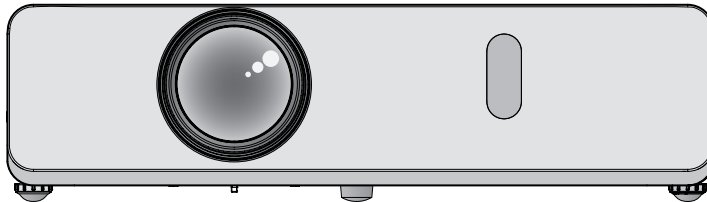


## Operating Instructions Functional Manual

LCD Projector Commercial Use

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Model No. **PT-VW350**  
**PT-VX420**



Thank you for purchasing this Panasonic Product.

- Before operating this product, please read the instructions carefully, and save this manual for future use.
- Before using your projector, be sure to read “Read this first!” (➔pages 2 to 8).

# Read this first!

**WARNING:** THIS APPARATUS MUST BE EARTHED.

**WARNING:** To prevent damage which may result in fire or shock hazard, do not expose this appliance to rain or moisture.  
This device is not intended for use in the direct field of view at visual display workplaces. To avoid incommoding reflexions at visual display workplaces this device must not be placed in the direct field of view.  
The equipment is not intended for used at a video workstation in compliance BildscharbV.

The sound pressure level at the operator position is equal or less than 70 dB (A) according to ISO 7779.

**WARNING:**

1. Remove the plug from the mains socket when this unit is not in use for a prolonged period of time.
2. To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service personnel.
3. Do not remove the earthing pin on the mains plug. This apparatus is equipped with a three prong earthing type mains plug. This plug will only fit an earthing-type mains socket. This is a safety feature. If you are unable to insert the plug into the mains socket, contact an electrician. Do not defeat the purpose of the earthing plug.

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**WARNING:**



TURN THE POWER OFF AND DISCONNECT THE POWER PLUG FROM THE WALL OUTLET BEFORE REPLACING THE LAMP UNIT.

**CAUTION:** To assure continued compliance, follow the attached installation instructions. This includes using the provided power cord and shielded interface cables when connecting to computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user’s authority to operate this device.

This is a device to project images onto a screen, etc., and is not intended for use as indoor lighting in a domestic environment.

Directive 2009/125/EC

**Importer's name and address within the European Union**

**Panasonic Marketing Europe GmbH  
Panasonic Testing Centre  
Winsbergring 15, 22525 Hamburg, Germany**

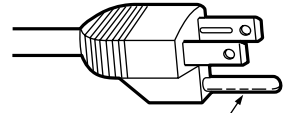
## Read this first!

### WARNING:

- Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75.
- For permanently connected equipment, a readily accessible disconnect device shall be incorporated in the building installation wiring.
- For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

### CAUTION (North/Middle/South America)

**CAUTION:** This equipment is equipped with a three-pin grounding-type power plug. Do not remove the grounding pin on the power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician. Do not defeat the purpose of the grounding plug.



Do not remove

### FCC NOTICE (USA)

#### Declaration of Conformity

Model Number: PT-VW350, PT-VX420  
Trade Name : Panasonic  
Responsible Party : Panasonic Corporation of North America  
Address : Two Riverfront Plaza, Newark, NJ 07102-5490  
General Contact : <http://www.panasonic.com/support>  
Projector Contact : <http://panasonic.net/avc/projector/>

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

To assure continued compliance, follow the attached installation instructions and do not make any unauthorized modifications.

#### CAUTION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the booklet "Something About Interference" available from FCC local regional offices helpful.

#### FCC Warning:

To assure continued FCC emission limit compliance, follow the attached installation instructions. This includes using the provided power cord and shielded interface cables when connecting to computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate this device.

### NOTIFICATION (Canada)

This class B digital apparatus complies with Canadian ICES-003.



#### Notice (USA only):

- This product has a High Intensity Discharge (HID) lamp that contains mercury. Disposal may be regulated in your community due to environmental considerations. For disposal or recycling information, please visit Panasonic website: <http://www.panasonic.com/environmental> or call 1-888-769-0149.

**IMPORTANT: THE MOULDED PLUG (U.K. only)**

FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience. A 13 amp fuse is fitted in this plug. Should the fuse need to be replaced, please ensure that the replacement fuse has a rating of 13 amps and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover, you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover, the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from an Authorised Service Center.

If the fitted moulded plug is unsuitable for the mains socket in your home, then the fuse should be removed and the plug cut off and disposed of safely. There is a danger of severe electrical shock if the cut off plug is inserted into any 13 amp socket.


If a new plug is to be fitted, please observe the wiring code as shown below.  
If in any doubt, please consult a qualified electrician.

**WARNING:**        THIS APPLIANCE MUST BE EARTHED.

**IMPORTANT:**        The wires in this mains lead are coloured in accordance with the following code:

Green - and - Yellow:	Earth
Blue:	Neutral
Brown:	Live

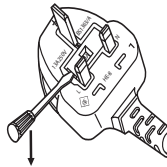
As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured GREEN - AND - YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the Earth symbol  or coloured GREEN or GREEN - AND - YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

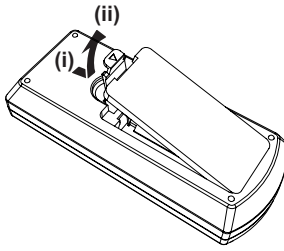
The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

How to replace the fuse: Open the fuse compartment with a screwdriver and replace the fuse.

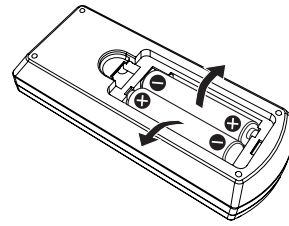


## To remove the battery

1. Press the guide and lift the cover.

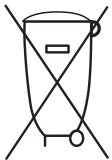


2. Remove the batteries.



## Brazil Only Brasil Apenas

### ■ Manuseio de baterias usadas

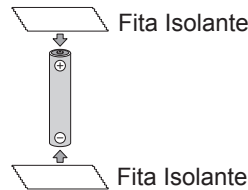


#### BRASIL

Após o uso, as pilhas e /ou baterias deverão ser entregues ao estabelecimento comercial ou rede de assistência técnica autorizada.

Cobrir os terminais positivo (+) e negativo (-) com uma fita isolante adesiva, antes de depositar numa caixa destinada para o recolhimento. O contato entre partes metálicas pode causar vazamentos, gerar calor, romper a blindagem e produzir fogo.(Fig. 1)

Fig. 1  
Como isolar os terminais

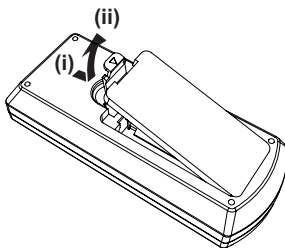


Não desmonte, não remova o invólucro, nem amasse a bateria. O gás liberado pela bateria pode irritar a garganta, danificar o lacre do invólucro ou o vazamento provocar calor, ruptura da blindagem e produzir fogo devido ao curto circuito dos terminais. Não incinere nem aqueça as baterias, elas não podem ficar expostas a temperaturas superiores a 100 °C (212 °F). O gás liberado pela bateria pode irritar a garganta, danificar o lacre do invólucro ou o vazamento provocar calor, ruptura da blindagem e produzir fogo devido ao curto circuito dos terminais provocado internamente.

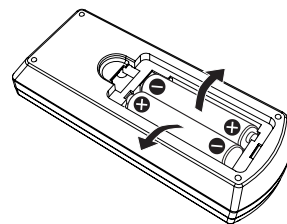
Evite o contato com o líquido que vazar das baterias. Caso isto ocorra, lave bem a parte afetada com bastante água. Caso haja irritação, consulte um médico.

### ■ Remoção das baterias

1. Pressione a guia e levante a tampa.



2. Remova as baterias.



## **WARNING:**

### **■ POWER**

**The wall outlet shall be installed near the equipment and shall be easily accessible when problems occur. If the following problems occur, disconnect the power plug from the wall outlet immediately.**

Continued use of the projector in these conditions will result in fire or electric shock.

- If foreign objects or water get inside the projector, disconnect the power plug from the wall outlet.
- If the projector is dropped or the cabinet is broken, disconnect the power plug from the wall outlet.
- If you notice smoke, strange smells or noise coming from the projector, disconnect the power plug from the wall outlet.
- You have to disconnect the power plug from the wall outlet to cut off the power supply.

Please contact an Authorized Service Center for repairs, and do not attempt to repair the projector yourself.

**During a thunderstorm, do not touch the projector or the cable.**

Electric shocks can result.

**Do not do anything that might damage the power cord or the power plug.**

If the power cord is used while damaged, electric shocks, short-circuits or fire will result.

- Do not damage the power cord, make any modifications to it, place it near any hot objects, bend it excessively, twist it, pull it, place heavy objects on top of it or wrap it into a bundle.

Ask an Authorized Service Center to carry out any repairs to the power cord that might be necessary.

**Completely insert the power plug into the wall outlet and the power connector into the projector terminal.**

If the plug is not inserted correctly, electric shocks or overheating will result.

- Do not use plugs which are damaged or wall outlets which are coming loose from the wall.

**Do not use anything other than the provided power cord.**

Failure to observe this will result in fire or electric shocks. Please note that if you do not use the provided power cord to ground the device on the side of the outlet, this may result in electric shocks.

**Clean the power plug regularly to prevent it from becoming covered in dust.**

Failure to observe this will cause a fire.

- If dust builds up on the power plug, the resulting humidity can damage the insulation.
- If not using the projector for an extended period of time, pull the power plug out from the wall outlet. Pull the power plug out from the wall outlet and wipe it with a dry cloth regularly.

**Do not handle the power plug and power connector with wet hands.**

Failure to observe this will result in electric shocks.

**Do not overload the wall outlet.**

If the power supply is overloaded (ex., by using too many adapters), overheating may occur and fire will result.

### **■ ON USE/INSTALLATION**

**Do not place the projector on soft materials such as carpets or sponge mats.**

Doing so will cause the projector to overheat, which can cause burns, fire or damage to the projector.

**Do not set up the projector in humid or dusty places or in places where the projector may come into contact with oily smoke or steam, ex. a bathroom.**

Using the projector under such conditions will result in fire, electric shocks or components deterioration. Components deterioration (such as ceiling mount brackets) may cause the projector which is mounted on the ceiling to fall down.

**Do not install this projector in a place which is not strong enough to take the full weight of the projector or on top of a surface which is sloped or unstable.**

Failure to observe this will cause projector to fall down or tip over the projector, and severe injury or damage could result.

**Installation work (such as ceiling mount bracket) should only be carried out by a qualified technician.**

If installation is not carried out and secured correctly, it can cause injury or accidents, such as electric shocks.

- Be sure to use the wire provided with the ceiling mount bracket as an extra safety measure to prevent the projector from falling down. (Install in a different location to the ceiling mount bracket.)

**Do not cover the air intake/exhaust ports.**

Doing so will cause the projector to overheat, which can cause fire or damage to the projector.

- Do not place the projector in narrow, badly ventilated places.
- Do not place the projector on cloth or papers, as these materials could be drawn into the air intake port.
- Provide at least 1 m (40") of space between any walls or objects and the exhaust port, and at least 50 cm (20") of space between any walls or objects and the intake port.

**Do not place your hands or other objects close to the air exhaust port.**

Doing so will cause burns or damage your hands or other objects.

- Heated air comes out of the air exhaust port. Do not place your hands or face, or objects which cannot withstand heat close to this port.

## **WARNING:**

**Do not look at or place your skin into the lights emitted from the lens while the projector is being used.**

Doing so can cause burns or loss of sight.

- Strong light is emitted from the projector's lens. Do not look at or place your hands directly into this light.
- Be especially careful not to let young children look into the lens. In addition, turn off the power and disconnect the power plug when you are away from the projector.

**Never attempt to remodel or disassemble the projector.**

High voltages can cause fire or electric shocks.

- For any inspection, adjustment and repair work, please contact an Authorized Service Center.

**Do not allow metal objects, flammable objects, or liquids to enter inside of the projector. Do not allow the projector to get wet.**

Doing so may cause short circuits or overheating, and result in fire, electric shock, or malfunction of the projector.

- Do not place containers of liquid or metal objects near the projector.
- If liquid enters inside of the projector, consult your dealer.
- Particular attention must be paid to children.

**Use the ceiling mount bracket specified by Panasonic.**

Using the ceiling mount bracket other than the specified one will result in falling accidents.

- Attach the supplied safety cable to the ceiling mount bracket to prevent the projector from falling down.

## **■ ACCESSORIES**

**Do not use or handle the batteries improperly, and refer to the following.**

Failure to observe this will cause burns, batteries to leak, overheat, explode or catch fire.

- Do not use unspecified batteries.
- Do not use chargeable batteries.
- Do not disassemble dry cell batteries.
- Do not heat the batteries or place them into water or fire.
- Do not allow the + and - terminals of the batteries to come into contact with metallic objects such as necklaces or hairpins.
- Do not store or carry batteries together with metallic objects.
- Store the batteries in a plastic bag and keep them away from metallic objects.
- Make sure the polarities (+ and -) are correct when inserting the batteries.
- Do not use a new battery together with an old battery or mix different types of batteries.
- Do not use batteries with the outer cover peeling away or removed.

**Do not allow children to reach the batteries.**

Accidentally swallowing them can cause physical harm.

- If swallowed, seek medical advice immediately.

**If the battery fluid leaks, do not touch it with bare hands, and take the following measures if necessary.**

- Battery fluid on your skin or clothing could result in skin inflammation or injury.  
Rinse with clean water and seek medical advice immediately.
- Battery fluid coming in contact with your eyes could result in loss of sight.  
In this case, do not rub your eyes. Rinse with clean water and seek medical advice immediately.

**Do not disassemble the lamp unit.**

If the lamp breaks, it could cause injury.

### **Lamp replacement**

The lamp has high internal pressure. If improperly handled, an explosion and severe injury or accidents will result.

- The lamp can easily explode if struck against hard objects or dropped.
- Before replacing the lamp unit, be sure to turn the power off and to disconnect the power plug from the wall outlet.  
Electric shocks or explosions can result if this is not done.
- When replacing the lamp unit, turn the power off and allow the lamp to cool for at least 1 hour before handling it otherwise it can cause burns.

**Do not use the supplied power cord with devices other than this projector.**

- Using the supplied power cord with devices other than this projector may cause short circuits or overheating, and result in electric shock or fire.

**Remove the depleted batteries from the remote control promptly.**

- Leaving them in the unit may result in fluid leakage, overheating, or explosion of the batteries.

## **CAUTION:**

### **■ POWER**

**When disconnecting the power cord, be sure to hold the power plug and power connector.**

If the power cord itself is pulled, the lead will become damaged, and fire, short-circuits or serious electric shocks will result.

**When not using the projector for an extended period of time, disconnect the power plug from the wall outlet.**

Failure to do so may result in fire or electric shock.

**Disconnect the power plug from the wall outlet before carrying out any cleaning and replacing the unit.**

Failure to do so may result in electric shock.

### **■ ON USE/INSTALLATION**

**Do not place heavy objects on top of the projector.**

Failure to observe this will cause the projector to become unbalanced and fall, which could result in damage or injury. The projector will be damaged or deformed.

**Do not put your weight on this projector.**

You could fall or the projector could break, and injury will result.

- Be especially careful not to let young children stand or sit on the projector.

**Do not place the projector in extremely hot locations.**

Doing so will cause the outer casing or internal components to deteriorate, or result in fire.

- Take particular care in locations exposed to direct sunlight or near stoves.

**Do not place the projector where it may be affected by salt or corrosive gas.**

Doing so may cause the projector to become faulty due to corrosion.

**Do not place objects in front of the lens while the projector is being used.**

Doing so can cause fire or damage to the object and can cause the projector to malfunction.

- Extremely strong light is emitted from the projector's lens.

**Do not stand in front of the lens while the projector is being used.**

Doing so can cause damage and burns to clothing.

- Extremely strong light is emitted from the projector's lens.

**Always disconnect all cables before moving the projector.**

Moving the projector with cables still attached can damage the cables, which will cause fire or electric shocks to occur.

**When mounting the projector on the ceiling, keep mounting screws and power cord from contact with metal parts inside the ceiling.**

Contact with metal parts inside the ceiling can cause electric shocks.

**Never plug headphones and earphones into <VARIABLE AUDIO OUT> terminal.**

Excessive sound pressure from earphones and headphones can cause hearing loss.

### **■ ACCESSORIES**

**Do not use the old lamp unit.**

If used it could cause lamp explosion.

**If the lamp has broken, ventilate the room immediately. Do not touch or bring your face close to the broken pieces.**

Failure to observe this will cause the user to absorb the gas which was released when the lamp broke and which contains nearly the same amount of mercury as fluorescent lamp, and the broken pieces will cause injury.

- If you believe that you have absorbed the gas or that the gas has got into your eyes or mouth, seek medical advice immediately.
- Ask your dealer about replacing the lamp unit and check the inside of the projector.

**When not using the projector for an extended period of time, remove the batteries from the remote control.**

Failure to observe this will cause the batteries to leak, overheat, catch fire or explode, which may result in fire or contamination of surrounding area.

### **■ MAINTENANCE**

**Ask your dealer about cleaning inside the projector once a year.**

Continuous use while dust is accumulated inside the projector may result in fire.

- For cleaning fee, ask your dealer.



---

### ■ Trademarks, etc.

- Windows, Windows Vista and Internet Explorer are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.
- Mac, Mac OS, OS X, and Safari are trademarks of Apple Inc., registered in the United States and other countries.
- HDMI, the HDMI logo and High-Definition Multimedia Interface is a trademark or registered trademark of HDMI Licensing LLC.
- PJLink™ is a trademark or pending trademark in Japan, the United States, and other countries and regions.
- RoomView and Crestron RoomView are registered trademarks of Crestron Electronics, Inc. Crestron Connected™ and Fusion RV are trademarks of Crestron Electronics, Inc.
- Adobe, Adobe Flash Player and Adobe Reader are trademarks or registered trademarks of Adobe Systems Inc. in the United States and/or other countries.
- Some of the fonts used in the on-screen menu are Ricoh bitmap fonts, which are manufactured and sold by Ricoh Company, Ltd.
- Other names, company names or product names used in these operating instructions are the trademarks or registered trademarks of their respective holders.  
Please note that the operating instructions do not include the ® and ™ symbols.

### Software information regarding this product

This product incorporates the following software.

- (1) The software which is developed independently by or for Panasonic Corporation
- (2) The software owned by third party and licensed to Panasonic Corporation
- (3) The software which is licensed under the GNU LESSER GENERAL PUBLIC LICENSE Version2.1 (LGPL V2.1)

The software categorized as (3), the license is available in accordance with gnu lesser general public license, it is distributed in the hope that it will be useful, but without any warranty, without even the implied warranty of merchantability or fitness for a particular purpose. As for the terms and conditions, please refer to the software license of the supplied CD-ROM.

If you wish to ask any questions as to the software, please contact (sav.pj.gpl.pavc@ml.jp.panasonic.com) by email.

### ■ Illustrations in these operating instructions

- Note that illustrations of the projector and screens may differ from the ones you actually see.

### ■ Page references

- In these instructions, references to pages are indicated as: (➡ page 00).

### ■ Term

- In these instructions, the “Wireless remote control unit” accessory is referred to as the “Remote control”.

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## Features of the Projector

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### High Contrast

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- ▶ A high contrast of 12 000:1 is achieved by the unique optical system.

### Auto Setup Function

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- ▶ This function executes [SHIFT], [CLOCK PHASE], [DOT CLOCK] at the same time by pressing the <AUTO SETUP> button.

### Direct Power Off Function

---

- ▶ With the Direct Power Off function, you can disconnect the power cord from the wall outlet or turn off the breaker even during projection.

### Wired LAN Function

---

- ▶ This function allows you to project an image on a computer as well as operate and manage the projector via network.

### Useful Functions for Presentations

---

- ▶ The digital zoom function allows you to focus on the crucial information during a presentation.
- ▶ The MIC function and 10 W audio output allows you to make a presentation without any external audio equipment.

## Quick Steps

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For details, see the corresponding pages.

1. **Set up your projector.**  
(⇒ page 26)



2. **Connect with other devices.**  
(⇒ page 30)



3. **Connect the power cord.**  
(⇒ page 35)



4. **Power on.**  
(⇒ page 36)



5. **Make initial settings.**  
(⇒ page 36)

- Take this step when you power on for the first time after purchasing the projector.



6. **Select the input signal.**  
(⇒ page 40)



7. **Adjust the image.**  
(⇒ page 40)

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Be sure to read “Read this first!” from page 2.

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# Chapter 1 Preparation

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This chapter describes things you need to know or check before using the projector.

# Precautions for use

## Cautions when transporting

- When transporting the projector, hold it securely by its bottom and avoid excessive vibration and impacts. Doing so may damage the internal parts and result in malfunctions.
- Do not transport the projector with the adjustable feet extended. Doing so may damage the adjustable feet.

## Cautions when installing

### ■ Do not set up the projector outdoors.

- The projector is designed for indoor use only.

### ■ Do not use under the following conditions.

- Places where vibration and impacts occur such as in a car or vehicle: Doing so may damage the internal parts and result in malfunctions.
- Locations near the sea or areas affected by corrosive gas: Corrosion may damage internal components or cause the projector to malfunction.
- Near the exhaust of an air conditioner: Depending on the conditions of use, the screen may fluctuate in rare cases due to the heated air from the air exhaust port or the hot or cooled air. Make sure that the exhaust from the projector or other equipment, or the air from the air conditioner does not blow toward the front of the projector.
- Places with sharp temperature fluctuations such as near lights (studio lamp): Doing so may shorten the life of the lamp, or result in deformation of the outer case due to heat, which may cause malfunctions.

The operating environment temperature of the projector should be between 0 °C (32 °F) and 40 °C (104 °F)\*1 when using it at elevations lower than 1 400 m (4 593') above sea level, and between 0 °C (32 °F) and 30 °C (86 °F) when using it at high altitudes (between 1 400 m (4 593') and 2 700 m (8 858') above sea level).

\*1 When the operating environment temperature of the projector is between 35 °C (95°F) and 40 °C (104 °F), the lamp mode will change to [ECO] automatically.

- Near high-voltage power lines or near motors: Doing so may interfere with the operation of the projector.

### ■ Be sure to ask a specialized technician when installing the product to a ceiling.

This requires an optional ceiling mount bracket. Be sure to use the Projector Mount Bracket together with the ceiling mount bracket for high ceilings or low ceilings.

Model No.:

- ① ET-PKL100H (for high ceilings), ET-PKV400B (Projector Mount Bracket)
- ② ET-PKL100S (for low ceilings), ET-PKV400B (Projector Mount Bracket)

### ■ Focus adjustment

The projection lens is thermally affected by the light from the light source, making the focus unstable in the period just after switching on the power. It is recommended that the images are projected continuously for at least 30 minutes before the focus is adjusted.

### ■ When using the projector in the elevation of below 1 400 m (4 593'), make sure [HIGH ALTITUDE MODE] is set to [OFF].

Failure to do so may shorten the life of the internal parts and result in malfunctions.

### ■ When using the projector in the elevation of above 1 400 m (4 593') and below 2 000 m (6 562'), make sure [HIGH ALTITUDE MODE] is set to [HIGH1].

Failure to do so may shorten the life of the internal parts and result in malfunctions.

### ■ When using the projector in the elevation of above 2 000 m (6 562') and below 2 700 m (8 858'), make sure [HIGH ALTITUDE MODE] is set to [HIGH2].

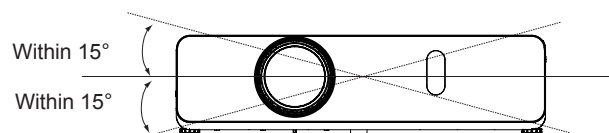
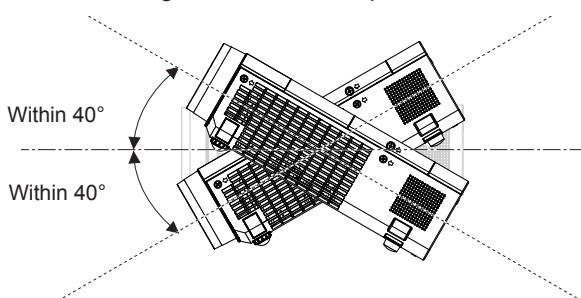
Failure to do so may shorten the life of the internal parts and result in malfunctions.

### ■ Do not install the projector at elevations of 2 700 m (8 858') or higher above sea level.

Failure to do so may shorten the life of the internal parts and result in malfunctions.

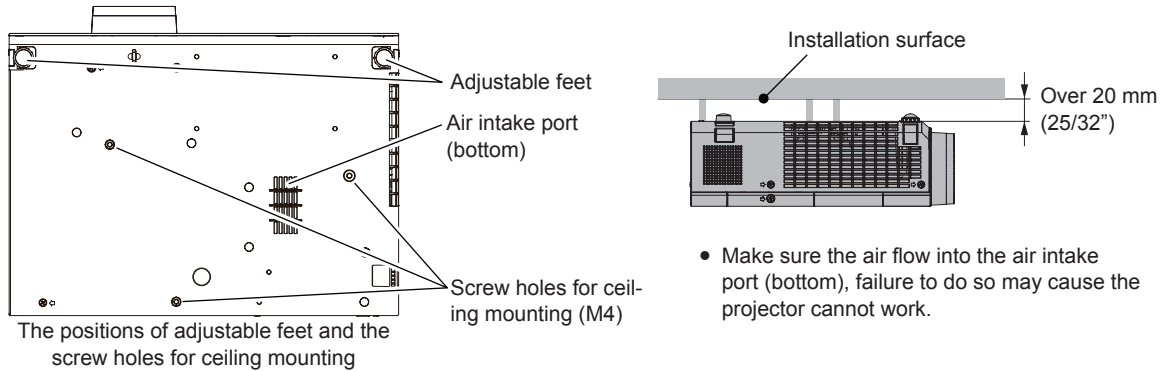
### ■ Do not tilt the projector or place it on its side.

Do not tilt the projector body more than approximately  $\pm 40$  degrees vertically or  $\pm 15$  degrees horizontally. Over tilting may result in shortening the life of the components.

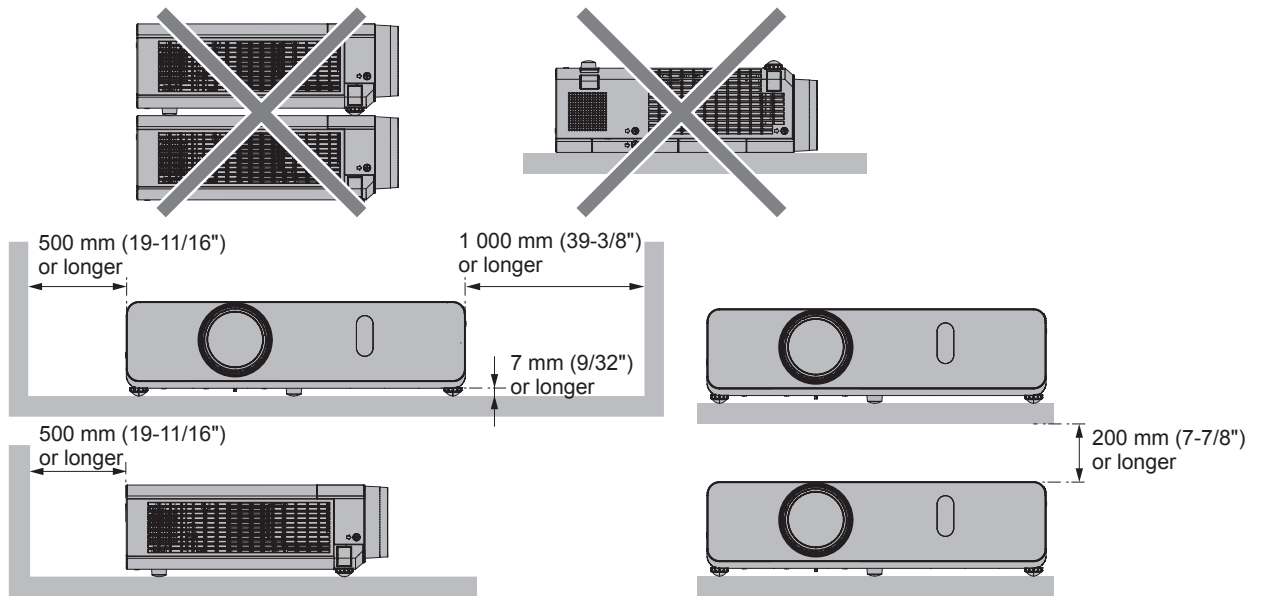


■ **Cautions when setting the projectors**

- If you want to use the projector other than the way of setting on the desk/floor with the adjustable feet or mounting on the ceiling, use the three screw holes for ceiling mounting (as shown below) to fix the projector.  
(Screw: M4; Depth of the screw hole: 8 mm (5/16"); Torque: M4 1.25 ± 0.2 N·m)  
In addition, always keep a gap of more than 20 mm (25/32") between the bottom of the projector and installation surface. Make sure that there is no clearance of at least 20 mm (25/32") between the screw holes for ceiling mounting and the installation surface by inserting supports (metallic) between them.



- Do not stack the projectors.
- Do not use the projector supporting it by the top.
- Do not block the ventilation ports (intake and exhaust) of the projector.
- Avoid heating and cooling air from the air conditioning system directly blow to the ventilation ports (intake and exhaust) of the projector.



- Do not install the projector in a confined space.  
When placing the projector in a confined space, a ventilation and/or air conditioning system is required. Exhaust heat may accumulate when the ventilation is not enough, triggering the protection circuit of the projector.

**Security**

Take safety measures against following incidents.

- Personal information being leaked via this product.
  - Unauthorized operation of this product by a malicious third party.
  - Interfering or stopping of this product by a malicious third party.
- Security instruction (▶ pages 76, 93)
- Make your password as difficult to guess as possible.
  - Change your password periodically.
  - Panasonic or its affiliate company never inquires a password directly to a customer. Do not tell your password in case you receive such an inquiry.
  - The connecting network must be secured by firewall or others.
  - Set a password for web control and restrict the users who can log in.

## Disposal

---

To dispose of the product, ask your local authorities or dealer for correct methods of disposal.

The lamp contains mercury. When disposing of used lamp units, contact your local authorities or dealer for correct methods of disposal.

## Cautions on use

---

### ■ To get a good picture quality

- In order to view a beautiful image in higher contrast, prepare an appropriate environment. Draw curtains or blinds over windows and turn off any lights near the screen to prevent outside light or light from indoor lamp from shining onto the screen.

### ■ Do not touch the surface of the projector lens with your bare hands.

If the surface of the projection lens becomes dirty from fingerprints or anything else, this will be magnified and projected onto the screen.

Attach the supplied lens cap to the projection lens when you do not use the projector.

### ■ LCD panel

The LCD panel is precision-made. Note that in rare cases, pixels of high precision could be missing or always lit. Note that such phenomena do not indicate malfunction. If still images are projected for a long time, a residual image may remain on the LCD panel. Note that the residual image may not disappear.

### ■ Optical parts

When the operating environment temperature is high or in environments where lots of dust, cigarette smoke, etc. is present, the replacement cycle of the LCD panel, polarizing plate and other optical parts may be shorter even if used for less than one year. Consult your dealer for details.

### ■ Lamp

The luminous source of the projector is a mercury lamp with high internal pressure.

A high-pressure mercury lamp has the following characteristics.

- The luminance of the lamp will decrease by duration of usage.
- The lamp may burst with a loud sound or have its service life shortened because of shock, chipping, or degradation due to cumulative runtime.
- The life of the lamp varies greatly depending on individual specificities and usage conditions. In particular, continuous use over 12 hours and frequent switching off/on of the power greatly deteriorate the lamp and affect the lamp life.
- In rare cases, the lamp burst shortly after the projection.
- The risk of bursting increases when the lamp is used beyond its replacement cycle. Make sure to replace the lamp unit consistently. ("When to replace the lamp unit" (➡ page 101), "Replacing the Lamp unit" (➡ page 101))
- If the lamp bursts, gas contained inside of the lamp is released in a form of smoke.
- It is recommended to store replacement lamp for contingency.

### ■ Computer and external device connections

- When connecting a computer or an external device, read this manual carefully regarding the use of power cords and shielded cables as well.



## Accessories

Make sure the following accessories are provided with your projector. Numbers enclosed < > show the number of accessories.

**Wireless remote control unit <1>**  
(N2QAYA000071) (N2QAYA000070)

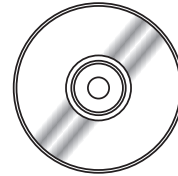
PT-VW350



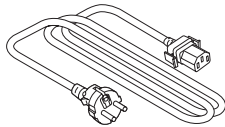
PT-VX420



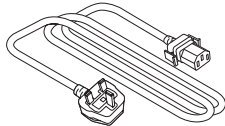
**CD-ROM <1>**  
(TXFQB02WYKZ)



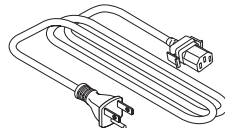
**Power cord**  
(TXFSX02UXRZ)



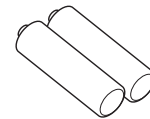
(TXFSX02UYAZ)



(TXFSX02UFEZ)



**AAA/R03 or AAA/LR03 battery <2>**

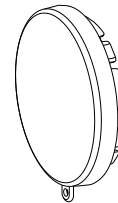


(for remote control unit)

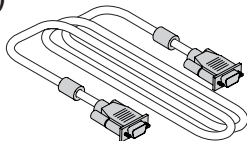
**String <1>**  
(for lens cap)  
(6103504711)



**Lens cap <1>**  
(TKKL5568)



**RGB signal cable <1>**  
(K1HY15YY0012)



### Attention

- After unpacking the projector, discard the power cord cap and packaging material properly.
- Do not use the supplied power cord for devices other than this projector.
- For lost accessories, consult your dealer.
- Store small parts in an appropriate manner, and keep them away from young children.

### Note

- The type and number of the power cord depend on the country in which you purchased the product.
- The model numbers of accessories are subject to change without prior notice.
- The supplied string is used for lens cap, refer to “Attaching the Lens Cap” (➔ page 24).

## Contents of the supplied CD-ROM

The contents of the supplied CD-ROM are as follow.

Instruction / list (PDF)	Operating Instructions – Functional Manual	
	Operating Instructions – Multi Projector Monitoring & Control Software	
	Operating Instructions – Logo Transfer Software	
	List of compatible projector models	This is a list of projectors that are compatible with the software contained in the CD-ROM and their restrictions.
	Software license	The open source software licenses that used in this projector are included in the PDF files.
Software	Multi Projector Monitoring & Control Software (Windows)	This software allows you to monitor and control multiple projectors connected to the LAN.
	Logo Transfer Software (Windows)	This software allows you to transfer original images, such as company logos to be displayed when projection starts, to the projector.

## Optional accessories

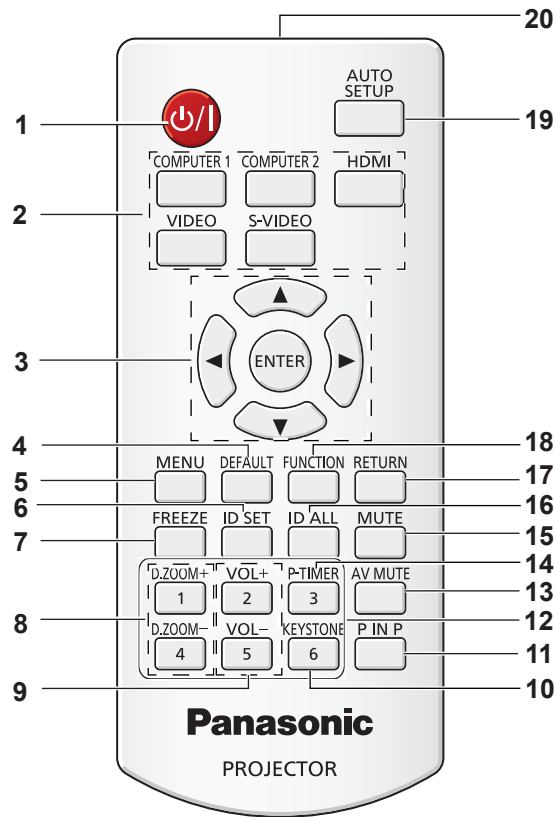
Options	Model No.
Ceiling Mount Bracket	ET-PKL100H (for high ceilings) ET-PKL100S (for low ceilings) ET-PKV400B (Projector Mount Bracket)
Replacement Lamp Unit	ET-LAV300
Replacement Filter Unit	ET-RFV300

### Note

- The model numbers of optional accessories are subject to change without prior notice.

# About your projector

## Remote control



**1 Power <Power/Standby> button**

Turn the projector on or off. (➔ pages 36, 39)  
(⏻ standby / | power on)

**2 Input Selection Buttons: <COMPUTER 1>, <COMPUTER 2>, <HDMI>, <VIDEO>, <S-VIDEO>**

These buttons are used to select the input signal.  
(➔ page 40)

**3 ▲▼◀▶ Buttons, <ENTER> Button**

Navigate the MENU display.

**4 <DEFAULT> Button**

Resets the content of the sub-menu to the factory default.  
(➔ page 48) Or deletes one character when you enter an IP address or a text.

**5 <MENU> Button**

Open or close the On-Screen Menu. (➔ page 47)

**6 <ID SET> Button**

Sets the ID number of the remote control to use for a system using multiple projectors. (➔ page 23)

**7 <FREEZE> Button**

Pauses the projected image and mute the audio temporarily. (➔ page 42)

**8 <D.ZOOM +/-> Buttons**

Zoom in and out the images. (➔ page 43)

**9 <VOL +/-> Buttons**

Adjust the volume of the speaker. (➔ page 44)

**10 <KEystone> Button**

Correct keystone distortion. (➔ page 41)

**11 <P IN P> Button (Only for PT-VW350)**

Operate the P IN P function.

**12 Number buttons**

Act as number buttons. Use these buttons when setting the remote control codes or entering the password.

**13 <AV MUTE> Button**

Used to turn off the audio and video temporarily.  
(➔ page 43)

**14 <P-TIMER> Button**

Operate the P-timer function. (➔ page 43)

**15 <MUTE> Button**

Used to mute the audio. (➔ page 44)

**16 <ID ALL> Button**

Used to simultaneously control all the projectors with one remote control for a system using multiple projectors.  
(➔ page 23)

**17 <RETURN> Button**

Return to the previous menu or cancel the setting.

**18 <FUNCTION> Button**

Assigns a frequently used operation as a shortcut button.


**19 <AUTO SETUP> Button**

Automatically adjusts the image display position while projecting the image. (➔ page 41)

**20 Remote control signal emitter**

**Attention**

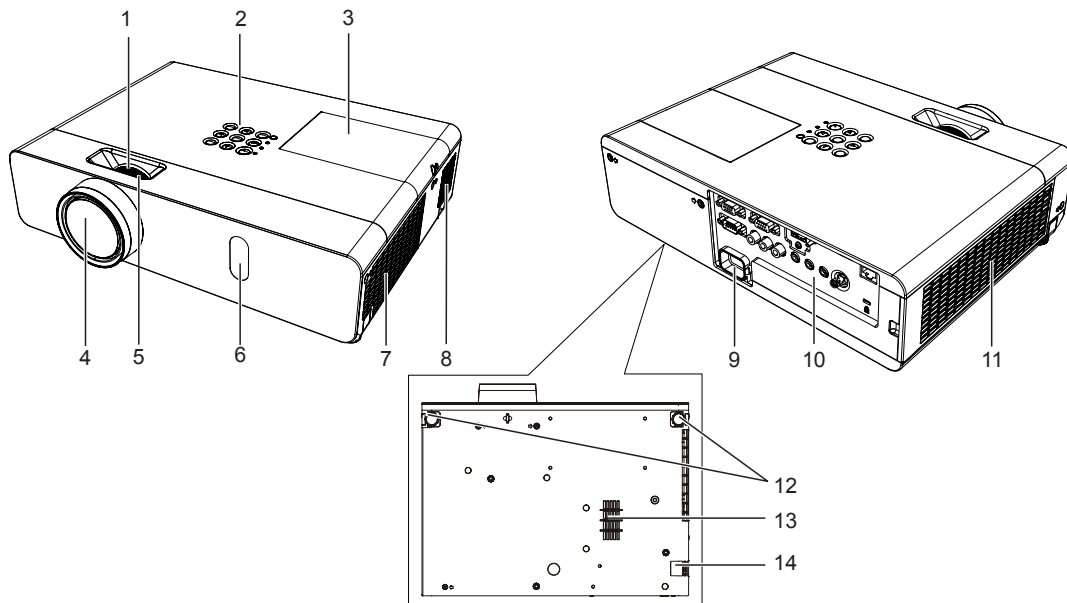
- Do not drop the remote control.
- Avoid contact with liquids.
- Do not attempt to modify or disassemble the remote control.
- Please observe the following contents that are described on the back of the remote control unit (see the right picture).
  1. Do not use a new battery together with an old battery.
  2. Do not use unspecified batteries.
  3. Make sure the polarities (+ and -) are correct when inserting the batteries.
- In addition, please read the contents that are related to batteries in the "Read this first!".

CAUTION	
1. Do not use old battery with new one. 2. Do not use batteries other than the type specified. 3. Be sure the batteries are inserted properly.	

**Note**

- The remote control can be used within a distance of about 7 m (22'11-5/8") if pointed directly at the remote control signal receiver. The remote control can control at angles of up to  $\pm 30^\circ$  vertically and  $\pm 30^\circ$  horizontally, but the effective control range may be reduced.
- If there are any obstacles between the remote control and the remote control signal receiver, the remote control may not operate correctly.
- You can operate the projector by reflecting the remote control signal on the screen. The operating range may differ due to the loss of light caused by the properties of the screen.
- When the remote control signal receiver is lit with a fluorescent light or other strong light source, the projector may become inoperative. Set the projector as far from the luminous source as possible.

**Projector body**



**WARNING**

**Keep your hands and other objects away from the air exhaust port and the air intake port (bottom).**

- Keep your hand and face away.
- Do not insert your finger.
- Keep heat-sensitive articles away.

Heated air from the air exhaust port can cause burns or external damage.

When using the projector on a ceiling and powering off with the Direct Power Off function, the heated air from the air intake port in the bottom can cause burns or external damage.

- |  |  |
|--|--|
| <p><b>1 Zoom ring (Back)</b><br/>Adjust the zoom.</p> <p><b>2 Control Panel and Indicators</b> (⇒ page 21)</p> <p><b>3 Lamp cover</b> (⇒ page 101)<br/>The lamp unit is located inside.</p> <p><b>4 Projection Lens</b></p> <p><b>5 Focus ring (Front)</b><br/>Adjust the focus.</p> <p><b>6 Remote control signal receiver</b></p> <p><b>7 Air exhaust port</b></p> <p><b>8 Speaker</b></p> | <p><b>9 &lt;AC IN&gt; terminal</b><br/>Connect the supplied power cord.</p> <p><b>10 Connecting terminals</b> (⇒ page 22)</p> <p><b>11 Air intake port (Side) / Air filter cover</b> (⇒ page 99)<br/>The air filter unit is inside.</p> <p><b>12 Adjustable feet</b><br/>Adjust the projection angle.</p> <p><b>13 Air intake port (Bottom)</b></p> <p><b>14 Security Chain Hook</b><br/>Attaches a burglar prevention cable, etc.</p> |
|--|--|