NEC

Projector

V302X/V302W/ V332X/V332W/ V302H

User's Manual

Model No.
NP-V302X/NP-V302W/NP-V332X/NP-V332W/NP-V302H

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(4) Notwithstanding article (3), NEC will not be responsible for any claims on loss of profit or other matters deemed to result from using the Projector.

Important Information

Safety Cautions

Precautions

Please read this manual carefully before using your NEC projector and keep the manual handy for future reference.

CAUTION

To turn off main power, be sure to remove the plug from power outlet.
The power outlet socket should be installed as near to the equipment as possible, and should be easily accessible.

CAUTION

TO PREVENT SHOCK, DO NOT OPEN THE CABINET.
THERE ARE HIGH-VOLTAGE COMPONENTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol warns the user that uninsulated voltage within the unit may be sufficient to cause electrical shock. Therefore, it is dangerous to make any kind of contact with any part inside of the unit.

This symbol alerts the user that important information concerning the operation and maintenance of this unit has been provided.
The information should be read carefully to avoid problems.

WARNING: TO PREVENT FIRE OR SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE. DO NOT USE THIS UNIT'S PLUG WITH AN EXTENSION CORD OR IN AN OUTLET UNLESS ALL THE PRONGS CAN BE FULLY INSERTED.

DOC Compliance Notice (for Canada only)

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

Machine Noise Information Regulation - 3. GPSGV,

The highest sound pressure level is less than 70 dB (A) in accordance with EN ISO 7779.

Disposing of your used product

EU-wide legislation as implemented in each Member State requires that used electrical and electronic products carrying the mark (left) must be disposed of separately from normal household waste. This includes projectors and their electrical accessories or lamps. When you dispose of such products, please follow the guidance of your local authority and/or ask the shop where you purchased the product.
After collecting the used products, they are reused and recycled in a proper way. This effort will help us reduce the wastes as well as the negative impact such as mercury contained in a lamp to the human health and the environment at the minimum level. The mark on the electrical and electronic products only applies to the current European Union Member States.

For EU: The crossed-out wheeled bin implies that used batteries should not be put to the general household waste. There is a separate coollection system for used batteries, to allow proper treatment and recycling in accordance with legislation.
According the EU directive 2006/66/EC, the battery can't be disposed improperly. The battery shall be separated to collect by local service.

WARNING TO CALIFORNIA RESIDENTS:
Handling the cables supplied with this product will expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. *WASH HANDS AFTER HANDLING.*

RF Interference (for USA only)

WARNING

The Federal Communications Commission does not allow any modifications or changes to the unit EXCEPT those specified by NEC Display Solutions of America, Inc. in this manual. Failure to comply with this government regulation could void your right to operate this equipment. 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 or more 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.

For UK only: In UK, a BS approved power cord with moulded plug has a Black (five Amps) fuse installed for use with this equipment. If a power cord is not supplied with this equipment please contact your supplier.

Important Safeguards

These safety instructions are to ensure the long life of your projector and to prevent fire and shock. Please read them carefully and heed all warnings.

⚠️ Installation

• Do not place the projector in the following conditions:
    - on an unstable cart, stand, or table.
    - near water, baths, or damp rooms.
    - in direct sunlight, near heaters, or heat radiating appliances.
    - in a dusty, smoky or steamy environment.
    - on a sheet of paper, cloth, rugs, carpets, or any objects which are damaged or affected by heat.
• If you wish to have the projector installed on the ceiling:
    - Do not attempt to install the projector yourself.
    - The projector must be installed by qualified technicians in order to ensure proper operation and reduce the risk of bodily injury.
    - In addition, the ceiling must be strong enough to support the projector and the installation must be in accordance with any local building codes.
    - Please consult your dealer for more information.

WARNING

• Do not use any other object than the projector's lens cover to cover the lens while the projector is on. Doing so can cause the object to get extremely hot, and possibly resulting in a fire or damage due to the heat emitted from the light output.
• Do not place any objects, which are easily affected by heat, in front of the projector lens. Doing so could lead to the object melting from the heat that is emitted from the light output.

Place the projector in a horizontal position

The tilt angle of the projector should not exceed 5 degrees, nor should the projector be installed in any way other than the desktop and ceiling mount, otherwise lamp life could decrease dramatically.

⚠ Fire and Shock Precautions ⚠

• Ensure that there is sufficient ventilation and that vents are unobstructed to prevent the build-up of heat inside your projector. Allow at least 4 inches (10cm) of space between your projector and a wall.

• Do not try to touch the exhaust vent as it can become heated while the projector is turned on and immediately after the projector is turned off.

HOT

• Prevent foreign objects such as paper clips and bits of paper from falling into your projector. Do not attempt to retrieve any objects that might fall into your projector. Do not insert any metal objects such as a wire or screwdriver into your projector. If something should fall into your projector, disconnect it immediately and have the object removed by a qualified service personnel.

• Do not place any objects on top of the projector.

• Do not touch the power plug during a thunderstorm. Doing so can cause electrical shock or fire.

• The projector is designed to operate on a power supply of 100-240V AC 50/60 Hz. Ensure that your power supply fits this requirement before attempting to use your projector.

• Do not look into the lens while the projector is on. Serious damage to your eyes could result.

• Keep any items (magnifying glass etc.) out of the light path of the projector. The light path being projected from the lamp is extensive, therefore any kind of abnormal objects that can redirect light coming out of the lamp, can cause unpredictable outcome such as a fire or injury to the eyes.

• Do not block the light path between the light source and the lamp with any objects. Doing so could cause the object to catch on fire.

• Do not place any objects, which are easily affected by heat, in front of the projector lamp or a projector exhaust vent.

  Doing so could lead to the object melting or getting your hands burned from the heat that is emitted from the light output and exhaust.

• Handle the power cord carefully. A damaged or frayed power cord can cause electric shock or fire.
    - Do not use any power cord other than the one supplied.
    - Do not bend or tug the power cord excessively.
    - Do not place the power cord under the projector, or any heavy object.
    - Do not cover the power cord with other soft materials such as rugs.
    - Do not heat the power cord.
    - Do not handle the power plug with wet hands.

• Turn off the projector, unplug the power cord and have the projector serviced by a qualified service personnel under the following conditions:
    - When the power cord or plug is damaged or frayed.
    - If liquid has been spilled into the projector, or if it has been exposed to rain or water.

- If the projector does not operate normally when you follow the instructions described in this user's manual.
- If the projector has been dropped or the cabinet has been damaged.
- If the projector exhibits a distinct change in performance, indicating a need for service.

• Disconnect the power cord and any other cables before carrying the projector.
• Turn off the projector and unplug the power cord before cleaning the cabinet or replacing the lamp.
• Turn off the projector and unplug the power cord if the projector is not to be used for an extended period of time.
• When using a LAN cable:
  For safety, do not connect to the connector for peripheral device wiring that might have excessive voltage.

⚠ Remote Control Precautions

• Handle the remote control carefully.
• If the remote control gets wet, wipe it dry immediately.
• Avoid excessive heat and humidity.
• Do not short, heat, or take apart batteries.
• Do not throw batteries into fire.
• If you will not be using the remote control for a long time, remove the batteries.
• Ensure that you have the batteries' polarity (+/–) aligned correctly.
• Do not use new and old batteries together, or use different types of batteries together.
• Dispose of used batteries according to your local regulations.

Lamp Replacement

• Use the specified lamp for safety and performance.
• To replace the lamp, follow all instructions provided on pages 84-85.
• Be sure to replace the lamp when the message [THE LAMP LIFE EXCEEDED] appears. If you continue to use the lamp after the lamp has reached the end of its usable life, the lamp bulb may shatter, and pieces of glass may be scattered in the lamp case. Do not touch them as the pieces of glass may cause injury. If this happens, contact your dealer for lamp replacement.

A Lamp Characteristic

The projector has a discharge lamp for special purposes as a light source.
A lamp has a characteristic that its brightness gradually decreases with age. Also repeatedly turning the lamp on and off will increase the possibility of its lower brightness. The actual lamp life may vary depending upon the individual lamp, the environmental conditions and usage.

⚠ CAUTION:

• DO NOT TOUCH THE LAMP immediately after it has been used. It will be extremely hot. Turn the projector off and then disconnect the power cord. Allow at least one hour for the lamp to cool before handling.
• When removing the lamp from a ceiling-mounted projector, make sure that no one is under the projector. Glass fragments could fall if the lamp has been burned out.

Note for US Residents

The lamp in this product contains mercury. Please dispose according to Local, State or Federal Laws.

Note for Canadian Environmental Protection Act, 1999

The lamp in this product contains mercury. Please dispose according to your local authority low.
FOR MORE INFORMATION, CONTACT:
NEC Display Solutions of America, Inc.
500 Park Boulevard, Suite 1100
Itasca, Illinois 60143-1248
TELEPHONE 800-836-0655
www.necdisplay.com

⚠ **Health precautions to users viewing 3D images**

• Before viewing, be sure to read health care precautions that may be found in the user's manual
  included with your LCD shutter eyeglasses or your 3D compatible content such as DVDs, video games,
  computer's video files and the like.
  To avoid any adverse symptoms, heed the following:
  - Do not use LCD shutter eyeglasses for viewing any material other than 3D images.
  - Allow a distance of 2 m/7 feet or greater between the screen and a user. Viewing 3D images from too
    close a distance can strain your eyes.
  - Avoid viewing 3D images for a prolonged period of time. Take a break of 15 minutes or longer after
    every hour of viewing.
  - If you or any member of your family has a history of light-sensitive seizures, consult a doctor before
    viewing 3D images.
  - While viewing 3D images, if you get sick such as nausea, dizziness, queasiness, headache, eyestrain,
    blurry vision, convulsions, and numbness, stop viewing them. If symptoms still persist, consult a
    doctor.

About High Altitude mode

• Set [FAN MODE] to [HIGH ALTITUDE] when using the projector at altitudes approximately 2500
  feet/760 meters or higher.
• Using the projector at altitudes approximately 2500 feet/760 meters or higher without setting to [HIGH
  ALTITUDE] can cause the projector to overheat and the protector could shut down. If this happens, wait
  a couple minutes and turn on the projector.
• Using the projector at altitudes less than approximately 2500 feet/760 meters and setting to [HIGH
  ALTITUDE] can cause the lamp to overcool, causing the image to flicker. Switch [FAN MODE] to
  [AUTO].
• Using the projector at altitudes approximately 2500 feet/760 meters or higher can shorten the life of
  optical components such as the lamp.

About Copyright of original projected pictures:

Please note that using this projector for the purpose of commercial gain or the attraction of public attention
in a venue such as a coffee shop or hotel and employing compression or expansion of the screen image with
the following functions may raise concern about the infringement of copyrights which are protected by
copyright law. [ASPECT RATIO], [KEYSTONE], Magnifying feature and other similar features.

[NOTE] Power management function

The projector has power management functions.

To reduce power consumption, the power management functions (1 and 2) are factory-preset in the following way. To control the projector via a LAN or serial cable connection, use the on-screen menu to change the settings for 1 and 2.

1. STANDBY MODE (Factory preset: NORMAL)

To control the projector from an external device, select [NETWORK STANDBY] for [STANDBY MODE]. When [NORMAL] is selected for [STANDBY MODE], the following connectors and functions will not work:

- PC CONTROL connector, MONITOR OUT connector, AUDIO OUT connector, LAN functions, Mail Alert function

2. AUTO POWER OFF (Factory default: 60 minutes)

To control the projector from an external device, select [0] for [AUTO POWER OFF (MIN)].

-When [60] is selected for [AUTO POWER OFF], you can enable the projector to automatically turn off in 60 minutes if there is no signal received by any input or if no operation is performed.

Table of Contents

Precautions

Follow all warnings, precautions and maintenance as recommended in this user's guide to maximize the life of your unit.

■ Warning-	This projector will detect the life of the lamp itself. Please be sure to change the lamp when it shows warning messages.
■ Warning-	Reset the "CLEAR LAMP HOURS" function from the on-screen display "OPTIONS |LAMP SETTINGS" menu after replacing the lamp module. Please see the page 73.
■ Warning-	When switching the projector off, please ensure the cooling cycle has been completed before disconnecting power.
■ Warning-	Turn on the projector first and then the signal sources.
■ Warning-	When the lamp reaches the end of its life, it will burn out and may make a loud popping sound. If this happens, the projector will not turn back on until the lamp module has been replaced. To replace the lamp, follow the procedures listed under "Replacing the Lamp".

Turkish RoHS information relevant for Turkish market
EEE Yönetmeliğine Uygundur.

This device is not intended for use in the direct field of view at visual display workplaces. To avoid incommoding reflections at visual display workplaces this device must not be placed in the direct field of view.

High gain type screens are not optimal for use with this projector. The lower the screen gain (i.e., screen gain on the order of 1), the better the appearance of the projected image.

Do:

- Turn off the product before cleaning.
- Use a soft cloth moistened with mild detergent to clean the display housing.
- Disconnect the power plug from AC outlet if the product is not being used for a long period of time.
- If the lens is soiled, use a commercially available cleaning cloth for lens.

Do not:

- Use abrasive cleaners, waxes or solvents to clean the unit.
- Use under the following conditions:
  - Extremely heat, cold or humidity.
  - In areas susceptible to excessive dust and dirt.
  - In direct sunlight.
  - Outdoors.
  - Move the projector by holding the cable cover.
  - Hang from the projector in a ceiling or wall mounted installation.
  - Apply excessively strong pressure against the lens.
  - Keep finger prints off the lens surface.
  - Bring the projector using the Security Lock Hunger
- Install and store in the following conditions:
  - In powerful magnetic fields.
 - In corrosive gas environment.

Introduction

Product Features

■ **High resolution**
Full HD (1920 x 1080) support.

■ **0.5 W in standby condition with energy saving technology**
Selecting [NORMAL] for [STANDBY MODE] from the menu
can put the projector in power-saving mode that consumes
only 0.5 W.

■ **Two HDMI input ports provide digital signal**
The two HDMI inputs provide HDCP compatible digital
signals. The HDMI input also supports audio signal.

■ **Quick Power Off, Direct Power Off**
The projector can be put away immediately after the projector
is powered on. No cool down period is required after the
projector is turned off from the remote control or cabinet
control panel.
The projector has a feature called "Direct Power Off". This
feature allows the projector to be turned off (even when
projecting an image) by using the Main Power Switch or
disconnecting the AC power supply. To turn off the AC power
supply when the projector is powered on, use a power strip
equipped with a switch and a breaker.

■ **8 W speaker for an integrated audio solution**
Powerful 8 watt stereo speakers provide volume need for
large rooms.

■ **3D features supported**
The projector can support following format by DLP® Link.
- HDMI 3D
- HQFS 3D

■ **Integrated RJ-45 connector for wired networking capability**
The customer can control the projector by own computer via
Wired LAN.

■ **Preventing unauthorized use of the projector**
Enhanced smart security settings for keyword protection,
cabinet control panel lock, security slot, and security chain
opening to help prevent unauthorized access, adjustments and
theft deterrence.

Package Overview

This projector comes with all the items shown below. Check to make sure your unit is completed. Contact your dealer immediately if anything is missing.
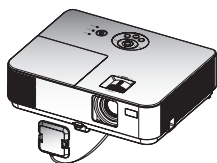
Projector	Lens Cap (79TCB121)	Remote Control (P/N:7N901052)	Batteries (AAAx2)

Power Cord x1

US (P/N:79TC5021)　　　　EU (P/N: 79TC5031)

Computer Cable (VGA) (P/N:7N520087)

Security Label

Documentation:

☐ NEC Projector CD-ROM (P/N: 7N952172)

☐ Quick Setup Guide (P/N: 7N8N5831)

☐ Important Information (For North America: 7N8N5812) (For Other countries than North America: 7N8N5812 and 7N8N5822)

For North America:

☐ Limited Warranty

For Europe:

☐ Guarantee Policy
For customers in Europe:You will find our current valid Guarantee Policy on our Web Site:www.nec-display-solutions.com

Introduction

Product Overview

Projector
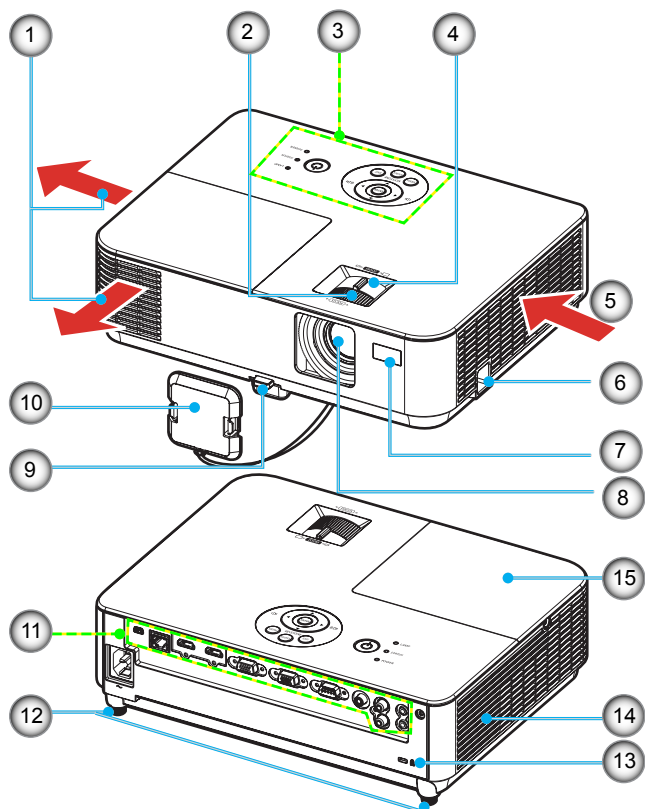
1. Exhaust Vent	9. Tilt Foot
2. Focus Ring	Release Button
3. Control Panel	10. Lens Cap
4. Zoom Lever	11. Ports
5. Intake Vent	12. Tilt Foot
6. Security Lock Hunger	13. Kensington™ Lock Port
7. Remote Control Sensor	14. Monaural Speaker (8W)
8. Lens	15. Lamp Cover

Introduction

Ports

NP-V332X/NP-V332W/NP-V302H
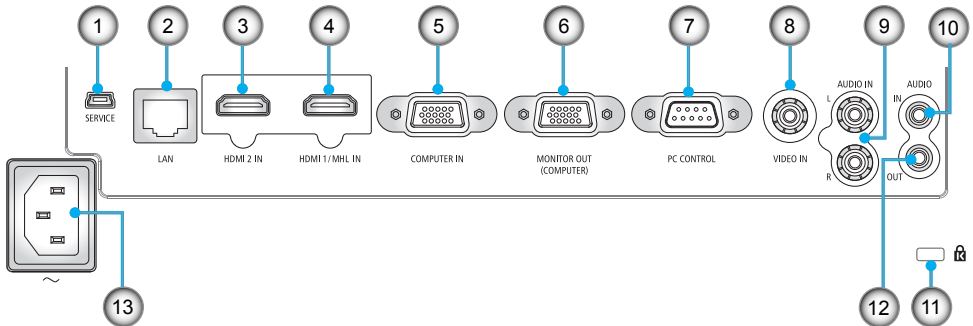
NP-V302X/NP-V302W
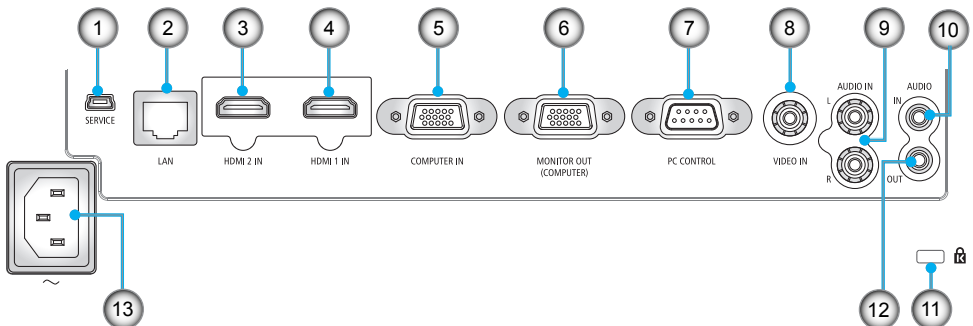
1. SERVICE Port (for service purpose only)
2. LAN Port (RJ-45)
3. HDMI 2 IN Port
4. HDMI 1/MHL IN or
    HDMI 1 Port
5. COMPUTER IN Port
6. MONITOR OUT Port (separate
    sync signal only)
7. PC CONTROL Port

8. VIDEO IN Port
9. AUDIO IN L/R Port
10. AUDIO IN Jack (3.5mm
    mini jack)
11. Kensington™ Lock 🔒 Port
12. AUDIO OUT Port
    (This port does not support
    Headphone terminal)
13. AC IN Terminal

Introduction

Control Panel

NP-V332X/NP-V332W/NP-V302H
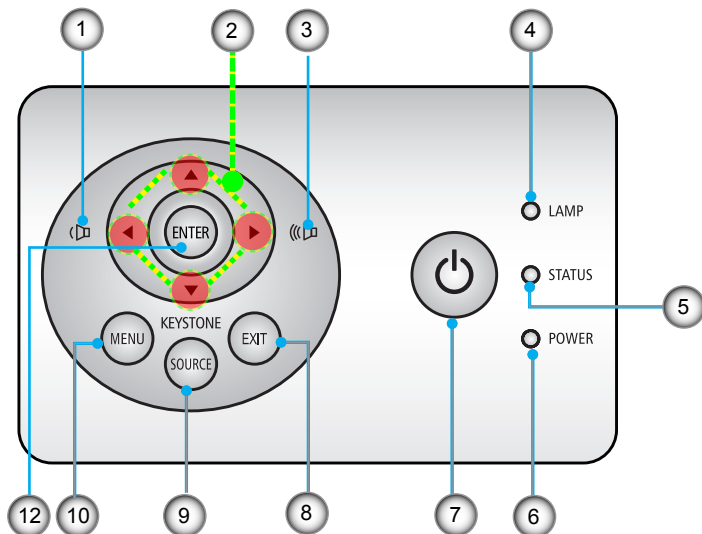
NP-V302X/NP-V302W

Introduction

1		VOLUME -	Decrease speaker volume.
2		Four Directional Select Keys	-Use ▲ , ▼ , ◀ or ▶ to select items or make adjustments to your selection. -Use as Quick Keys. Please see the page 13.
3		VOLUME +	Increase speaker volume.
4		LAMP LED	Indicate the projector's lamp status.
5		STATUS LED	Indicate the projector's various status.
6		POWER LED	Indicate the projector's status.
7		POWER	Turn the projector on/off. Refer to the "Power On/Off the Projector" section on pages 29-30.
8		EXIT	Press to exit the OSD menu.
9		SOURCE	Press "SOURCE" to select an input signal.
10		MENU	Press "MENU" to launch the Onscreen display (OSD), back to the top level of OSD for the OSD main menu operation.
11		KEYSTONE Correction	Adjust the image to compensate for distortion caused by tilting the projector (vertical ± 40 degrees).
12		ENTER	Confirm your section of items in sub menu operation.

❖ For controlling the speaker volume, use ◀ or ▶ .

❖ NP-V332X, NP-332W, and NP-V302H also support horizontal keystone correction. Use ▼ button for adjusting horizontal keystone.

Introduction

Remote Control
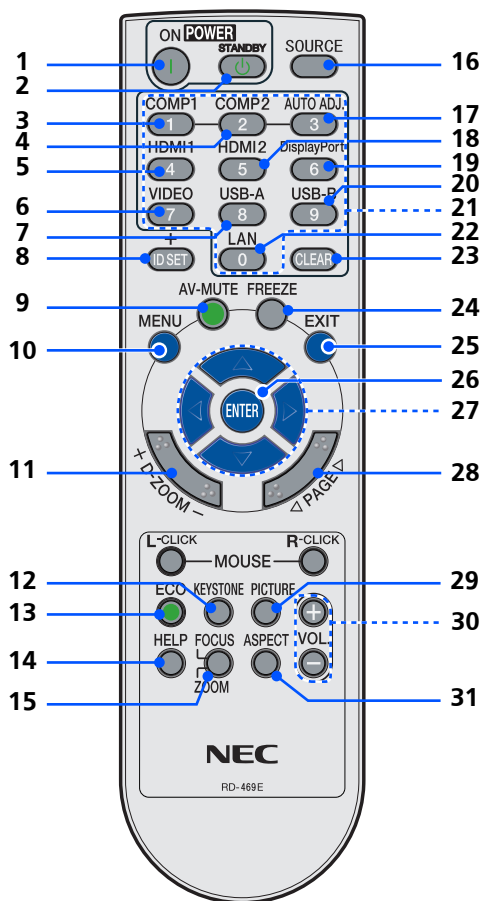
1		POWER ON	Power on the projector. Please see the "Power On/Off the Projector" section on pages 29-30.
2		POWER OFF	Power off the projector. Please see the "Power On/Off the Projector" section on pages 29-30.

3	COMPUTER 1	Press "1" to choose Computer IN connector.
4	COMPUTER 2	No function.
5	HDMI 1	Press "4" to choose HDMI 1/MHL IN connector (*1) or HDMI1 connector (*2).
6	VIDEO	Press "VIDEO" to choose VIDEO IN connector.
7	USB A	No function.
8	ID SET	Press ID SET for indicating the ID number.
9	AV-MUTE	Momentarily turn off/on the audio and video.
10	MENU	Press "MENU" to launch the Onscreen display (OSD), back to the top level of OSD for the OSD main menu operation
11	D-ZOOM	Zoom in/out the projected image.
12	KEYSTONE Correction	Adjust the image to compensate for distortion caused by tilting the projector.
13	ECO	Dim the projector lamp which will lower power consumption and extend the lamp life. Please see the page 72.
14	HELP	This function ensures easy setup and operation.
15	FOCUS/ZOOM	No function.
16	SOURCE	Press "SOURCE" to select the desired input source.
17	AUTO ADJ.	Automatically synchronize the projector to the input source.

18	HDMI 2	Press "5" to choose HDMI 2 IN connector.
19	DISPLAY PORT	No function.
20	USB B	No function.
21	Number Button	No function.
22	LAN	No function.
23	CLEAR	Clear the password while you input the password.
24	FREEZE	Freeze To pause the screen image. Press again to resume the screen image.
25	EXIT	Exit the settings.
26	ENTER	Confirm your section of items in sub menu operation.
27	Four Directional Select Buttons	-Use ▲ or ▼ or ◄ or ► to select items or make adjustments to your selection. When the image is magnified by using the D-ZOOM + button, the ▲ , ▼ , ◄ or ► button moves the image. - Use as Quick Keys. Please see the page 13.
28	PAGE	No function.
29	PICTURE Mode	Select the Picture mode from PRESENTATION, HIGH-BRIGHT, VIDEO, MOVIE, sRGB, BLACKBOARD, USER1, and USER2.
30	VOL. +/-	Increase/decrease speaker volume.
31	ASPECT	Use this function to choose your desired aspect ratio. Please see the page 49.

❖   When the demagnified image is displayed, the ▲ , ▼ , ◄ or ► button is not available to move the image.

Introduction

Quick Key Activate Behavior

Quick keys are available when no OSD is displayed.

The Quick Keys can be accessed on Control Panel or remote control
(◄ ▲▼ ►).

The behavior of the Quick Keys is as described in the following tables.

NP-V302X/NP-V302W

Quick Key	Function	Activate Condition
LEFT (◄)/ RIGHT (►)	Pop Volume OSD and allow user to adjust.	No OSD Display.
UP (▲)/ DOWN (▼)	Pop Vertical Keystone OSD and allow user to adjust.	

NP-V332X,/NP-V332W/NP-V302H

Quick Key	Function	Activate Condition
LEFT (◄)/ RIGHT (►)	Pop Volume OSD and allow user to adjust.	No OSD Display.
UP (▲)	No function.	
DOWN (▼)	Pop Hrizontal + Vertical Keystone OSD allow user to choose adjust horizontal or vertical keystone. Use the ▼ button on the control panel or the KEYSTONE button on the remote control	

Introduction

Battery Installation

1. Press firmly and slide the battery cover off.
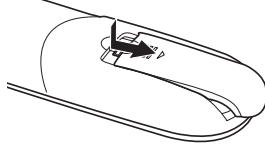
2. Install new batteries (AAA). Ensure that you have the batteries' polarity (+/–) aligned correctly.

3. Slip the cover back over the batteries until it snaps into place. Do not mix different types of batteries or new and old batteries.

Remote Control Precautions
• Handle the remote control carefully.
• If the remote control gets wet, wipe it dry immediately.
• Avoid excessive heat and humidity.
• Do not place the battery upside down.
• Replace only with the same or equivalent type recommended by the manufacturer.
• Dispose of used batteries according to your local regulations.

Introduction
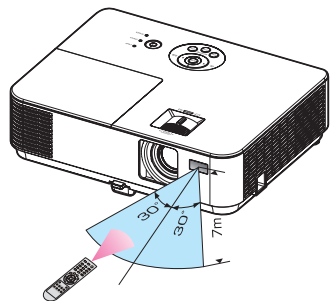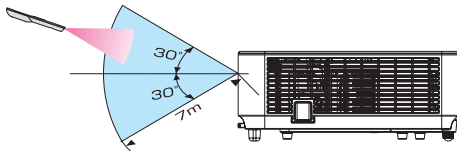
Using the Downloadable Software

Operating the Projector Via the LAN (Virtual Remote Tool)

Using the utility software "Virtual Remote Tool" that you can download from our web site (http://www.nec-display.com/dl/en/index.html), Virtual Remote screen (or toolbar) can be displayed on your computer screen.
This will help you perform operations such as projector's power on or off and signal selection via a LAN connection.

Virtual Remote screen   Toolbar

This section provides an outline of preparation for use of Virtual Remote Tool.
For information on how to use Virtual Remote Tool, see Help of Virtual Remote Tool. Please refer to page 19.

Step 1: Install Virtual Remote Tool on the computer. Please refer to page 16.

Step 2: Connect the projector to a LAN. Please refer to page 17.

Step 3: Start Virtual Remote Tool. Please refer to page 18.

❖ The projector does not support the LAN automatic search feature of Virtual Remote Tool. To connect the projector, register an IP address manually.

TIP:

• Virtual Remote Tool can be used also with a serial connection.
• For update information on Virtual Remote Tool, visit our website:
   http://www.nec-display.com/dl/en/index.html

Introduction

❖ To install or uninstall the program, the Windows user account must have [Administrator] privilege (Windows 8.1, Windows 8, Windows 7, and Windows Vista).

❖ Exit all running programs before installation. If another program is running, the installation may not be completed.

Step 1: Install Virtual Remote Tool on the computer
• Supported OS

Virtual Remote Tool will run on the following operating systems.
Windows 8.1 *1, Windows 8.1 Pro *1, Windows 8.1 Enterprise *1, Windows 8 *1, Windows 8 Pro *1, Windows 8 Enterprise *1,
Windows 7 Home Basic, Windows 7 Home Premium, Windows 7 Professional, Windows 7 Enterprise, Windows 7 Ultimate
Windows Vista Home Basic, Windows Vista Home Premium, Windows Vista Business,
Windows Vista Enterprise, Windows Vista Ultimate
Windows XP Home Edition *1, Windows XP Professional

*1: To run Virtual Remote Tool, "Microsoft .NET Framework Version 2.0" is required. The Microsoft .NET Framework Version is available from Microsoft's web page. Install the Microsoft .NET Framework Version 2.0, 3.0 or 3.5 on your computer.

1 Download the updated VRT exe file from our web site

(http://www.nec-display.com/dl/en/index.html).

2 Double-click the VRT. exe icon.

The Installer will start and the Wizard screen will appear.
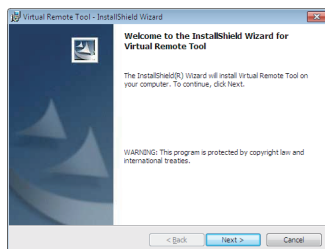
3 Click "Next".

"END USER LICENSE AGREEMENT" screen will be displayed.

Read "END USER LICENSE AGREEMENT" carefully.

4 *If you agree, click "I accept the terms in the license agreement"* and then click "Next".

Follow the instructions on the installer screens to complete the installation.

After the installation is completed, the shortcut icon for Virtual Remote Tool.

TIP:Uninstalling Virtual Remote Tool

• Preparation
Exit Virtual Remote Tool before uninstalling. To uninstall Virtual Remote Tool, the Windows user account must have "Administrator" privilege "(Windows 8.1, Windows 8, Windows 7 and Windows Vista)" or "Computer Administrator" privilege (Windows XP).

• For Windows 8.1/Windows 8/Windows 7/Windows Vista

1. Click "Start" and then "Control Panel".
The Control Panel window will be displayed.
2. Click "Uninstall a program" under "Programs".
The "Programs and Features" window will be displayed.
3. Select Virtual Remote Tool and click it.
4. Click "Uninstall/Change" or "Uninstall".
When the "User Account Control" window is displayed, click "Continue". Follow the instructions on the screens to complete the uninstallation.

• For Windows XP

1. Click "Start" and then "Control Panel".
The Control Panel window will be displayed.
2. Double-click "Add / Remove Programs".
The Add / Remove Programs window will be displayed.
3. Click Virtual Remote Tool from the list and then click "Remove".
Follow the instructions on the screens to complete the uninstallation.

Step 2: Connect the projector to a LAN

Connect the projector to the LAN by following the instructions in "Connecting the Projector" on pages 25-26 and "How to use web browser to control your projector" in pages 64-68.

Step 3: Start Virtual Remote Tool

Start using the shortcut icon

Start from the Start menu

Click [Start] -> [All Programs] or [Programs] -> [NEC Projector User Supportware] -> [Virtual Remote Tool] -> [Virtual Remote Tool].

When Virtual Remote Tool starts for the first time, "Easy Setup" window will be displayed.
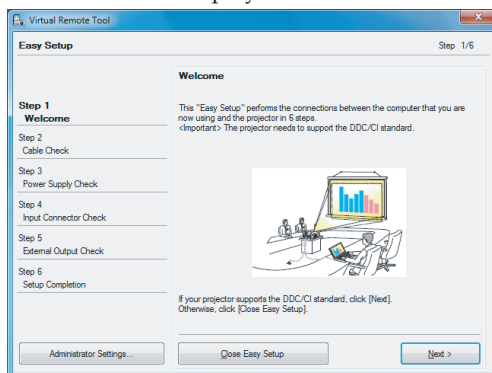
The "Easy Setup" feature is not available on this model. Click "Close Easy Setup".
Closing the "Easy Setup" window will display the "Projector List" window. Click "Close". This will display the Virtual Remote screen. To connect the projector, register an IP address manually.

NOTE

❖ When "NORMAL" is selected for "STANDBY MODE" from the menu, the projector cannot be controlled via the serial cable or network (wired LAN) connection..

TIP:

• The Virtual Remote Tool screen (or Toolbar) can be displayed without displaying "Easy Setup" window.
  To do so, click to place a check mark for "Do not use Easy Setup next time" on the screen.

Exiting Virtual Remote Tool

1 Click the Virtual Remote Tool icon on the Taskbar.

The pop-up menu will be displayed.
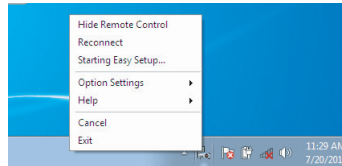
2 Click "Exit".

The Virtual Remote Tool will be closed.

Viewing the help file of Virtual Remote Tool

Displaying the help file using the taskbar

1 Click the Virtual Remote Tool icon on the taskbar when Virtual Remote Tool is running.

The pop-up menu will be displayed.
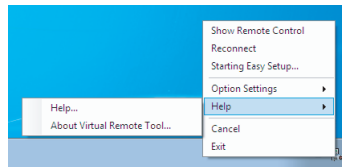
2 Click "Help".

The Help screen will be displayed.
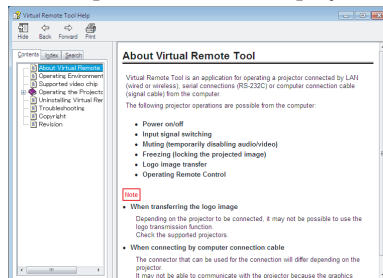
Displaying the help file using the Start Menu.
Click "Start" -> "All programs" or "Programs" -> "NEC Projector User Supportware" -> "Virtual Remote Tool" and then "Virtual

Remote Tool Help" in this order.
The Help screen will be displayed.

Introduction

Controlling the Projector over a LAN
(PC Control Utility Pro 4 for Windows/PC Control Utility Pro 5 for Mac OS)

[Using on Windows]

Using the utility software "PC Control Utility Pro 4" that you can download from our web site (http://www.nec-display.com/dl/en/index.html), the projector can be controlled from a computer over a LAN.

Control Functions

Power On/Off, signal selection, picture freeze, picture mute, audio mute, adjusting, error message notification, event schedule.

> **NOTE**
>
> ❖ When the projector is in the standby condition, the Error Alert function of PC Control Utility Pro 4/ PC Control Utility Pro 5 are not available.
>
> To make this function available even in the standby condition, use the E-Mail Alert function of the projector.
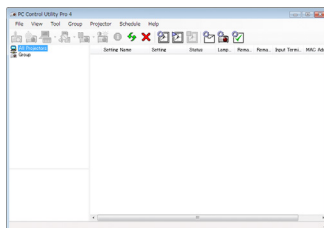
Screen of PC Control Utility Pro 4

This section provides an outline of preparation for use of PC Control Utility Pro 4. For information on how to use PC Control Utility Pro 4, see Help of PC Control Utility Pro 4.

- Step 1: Install PC Control Utility Pro 4 on the computer. Please see the page 21.
- Step 2: Connect the projector to a LAN. Please see the page 22.
- Step 3: Start PC Control Utility Pro 4. Please see the page 22.

TIP:
- PC Control Utility Pro 4 can be used also with a serial connection.
- For update information on PC Control Utility Pro 4, visit our website: http://www.nec-display.com/dl/en/index.html

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Step 1: Install PC Control Utility Pro 4 on the computer

• Supported OS - PC Control Utility Pro 4 will run on the following operating systems.

Windows 8.1*1, Windows 8.1 Pro *1, Windows 8.1 Enterprise *1, Windows 8 *1, Windows 8 Pro *1, Windows 8 Enterprise *1,

Windows 7 Home Basic, Windows 7 Home Premium, Windows 7 Professional, Windows 7 Enterprise, Windows 7 Ultimate

Windows Vista Home Basic, Windows Vista Home Premium, Windows Vista Business, Windows Vista Enterprise, Windows Vista Ultimate

Windows XP Home Edition *1, Windows XP Professional *1

*1: To run PC Control Utility Pro 4, "Microsoft .NET Framework Version 2.0" is required. The Microsoft .NET Framework Version is available from Microsoft's web page. Install the Microsoft .NET Framework Version 2.0, 3.0 or 3.5 on your computer.

NOTE

❖ To install or uninstall the program, the Windows user account must have [Administrator] privilege (Windows 8.1, Windows 8, Windows 7, and Windows Vista)

❖ Exit all running programs before installation. If another program is running, the installation may not be completed.

1 Connect your computer to the Internet and download the updated PCCUP4 exe file from our web site (http://www.nec-display.com/dl/en/index.html).

2 Double-click the PCCUP4. exe icon.

The Installer will start and the Wizard screen will appear.

3 Click "Next".

"END USER LICENSE AGREEMENT" screen will be displayed.

Introduction

Read "END USER LICENSE AGREEMENT" carefully.

4 If you agree, click "I accept the terms in the license agreement" and then click "Next".

Follow the instructions on the installer screens to complete the installation.

TIP:Uninstalling PC Control Utility Pro 4

• To uninstall PC Control Utility Pro 4, do the same procedures stated as in "Uninstalling Virtual Remote Tool". Read "Virtual Remote Tool" as "PC Control Utility Pro 4"

Step 2: Connect the projector to a LAN

Connect the projector to the LAN by following the instructions in "Connecting the Projector" on pages 25-26 and "How to use web browser to control your projector" in pages 64-65.

Step 3: Start PC Control Utility Pro 4

Click "Start" -> "All programs" or "Programs" -> "NEC Projector User Supportware" -> "PC Control Utility Pro 4" -> "PC Control Utility Pro 4".

TIP: Viewing the Help of PC Control Utility Pro 4

• Displaying the Help file of PC Control Utility Pro 4 while it is running.
Click "Help (H)" -> "Help (H)" of window of PC Control Utility Pro 4 in this order.
The pop-up menu will be displayed.
• Displaying the help file using the Start Menu.
Click "Start" -> "All programs" or "Programs" -> "NEC Projector User Supportware" -> "PC Control Utility Pro 4" -> "PC Control Utility Pro 4 Help".
The Help screen will be displayed.

PC Control Utility Pro 5 for Mac OS

Step 1: Install PC Control Utility Pro 5 on the computer

1 Connect your computer to the Internet and visit our website (http://www.nec-display.com/dl/en/index.html).

2 Download the updated PC Control Utility Pro 5 from our website.

3 In Finder, control-click ("control" + click) or right click the PC Control Utility Pro 5.pkg.

4 Select "Open" from the top of contextual menu that appears.

❖ For the Schedule function of the PC Control utility Pro 4 to work, you must have your computer running and not in standby/sleep mode. Select "Power Options" from the "Control Panel" in Windows and disable its standby/sleep mode before running the scheduler.

[Example] For Windows 7:

Select "Control Panel" -> "System and Security" -> "Power Options" -> "Change when the computer sleeps" -> "Put the computer to sleep" -> "Never".

❖ When "NORMAL" is selected for "STANDBY MODE" from the menu, the projector cannot be controlled via the serial cable or network (wired LAN) connection.

❖ The projector does not support the LAN automatic search feature of PC Control Utility Pro 4. To connect the projector, register an IP address manually.

5 Click "Open" in the dialog box. If prompted, enter an administrator name and password.

The installer will start.

6 Click "Next".

"END USER LICENSE AGREEMENT" screen will be displayed.

7 Read "END USER LICENSE AGREEMENT" and click "Next".

The confirmation window will be displayed.

8 Click "I accept the terms in the license agreement".

Follow the instructions on the installer screens to complete the installation.

Step 2: Connect the projector to a LAN

Connect the projector to the LAN by following the instructions in "Connecting the Projector". Please see pages 25-26.

Step 3: Start PC Control Utility Pro 5

1. Open your Applications folder in Mac OS.

2. Click the "PC Control Utility Pro 5" folder.

3. Click the "PC Control Utility Pro 5" icon.

PC Control Utility Pro 5 will start.

❖ For the Schedule function of the PC Control utility Pro 5 to work, you must have your computer running and not in sleep mode. Select "Energy Saver" from the "System Preferences" in Mac and disable its sleep mode before running the scheduler.

❖ When [NORMAL] is selected for [STANDBY MODE] from the menu, the projector cannot be turned on via the network.

TIP: Viewing the Help of PC Control Utility Pro 5

• Displaying the Help file of PC Control Utility Pro 5 while it is running.
• From the menu bar, click "Help" → "Help" in this order.
  The Help screen will be displayed
• Displaying the Help using the Dock

  1. Open "Application Folder" in Mac OS.

  2. Click the "PC Control Utility Pro 5" folder.

  3. Click the "PC Control Utility Pro 5 Help" icon.

  The Help screen will be displayed.

TIP: Uninstalling a software program

1. Put the "PC Control Utility Pro 5" folder to the Trash icon.
2. Put the configuration file of PC Control Utility Pro 5 to the Trash icon.
• The configuration file of PC Control Utility Pro 5 is located in "/Users/ <your user name>/Application Data/NEC Projector User Supportware/ PC Control Utility Pro 5".

Introduction

Viewing 3D Images

The projector provides 3D images to a user wearing commercially available LCD shutter eyeglasses.

CAUTION
Health precautions Before viewing, be sure to read health care precautions that may be found in the user's manual included with your LCD shutter eyeglasses or your 3D compatible content such as DVDs, video games, computer's video files and the like. To avoid any adverse symptoms, heed the following: - Do not use LCD shutter eyeglasses for viewing any material other than 3D images. - Allow a distance of 2 m/7 feet or greater between the screen and a user. Viewing 3D images from too close a distance can strain your eyes. Avoid viewing 3D images for a prolonged period of time. Take a break of 15 minutes or longer after every hour of viewing. - If you or any member of your family has a history of light-sensitive seizures, consult a doctor before viewing 3D images. - While viewing 3D images, if you get sick such as nausea, dizziness, queasiness, headache, eyestrain, blurry vision, convulsions, and numbness, stop viewing them. If symptoms still persist, consult a doctor. - View 3D images from the front of the screen. Viewing from an angle may cause fatigue or eyestrain.

LCD shutter eyeglasses

• Use commercially available 3D eyeglasses which meet the following requirements:

- DLP® Link compatible

- Support vertical refresh rate up to 144 Hz.

Steps for viewing 3D images on the projector

1. Connect the projector to your video equipment.

2. Turn on the projector, display the on-screen menu.

3. Select [3D SETTINGS] from [SCREEN] tab and then select [ON] for [3D].

 - Set for [3D INVERT] and [3D STRUCTURE] as necessary. Please see the page 51.

4. Play your 3D compatible content and use the projector to display the image.

5. Put on your LCD shutter eyeglasses to view 3D images.

Also refer to the user's manual accompanied with your LCD shutter eyeglasses for more information.

Connecting the Projector

Connect to Computer/Notebook

NP-V332X, NP-V332W, NP-V302H

To the wall outlet

Router / Network Switch

External Display

Audio Output

1...Power cord (supplied)
2...HDMI cable
3.. Computer cable (VGA) (supplied)
4..RS232 cable
5.. Audio cable
6... Audio output cable
7... VGA output cable
8.. RJ45 cable

Installation
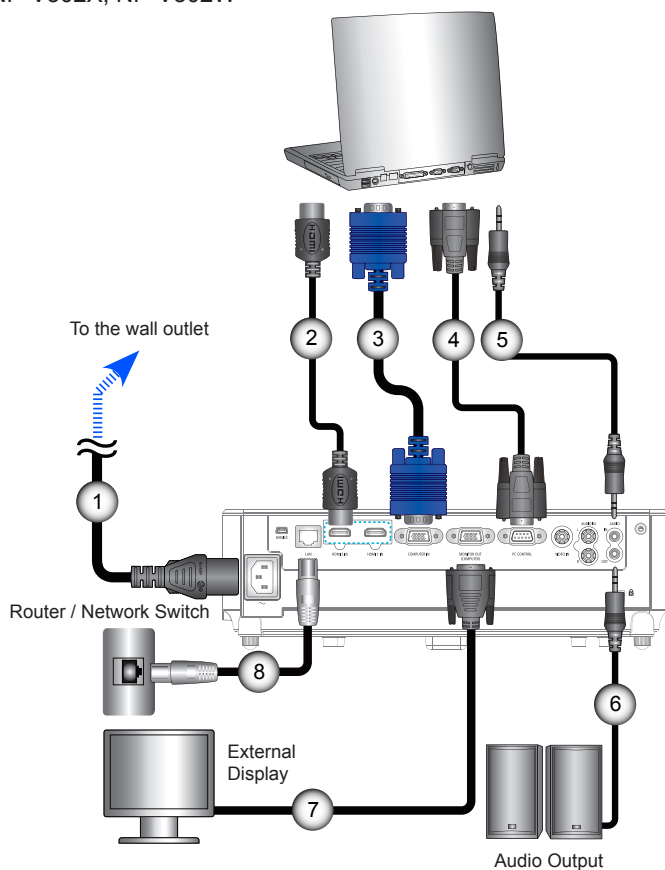
NP-V302X, NP-V302W

To the wall outlet

Router / Network Switch

External Display

Audio Output

1..Power cord (supplied)
2...HDMI cable
3.. Computer cable (VGA) (supplied)
4..RS232 cable
5.. Audio cable
6.. Audio output cable
7.. VGA output cable
8... RJ45 cable

Connect to Video Sources

NP-V332X, NP-V332W, NP-V302H

❖ Make sure that the power plug is fully inserted into both the projector AC IN terminal and the wall outlet.

DVD Player, Set-top Box, HDTV receiver

To the wall outlet

Composite Video Output
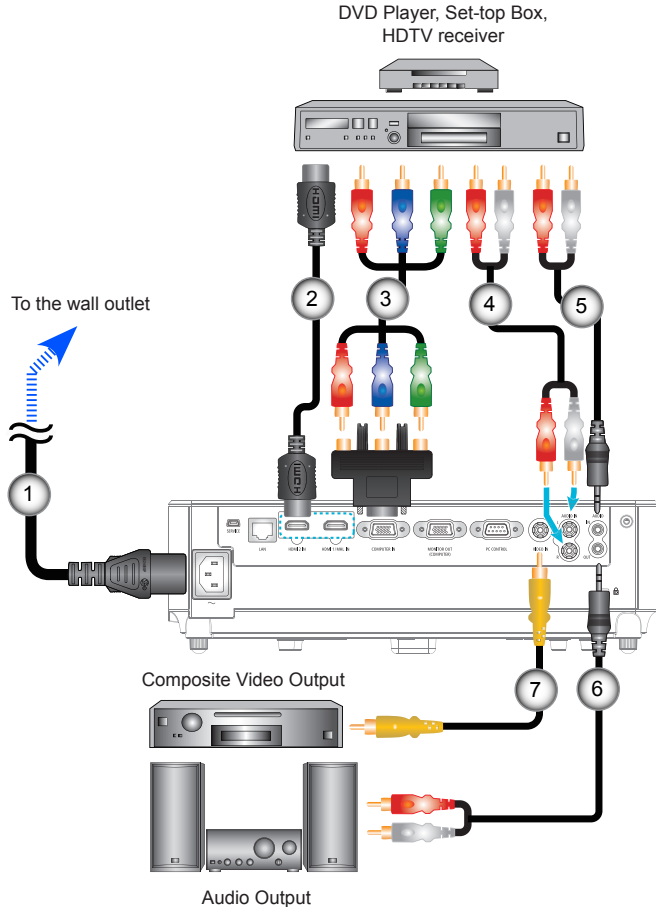
❖ Due to the difference in applications for each country, some regions may have different accessories.

❖ When Deep Color is set to ON on your HDMI equipment, video or audio noise may be generated depending on the equipment or cable being used. Should this happen, set Deep Color to OFF (8 bit).

Audio Output

1...Power cord (supplied)
2.. HDMI cable*
3..15-Pin to 3 RCA Component/HDTV Adaptor
4.. Audio
5... Audio Cable/RCA
6... Audio Cable/RCA
7.. Composite video cable

*HDMI cable: Use High Speed HDMI® Cable.

Installation

NP-V302X, NP-V302W

DVD Player, Set-top Box,
HDTV receiver

To the wall outlet

Composite Video Output

Audio Output

1..Power cord (supplied)
2.. HDMI cable*
3...15-Pin to 3 RCA Component/HDTV Adaptor
4.. Audio
5.. Audio Cable/RCA
6.. Audio Cable/RCA
7.. Composite video cable

*HDMI cable: Use High Speed HDMI® Cable.

Installation
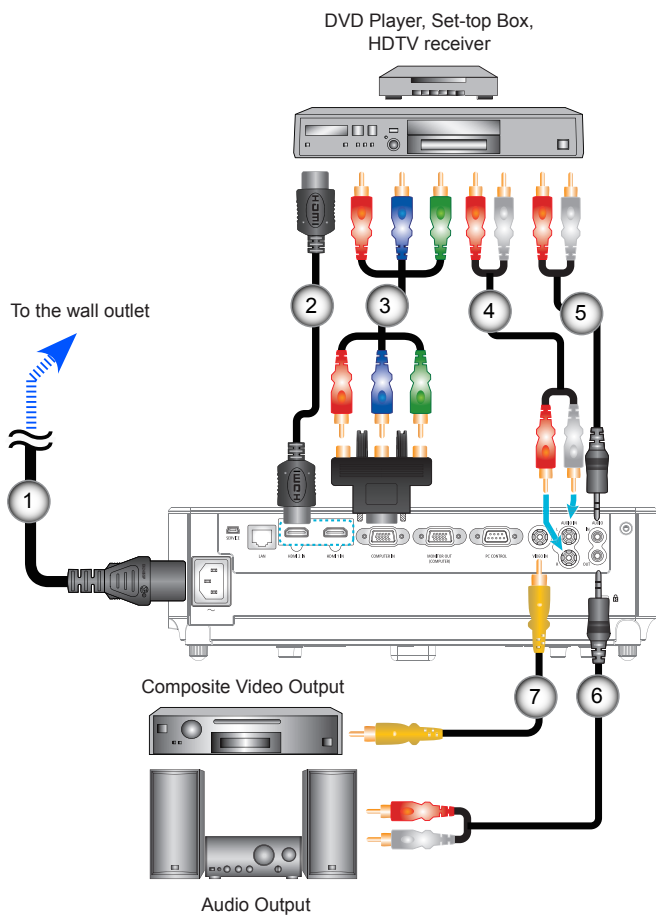
Powering On/Off the Projector

Powering On the Projector

❖ While the POWER indicator is blinking green in short cycles, the power cannot be turned off by using the power button.

1. Securely connect the power cord and signal cable. When connected, the POWER/STANDBY LED will turn Red or Orange (*).
2. Turn on the projector by pressing "POWER" on the remote control or ⏻ on the control panel. At this moment, the POWER/STANDBY LED will now turn Green. ❶

   The startup screen will display in approximately 10 seconds. The first time you use the projector, you will be asked to select the preferred language and power saving mode.
3. Turn on your source (computer, notebook, video player, etc.) The projector will detect your source automatically.

❖ If you connect multiple sources at the same time, press the "SOURCE" button on the control panel or direct source keys on the remote control to switch between inputs.

❖(*)When "Normal" is selected for "Standby Mode", the Power LED indicator will turn red; when "Network standby" is selected for "Standby Mode", the Power LED indicator will turn orange.

❖Turn on the projector first and then the signal sources.

❶ POWER/STANDBY

Installation
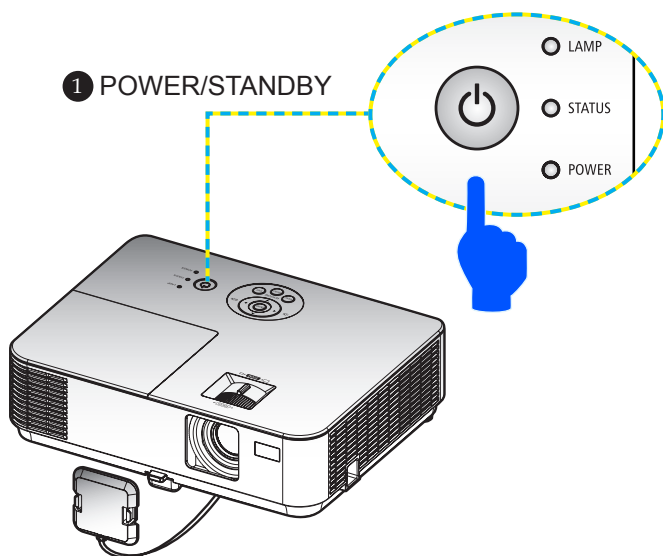
Powering Off the Projector

1. Press the "POWER OFF" button on the remote control or the ⏻ button on the control panel to turn off the projector lamp, you will see a message as below on the on-screen display.

POWER OFF
ARE YOU SURE
YES   NO
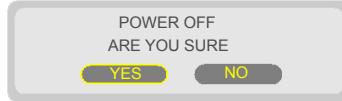
2. Press the "POWER OFF" button again to confirm.
3. Disconnect the power cord from the electrical outlet and the projector. If you disconnect the power cord while viewing the picture and connect the power cord again, wait for at least one second until you connect the power cord again.

Installation

Warning Indicator

❖ When the "STATUS" LED indicator flashes red, it
indicates the projector has overheated. The projector will
automatically shut itself down.

> WARNING! TEMPERATURE TOO HIGH
>
> 1. MAKE SURE AIR IN AND OUTLETS ARE NOT BLOCKED.
> 2. MAKE SURE THE ENVIRONMENT TEMPERATURE IS UNDER 40 DEGREE C

❖ When the "LAMP" LED indicator turns red and the message
below displays on-screen, the projector has detected that
the lamp is approaching its end of life. When you see this
message, change the lamp as soon as possible.

> WARNING! LAMP
>
> LAMP WARNING
> LAMP LIFE IS ABOVE LIMIT TIME. LAMP OFF!

> WARNING! LAMP
>
> LAMP WARNING
> LAMP LIFE EXCEEDED.

❖ When the "STATUS" LED indicator flashes red and the
message below displays on-screen, it indicates the fan failed.
Stop using the projector and disconnect the power cord from
the electrical outlet, then contact your local dealer or our
service center.

> WARNING! FAN LOCKED
>
> THE PROJECTOR WILL SWITCH OFF AUTOMATICALLY.

Installation

Adjusting the Projected Image

Adjusting the Height of Projection Image

The projector is equipped with the tilt foot for adjusting the image height.

1. Press the tilt foot release button. ①
   Keep to press the tilt foot release button for raising or lowering the projector, then lock the button by releasing it. ②

2. Rotate the rear feet counter clockwise to raise the projector or clockwise to lower it. ③

❖Two tilt foot at the rear side will be screwed off if these are rotated too much.

Tilt foot release button

Rear foot ③ Tilt Foot ② Rear foot ③
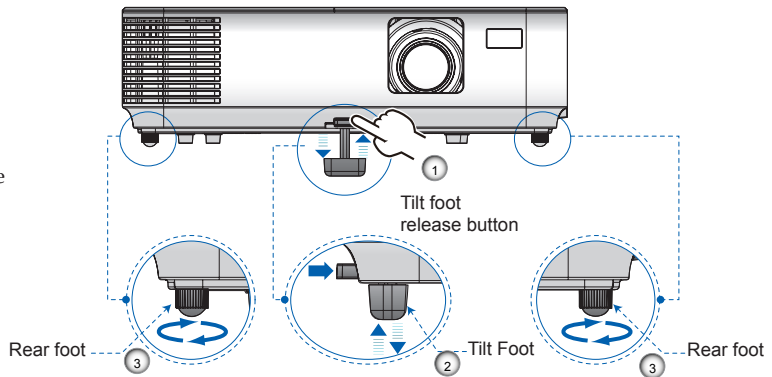
Adjusting the Projector's Focus

To focus the image, rotate the focus ring until the image is clear.
To zoom the image, turn the zoom lever in or out.

Zoom Lever

Focus Ring
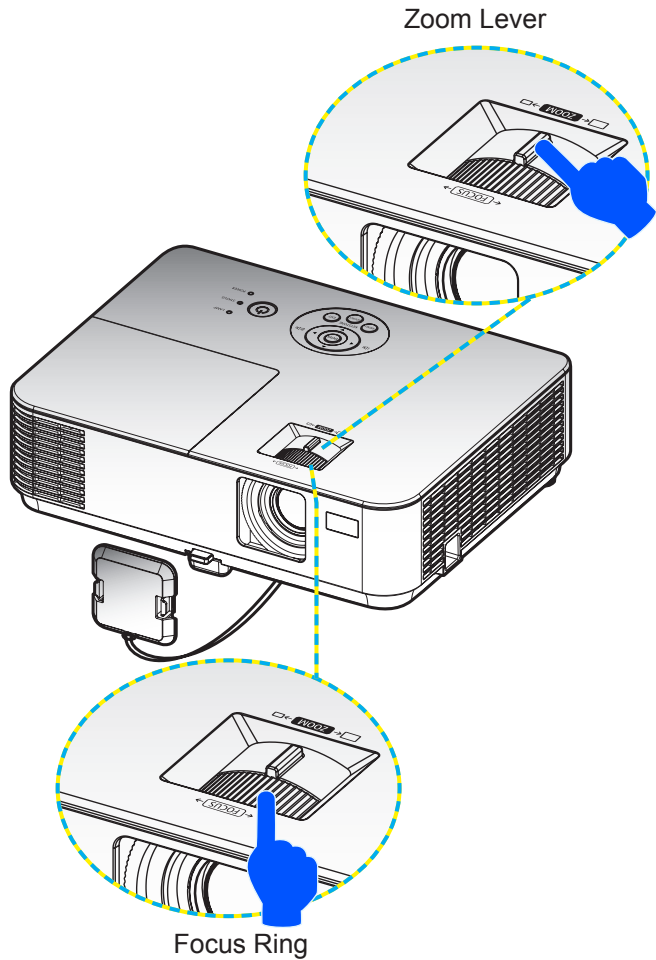
Installation

Adjusting Projection Image Size (Diagonal)

B = Vertical distance between lens center and screen center.
C = Throw distance.
D = Vertical distance between lens center and bottom of screen (top of screen for ceiling application).
α = Throw angle.
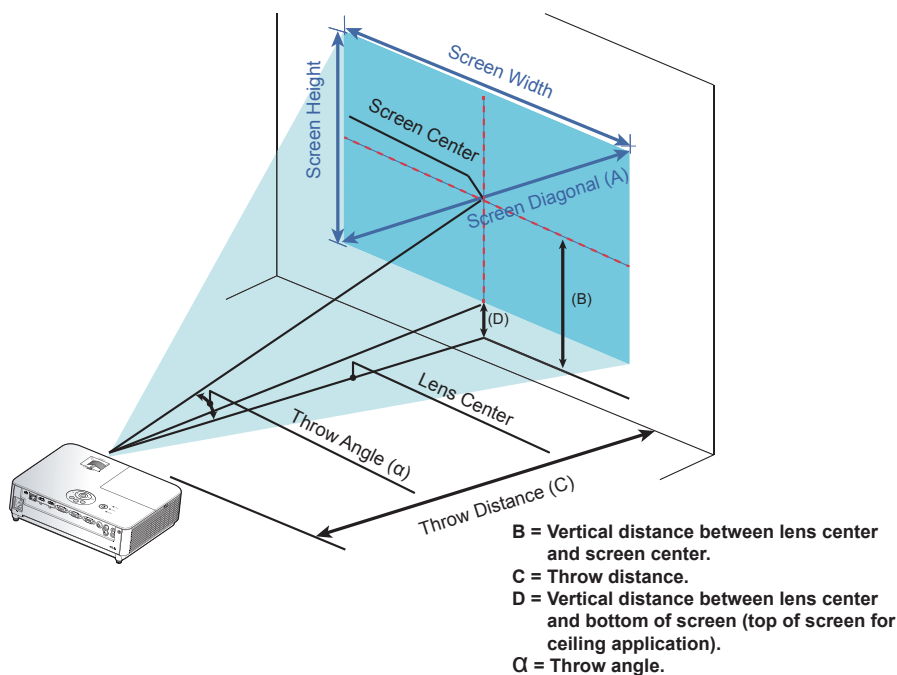
Projection Image Size from 30" to 300" (0.76 to 7.62 meters).
Models: NP-V332X, NP-V302X

Screen Size						(B)		(C)				D (WIDE)		α	α
Diagonal (A)		Width		Height				Wide		Tele				Wide	Tele
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	degree	degree
30	762	24	610	18	457	12	297	47	1189	52	1311	3	69	14.0	12.8
40	1016	32	813	24	610	16	396	62	1585	69	1747	4	91	14.0	12.8
60	1524	48	1219	36	914	23	594	94	2377	103	2621	5	137	14.0	12.8
70	1778	56	1422	42	1067	27	693	109	2773	120	3058	6	160	14.0	12.8
80	2032	64	1626	48	1219	31	792	125	3169	138	3495	7	183	14.0	12.8
90	2286	72	1829	54	1372	35	891	140	3566	155	3932	8	206	14.0	12.8

Screen Size						(B)		(C)				D (WIDE)		α α	
Diagonal (A)		Width		Height				Wide		Tele				Wide	Tele
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	degree	degree
100	2540	80	2032	60	1524	39	990	156	3962	172	4368	9	228	14.0	12.8
120	3048	96	2438	72	1829	47	1188	187	4754	206	5242	11	274	14.0	12.8
150	3810	120	3048	90	2286	58	1486	234	5943	258	6553	13	343	14.0	12.8
180	4572	144	3658	108	2743	70	1783	281	7131	310	7863	16	411	14.0	12.8
200	5080	160	4064	120	3048	78	1981	312	7923	344	8737	18	457	14.0	12.8
240	6096	192	4877	144	3658	94	2377	374	9508	413	10484	22	548	14.0	12.8
270	6858	216	5486	162	4115	105	2674	421	10697	464	11795	24	617	14.0	12.8
300	7620	240	6096	180	4572	117	2971	468	11885	516	13105	27	685	14.0	12.8

* This table is for user's reference only.

*The values in the tables are design values and may vary.

Projection Image Size from 30" to 300" (0.76 to 7.62 meters).

Models: NP-V332W, NP-V302W

Screen Size						(B)		(C)				D (WIDE)		α α	
Diagonal (A)		Width		Height				Wide		Tele				Wide	Tele
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	degree	degree
30	762	25	646	16	404	10	253	39	1002	43	1099	2	51	14.2	13.0
40	1016	34	862	21	538	13	337	53	1335	58	1465	3	68	14.2	13.0
60	1524	51	1292	32	808	20	506	79	2003	86	2197	4	102	14.2	13.0
70	1778	59	1508	37	942	23	591	92	2337	101	2563	5	119	14.2	13.0
80	2032	68	1723	42	1077	27	675	105	2671	115	2929	5	136	14.2	13.0
90	2286	76	1939	48	1212	30	759	118	3005	130	3296	6	153	14.2	13.0
100	2540	85	2154	53	1346	33	844	131	3339	144	3662	7	171	14.2	13.0
120	3048	102	2585	64	1615	40	1012	158	4006	173	4394	8	205	14.2	13.0
150	3810	127	3231	79	2019	50	1265	197	5008	216	5493	10	256	14.2	13.0
180	4572	153	3877	95	2423	60	1518	237	6009	259	6591	12	307	14.2	13.0
200	5080	170	4308	106	2692	66	1687	263	6677	288	7323	13	341	14.2	13.0

Installation

Screen Size						(B)		(C)				D (WIDE)		α Wide	α Tele
Diagonal (A)		Width		Height				Wide		Tele					
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	degree	degree
240	6096	204	5169	127	3231	80	2025	315	8012	346	8788	16	409	14.2	13.0
270	6858	229	5816	143	3635	90	2278	355	9014	389	9887	18	460	14.2	13.0
300	7620	254	6462	159	4039	100	2531	394	10016	432	10985	20	512	14.2	13.0

* This table is for user's reference only.

*The values in the tables are design values and may vary.

Projection Image Size from 40″ to 300″ (1.02 to 7.62 meters).
Model: NP-V302H

Screen Size						(B)		(C)				D (WIDE)		α Wide	α Tele
Diagonal (A)		Width		Height				Wide		Tele					
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	degree	degree
40	1016	35	886	20	498	13	331	52	1328	63	1594	3	82	14.0	11.7
60	1524	52	1328	29	747	20	496	78	1992	94	2391	5	123	14.0	11.7
70	1778	61	1550	34	872	23	579	92	2324	110	2789	6	143	14.0	11.7
80	2032	70	1771	39	996	26	662	105	2657	126	3188	6	164	14.0	11.7
90	2286	78	1992	44	1121	29	745	118	2989	141	3586	7	184	14.0	11.7
100	2540	87	2214	49	1245	33	827	131	3321	157	3985	8	205	14.0	11.7
120	3048	105	2657	59	1494	39	993	157	3985	188	4782	10	246	14.0	11.7
150	3810	131	3321	74	1868	49	1241	196	4981	235	5977	12	307	14.0	11.7
180	4572	157	3985	88	2241	59	1489	235	5977	282	7173	15	368	14.0	11.7
200	5080	174	4428	98	2491	65	1655	261	6641	314	7970	16	409	14.0	11.7
240	6096	209	5313	118	2989	78	1986	314	7970	377	9564	19	491	14.0	11.7
270	6858	235	5977	132	3362	88	2234	353	8966	424	10759	22	553	14.0	11.7
300	7620	261	6641	147	3736	98	2482	392	9962	471	11955	24	614	14.0	11.7

* This table is for user's reference only.

*The values in the tables are design values and may vary.

User Controls

On Screen Display

The Projector has a multilingual On Screen Display that allows you to make image adjustments and change a variety of settings.

How to operate

1. To open the OSD, press the MENU button on the Remote Control.

2. When OSD is displayed, use the ◀ ▶ buttons to select any item in the main menu. While making a selection on a particular page, press the ▼ button to enter sub menu.

3. Use the ▲ ▼ buttons to select the desired item in the sub menu and adjust the settings by using the ◀ or ▶ button.

4. Select the desired item in the sub menu and press the ENTER button to enter another sub menu. Press the MENU button to close the sub menu after adjustment.

5. After adjusting the settings, press the MENU or EXIT button go back to the main menu.

6. To exit, press the MENU button again. The OSD will be closed and the projector will automatically save the new settings.

Main Menu

NOTE

❖If no button operation is made for 30 seconds, the OSD will be closed automatically.

IMAGE	SCREEN	SETTING	OPTIONS
GENERAL	ADVANCED		

GAMMA   FILM
BrilliantColor™   ◀━━━━●━━▶ 10
COLOR TEMP.   LOW
DYNAMIC CONTRAST   OFF
COLOR
COLOR SPACE   AUTO

ENTER SELECT   EXIT EXIT   ↕ MOVE   ◀▶ MOVE
COMPUTER
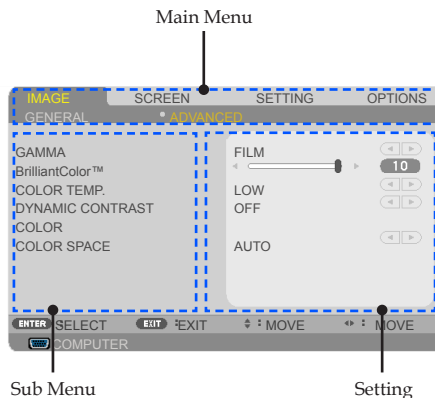
Sub Menu   Setting

User Controls

Menu Tree

MAIN MENU		SUB MENU	SETTINGS
IMAGE	GENERAL	PICTURE MODE	PRESENTATION/HIGH-BRIGHT/VIDEO/MOVIE/SRGB/BLACKBOARD/USER1/USER2
		WALL COLOR	OFF/RED/GREEN/BLUE/CYAN/MAGENTA/YELLOW
		BRIGHTNESS	0~100
		CONTRAST	0~100
		SHARPNESS	0~31
		SATURATION	DEPEND ON SOURCE FORMAT
		HUE	DEPEND ON SOURCE FORMAT
	ADVANCED	GAMMA	FILM/VIDEO/GRAPHICS/PC/BLACKBOARD
		BRILLIANTCOLOR™	0~10
		COLOR TEMP.	LOW/MEDIUM/HIGH
		DYNAMIC CONTRAST	ON/OFF
		COLOR	RED GAIN/GREEN GAIN/BLUE GAIN/CYAN GAIN/MAGENTA GAIN/YELLOW GAIN/RED BIAS/GREEN BIAS/BLUE BIAS/RESET
		COLOR SPACE	AUTO/RGB/YUV
SCREEN	GENERAL	ASPECT RATIO	4:3/16:9/16:10/15:9/5:4/NATIVE/AUTO
		OVERSCAN	0%/5%/10%
		V KEYSTONE	-30~+30 (NP-V302H, NP-V332W, and NP-V332X)
			-40~+40 (NP-V302W, NP-V302X)
	3D SETTINGS	3D	ON/OFF
		3D INVERT	ON/OFF
		3D STRUCTURE	AUTO/FRAME PACKING/TOP-AND-BOTTOM/SIDE-BY-SIDE/FRAME SEQUENTIAL
SETTING	GENERAL	LANGUAGE	ENGLISH / DEUTSCH / FRANÇAIS /ITALIANO / ESPAÑOL / SVENSKA / 日本語 / PORTUGUÊS / ČEŠTINA / MAGYAR / POLSKI / عربي / 简体中文 / 繁體中文 / NORSK / TÜRKÇE / РУССКИЙ / ΕΛΛΗΝΙΚΑ / INDONESIA / 한국어 / SUOMI / NEDERLANDS / DANSK / ROMÂNĂ / HRVATSKI / БЪЛГАРСКИ / ไทย / हिन्दी / ئۇيغۇر / TIẾNG VIỆT

MAIN MENU		SUB MENU	SETTINGS
SETTING	GENERAL	ORIENTATION	DESKTOP FRONT/DESKTOP REAR/ CEILING FRONT/CEILING REAR
		HDMI SETTINGS	(NP-V302H, NP-V332W, and NP-V332X) -VIDEO LEVEL (AUTO/NORMAL/ ENHANCED)/ AUDIO SELECT (HDMI1 and MHL/ COMPUTER), OR HDMI2/ COMPUTER (NP-V302W and NP-V302X) -VIDEO LEVEL (AUTO/NORMAL/ ENHANCED)/ AUDIO SELECT (HDMI1/ COMPUTER), OR HDMI2/ COMPUTER
		MUTE	ON/OFF
		VOLUME	0~20
	SIGNAL	PHASE	DEPEND ON SOURCE FORMAT
		CLOCK	DEPEND ON SOURCE FORMAT
		H.POSITION	DEPEND ON SOURCE FORMAT
		V.POSITION	DEPEND ON SOURCE FORMAT
	ADVANCED	LOGO	ON/OFF
		NETWORK	NETWORK STATUS/DHCP/ IP ADDRESS/SUBNET MASK/GATEWAY/ APPLY
		CLOSED CAPTION	OFF/CC1/CC2/CC3/CC4/T1/T2/T3/T4
		SECURITY	SECURITY/SECURITY TIMER/CHANGE PASSWORD
		TEST PATTERN	

User Controls

MAIN MENU		SUB MENU	SETTINGS
OPTIONS	GENERAL	INPUT SEARCH	ON/OFF
		INPUT	(NP-V302H, NP-V332W, and NP-V332X) - COMPUTER/HDMI1 and MHL/HDMI2, VIDEO (NP-V302W and NP-V302X) - COMPUTER/HDMI1/HDMI2, VIDEO
		FAN MODE	AUTO/HIGH ALTITUDE
		INFORMATION HIDE	ON/OFF
		ID DISPLAY	ON/OFF
		BACKGROUND COLOR	BLACK/BLUE
		RESET	YES/NO
	LAMP SETTINGS	LAMP LIFE RE-MAINING	
		LAMP HOURS USED	
		ECO MODE	OFF/ECO
		LAMP LIFE RE-MINDER	ON/OFF
		CLEAR LAMP HOURS	YES/NO
	INFORMA-TION	MODEL NO.	
		SERIAL NUMBER	
		SOURCE	
		RESOLUTION	
		SOFTWARE VER-SION	
		CONTROL ID	
	ADVANCED	STANDBY MODE	NORMAL/NETWORK STANDBY
		DIRECT POWER ON	ON/OFF
		AUTO POWER OFF (MIN)	0~180
		OFF TIMER (MIN)	0~995
		CONTROL PANEL LOCK	ON/OFF
		CONTROL ID	

User Controls

IMAGE | GENERAL
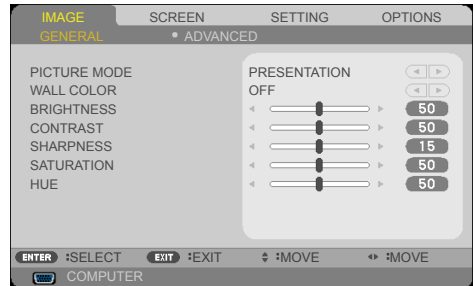
PICTURE MODE

There are many factory presets optimized for various types of images. Use the ◀ or ▶ button to select the item.
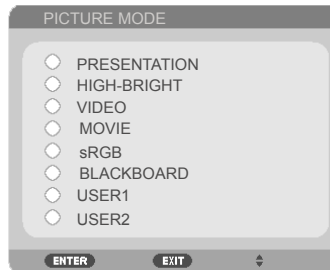
▶ PRESENTATION: For computer or notebook.

▶ HIGH-BRIGHT: Maximum brightness from PC input.

▶ VIDEO: This mode is recommended for typical TV program viewing.

▶ MOVIE: For home theater.

▶ sRGB: Standardized accurate color.

▶ BLACKBOARD: This mode should be selected to achieve optimum color settings when projecting onto a blackboard (green).

▶ USER1/USER2: Memorize user's settings.

User Controls

WALL COLOR

Use this function to choose a proper color according to the wall. It will compensate the color deviation due to the wall color to show the correct image tone.

WALL COLOR
○ OFF
○ RED
○ GREEN
○ BLUE
○ CYAN
○ MAGENTA
○ YELLOW
ENTER   EXIT   ↕

BRIGHTNESS

Adjust the brightness of the image.

▸ Press the ◀ button to darken image.
▸ Press the ▶ button to lighten the image.

BRIGHTNESS
◀ ——●—— ▶   50
ENTER :EXIT   EXIT :EXIT   ◀▶ :   ADJUST

CONTRAST

The contrast controls the degree of difference between the lightest and darkest parts of the picture. Adjusting the contrast changes the amount of black and white in the image.

▸ Press the ◀ button to decrease the contrast.
▸ Press the ▶ button to increase the contrast.

CONTRAST
◀ ——●—— ▶   50
ENTER :EXIT   EXIT :EXIT   ◀▶ :   ADJUST

SHARPNESS

Adjust the sharpness of the image.

▶ Press the ◀ button to decrease the sharpness.

▶ Press the ▶ button to increase the sharpness.

```
SHARPNESS

      ◀ ──────●──────── ▶      ( 15 )

ENTER :EXIT    EXIT :EXIT          ◀▶ :        ADJUST
```

SATURATION

Adjust a video image from black and white to fully saturated color.

▶ Press the ◀ button to decrease the amount of saturation in the image.

▶ Press the ▶ button to increase the amount of saturation in the image.

```
SATURATION

      ◀ ─────●───────── ▶      ( 0 )

ENTER :EXIT    EXIT :EXIT          ◀▶ :        ADJUST
```

HUE

Adjust the color balance of red and green.

▶ Press the ◀ button to increase the amount of green in the image.

▶ Press the ▶ button to increase the amount of red in the image.

```
HUE

      ◀ ──────●──────── ▶      ( 50 )

ENTER :EXIT    EXIT :EXIT          ◀▶ :        ADJUST
```

Input signal	BRIGHTNESS	CONTRAST	SHARPNESS	SATURATION	HUE
COMPUTER/ HDMI (RGB)	YES	YES	YES	NO	NO
COMPUTER/ HDMI (COMPONENT)	YES	YES	YES	YES	YES
VIDEO	YES	YES	YES	YES	YES

❖ Yes=Adjustable, No=Not adjustable

IMAGE | ADVANCED

IMAGE	SCREEN	SETTING	OPTIONS
GENERAL	● ADVANCED		

GAMMA	FILM
BrilliantColor™	10
COLOR TEMP.	LOW
DYNAMIC CONTRAST	OFF
COLOR	
COLOR SPACE	AUTO

ENTER SELECT   EXIT EXIT   ↕ MOVE   ◆ MOVE
COMPUTER
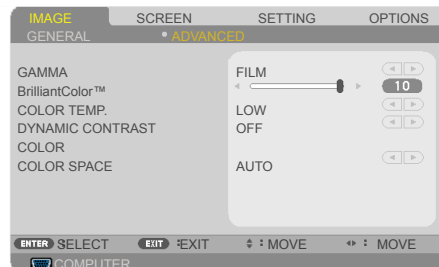
GAMMA

This allows you to choose a gamma table that has been fine-tuned to bring out the best image quality for the input.

▶ FILM: for home theater.

▶ VIDEO: for video or TV source.

▶ GRAPHICS: for image source.

▶ PC: for PC or computer source.

▶ BLACKBOARD: for displaying on the blackboard.

GAMMA

○ FILM
○ VIDEO
○ GRAPHICS
○ PC
○ BLACKBOARD

ENTER   EXIT   ↕

NOTE

❖ The Color Temp is not available when "HIGH-BRIGHT" or "sRGB" is selected for "PICTURE MODE".

BrilliantColor™

This adjustable item utilizes a new color-processing algorithm and system level enhancements to enable higher brightness while providing true, more vibrant colors. The range is from "0" to "10". If you prefer a stronger enhanced image, adjust toward the maximum setting. For a smoother, more natural image, adjust toward the minimum setting.

BrilliantColor™

◄ ─────●───── ►   5

ENTER :EXIT   EXIT :EXIT   ◄► :   ADJUST

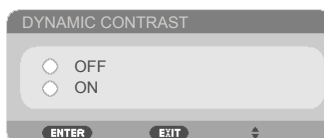## COLOR TEMP.

Adjust the color temperature. At higher temperature, the screen looks colder; at lower temperature, the screen looks warmer.

COLOR TEMP.

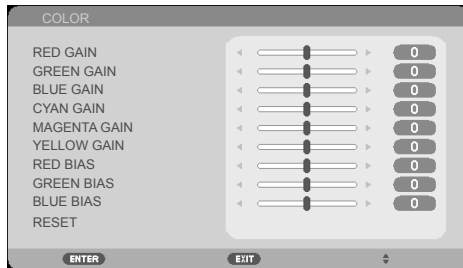○ LOW
○ MEDIUM
○ HIGH

ENTER   EXIT   ⬍

DYNAMIC CONTRAST

Turning this item on allows the contrast ratio to be adjusted to the proper level.

DYNAMIC CONTRAST

○ OFF
○ ON

ENTER   EXIT   ⬍

User Controls

COLOR

Press ENTER into the next menu as below and then use the ▲ or ▼ button to select item.

COLOR		
RED GAIN		0
GREEN GAIN		0
BLUE GAIN		0
CYAN GAIN		0
MAGENTA GAIN		0
YELLOW GAIN		0
RED BIAS		0
GREEN BIAS		0
BLUE BIAS		0
RESET		
ENTER	EXIT	

▶ RED GAIN

RED GAIN

◀ ━━━ ▶   5

ENTER EXIT   EXIT :EXIT   ◀▶ :   ADJUST

▶ GREEN GAIN

GREEN GAIN

◀ ━━━ ▶   5

ENTER :EXIT   EXIT :EXIT   ◀▶ :   ADJUST

▶ BLUE GAIN

BLUE GAIN

◀ ━━━ ▶   5

ENTER :EXIT   EXIT :EXIT   ◀▶ :   ADJUST

▶ CYAN GAIN

CYAN GAIN

◀ ━━━ ▶   5

ENTER :EXIT   EXIT :EXIT   ◀▶ :   ADJUST

User Controls

▶ **MAGENTA GAIN**

```
MAGENTA GAIN
      ◀ ───●───── ▶        5
ENTER :EXIT    EXIT :EXIT          ◀▶ :   ADJUST
```

▶ **YELLOW GAIN**

```
YELLOW GAIN
      ◀ ───●───── ▶        5
ENTER :EXIT    EXIT :EXIT          ◀▶ :   ADJUST
```

▶ **RED BIAS**

```
RED BIAS
      ◀ ────●──── ▶        5
ENTER :EXIT    EXIT :EXIT          ◀▶ :   ADJUST
```

▶ **GREEN BIAS**

```
GREEN BIAS
      ◀ ───●───── ▶        5
ENTER :EXIT    EXIT :EXIT          ◀▶ :   ADJUST
```

▶ **BLUE BIAS:**

```
BLUE BIAS
      ◀ ───●───── ▶        5
ENTER :EXIT    EXIT :EXIT          ◀▶ :   ADJUST
```
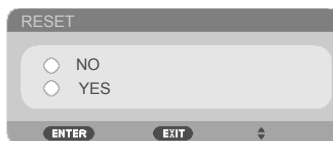
▶ Use the ◀ or ▶ button to select RED, GREEN, BLUE, CYAN, MAGENTA AND YELLOW COLORS.

User Controls

▶ RESET: Choose "YES" to return the factory default settings for color adjustments.

```
┌─────────────────────────────────┐
│ RESET                           │
│                                 │
│      ◯  NO                      │
│      ◯  YES                     │
│                                 │
│  ENTER        EXIT          ⬍   │
└─────────────────────────────────┘
```

COLOR SPACE

Select an appropriate color matrix type from AUTO, RGB or YUV.

```
┌─────────────────────────────────┐
│ COLOR SPACE                     │
│                                 │
│      ◯  AUTO                    │
│      ◯  RGB                     │
│      ◯  YUV                     │
│                                 │
│  ENTER        EXIT          ⬍   │
└─────────────────────────────────┘
```

IMAGE SCREEN SETTING OPTIONS
GENERAL • 3D SETTINGS

ASPECT RATIO   AUTO
OVERSCAN   0[%]
H KEYSTONE   0
V KEYSTONE   0

ENTER :SELECT   EXIT :EXIT   :MOVE   :MOVE
COMPUTER

SCREEN |
GENERAL

IMAGE SCREEN SETTING OPTIONS
GENERAL 3D SETTINGS

ASPECT RATIO   AUTO
OVERSCAN   0[%]
KEYSTONE   0

ENTER :SELECT   EXIT :EXIT   :MOVE   :MOVE
COMPUTER
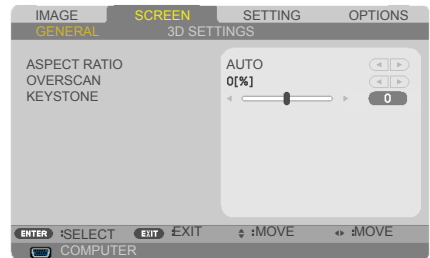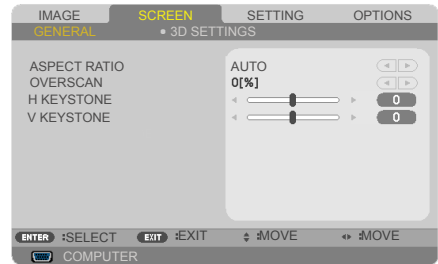
ASPECT RATIO

Use this function to choose your desired aspect ratio.

▶ 4:3: This format is for 4×3 input sources.

▶ 16:9: This format is for 16×9 input sources, like HDTV and DVD enhanced for Wide screen TV.

▶ 16:10: This format is for 16×10 input sources, like widescreen laptops.

▶ 15:9: This format is for 15×9 input sources.

▶ 5:4: This format is for 5×4 input sources.

▶ NATIVE: This format displays the original image without any scaling.

▶ AUTO: Automatically selects the appropriate display format.

ASPECT RATIO

○ 4:3
○ 16:9
○ 16:10
○ 15:9
○ 5:4
○ NATIVE
○ AUTO

ENTER   EXIT
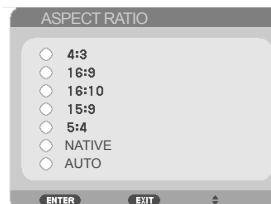
User Controls

OVERSCAN

Overscan function removes the noise in a video image. Overscan the image to remove video encoding noise on the edge of video source.

```
OVERSCAN

○  0[%]
○  5[%]
○  10[%]

ENTER        EXIT        ▲▼
```

KEYSTONE (NP-V332W, NP-V332X, NP-V302H)

Press the ◀ or ▶ button to adjust image distortion vertically (V Keystone) or horizontally (H Keystone).

```
KEYSTONE

H KEYSTONE      ◀ ─────┃───── ▶  0
V KEYSTONE      ◀ ─────┃───── ▶  0

EXIT :EXIT      ▲▼ :MOVE      ◀▶ :ADJUST
```
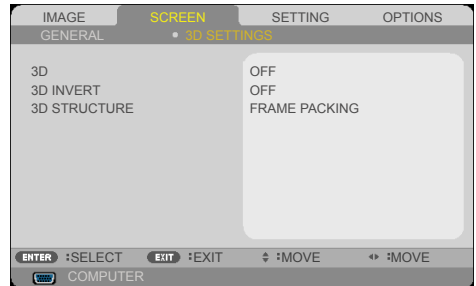
V KEYSTONE (NP-V302X, NP-V302W)

Press the ◀ or ▶ button to adjust image distortion vertically. If the image looks trapezoidal, this option can help make the image rectangular.

```
V KEYSTONE

      ◀ ───●──── ▶      0

ENTER :EXIT    EXIT :EXIT        ◀▶ :    ADJUST
```

User Controls

SCREEN | 3D SETTINGS

NOTE

❖ "3D INVERT" and "3D STRUCTURE"only available when 3D is enabled.

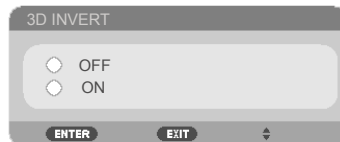❖ Compatible 3D source, 3D content and active shutter glasses are required for 3D viewing.

3D

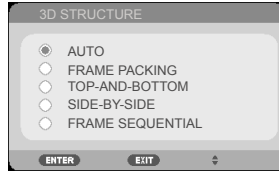Choose "ON" to turn this item on for 3D images. (default: OFF)

3D
○ OFF
○ ON
ENTER   EXIT   ↕

3D INVERT

▸ Choose "ON" to invert left and right frame contents.

▸ Choose "OFF" for default frame contents.

3D INVERT
○ OFF
○ ON
ENTER   EXIT   ↕

User Controls

3D STRUCTURE

Adjust the 3D format to display 3D content correctly.

```
┌─────────────────────────────────────┐
│  3D STRUCTURE                        │
│                                      │
│   ◉  AUTO                            │
│   ○  FRAME PACKING                   │
│   ○  TOP-AND-BOTTOM                  │
│   ○  SIDE-BY-SIDE                    │
│   ○  FRAME SEQUENTIAL                │
│                                      │
│   [ENTER]      [EXIT]        ↕       │
└─────────────────────────────────────┘
```

TIP: 3D supported signal

• For PC Signal :
    1024x768@60/120Hz
    1280x720@60Hz
    1280x800@60/120Hz
    1920x1080@60Hz
• For Video Signal :
    480i@60Hz
• For HDMI Signal :
    720p (Frame Packing) 1280 x 720@50/60/59.94
    1080p (Frame Packing) 1920 x 1080@23.98/24
    720p (Top and Bottom) 1280 x 720@50/60/59.94* (*Select manually)
    1080p (Top and Bottom) 1920 x 1080@23.98/24
    1080i (Side by Side (Half)) 1920 x 1080@50/60/59.94* (*Select manually)

User Controls

SETTING | GENERAL

LANGUAGE

Choose the multilingual OSD menu. Press the ◀ or ▶ button into the sub menu and then use the ▲ or ▼ button to select your preferred language. Press ENTER to finalize the selection.

ORIENTATION

▶ DESKTOP FRONT:

When selected, the image is projected straight on the screen.

▶ DESKTOP REAR:

When selected, the image will appear reversed.

> **NOTE**
>
> ❖ DESKTOP-REAR and CEILING-REAR are to be used with a translucent screen.

▶ CEILING FRONT:

When selected, the image will turn upside down.

▶ CEILING REAR

This is the default selection. The image will appear reversed in upside down position.
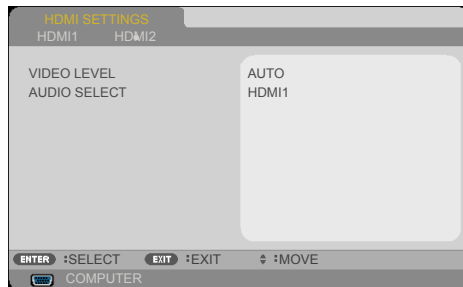
ORIENTATION
- ○ DESKTOP FRONT
- ○ DESKTOP REAR
- ○ CEILING FRONT
- ○ CEILING REAR

ENTER   EXIT

❖ "HDMI SETTING" is only supported under HDMI source.

HDMI SETTINGS

Use this feature to set HDMI1/MHL or HDMI2

HDMI SETTINGS
HDMI1   HDMI2

VIDEO LEVEL   AUTO
AUDIO SELECT   HDMI1

ENTER :SELECT   EXIT :EXIT   :MOVE
COMPUTER

▶ VIDEO LEVEL: Select "AUTO" to automatically detect video level. If automatic detection may not work well, select "NORMAL" to disable the "ENHANCED" feature of your HDMI equipment or select "ENHANCED" to improve image contrast and increase detail in the dark areas.

VIDEO LEVEL
- ○ AUTO
- ○ NORMAL
- ○ ENHANCED

ENTER   EXIT
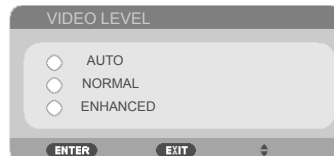
▸ AUDIO SELECT: Use this function to select the audio souce from "HDMI1/MHL", "HDMI2"or "COMPUTER".

AUDIO SELECT
○ HDMI1/MHL
○ COMPUTER
ENTER   EXIT   ⬍

AUDIO SELECT
○ HDMI2
○ COMPUTER
ENTER   EXIT   ⬍
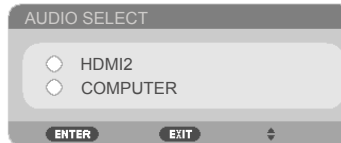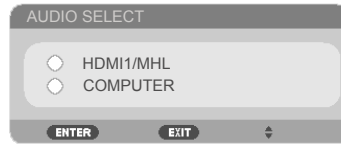
MUTE

▸ Choose "ON" to turn mute on.

▸ Choose "OFF" to turn mute off.

MUTE
○ OFF
○ ON
ENTER   EXIT   ⬍

VOLUME

▸ Press the ◀ button to decrease the volume.

▸ Press the ▶ button to increase the volume.

VOLUME
◀ ━━━●━━━ ▶   16
ENTER :EXIT   EXIT :EXIT   ◀▶ :   ADJUST

IMAGE　　　SCREEN　　　SETTING　　　OPTIONS
GENERAL　　　• SIGNAL　　　• ADVANCED

PHASE　　　　　　　15
CLOCK　　　　　　　0
H. POSITION　　　　0
V. POSITION　　　　0

ENTER :SELECT　　EXIT :EXIT　　：MOVE　　：MOVE
COMPUTER

SETTING | SIGNAL
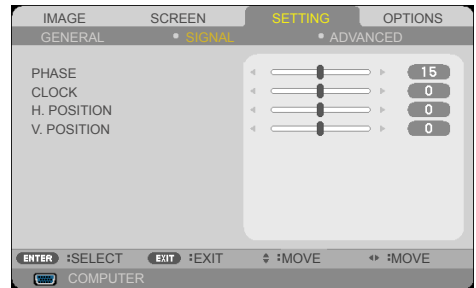
PHASE

Synchronize the signal timing of the display with the graphic card. If the image appears to be unstable or flickers, use this function to correct it.

PHASE

16

ENTER :EXIT　　EXIT :EXIT　　　　：　ADJUST

CLOCK

Change the display data frequency to match the frequency of your computer's graphic card. Use this function only if the image appears to flicker vertically.

CLOCK

0

ENTER :EXIT　　EXIT :EXIT　　　　：　ADJUST

H. POSITION

▸ Press the ◄ button to move the image left.

▸ Press the ▶ button to move the image right.

H. POSITION

◄ ─────●───── ▶   0

ENTER :EXIT   EXIT :EXIT   ◄▶ :   ADJUST

V. POSITION

▸ Press the ◄ button to move the image down.

▸ Press the ▶ button to move the image up.

V. POSITION

◄ ─────●───── ▶   -1

ENTER :EXIT   EXIT :EXIT   ◄▶ :   ADJUST

User Controls

SETTING | ADVANCED
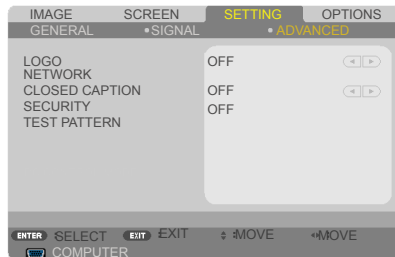
LOGO

Use this function to display the startup screen (NEC logo).
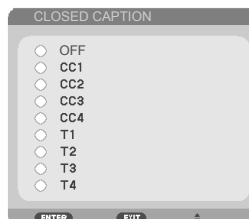
‣ ON: Displays the NEC logo.

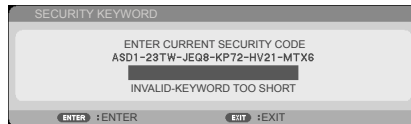‣ OFF: Not display the NEC logo.
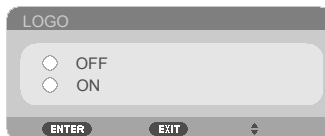
NETWORK

CLOSED CAPTION

Use this function to enable closed caption and activate the closed caption menu. Select an appropriate closed captions option: OFF, CC1, CC2, CC3, CC4, T1, T2, T3 and T4.

SECURITY

▶ OFF: Choose "OFF" to be able to switch on the projector
without password verification.

▶ ON: Choose "ON" to use security verification when turning on
the projector.

SECURITY

○ OFF
○ ON

ENTER   **EXIT**   ⇕

SECURITY KEYWORD

ENTER CURRENT SECURITY CODE
ASD1-23TW-JEQ8-KP72-HV21-MTX6

INVALID-KEYWORD TOO SHORT

ENTER :ENTER   **EXIT** :EXIT

First Time:

1. The default password : ▲▶▼◀

2. Use the remote to enter your password, and then press
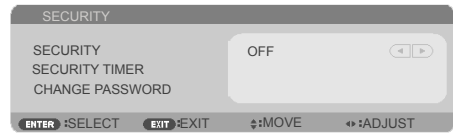ENTER to confirm your password.

❖ The available test pattern is GRID.

TEST PATTERN

Press ENTER to make the selection. Then press MENU or EXIT to
close the sub menu.

SETTING | ADVANCED | SECURITY

SECURITY	
SECURITY	OFF ◄ ►
SECURITY TIMER	
CHANGE PASSWORD	
ENTER :SELECT	EXIT :EXIT ‡:MOVE ↔:ADJUST

SECURITY TIMER

Use this function to set how long (MONTH/DAY/HOUR) the projector can be used. Once this time has elapsed you will be requested to enter your password again.
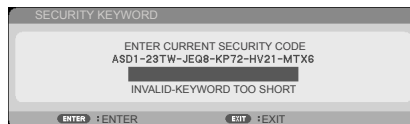
SECURITY TIMER		
MONTH	◄ ───●─── ►	12
DAY	◄ ───●─── ►	30
HOUR	◄ ───●─── ►	24
ENTER : EXIT	EXIT : EXIT ‡ : MOVE	↔ : ADJUST

The "SECURITY TIMER" will restart to count down when the projector is turned off and then turned back on.

CHANGE PASSWORD

1. Press ENTER to enter SECURITY KEYWORD setting.

2. The password has to be combination of ◄, ►, ▲ ,▼ direction keys and must include 4 to 10 characters.

   ▶ Current password

SECURITY KEYWORD
ENTER CURRENT SECURITY CODE
ASD1-23TW-JEQ8-KP72-HV21-MTX6
INVALID-KEYWORD TOO SHORT
ENTER : ENTER   EXIT : EXIT

3. Use number buttons on the remote control, to enter your **old** password and then press ENTER to confirm your password.

   ▶ Input new password
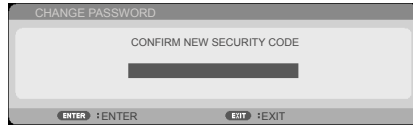
CHANGE PASSWORD
ENTER NEW SECURITY CODE
─────────────
ENTER : ENTER   EXIT : EXIT

NOTE

❖ The default password is ▲►▼◄ (first time).
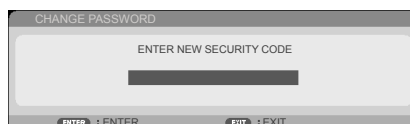
4. Use direction keys, to enter your **new** password and then press ENTER to confirm your password.

 ▶ Confirm new password

 CHANGE PASSWORD

 CONFIRM NEW SECURITY CODE

 ENTER : ENTER   EXIT : EXIT
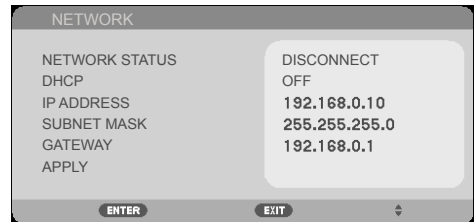
5. Enter the new password again and press ENTER to confirm.

▶ If the incorrect password is entered 3 times, the projector will automatically shut down. (When turn on the projector.)

▶ If you have forgotten your password, please contact your local office for support.

User Controls

SETTING | ADVANCED | NETWORK

```
NETWORK

NETWORK STATUS          DISCONNECT
DHCP                    OFF
IP ADDRESS              192.168.0.10
SUBNET MASK             255.255.255.0
GATEWAY                 192.168.0.1
APPLY

      ENTER               EXIT
```

NETWORK STATUS

Display the network connection status. (default: DISCONNECT)

DHCP

Use this function to select your desired startup screen. If you change the setting from one to another, when you exit the OSD menu, the new setting will take effect on next open.

▶ ON: Assign an IP address to the projector from an external DHCP server automatically.

▶ OFF: Assign an IP address manually.

```
DHCP

      ○  OFF
      ○  ON

    ENTER        EXIT
```

IP ADDRESS

Select an IP address.

```
IP ADDRESS

        192   .   168   .   0   .   10

  ENTER :SELECT    EXIT :EXIT    :ADJUST   :MOVE
```

SUBNET MASK

Select subnet mask number.

SUBNET MASK
255 . 255 . 255 . 0
ENTER :SELECT   EXIT :EXIT   ↕:ADJUST   ↔:MOVE

GATEWAY

Select the default gateway of the network connected to the projector.

GATEWAY
192 . 168 . 0 . 1
ENTER :SELECT   EXIT :EXIT   ↕:ADJUST   ↔:MOVE

APPLY

Press ENTER to apply the selection.

User Controls

❖ PJLink: Set a password for PJLink. PJLink is a standardization of protocol used for controlling projectors of different manufacturers. This standard protocol is established by Japan Business Machine and Information System Industries Association (JBMIA) in 2005. The projector supports all the commands of PJLink Class 1.

❖ AMX BEACON:

Turn on or off for detection from AMX Device Discovery when connecting to the network supported by AMX's NetLinx control system.

❖ CRESTRON ROOM-VIEW compatibility: The projector supports CRESTRON ROOMVIEW, allowing multiple devices connected in the network to be managed and controlled from a computer or a controller.
For more information, visit http://www.crestron.com

How to use web browser to control your projector

1. Turn on DHCP to allow the DHCP server to automatically assign an IP, or manually enter the required network information.

   SECURITY KEYWORD

   ENTER CURRENT SECURITY CODE
   ASD1-23TW-JEQ8-KP72-HV21-MTX6

   INVALID-KEYWORD TOO SHORT

   ENTER : ENTER   EXIT : EXIT

   NETWORK

NETWORK STATUS	DISCONNECT
DHCP	OFF
IP ADDRESS	192.168.0.10
SUBNET MASK	255.255.255.0
GATEWAY	192.168.0.1
APPLY	

   ENTER   EXIT

2. Then choose apply and press ENTER button to complete the configuration process.

3. Open your web browser and type in from the OSD LAN screen then the web page will display as below:

4. Open "Projector Status and Control" to control your projector.

When making a direct connection from your computer to the projector
Step 1: Find an IP Address (default:192.168.0.10) from LAN function of projector.

192.168.0.10

Step 2: Select apply and press the ENTER button on the remote control or the control panel to submit function or press the MENU button on the remote control or the control panel to exit.

Step 3: To open Network Connections, click **Start**, click **Control Panel**, click **Network and Internet Connections**, and then click **Network Connections**. Click the connection you want to configure, and then, under **Network Tasks**, click **Change settings of this connection**.

Step 4: On the **General** tab, under **This connection uses the following items**, click **Internet Protocol (TCP/IP)**, and then click "Properties."
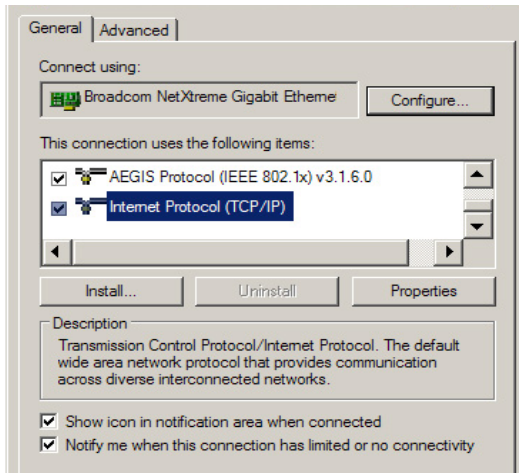
Step 5: Click **Use the following IP address**, and type in as below:

1) IP address: 192.168.0.20
2) Subnet mask: 255.255.255.0
3) Default gateway:192.168.0.1
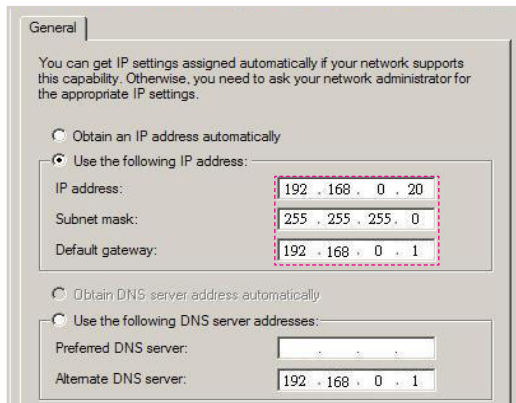
Step 6: To open Internet Options, click IE web browser, click Internet Options, click the **Connections tab** and click "LAN Settings..."
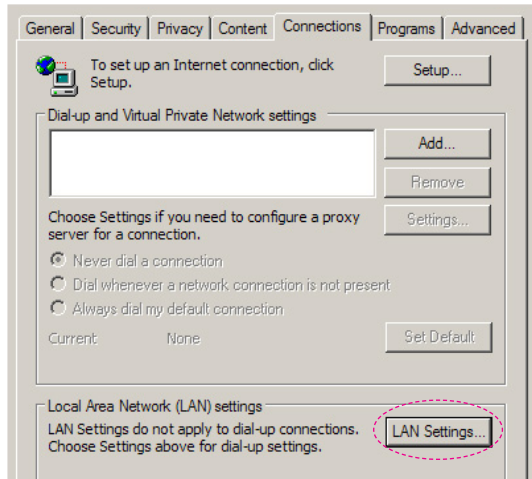
Step 7: The **Local Area Network (LAN) Setting** dialog box appears**,** In the **Proxy Server area**, cancel the **Use a proxy server for your LAN check box**., then click "OK" button twice.
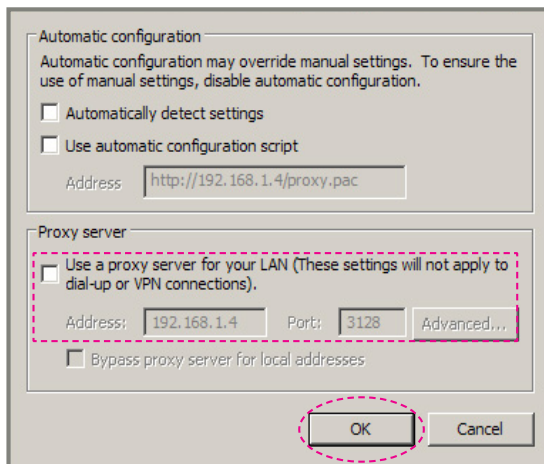
Step 8: Open your IE and type in the IP address of 192.168.0.10 in the URL then press the ENTER button key.

User Controls

Step 9: Open "Projector Status and Control" to control your projector.

IMAGE   SCREEN   SETTING   OPTIONS
◄ GENERAL   ● LAMP SETTINGS   ► 1/2

INPUT SEARCH   OFF   ◄ ►
INPUT
 FAN MODE   AUTO   ◄ ►
 INFORMATION HIDE   OFF   ◄ ►
 ID DISPLAY   OFF   ◄ ►
 BACKGROUND COLOR   BLUE   ◄ ►
 RESET

ENTER :SELECT   EXIT :EXIT   ‡ :MOVE   ◄► :MOVE
      COMPUTER

OPTIONS |
GENERAL

  INPUT SEARCH

  ▶ ON: The projector will search for other signals if the current
      input signal is lost.

  ▶ OFF: The projector will only search current input connection.

INPUT SEARCH

  ○ OFF
  ○ ON

  ENTER   EXIT   ‡
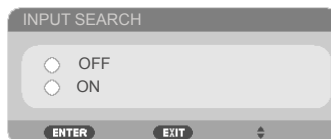
  INPUT

  Use this option to enable / disable input sources. Press ENTER to
  enter the sub menu and select which sources you require. Press
  the ENTER button to finalize the selection. The projector will not
  search for inputs that are not selected.

  NP-V332X, NP-V332W, NP-V302H

INPUT

  ▣ ○ COMPUTER
  ▬ ○ HDMI1/MHL
  ▬ ○ HDMI2
  ◉ ○ VIDEO

  ENTER   EXIT   ‡
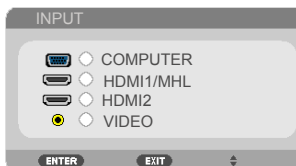
User Controls

NP-V302X, NP-302W

```
INPUT
    ⬚ ○ COMPUTER
    ⬚ ○ HDMI1
    ⬚ ○ HDMI2
    ◉ ○ VIDEO

    ENTER        EXIT        ⬍
```
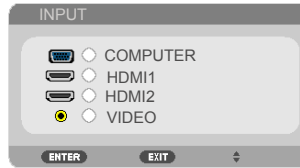
FAN MODE

▶ AUTO: The built-in fans automatically run at a variable speed according to the internal temperature.

▶ HIGH ALTITUDE: The built-in fans run at high speed.

Select this option when using the projector at altitudes approximately 2500 feet/760 meters or higher.

```
FAN MODE

    ○   AUTO
    ○   HIGH ALTITUDE

    ENTER        EXIT        ⬍
```

INFORMATION HIDE

▶ ON: Choose "ON" to hide the info message.

▶ OFF: Choose "OFF" to show the "SEARCHING" message.

```
INFORMATION HIDE

    ○   OFF
    ○   ON

    ENTER        EXIT        ⬍
```
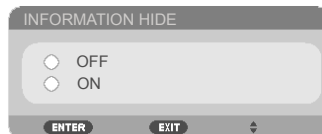
ID DISPLAY

Use this feature to display the ID number which is displayed when the "ID SET" button is pressed on the remote control.

```
ID DISPLAY

    ○   OFF
    ○   ON

    ENTER        EXIT        ⬍
```
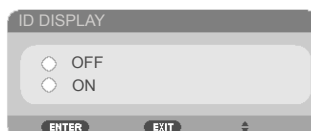
NOTE

❖ (*) Except "LANGUAGE", "LOGO", "NETWORK", "SECURITY", "FAN MODE", "BACKGROUND COLOR", "LAMP LIFE REMAINING", "LAMP HOURS USED", and "STANDBY MODE".

BACKGROUND COLOR

Use this feature to display a "BLACK"or "BLUE" screen when no signal is available.

> BACKGROUND COLOR
>
> ○ BLACK
> ○ BLUE
>
> ENTER   EXIT
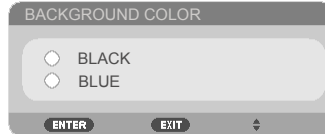
RESET

Choose "YES" to return the display parameters on all menus to the factory default settings. (*)

> ⚠ ARE YOU SURE
>
> YES   NO

User Controls
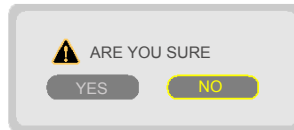
OPTIONS
| LAMP
SETTINGS
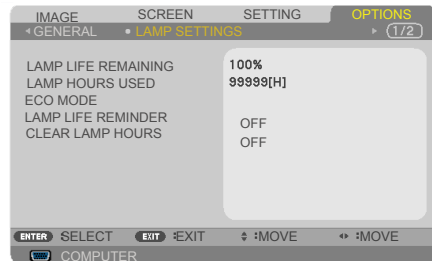
LAMP LIFE REMAINING

Showing the Lamp life.

LAMP HOURS USED

Display the projection time.

ECO MODE

Choose "ECO" to dim the projector lamp which will lower power consumption and extend the lamp life. Choose "OFF" to return to normal mode.
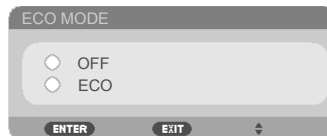
LAMP LIFE REMINDER

Choose this function to show or to hide the warning message when the changing lamp message is displayed.
The message will appear when the lamp has reached the end of its life.

LAMP LIFE REMINDER

○ OFF
○ ON

ENTER   EXIT

USE THE SPECIFIED LAMP

FOR SAFETY AND PERFORMANCE.

⚠ ARE YOU SURE ?

YES   NO
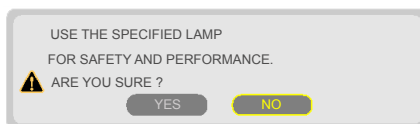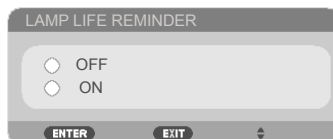
CLEAR LAMP HOURS

Reset the lamp hour counter after replacing the lamp.

User Controls

OPTIONS |
INFORMATION

IMAGE	SCREEN	SETTING	OPTIONS

‹ INFORMATION   • ADVANCED   ► 2/2

MODEL NO.   NP-V3xxx
SERIAL NUMBER   0000
SOURCE
RESOLUTION
SOFTWARE VERSION   A01
CONTROL ID   1

ENTER SELECT   EXIT EXIT   ↕ MOVE   ↔ MOVE

COMPUTER
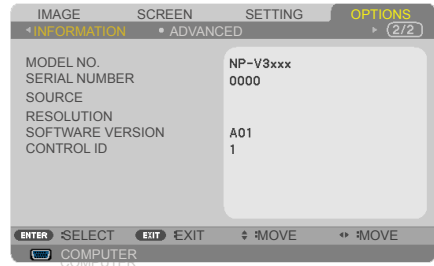
INFORMATION

To display the projector information for model no., serial number, source, resolution, and software version on the screen.

User Controls

IMAGE   SCREEN   SETTING   **OPTIONS**
◄ INFORMATION   ● ADVANCED   ► (2/2)

STANDBY MODE   NORMAL
DIRECT POWER ON   OFF
AUTO POWER OFF (MIN)   ◄ ──●── ► 180
OFF TIMER (MIN)   ◄ ──●── ► 995
CONTROL PANEL LOCK   OFF
CONTROL ID

ENTER :SELECT   EXIT :EXIT   ⬍ :MOVE   ⬌ :MOVE
COMPUTER

OPTIONS | ADVANCED

NOTE
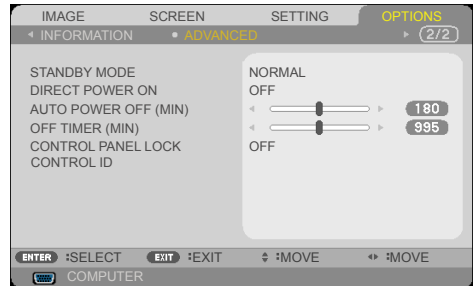
❖ Network Standby mode will disable the following connectors, buttons or functions when the projector is in standby:
- AUDIO OUT connector
- LAN and Mail Alert functions
- Buttons other than POWER button on the cabinet
- Buttons other than POWER ON button on the remote control
- PC Control connector
- Virtual Remote Tool, PC Control Utility Pro 4/PC Control Utility Pro 5.

STANDBY MODE

▶ NETWORK STANDBY: Choose "NETWORK STANDBY" to save power dissipation further < 0.5W.
▶ NORMAL: Choose "NORMAL" to return to normal standby.

STANDBY MODE
○ NORMAL
○ NETWORK STANDBY
ENTER   EXIT
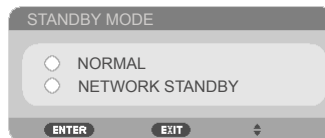
DIRECT POWER ON

Choose "ON" to activate Direct Power mode. The projector will automatically power on when AC power is supplied, without pressing the ⏻ button on the projector control panel or the POWER ON button on the remote control.

DIRECT POWER ON
○ OFF
○ ON
ENTER   EXIT

User Controls

AUTO POWER OFF (MIN)

Sets the countdown timer interval. The countdown timer will start, when there is no signal being sent to the projector. The projector will automatically power off when the countdown has finished (in minutes).

```
AUTO POWER OFF (MIN)
        ◄ ━━━━━━━━━━ ►        90
ENTER  ⇄EXIT    EXIT  ⇄EXIT           ◄► :      ADJUST
```

OFF TIMER (MIN)

Sets the countdown timer interval. The countdown timer will start, with or without a signal being sent to the projector. The projector will automatically power off when the countdown has finished (in minutes).

```
OFF TIMER (MIN)
        ◄ ━━━━━━━━━━ ►        500
ENTER  :EXIT    EXIT  :EXIT           ◄► :      ADJUST
```

CONTROL PANEL LOCK

When the keypad lock function is "ON", the control panel will be locked however, the projector can be operated by the remote control. By selecting "OFF", you will be able to reuse the control panel. Press and hold the EXIT button on the projector cabinet for about 10 seconds to turn off "CONTROL PANEL LOCK".

Even when "NORMAL" mode is selected for "STANDBY MODE" and "ON" is selected for "CONTROL PANEL LOCK", the POWER button on the cabinet can be used to turn on the power.

```
CONTROL PANEL LOCK

    ○  OFF
    ○  ON

   ENTER        EXIT        ⇕
```
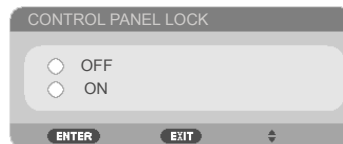
CONTROL ID

Use this feature to display the ID number of the projector when the "ID SET" button is pressed on the remote control.

CONTROL ID

| CONTROL ID NUMBER | 1 |
| CONTROL ID | OFF |

ENTER :SELECT   EXIT :EXIT   ↕ :MOVE   ◄►

CONTROL ID NUMBER

CONTROL ID NUMBER   ◄ 100 ►

ENTER :EXIT   EXIT :EXIT   ◄► :   ADJUST

CONTROL ID (ACTIVE)

1

ENTER :EXIT   EXIT :EXIT   ◄► :   ADJUST

CONTROL ID

◯ OFF
◯ ON

ENTER   EXIT   ↕

⚠ CONTROL ID WILL BE ENABLED
ARE YOU SURE ?
YES   NO

CONTROL ID

CONTROL ID IS DISABLED !

Appendices

Troubleshooting

If you experience trouble with the projector, refer to the following information. If the problem persists, please contact your local dealer or service center.

Problem: No image appears on screen

▶ Ensure all the cables and power connections are correctly and securely connected as described in the "Installation" section.

▶ Ensure the pins of connectors are not crooked or broken.

▶ Check if the projection lamp has been securely installed. Please refer to the "Replacing the lamp" section.

▶ Make sure the projector is switched on.

▶ Ensure that the "AV-MUTE" feature is not turned on.

Problem: Partial, scrolling or incorrectly displayed image

▶ Press "AUTO ADJ." on the remote control.

▶ If you are using a PC:

For Windows Vista:

1. From the "My Computer" icon, open the "Control Panel" folder, and double click the "Appearance and Personalization"

2. Select "Personalization"

3. Click "Adjust screen resolution" to display "Display Settings". Click on the "Advanced Settings".

For Windows 7:

1. From "Start" menu, open "Control Panel".

2. From drop-down menu select "Display".

3. Click "Adjust resolution".

If the projector is still not projecting the whole image, you will also need to change the monitor display you are using. Refer to the following steps.

4. Verify the resolution setting is less than or equal to 1280 x 1024 resolution.

5. Select the "Change" under the "Monitor" tab .

6. Click on "Show all devices". Next, select "Standard monitor types" under the SP box; choose the resolution mode you need under the "Models" box.

▶ If you are using a Notebook:

1. First, follow the steps above to adjust resolution of the computer.

2. Press the toggle output settings. A combination of function keys will enable/disable the external display. Usually, the combination of the "Fn" key along with one of the 12 function keys gets the external display to come on or off. For example, NEC notebook PCs use Fn + F3, While Dell notebook PCs use Fn + F8 key combination to toggle through external display selection.

▶ If you experience difficulty changing resolutions or your monitor freezes, restart all equipment including the projector.

Problem: The screen of the Notebook or PowerBook computer is not displaying a presentation

▶ If you are using a Notebook PC:

Some Notebook PCs may deactivate their own screens when a second display device is in use. Each has a different way to be reactivated. Refer to your computer's documentation for detailed information.

Problem: Image is unstable or flickering

▶ Adjust the "PHASE" to correct it. Refer to the "SETTING" section for more information.

▶ Change the monitor color setting from your computer.

Problem: Image has vertical flickering bar

▶ Use "CLOCK" to make an adjustment.

▶ Check and reconfigure the display mode of your graphic card to make it compatible with the product.

Appendices

Problem: Image is out of focus

▶ Adjust the Focus Lever on the projector lens.

▶ Make sure the projection screen is between the required distance from the projector. Please see the pages 32-33).

Problem: The image is stretched when displaying 16:9 DVD

The projector automatically detects 16:9 DVD and adjusts the aspect ratio by digitizing to full screen with 4:3 default setting.

If the image is still stretched, you will also need to adjust the aspect ratio by referring to the following:

▶ Please select 4:3 aspect ratio type on your DVD player if you are playing a 16:9 DVD.

▶ If you can't select 4:3 aspect ratio type on your DVD player, please select 4:3 aspect ratio in the on screen menu.

Problem: Image is reversed

▶ Select "SETTING|GENERAL-->ORIENTATION" from the OSD and adjust the projection direction.

Problem: Lamp burns out or makes a popping sound

▶ When the lamp reaches its end of life, it will burn out and may make a loud popping sound. If this happens, the projector will not turn on until the lamp module has been replaced. To replace the lamp, follow the procedures in the "Replacing the Lamp".

Problem: LED Indicator message

POWER LED Indicator

Indicator Condition			Projector Condition	Note
Off			The main power is off.	Without connecting power cable.
Blinking light	GREEN	0.5sec ON / 0.5sec OFF	The projector is getting ready to turn on.	--
	GREEN	2.5sec ON / 0.5sec OFF	Off Timer is working.	--
	ORANGE	0.5sec ON / 0.5sec OFF	Cooling	--
Steady light	GREEN		Power on mode	--
	ORANGE		Network Standby mode	Connecting power cable.
	RED		Normal Standby mode	Connecting power cable.

STATUS LED Indicator

Indicator Condition			Projector Condition	Note
Off			Normal Condition	--
Blinking light	RED	2cycle (0.5sec ON / 0.5sec OFF)	Temperature error	--
		3cycle (0.5sec ON / 0.5sec OFF)	Power error	Power unit is not working properly. Contact your dealer.
		4cycle (0.5sec ON / 0.5sec OFF)	Fan error	--
		6cycle (0.5sec ON / 0.5sec OFF)	Lamp error	--
	GREEN	0.5sec ON / 0.5sec OFF	Re-firing the lamp (The projector is cooling down)	--
Steady light	ORANGE		Control Panel Lock is working	You have pressed cabinet button when Control Panel Lock is on.
			CONTROL ID error	Remote control ID and projector ID are not matched.

Appendices

LAMP LED Indicator

Indicator Condition			Projector Condition	Note
Off			Normal Condition	--
Blinking light	RED	0.5sec ON / 0.5sec OFF	Lamp has reached its end of life.	--
Steady light	RED		Lamp has been used beyond its limit.	The projector will not turn on until the lamp is replaced.
	GREEN		[ECO MODE] is set to [ECO]	

Problem: Message Reminders

▶ Over temperature - the projector has exceeded its recommended operating temperature and must be allowed to cool down before it may be used.

> WARNING! TEMPERATURE TOO HIGH
>
> 1. MAKE SURE AIR IN AND OUTLETS ARE NOT BLOCKED.
> 2. MAKE SURE THE ENVIRONMENT TEMPERATURE IS UNDER 40 DEGREE C

▶ Replacing the lamp - the lamp is about to reach its maximum lifetime. Prepare to replace it soon.

> WARNING! LAMP
>
> LAMP WARNING
> LAMP LIFE IS ABOVE LIMIT TIME. LAMP OFF!

> WARNING! LAMP
>
> LAMP WARNING
> LAMP LIFE EXCEEDED.
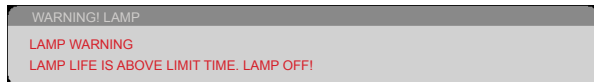
NOTE: When you continue to use the projector for another 100 hours after the lamp has reached the end of its life, the projector cannot turn on.

If this happens, after replacing the lamp, connect the power cord and then press and hold the HELP button on the remote control at least 10 seconds. This will allow you to turn on the projector. Clear the lamp hours by selecting "OPTIONS" -> "LAMP SETTINGS" -> "CLEAR LAMP HOURS" from the menu.

▶ Fan failed - the system fan is not working.

> WARNING! FAN LOCKED
>
> THE PROJECTOR WILL SWITCH OFF AUTOMATICALLY.

Appendices

Replacing the lamp
Optional lamp

NP35LP (for NP-V332X / NP-V332W / NP-V302H)
NP36LP (for NP-V302X / NP-V302W)

The time to replace the lamp is differed from models.

On NP-V302X, and NP-V302W, the projectors will detect the lamp life at 4500 hours in ECO Mode Off (6000 hours in ECO Mode) On NP-V332X, NP-V332W, and NP-V302H, the projectors will detect the lamp life at 3500 hours in ECO Mode Off (6000 hours in ECO Mode). When the "POWER" LED indicator flashes red and the message below displays on-screen, the projector has detected that the lamp is approaching its end of life. Please see the page 72-73. It will show you a warning message:

WARNING! LAMP

LAMP WARNING
LAMP LIFE IS ABOVE LIMIT TIME. LAMP OFF!

WARNING! LAMP

LAMP WARNING
LAMP LIFE EXCEEDED.

When you see this message, change the lamp as soon as possible. Make sure the projector has been cooled down for at least 60 minutes before changing the lamp.

Warning: To avoid burns, allow the projector to cool for at least 60 minutes before you replace the lamp!

Warning: To reduce the risk of personal injury, do not drop the lamp module or touch the lamp bulb. The bulb may shatter and cause injury if it is dropped.

Do not break the glass on the lamp module. Keep finger prints off the glass surface on the lamp module. Leaving finger prints on the glass surface might cause an unwanted shadow and poor picture quality.

Be sure to tighten the screws after replacing the lamp module.

Positioning holes

Positioning protrusions
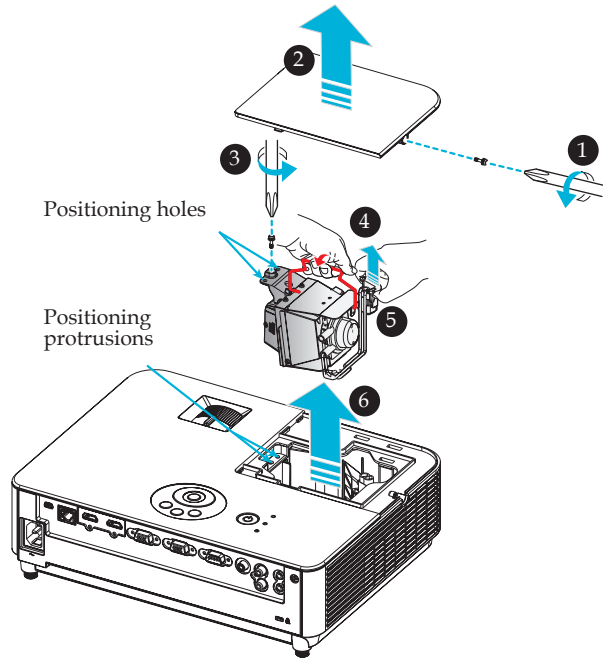
Lamp Replacing Procedure:
1. Switch off the power to the projector by pressing the POWER OFF button on the remote control or the ⏻ button on the control panel.
2. Allow the projector to cool down at least 60 minutes.
3. Disconnect the power cord.
4. Use a screwdriver to loosen the screw on the lamp cover. ❶
5. Slide and remove the cover. ❷
6. Loosen the screw on the lamp module. ❸
7. Lift the handle. ❹
8. Pinch the arrow marked positions on the connector housing and pull the housing upward for removing the connector. ❺
9. Pull out the lamp module. ❻
10. Install the new lamp module by reversing the previous steps.

Note: Make sure to align the positioning holes over the positioning protrusions for installing the lamp module.

11. After replacing the lamp, turn on the power, and select the [MENU] button -> OPTIONS | LAMP SETTINGS -> CLEAR LAMP HOURS to reset the lamp usage hours. Please see page 73.

Appendices

Cleaning procedure for the lens

If the projection lens is dusty or blemished, please clean the lens as following procedure:

1. Turn off the projector and cool projector down for a while.

2. Unplug the power cord from outlet.

3. Blow the dust by blower for cameras which you could buy from camera shops.Wipe the lens gently using a cleaning cloth.

⚠️ **CAUTION:**

• Always wipe the lens with a cleaning cloth.
• Please do not wipe the lens hard because that may cause serious damage on the lens surface.
• Wiping might scratch the lens. Optical performance of the projector will thus be impacted if the lens is scratched after wiping. Optical performance impact will be dependent on the scratch condition on it.
• Do not use liquid cleaners or chemicals on the cloth because it may contaminate the cloth and cause serious damage on the surface of lens.
• Do not use a spray containing flammable gas to get rid of accumulated dust on the lens. It may cause of fire.

Specifications

Optical	NP-V302X	NP-V302W	NP-V332X	NP-V332W	NP-V302H
Projection System	Single DLP® chip (0.55", Aspect ratio 4:3)	Single DLP® chip (0.65", Aspect ratio 16:10)	Single DLP® chip (0.55", Aspect ratio 4:3)	Single DLP® chip (0.65", Aspect ratio 16:10)	Single DLP® chip (0.65", Aspect ratio 16:9)
Resolution (pixels) *1	1024x768 (XGA)	1280x800 (WXGA)	1024x768 (XGA)	1280x800 (WXGA)	1920x1080 (1080P)
Lens	Manual zoom and manual focus				
	F=2.41-2.55	F=2.50-2.67	F=2.41-2.55	F=2.50-2.67	F=2.55-2.85
	f=21.8-24.0mm	f=21.8-24.0mm	f=21.8-24.0mm	f=21.8-24.0mm	f=22.4-26.8mm
Lamp	195W AC (160W in ECO mode)		218W AC (170W in ECO mode)		
Light Output *2 *3	3000 lumens	3000 lumens	3300 lumens	3300 lumens	3000 lumens
	Approx. 85% in ECO mode				
Contrast Ratio *3 (with DYNAMIC CONTRAST ON)	10000:1	10000:1	10000:1	10000:1	8000:1
Image Size (Diagonal)	30" to 300"				40" to 300"
	0.76 to 7.6 m (4:3)	0.76 to 7.6 m (16:10)	0.76 to 7.6 m (4:3)	0.76 to 7.6 m (16:10)	1.02 to 7.6 m (16:9)
Projection Distance	wide	47"to 468" (1.19 to 11.89m)	39" to 394" (0.99 to 10.01m)	47"to 468" (1.19 to 11.89m)	39" to 394" (0.99 to 10.01m)	52" to 392" (1.32 to 9.96m)
	tele	52" to 516" (1.32 to 13.11m)	43" to 432" (1.09 to 10.97m)	52" to 516" (1.32 to 13.11m)	43" to 432" (1.09 to 10.97m)	63" to 471" (1.60 to 11.96m)
Projection Angle	wide	14.0°	14.2°	14.0°	14.2°	14.0°
	tele	12.8°	13.0°	12.8°	13.0°	11.7°

*1 Effective pixels are more than 99.99%.

*2 This is the light output value (lumens) when [PICTURE MODE] is set to [HIGH-BRIGHT] in the menu.

If any other mode is selected as [PICTURE MODE], the light output value may drop slightly.

*3 Compliance with ISO21118-2012

Appendices

Electrical		NP-V302X	NP-V302W	NP-V332X	NP-V332W	NP-V302H
Inputs		1 x VGA and Y/Pb/Pr, 2 x HDMI *4 (Standard HDMI connector), 1 x VGA Audio (Stereo mini jack), 1 x Composite Video (RCA (yellow)), 2 x Composite Audio (RCA for both left and right)		1 x VGA and Y/Pb/Pr, 2 x HDMI *4 (Standard HDMI connector and one with MHL function support), 1 x VGA Audio (Stereo mini jack), 1 x Composite Video (RCA (yellow)), 2 x Composite Audio (RCA for both left and right)		
Outputs		1 x VGA (D-sub female 15 pin connector) (Separate sync signal only), 1 x Audio (Stereo mini jack(green))				
PC Control		1 x PC Control Port (D-Sub 9 Pin)				
Wired LAN Port		1 x RJ-45 (10/100 BASE-T/100 BASE-TX)				
Service Port		Mini USB type B (for FW download)				
Color Reproduction		1.07 billion colors simultaneously with 10-bit signal processing				
Compatible Signals *5	Analog	VGA/SVGA/XGA/XGA+/SXGA/Quad-VGA/SXGA+/UXGA/ PowerBook G4/iMac DV (G3)/WSVGA/WXGA/WXGA+/WSXGA/ WUXGA/480i/480p/576i/576p/720p/1080i/1080p				
	HDMI	VGA/SVGA/XGA/XGA+/SXGA/Quad-VGA/SXGA+/UXGA/ PowerBook G4/iMac DV (G3)/WSVGA/WXGA/WXGA+/WSXGA/ WUXGA/480i/480p/576i/576p/720p/1080i/1080p				
Horizontal Resolution		540 TV lines: NTSC/NTSC4.43/PAL/PAL-M/PAL-N/PAL60				
		300 TV lines: SECAM				
Scan Rate		Hsync Frequency: 24kHz ~ 102kHz				
		Vsync Frequency: 48kHz ~ 120 Hz				
Sync Compatibility		Separate Sync				
Built-in Speaker		8W				
Power Requirement		100 - 240V AC 50/60Hz				
Input Current		2.5-1.0 A	2.5-1.0 A	2.7-1.1 A	2.8-1.1 A	2.8-1.2A
Power Consumption (Typical value)						
Eco Mode OFF		251W (*6) / 237W (*7)	249W (*6) / 237W (*7)	275W (*6) / 263W (*7)	277W (*6) / 263W (*7)	280W (*6) / 266W (*7)
Eco Mode		206W (*6) / 198W (*7)	205W (*6) / 194W (*7)	213W (*6) / 204W (*7)	215W (*6) / 204W (*7)	217W (*6) / 207W (*7)
Network Stand-by		1.6W (*6) / 1.8W (*7)	1.5W (*6) / 1.8W (*7)	1.6W (*6) / 1.8W (*7)	1.5W (*6) / 1.8W (*7)	1.6W (*6) / 1.8W (*7)
Normal Stand-by		0.22W (*6) / 0.37W (*7)	0.23W (*6) / 0.38W (*7)	0.23W (*6) / 0.35W (*7)	0.22W (*6) / 0.35W (*7)	0.22W (*6) / 0.35W (*7)

*4 HDMI® (Deep Color, Lip Sync) with HDCP
What is HDCP/HDCP technology?
HDCP is an acronym for High-bandwidth Digital Content Protection. High bandwidth Digital Content Protection (HDCP) is a system for preventing illegal copying of video data sent over a High-Definition Multimedia Interface (HDMI).
If you are unable to view material via the HDMI input, this does not necessarily mean the projector is not functioning properly. With the implementation of HDCP, there may be cases in which certain content is protected with HDCP and might not be displayed due to the decision/intention of the HDCP community (Digital Content Protection, LLC).
Video: Deep Color; 8/10/12-bit, LipSync

*5 **NP-V302X, NP-V332X**:
An image with higher or lower resolution than the projector's native resolution (1024 × 768) will be displayed with scaling technology.
NP-V302W, NP-V332W:
An image with higher or lower resolution than the projector's native resolution (1280 × 800) will be displayed with scaling technology.
NP-V302H:
An image with higher or lower resolution than the projector's native resolution (1920 × 1080) will be displayed with scaling technology.

*6 100V - 130VAC

*7 200V - 240VAC

Appendices

Mechanical	NP-V302X	NP-V302W	NP-V332X	NP-V332W	NP-V302H
Installation Orientation	Desktop/Front, Desktop/Rear, Ceiling/Front, Ceiling/Rear				
Dimensions	12.8"(W) x 3.5" (H) X 9.8" (D) / 324 mm (W) x 88 mm (H) x 250 mm (D) (not including protrusions) 12.8"(W) x 4.0"(H) x 9.8"(D) / 324 mm(W) x 101 mm(H) x 250 mm(D) (including protrusions)				
Weight	2.7 kg/6.0lbs		2.8 kg/6.2lbs		2.9 kg/6.4lbs
Environmental Conditions *8	Operational Temperatures: 41° to 104° (5°C to 40°C) 20% to 80% humidity (non-condensing)				
	Storage Temperatures: 14° to 122° F (-10°C to 50°C) 20% to 80% humidity (non-condensing)				
Regulations	UL/C-UL Approved (UL 60950-1, CSA 60950-1)				
	Meets DOC Canada Class B requirements				
	Meets FCC Class B requirements				
	Meets AS/NZS CISPR.22 Class B				
	Meets EMC Directive (EN55022, EN55024, EN61000-3-2, EN61000-3-3)				
	Meets Low Voltage Directive (EN60950-1, TÜV Approved)				
	$C \epsilon$				

*8 Operational temperatures
- 0 to 2500 feet/760 m in the range of 41° to 104°F (5°to 40°C)
- 2500 feet/760m to 5000 feet/1500 m in the range of 41°to 95°F (5°to 35°C)
- 5000 feet/1500 m to 10000 feet/3000 m in the range of 41°to 86°F (5°to 30°C)
- Set [FAN MODE] to [HIGH ALTITUDE] when using the projector at altitudes approx. 2500 feet/760 m or higher.

Compatibility Modes

▸ VGA Analog

(1) VGA Analog - PC Signal

Modes	Resolution (dots)	V.Frequency [Hz]	H.Frequency [KHz]
VGA	640x480	60	31.47
VGA	640x480	72	37.86
VGA	640x480	75	37.5
VGA	640x480	85	43.27
SVGA	800x600	56	35.2
SVGA	800x600	60	37.88
SVGA	800x600	72	48.08
SVGA	800x600	75	46.88
SVGA	800x600	85	53.67
XGA	1024x768	60	48.36
XGA	1024x768	70	56.48
XGA	1024x768	75	60.02
XGA	1024x768	85	68.67
XGA+	1152x864	75	67.5
SXGA	1280x1024	60	63.98
SXGA	1280x1024	72	77.9
SXGA	1280x1024	75	79.98
SXGA	1280x1024	85	91.15
Quad VGA	1280x960	60	60
Quad VGA	1280x960	75	75
SXGA+	1400x1050	60	65.32
UXGA	1600x1200	60	75
Mac OS X	640x480	60	31.5
Mac OS X	640x480	66.6(67)	35
Mac OS X	800x600	60	37.88
Mac OS X	1024x768	60	48.36
Mac OS X	1152x870	75	68.68
Mac OS X	1280x960	75	75.2

Appendices

(2) VGA Analog - Extended Wide timing

Modes	Resolution (dots)	V.Frequency [Hz]	H.Frequency [KHz]
HD	1280x720	60	44.8
WXGA	1280x768	60	47.78
WXGA	1280x768	75	60.29
WXGA	1280x768	85	68.63
WXGA	1280x800	60	49.6
WXGA	1366x768	60	47.71
WXGA+	1440x900	60	55.9
WSXGA	1680x1050	60	65.3
Full HD	1920x1080	60	67.5
WUXGA	1920x1200	60	74.0

(3) VGA Analog -Component Signal

Modes	Resolution (dots)	V.Frequency [Hz]	H.Frequency [KHz]
480i	720x480	59.94(29.97)	27
480p	720x480	59.94	31.47
576i	720x576	50(25)	27
576p	720x576	50	31.25
720p	1280x720	60	45
720p	1280x720	50	37.5
1080i	1920x1080	60(30)	33.75
1080i	1920x1080	50(25)	33.75
1080p	1920x1080	60	67.5
1080p	1920x1080	50	56.25

Appendices

▸ **HDMI Digital**

Signal	Resolution (dots)	Aspect Ratio	Refresh Rate [Hz]
VGA	640x480	4:3	59.94/60
SVGA	800x600	4:3	60
XGA	1024x768 *1	4:3	60
XGA	1280x768	15:9	60
WXGA	1280x800 *2	16:10	60
WXGA	1366x768 *4	16:9	60
SXGA	1280x1024	5:4	60
SXGA+	1400x1050	4:3	60
WXGA+	1440x900	16:10	60
WXGA++	1600x900	16:9	60
WSXGA+	1680x1050	16:10	60
UXGA	1600x1200	4:3	60
Full HD	1920x1080 *3	16:9	60
HDTV (1080p)	1920x1080	16:9	23.98/24/50/59.94/60
HDTV(1080i)	1920x1080	16:9	50/59.94/60
HDTV (720p)	1280x720	16:9	50/59.94/60
SDTV (480p)	720x480	4:3/16:9	59.94/60
SDTV (576p)	720x576	4:3/16:9	50
SDTV (480i)	720(1440)x480	4:3/16:9	59.94/60
SDTV (576i)	720(1440)x576	4:3/16:9	50

*1 XGA Model Real Resolution
*2 WXGA Model Real Resolution
*3 1080p Model Real Resolution
*4 The projector may fail to display these signals correctly
     when [AUTO] is selected for [ASPECT RATIO] in the
     on-screen menu.
     The factory default is [AUTO] for [ASPECT RATIO]. To display these
     signals, select [16:9] for [ASPECT RATIO].

(1) HDMI - 3D Timing

Signal	Resolution (dots)	Aspect Ratio	Refresh Rate [Hz]
For PC Signal			
XGA	1024x768 *1	4:3	60/120 *5
1280x720	1280x720	16:9	60/120 RB *5
WXGA	1280x800 *2	16:10	60/120 RB *5
Full HD	1920x1080 *3	16:9	60
For Video Signal			
SDTV (480i)	720x480	4:3/16:9	60
For HDMI 3D			
720p (Frame Packing)	1280x720	16:9	50/60/59.94
1080p (Frame Packing)	1920x1080	16:9	23.98/24
1080i (Side by Side (Half))	1920x1080	16:9	50/60/59.94
1080P (Side by Side (Half))	1920x1080	16:9	50/60/59.94 *6
720p (Top and Bottom)	1280x720	16:9	50/60/59.94
1080p (Top and Bottom)	1920x1080	16:9	23.98/24

*1 XGA Model Real Resolution
*2 WXGA Model Real Resolution
*3 1080p Model Real Resolution
*4 The projector may fail to display these signals correctly
     when [AUTO] is selected for [ASPECT RATIO] in the
     on-screen menu.
     The factory default is [AUTO] for [ASPECT RATIO]. To display these
     signals, select [16:9] for [ASPECT RATIO].
*5 The 120 Hz signals are support frame sequential format only.
*6 Select manually.

(2) MHL Signal

Signal	Resolution (dots)	Aspect Ratio	Refresh Rate (Hz)
VGA	640x480	4:3	59.94/60
HDTV (1080p)	1920x1080	16:9	23.97/24/50/59.94/60
HDTV (1080i)	1920x1080	16:9	50/59.94/60
HDTV (720p)	1280x720	16:9	50/59.94/60
SDTV (480p)	720x480	4:3/16:9	59.94/60
SDTV (576p)	720x576	4:3/16:9	50
SDTV (480i)	720 x 480(1440x480i)	4:3/16:9	59.94/60
SDTV (576i)	720 x 576(1440x576i)	4:3/16:9	50

TIP:

• An image with higher or lower resolution than the projector's native resolution will be displayed with scaling technology.

• Sync on Green and Composite sync signals are not supported.

• Signals other than those specified in the table above may not be displayed correctly. If this should happen, change the refresh rate or resolution on your PC. Refer to Display Properties help section of your PC for procedures.

Appendices

Ceiling Mount Installation

1. To refuse the projector from damage, please use the ceiling mount kit for ceiling mount installation.

2. If you buy a ceiling mount from another company, please be sure to use the screw in correct size. Screw size is vary depending on the thickness of the mounting plate.

▸ Screw type: M4*4

▸ Maximum screw length: 8mm

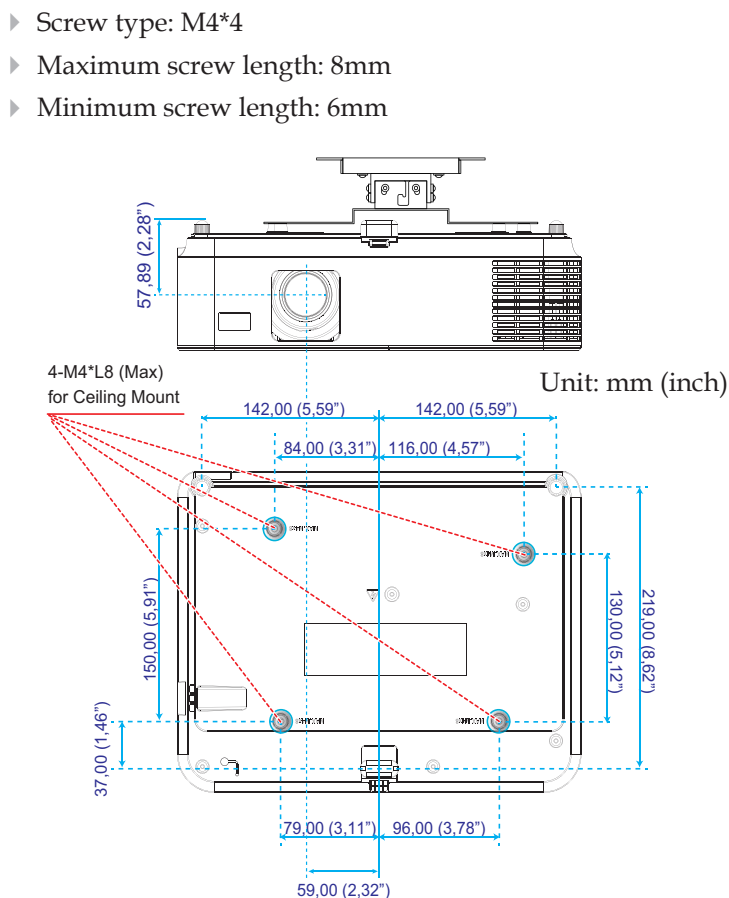▸ Minimum screw length: 6mm

NOTE

Please note that damage resulting from incorrect installation will invalidate the warranty.

Warning:
1. Be sure to keep at least 10 cm gap between the ceiling and the bottom of the projector.
2. Avoid installing the projector near a heat source.

57,89 (2,28")

4-M4*L8 (Max) for Ceiling Mount

Unit: mm (inch)

142,00 (5,59")   142,00 (5,59")

84,00 (3,31") 116,00 (4,57")

150,00 (5,91")

130,00 (5,12")

219,00 (8,62")

37,00 (1,46")

79,00 (3,11")   96,00 (3,78")

59,00 (2,32")

Cabinet Dimensions

Unit: mm (inch)

250,00 (9,84")

103,00 (4,06")

324,00 (12,76")

43,41 (1,71")

57,89 (2,28")

59,00 (2,32")

88,00 (3,46")

9,80 (0,39")

91,50 (3.60")

Appendices
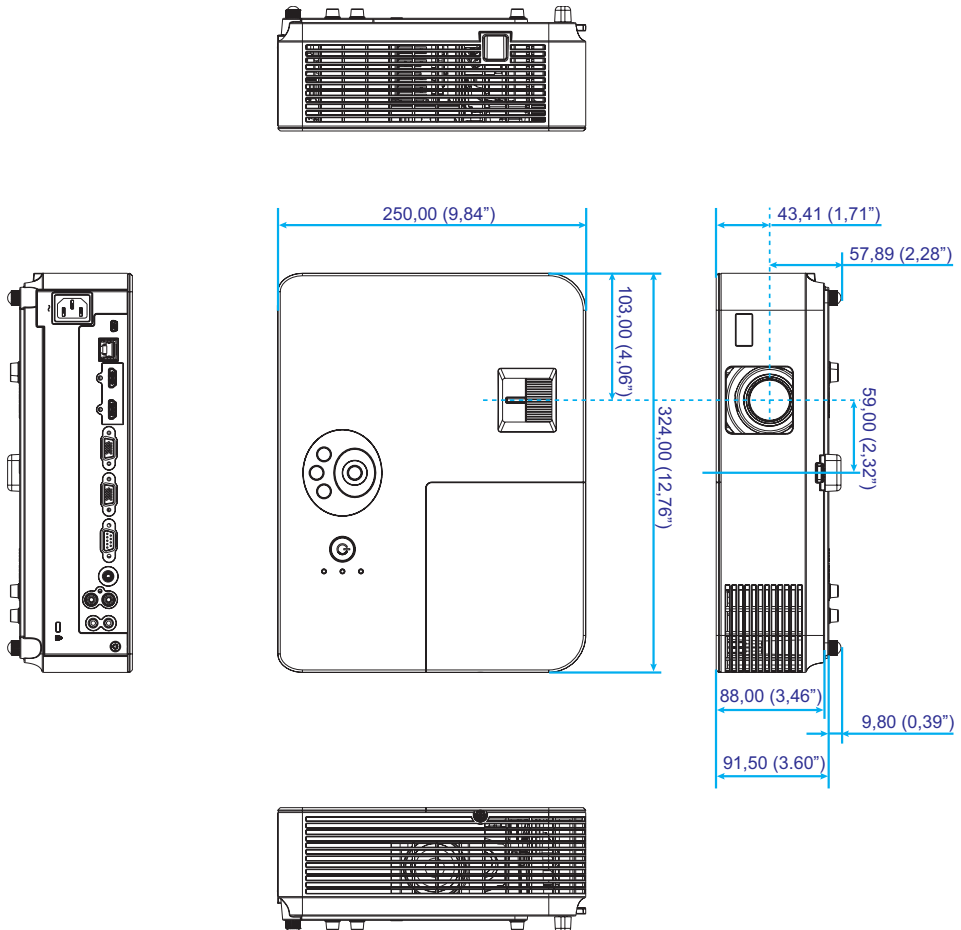
Pin Assignments of D-Sub COMPUTER Input Connector
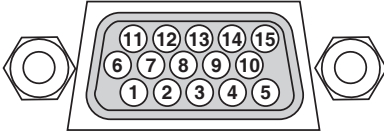
Mini D-Sub 15 Pin Connector

Signal Level
Video signal : 0.7Vp-p (Analog)
Sync signal : TTL level

Pin No.	RGB Signal (Analog)	YCbCr Signal
1	Red	Cr
2	Green	Y
3	Blue	Cb
4	Ground	
5	Ground	
6	Red Ground	Cr Ground
7	Green Gro	Y Ground
8	Blue Ground	Cb Ground
9	No Connection	
10	Sync Signal Ground	
11	No Connection	
12	Bi-directional DATA (SDA)	
13	Horizontal Sync or Composite Sync	
14	Vertical Sync	
15	Data Clock	

Appendices

PC Control Codes and Cable Connection

PC Control Codes

| Function	Code Data							
POWER ON	02H	00H	00H	00H	00H	02H		
POWER OFF	02H	01H	00H	00H	00H	03H		
INPUT SELECT COMPUTER	02H	03H	00H	00H	02H	01H	01H	09H
INPUT SELECT HDMI 1	02H	03H	00H	00H	02H	01H	A1H	A9H
INPUT SELECT HDMI 2	02H	03H	00H	00H	02H	01H	A2H	AAH
INPUT SELECT VIDEO	02H	03H	00H	00H	02H	01H	06H	0EH
PICTURE MUTE ON	02H	10H	00H	00H	00H	12H		
PICTURE MUTE OFF	02H	11H	00H	00H	00H	13H		
SOUND MUTE ON	02H	12H	00H	00H	00H	14H		
SOUND MUTE OFF	02H	13H	00H	00H	00H	15H		

NOTE: Contact your local dealer for a full list of the PC Control Codes if needed.

Cable Connection

Communication Protocol

> **Baud rate** ....38400 bps
> **Data length**..8 bits
> **Parity** ....No parity
> **Stop bit**...One bit
> **X on/off**...None
> **Communications procedure**....................Full duplex

PC Control Connector (D-SUB 9P)

To TxD of PC
To RxD of PC
To GND of PC

1 2 3 4 5
6 7 8 9

To RTS of PC
To CTS of PC
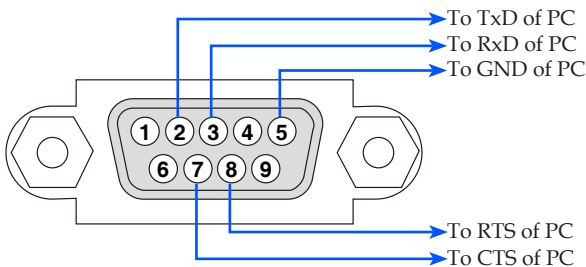
NOTE 1: Pins 1, 4, 6 and 9 are no used.
NOTE 2: Jumper "Request to Send" and "Clear to Send" together on both ends of the cable to simplify cable connection.

Troubleshooting Check List

Before contacting your dealer or service personnel, check the following list to be sure repairs are needed also by referring to the "Troubleshooting" section in your user's manual. This checklist below will help us solve your problem more efficiently.

* Print the following pages.

Frequency of occurrence ☐ always ☐ sometimes (How often?_____) ☐ other (_____)

Power

☐ No power (POWER indicator does not light green).
   ☐ Power cable's plug is fully inserted into the wall outlet.
   ☐ Lamp cover is installed correctly.
   ☐ Lamp Hours Used (lamp operation hours) was cleared after lamp replacement.
   ☐ No power even though you press and hold the POWER button for a minimum of 1 second.

☐ Shut down during operation.
   ☐ Power cable's plug is fully inserted into the wall outlet.
   ☐ Lamp cover is installed correctly .
   ☐ Power Management is turned off (only models with the Power Management function).

Video and Audio

☐ No image is displayed from your PC or video equipment to the projector.
   ☐ Still no image even though you connect the projector to the PC first, then start the PC.
   ☐ Enabling your notebook PC's signal output to the projector.
     * A combination of function keys will enable/disable the external display. Usually, the combination of the"Fn" key along with one of the 12 function keys turns the external display on or off.
   ☐ No image (blue background).
   ☐ Still no image even though you press the AUTO ADJUST button.
   ☐ Still no image even though you carry out [RESET] in the projector's menu.
   ☐ Signal cable's plug is fully inserted into the input connector
   ☐ A message appears on the screen.
     (_____)
   ☐ The source connected to the projector is active and available.
   ☐ Still no image even though you adjust the brightness and/or the contrast.
   ☐ Input source's resolution and frequency are supported by the projector.

☐ Image is too dark.
   ☐ Remains unchanged even though you adjust the brightness and/or the contrast.

☐ Image is distorted.
   ☐ Image appears to be trapezoidal (unchanged even though you carry out the [KEYSTONE] adjustment).

☐ Parts of the image are lost.
   ☐ Still unchanged even though you press the AUTO ADJUST button.
   ☐ Still unchanged even though you carry out [RESET] in the projector's menu.

☐ Image is shifted in the vertical or horizontal direction.
   ☐ Horizontal and vertical positions are correctly adjusted on a computer signal.
   ☐ Input source's resolution and frequency are supported by the projector.
   ☐ Some pixels are lost.

☐ Image is flickering.
   ☐ Still unchanged even though you press the AUTO ADJUST button.
   ☐ Still unchanged even though you carry out [RESET] in the projector's menu.
   ☐ Image shows flickering or color drift on a computer signal.

☐ Image appears blurry or out of focus.
   ☐ Still unchanged even though you checked the signal's resolution on PC and changed it to projector's native resolution.
   ☐ The throw distance is within 47" to 516" / 1189 mm to 13105 mm (NP-V332X & NP-V302X), 39" to 432" / 1002 mm to 10985 mm (NP-V332W & NP-V302W), 52" to 471" / 1328 mm to 11955 mm (NP-V302H)
   ☐ Still unchanged even though you adjusted the focus.

☐ No sound.
   ☐ Audio cable is correctly connected to the audio input of the projector.
   ☐ Still unchanged even though you adjusted the volume level.

Other

☐ Remote control does not work.
   ☐ No obstacles between the sensor of the projector and the remote control.
   ☐ Projector is placed near a fluorescent light that can disturb the infrared remote controls.
   ☐ Batteries are new and are not reversed in installation

☐ Buttons on the projector cabinet do not work.
   ☐ [CONTROL PANEL LOCK] is not turned on in the menu.
   ☐ Still unchanged even though you press and hold the EXIT button for minimum of 10 seconds.

In the space below please describe your problem in detail.

[blank space for description]

Information on application and environment where your projector is used

Projector

Model number:

Serial No.:

Date of purchase:

Lamp operating time (hours):

Eco Mode: ☐ Off ☐ Eco

Information on input signal:

  Horizontal synch frequency [   ] kHz

  Vertical synch frequency [   ] Hz

  Synch polarity H ☐ (+) ☐ (-)

               V ☐ (+) ☐ (-)

  Synch type ☐ Separate ☐ Composite

              ☐ Sync on Green

STATUS Indicator:

  Steady light ☐ Orange ☐ Green

  Blinking light [   ] cycles

Remote control model number:

PC

DVD Player   *Projector*

Signal cable

NEC standard or other manufacturer's cable?

  Model number: Length: inch/m

Distribution amplifier

  Model number:

Switcher

  Model number:

Adapter

  Model number:

Installation environment

Screen size: inch

Screen type: ☐ White matte ☐ Beads ☐ Polarization

            ☐ Wide angle ☐ High contrast

  Throw distance: feet/inch/m

  Orientation: ☐ Ceiling mount ☐ Desktop

Power outlet connection:

☐ Connected directly to wall outlet

☐ Connected to power cord extender or other (the number of connected equipment_____)

☐ Connected to a power cord reel or other (the number of connected equipment_____)

Computer

Manufacturer:

Model number:

Notebook PC ☐ / Desktop ☐

Native resolution:

Refresh rate:

Video adapter:

Other:

Video equipment

VCR, DVD player, Video camera, Video game or other

Manufacturer:

Model number:

REGISTER YOUR PROJECTOR!
(for residents in the United States, Canada, and Mexico)

Please take time to register your new projector. This will activate your limited parts and labor warranty and InstaCare service program.

Visit our web site at www.necdisplay.com, click on support center/register product and submit your completed form online.

Upon receipt, we will send a confirmation letter with all the details you will need to take advantage of fast, reliable warranty and service programs from the industry leader, NEC Display Solutions of America, Inc.

NEC