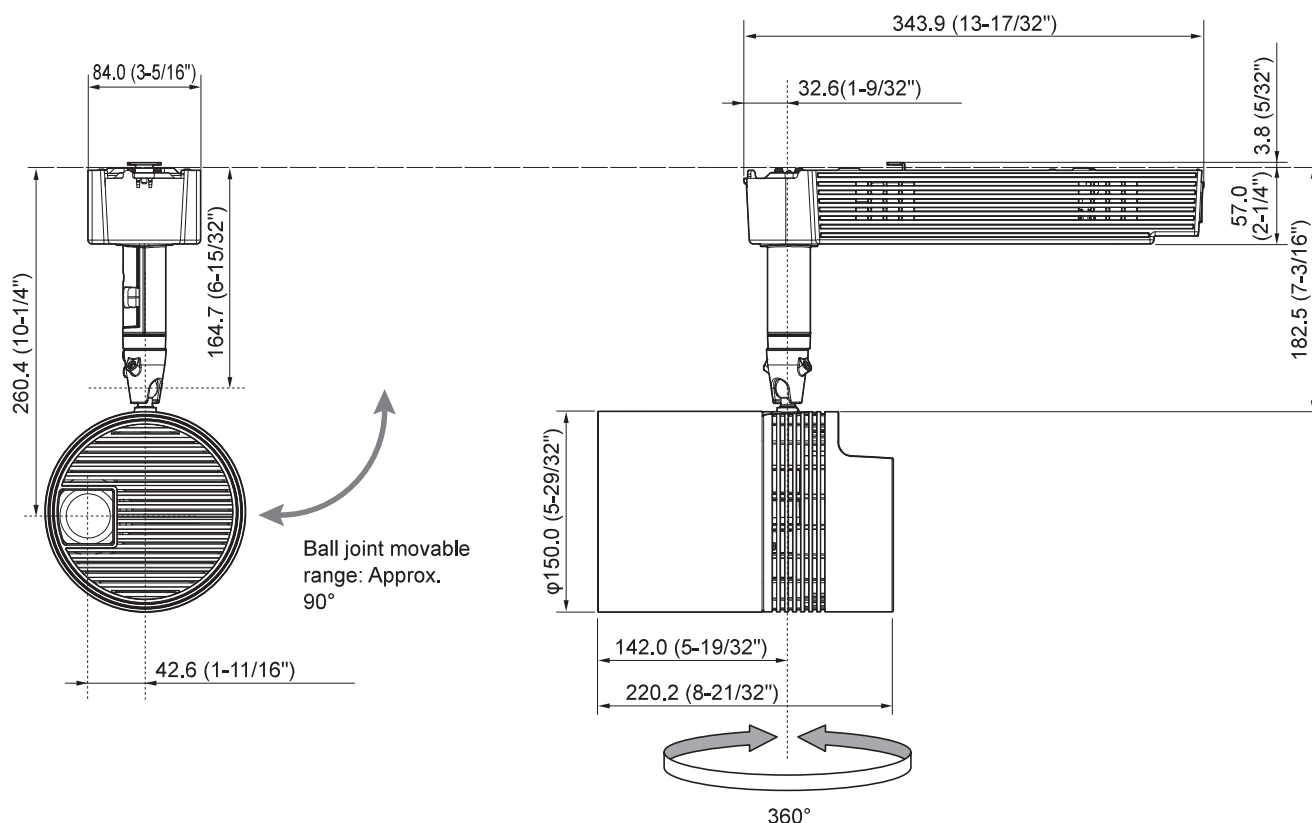
* Actual dimensions may differ depending on the product.

List of compatible signals

The following table specifies the HDMI input video signal that the projector can project.

Mode	Resolution (Dots)	Scanning freq.		Dot clock freq. (MHz)	Plug and play[1]
		Horizontal (kHz)	Vertical (Hz)		
525p (480p)	720 x 480	31.5	59.9	27.0	✓
625p (576p)	720 x 576	31.3	50.0	27.0	✓
750 (720)/60p	1 280 x 720	45.0	60.0	74.3	✓
750 (720)/50p	1 280 x 720	37.5	50.0	74.3	✓
1125 (1080)/60p	1 920 x 1 080	67.5	60.0	148.5	✓
1125 (1080)/50p	1 920 x 1 080	56.3	50.0	148.5	✓
VGA	640 x 480	31.5	59.9	25.2	✓
SVGA	800 x 600	35.2	56.3	36.0	✓
	800 x 600	37.9	60.3	40.0	✓
XGA	1 024 x 768	48.4	60.0	65.0	✓
SXGA	1 280 x 1 024	64.0	60.0	108.0	✓
1280 x 720	1 280 x 720	37.1	49.8	60.5	—
	1 280 x 720	44.8	59.9	74.5	—
1280 x 768	1 280 x 768	39.6	49.9	65.3	—
	1 280 x 768	47.8	59.9	79.5	—
1280 x 800	1 280 x 800	41.3	50.0	68.0	—
	1 280 x 800	49.7	59.8	83.5	✓
1600 x 900	1 600 x 900	46.4	49.9	96.5	—
	1 600 x 900	56.0	59.9	118.3	—

[1] Signals with a ✓ in the Plug and play columns are signals described in EDID (extended display identification data) of the projector. A signal, which has no ✓ in the Plug and play columns but has an entry in the Format column, can be input. For signals without a ✓ in the Plug and play columns, there are instances when resolution cannot be selected on the computer even though the projector supports them.

Note

● The picture quality may degrade due to image process depending on the input signal.

Index

Information on Disposal in other Countries outside the European Union

These symbols are only valid in the European Union.
If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

EU

Panasonic Lighting Americas, Inc

M0215NN0 -YI