vivitek

DX330/DW350
DH380/DX335ST
DW355ST/DX331
DW351/DH381
DH382/DH385ST

User Manual

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1.General Information

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Important Safety Information

⚠ **Important:**
It is strongly recommended that you read this section carefully before using the projector. These safety and usage instructions will ensure that you enjoy many years of safe use of the projector. Keep this manual for future reference.

Symbols used

Warning symbols are used on the unit and in this manual to alert you of hazardous situations.

The following styles are used in this manual to alert you to important information.

Note:
Provides additional information about the topic.

⚠ **Important:**
Provides additional information that should not be overlooked.

⚠ **Caution:**
Alerts you to situations that may damage the unit.

⚠ **Warning:**
Alerts you to situations that may damage the unit, create a hazardous environment, or cause personal injury.

Throughout this manual, component parts and items in the OSD menus are denoted in bold font as in this example:

"Push the Menu button on the remote control to open the Main menu."

General Safety Information

● Do not open the unit case. There are no user-serviceable parts in the unit.
   For servicing, contact qualified service personnel.
● Follow all warnings and cautions in this manual and on the unit case.
● To avoid damage to eyes, do not look into the lens when the light source is on.
● Do not place the unit on an unstable surface, cart, or stand.
● Avoid using the system near water, in direct sunlight, or near a heating device.
● Do not place heavy objects such as books or bags on the unit.

Symbols used

This product is intended for the adults who have the ability to operate this machine.

Please write down your projector model number and serial number and keep the information for maintenance purposes in the future. Should the equipment be lost or stolen, the information could also be used for the police report.

Model number:
Serial number:

Warning Labels

Safety Hazard and Warning information Labels are placed at the following locations:

Specification Label

Warning Label

Caution: Do not open,No user serviceable parts inside
警告：請勿打開外殼，設備內無服務性維修之元件
警告：请勿打开外壳，设备内无服务性维修之组件
Cuidado: no abra la tapa, Niguna parte interna es reparable por Usuario.
Avertissement: ne pas ouvrir le couvercle. Le produit ne contient aucune
pièce interne réparable par l' utilisateur.

RG2 Label

RG2

Eye Safety Warnings

- Avoid staring/facing directly into the projector beam at all times. Keep your back to the beam as much as possible.
- When projector is used in a classroom, ensure students do not look into the beam when they are asked to point something out on screen.

General Notice

Power Supply

- Only use the supplied power cord.
- Do not place anything on the power cord. Place the power cord where it will not be in the way of foot traffic.
- Remove the batteries from the remote control when storing or not in use for a prolonged period.

Cleaning the Projector

- Unplug the power cord before cleaning.
- Allow the light source to cool for about one hour.

Regulatory Warnings

Before installing and using the projector, read the regulatory notices in the Regulatory Compliance on page 46.

Symbol Explanations

DISPOSAL: Do not use household or municipal waste collection services for disposal of electrical and electronic equipment. EU countries require the use of separate recycling collection services.

Special Care for Laser Beams!

Special care should be considered when DLP projectors and high power laser equipment are used in the same room as. Direct or indirect hit of a laser beam on to the projector lens can severely damage the Digital Mirror Devices (DMD™).

Sun Light Warning

Avoid using the D366 Series in direct sun light. Sun light on the projector lens can severely damage the Digital Mirror Devices (DMD™).

2.Getting Started

Package Content

Carefully unpack the projector and check that the following items are included:

DH380
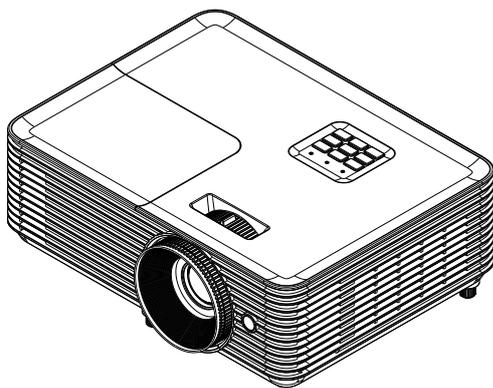
A. Remote Controller
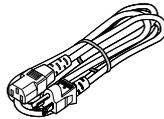
B. Power Cord
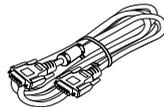
C. VGA Cable

DW355ST
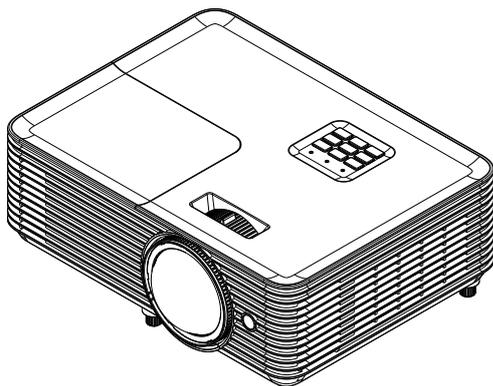
D. Baterry

E. Safety / Warranty booklet, Quick Start Card

Note:
Contact your dealer immediately if any items are missing, appear damaged, or if the unit does not work. It is recommend that you keep the original packing material should you ever need to return the equipment for warranty service.

Caution:
Avoid using the projector in dusty environments.

Projector Features

- Brilliant 1080p (1,920× 1,080) projection with a maximum WUXGA (1,920 x1,200) resolution
- Bright 4,000 ANSI lumens of brightness for projection even in bright meeting rooms
- High 30,000:1 contrast ratio ensuring clear presentations and sharp text
- 1 way keystone adjustment support
- DLP® and BrilliantColor™ technologies for distinct and vibrant images
- Low cost of ownership and maintenance with an energy efficient lamp for up to 10,000 hours (Long Eco. Mode) of usage
- 6 segment (RYGCWB) color wheel for improved and vivid color reproduction
- Extensive connectivity inputs and outputs including HDMI v1.4b (x1), Composite Video, VGA-In (x1), Audio-In (Mini-Jack), Audio-Out (Mini-Jack), RS232, and USB 5V/1.5A(w/Service)
- Manual zoom and focus for easy adjustment and positioning flexibility
- Audio ready with 10 watt audio speaker and audio-in/out ports
- Quiet operation with low 27dB (Eco mode) acoustic noise
- Top sided lamp cover for simple lamp removal and insertion
- Environmentally friendly with less than 0.5W of power in stand-by mode
- Portable and lightweight at only 2.7kg (5.9lbs)
- Anti-theft security features include: Kensington® security slot, security bar, and power button lock

Projector Functions

DH380
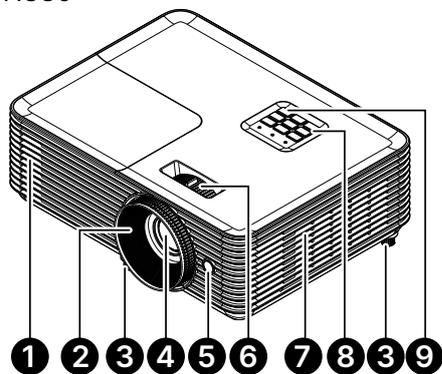
DW355ST

1. Outlet Vents
2. Lens Focus
3. Tilt Foot
4. Lens
5. IR Receiver
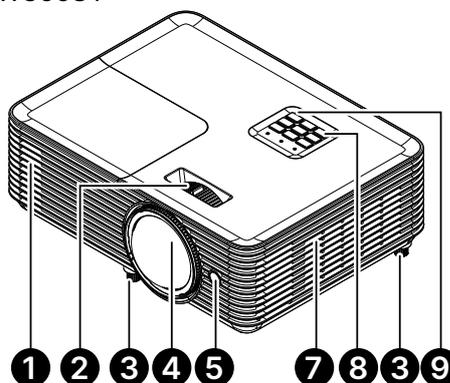
6. Lens Zoom
7. Air Vents
8. Control Panel
9. IR Receiver

⚠️ *Important:*
Ventilation openings on the projector allow for good air circulation, which keeps the projector light source cool. Do not obstruct any of the ventilation openings.

Connect Source Devices

DX330/DW350/DH380/DX335ST/DW355ST
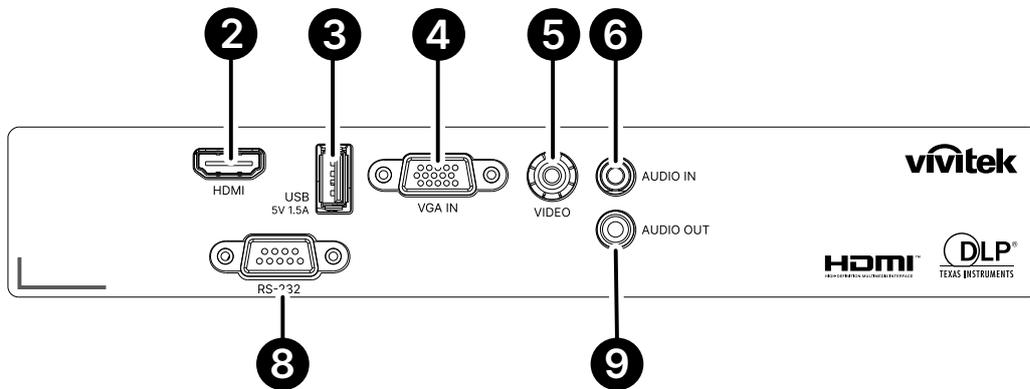
DX331/DW351/DH381/DH385ST
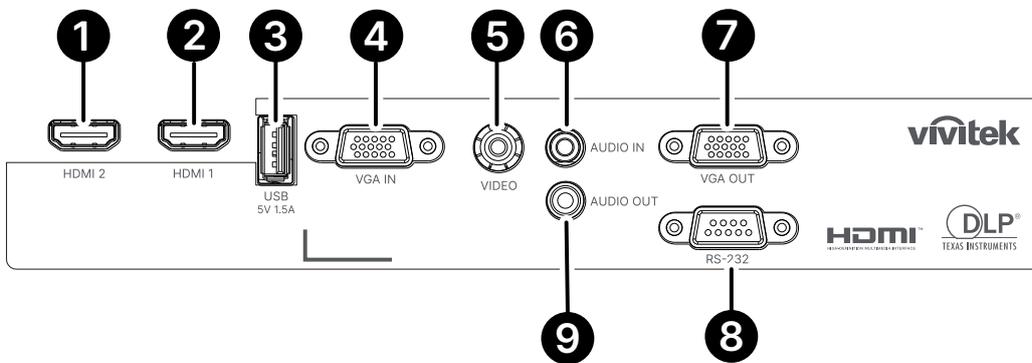
DH382
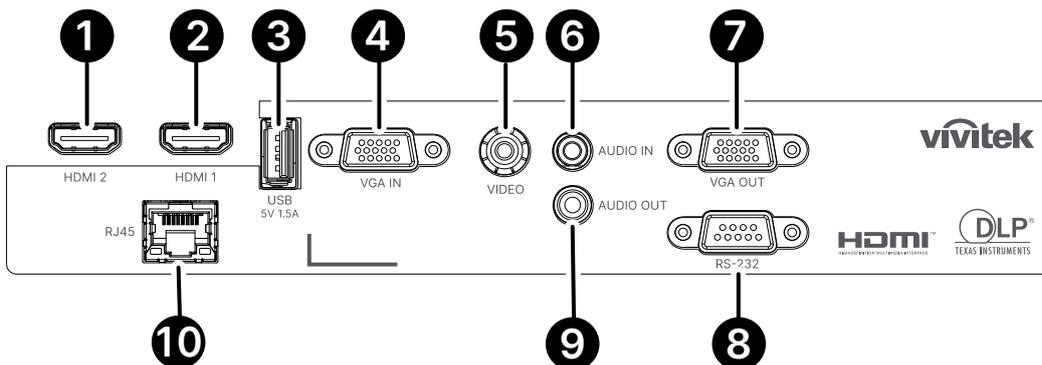
1. HDMI 2	**6.** Audio IN
2. HDMI 1	**7.** VGA OUT
3. USB Power OUT (5V/1.5A)	**8.** RS-232
4. VGA IN	**9.** Audio OUT
5. VIDEO	**10.** RJ45

Control Panel
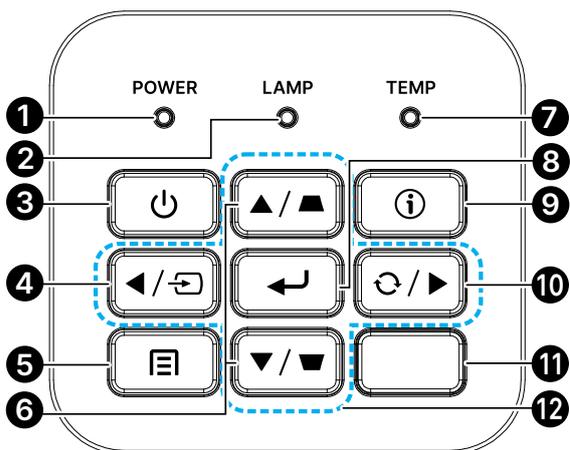
1. On/Standby LED
2. Lamp LED
3. Power
4. Source
5. Menu
6. Keystone Correction

7. Temp LED
8. Enter
9. Help
10. Re-Sync
11. IR Receiver
12. Four Directional Select Keys

Note:
MENU for App settings, ▲ Up, ▼ Down, ◀ Left and ▶ Right are used as directional arrows, also included ENTER and EXIT.

Press ▤ button once to return to the previous page. Keep pressing the ▤ button until to return to the main menu.

Controlling your smart device with the remote control:

⚠ *Warning:*
As a safety precaution, disconnect all power to the projector and connecting devices before making onnections.

Using the HELP button

The HELP function ensures easy setup and operation.

Press the button on the control panel to open the Help Menu.

If no input source is detected, these Help menu screens are displayed.

HELP

▶   No Image appears on-screen

No Image appears on-screen

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

▶   Ensure all the pins of connectors are not bent or broken.

▶   Ensure that the [AV MUTE] feature is not turned on.

    [NEXT]

    [EXIT]

◆ UpDown   ↵   Select   Menu   Exit

No Image appears on-screen

▶   If you are using a Notebook:

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

    the computer.

    2. Press the toggle output settings. Example : [Fn]+[F4]

Acer	⇨	[Fn]+[F5]	IBM/Lenovo	⇨	[Fn]+[F5]
Asus	⇨	[Fn]+[F8]	HP/Compaq	⇨	[Fn]+[F5]
Dell	⇨	[Fn]+[F8]	NEC	⇨	[Fn]+[F5]
Gateway	⇨	[Fn]+[F4]	Toshiba	⇨	[Fn]+[F5]

Mac Apple :

System Preference ⇨ Display ⇨ Arrangement ⇨ Mirror display

    [PREV]

    [EXIT]

◆ UpDown   ↵   Select   Menu   Exit

If an input source is detected, these Help menu screens are displayed.

VGA input signal:

HELP

▶   Image has slanted sides

▶   Image is too small or too large

▶   Image is unstable or flickering.
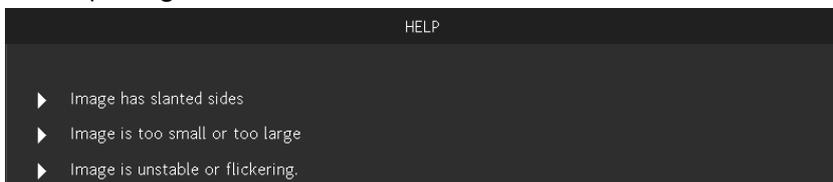
Other signals (other than VGA input signal):

HELP

▶   Image has slanted sides

▶   Image is too small or too large
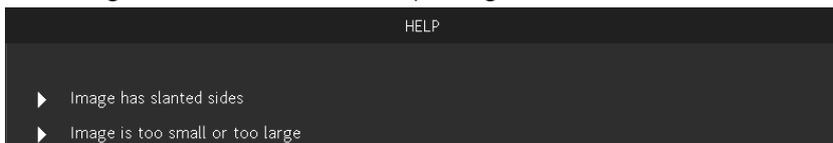
Image has slanted sides

▶ If possible, reposition the projector so that is centered on the screen
  and below the bottom of the screen.

▶ Press [Keystone +/-] button until the sides are vertical on the
  remote control.

[Keystone +/-]

[EXIT]

⬍ UpDown   ↵ Select   Menu Exit

Image is too small or too large

▶ Adjust the Zoom Ring on the top of the projector.

▶ Move the projector closer to or further from the screen.

▶ Press [Menu] button on the remote control or projector pannel,
  go to Display | Format and try the different settings.

[DISPLAY | Format]

[EXIT]

⬍ UpDown   ↵ Select   Menu Exit

Image is unstable or flickering.

▶ Use [Phase / Frequency] to correct it.

▶ Change the monitor color setting on your computer.

[Phase]

[Frequency]

[EXIT]

⬍ UpDown   ↵ Select   Menu Exit

Remote Controller (SRC) + Function

1. IR Transmitter
2. AV Mute
3. Re-Sync
4. Four Directional Select Keys
5. Menul
6. Keystone +/-
7. Power
8. Source
9. Enter
10. ECO
11. Volume +/-
12. Video
13. VGA
14. Page +/-
15. Mouse
16. Picture
17. HDMI
18. Aspect
19. Zoom +/-
20. Mute
21. Freeze
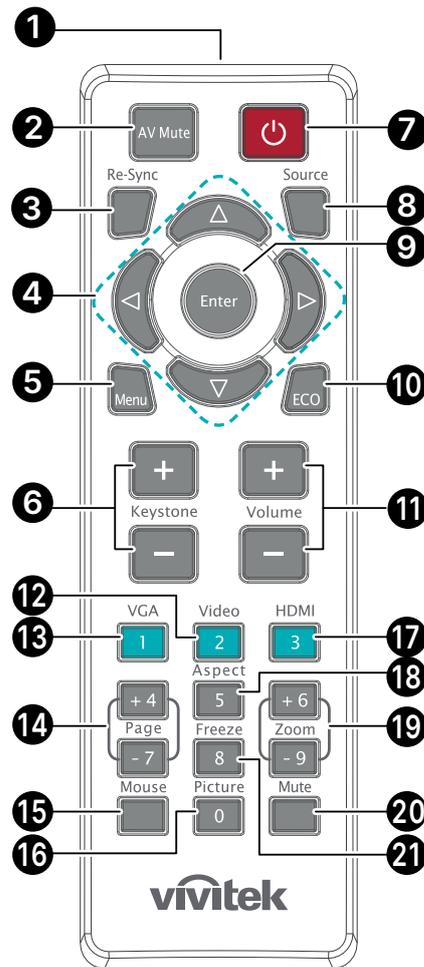
Important:
1. Avoid using the projector with bright fluorescent lighting turned on. Certain high-frequency fluorescent lights can disrupt remote control operation.

2. Be sure nothing obstructs the path between the remote control and the projector. If the path between the remote control and the projector is obstructed, you can bounce the signal off certain reflective surfaces such as projector screens.

3. The buttons and keys on the projector have the same functions as the corresponding buttons on the remote control. This user's manual describes the functions based on the remote control.

Operating Range

- The Remote Controller uses infrared transmission to control the projector.
- It is not necessary to point the remote directly at the projector.
- The Remote Controller will function properly within a distance radius of about 7 meters (23 feet) and vertical angle of 15 degrees above or below the projector level.
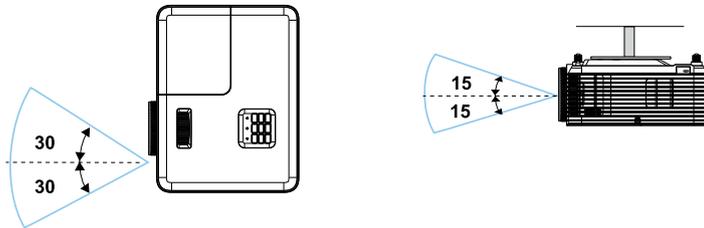
Note:
If the projector does not respond to the Remote Controller, Move to a closer range or Replace batteries.

Batteries
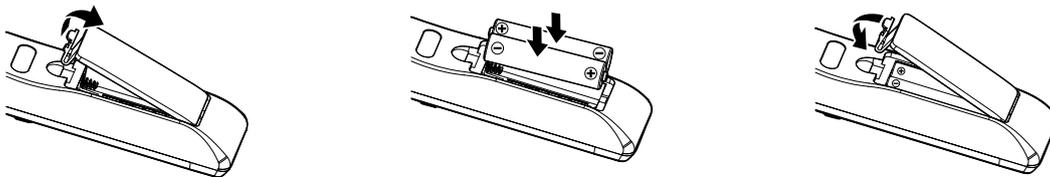
- Push the clip to release the battery cover.
- Install new batteries (AAA/R03). Ensure that you have the batteries' polarity (+/−) aligned correctly.
- Close the battery cover and press it down until it clicks into place. Do not mix different types of batteries or new and old atteries.

Caution:
1. Only use AAA batteries (Alkaline batteries are recommended).
2. Dispose of used batteries according to local ordinance regulations.
3. Remove the batteries when not using the projector for prolonged periods.

Installation Guide

Verify Installation Location

- To supply power, use the 3-blade (with earthing lead) socket to ensure proper grounding and equalized ground potential for all Projector System equipments.
- Use the power cord provided with the Projector. In case the item is missing, use a qualified 3-blade (with earthing lead) power cord; DO NOT USE 2-BLADE POWER CORD.
- Verify that the voltage is stable, grounded properly and there is no electricity leakage.
- Measure the total power consumption and ensure it is within the safety capacity to avoid safety issue and short circuit.
- Turn on Altitude Mode when located in high altitude areas
- Ensure installation brackets are firmly secured and can support the projector weight
- Avoid installing near air conditioner duct or sub-woofer.
- Avoid installing in locations with high temperature, insufficient cooling and heavy dust.
- Keep away from fluorescent lamps (>1 Meter) to avoid malfunction caused by IR interference
- Ensure the VGA IN connector is connected tightly to the VGA IN port. The screws on both sides securely fastened will secure the proper connection and wire signal to achieve optimal display.
- The AUDIO IN connector should only be connected to the AUDIO IN port.
  DO NOT connect to AUDIO OUT port or any other ports like BNC, RCA;
- Before you Power ON, ensure power cord and signal cable are connected properly. To avoid damaging the projector while starting and operating, DO NOT insert or remove the signal cable or the power cord.

Cooling Notes

Air Outlet

- Make sure the air outlet is 50cm clear of any obstruction to ensure proper cooling.
- Air outlet location should not be in front of the lens of other projector to avoid causing illusions.
- Keep the outlet at least 100cm away from the inlets of other projectors
- The projector generates a massive amount of heat during use. The internal fan dissipates the heat of the projector when shutting down, and such process may continue for a certain period. After the project enters STANDBY MODE status, press the AC power button to turn off the projector and remove the power cord. DO NOT remove the power cord during the shut-down process, as it may cause damage to the projector. In the meantime, the delayed heat radiating will also affect the service life of the projector. The shut-down process may vary depending on the model used. Whatever the case may be, make sure to disconnect the power cord till after the projector enters the STANDBY status.

Air Inlet

- Make sure there is no object blocking air input within 30 cm.
- Keep the inlet away from other heat sources
- Avoided heavy dust area

Installation Notice

- Insure a minimum clearance space of > 500mm (19.7 inch) around all exhaust vents.
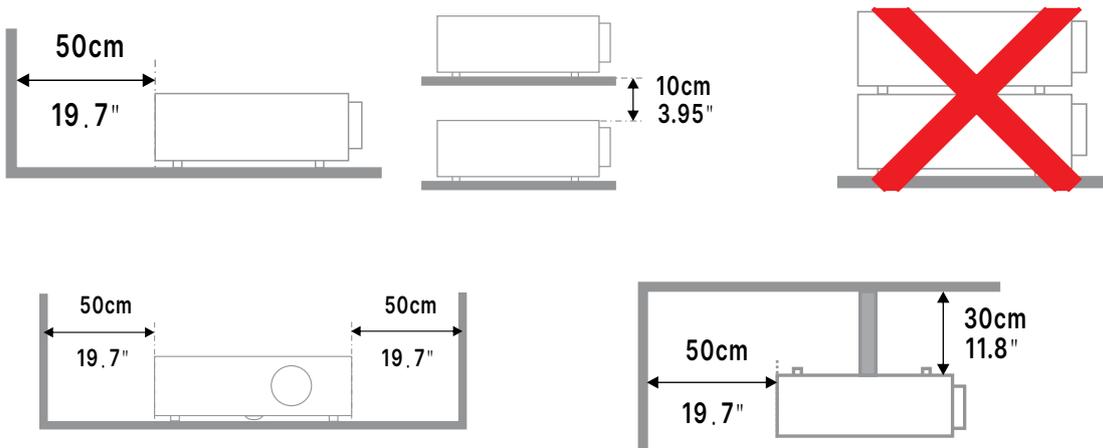
- When operating the projector in an enclosed space, ensure that the surrounding air temperature does not exceed the maximum allowed operating temperature and that all air intake and exhaust vents are unobstructed.
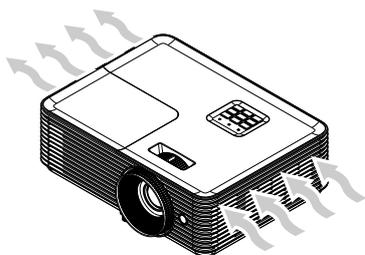
- Ensure that the intake vents do not recycle hot air or exhaust air from the exhaust vents as this may cause the device to shut-down even if the enclosure temperature is within the acceptable operating temperature range.
- All enclosures should pass a certified thermal evaluation to ensure that the projector does not recycle exhaust air.

Setup and Projection options

Front   **Rear**   **Ceiling Front**   **Ceiling Rear**
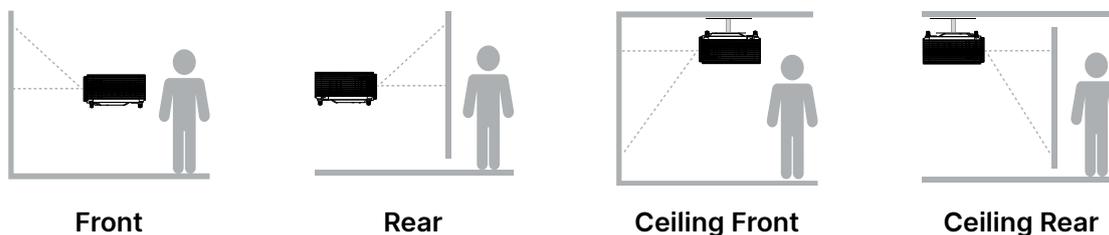
Mounting the Projector

Unit: mm
INSERT NUT: M4
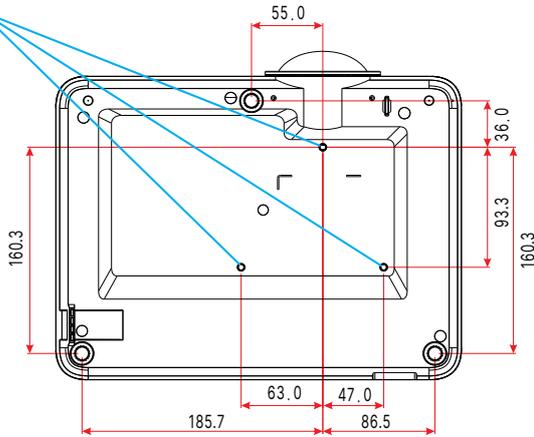
Caution:
When installing, ensure that you use only UL Listed ceiling mounts.

For ceiling installations, use approved mounting hardware and M4 screws with a maximum screw depth of 10mm (0.394inch).

The construction of the ceiling mount must be of a suitable shape and strength. The ceiling mount load capacity must exceed the weight of the installed equipment, and as an additional precaution be capable of withstanding three times the weight of the equipment over a period of 60 seconds.

Projection Distance vs. Projection Size
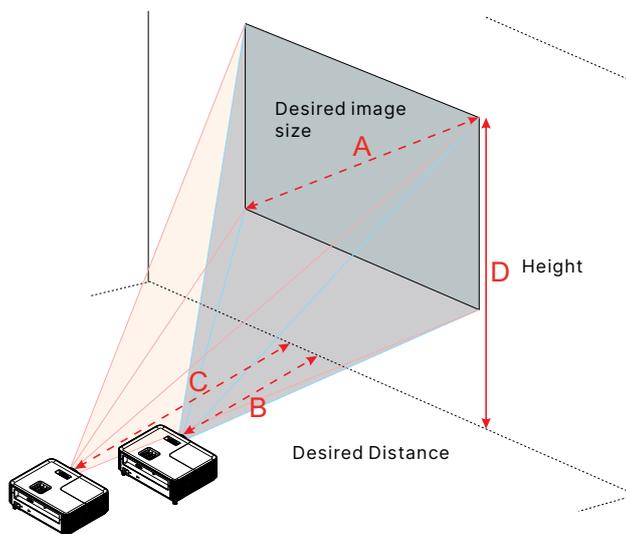
DX330

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	**W (cm) x H (cm)**	**Max zoom <B>**	**Min zoom <C>**	**From base to top of image <D>**
27.34	56 x 42	==	1.2	48
40	81 x 61	1.6	1.8	70
50	102 x 76	2	2.2	88
60	122 x 91	2.37	2.6	105
70	142 x 107	2.8	3.1	123
80	163 x 122	3.2	3.5	140
90	183 x 137	3.5	4	158
100	203 x 152	3.9	4.4	175
150	305 x 229	5.9	6.6	263
180	366 x 274	7.1	7.9	315
200	406 x 305	7.9	8.8	351
250	508 x 381	9.9	11	438
304.41	619 x 464	12	==	534

DW350

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	**W (cm) x H (cm)**	**Max zoom <B>**	**Min zoom <C>**	**From base to top of image <D>**
29.7	64 x 40	==	1.1	45
40	86 x 54	1.3	1.5	61
50	108 x 67	1.7	1.9	76
60	129 x 81	2	2.2	91
70	151 x 94	2.3	2.6	106
80	172 x 108	2.7	3	121
90	194 x 121	3	3.3	136
100	215 x 135	3.3	3.7	151
150	323 x 202	5	5.6	227
180	388 x 242	6	6.7	272
200	431 x 269	6.6	7.4	303
250	538 x 337	8.3	9.3	378
301.5	649 x 406	10	==	456

DH380

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	W (cm) x H (cm)	Max zoom <B>	Min zoom <C>	From base to top of image <D>
27.88	62 x 35	= =	1	40
50.0	111 x 62	1.6	1.8	72
60.0	133 x 75	1.97	2.2	87
70.0	155 x 87	2.3	2.5	101
80.0	177 x 100	2.6	2.9	116
90.0	199 x 112	2.9	3.2	130
100.0	221 x 125	3.3	3.6	144
120.0	266 x 149	3.9	4.3	173
150.0	332 x 187	4.9	5.4	217
180.0	398 x 224	5.9	6.5	260
200.0	443 x 249	6.6	7.2	289
250.0	553 x 311	8.2	9	361
305.21	676 x 380	10	= =	441

DX335ST

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	W (cm) x H (cm)	Max zoom <B>	Min zoom <C>	From base to top of image <D>
31.9	65 x 49	0.4	0.4	56
40	81 x 61	0.5	0.5	70
50	102 x 76	0.6	0.6	88
60	122 x 91	0.8	0.8	105
70	142 x 107	0.9	0.9	123
80	163 x 122	1.0	1.0	140
90	183 x 137	1.1	1.1	158
100	203 x 152	1.3	1.3	175
120	244 x 183	1.5	1.5	210
150	305 x 229	1.9	1.9	263
180	366 x 274	2.3	2.3	315
250	508 x 381	3.1	3.1	438
303.09	616 x 462	3.8	3.8	531

DW355ST

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	W (cm) x H (cm)	Max zoom <B>	Min zoom <C>	From base to top of image <D>
35.64	77 x 48	0.4	0.4	54
40	86 x 54	0.4	0.4	61
50	108 x 67	0.6	0.6	76
60	129 x 81	0.7	0.7	91
70	151 x 94	0.8	0.8	106
80	172 x 108	0.9	0.9	121
90	194 x 121	1.0	1.0	136
100	215 x 135	1.1	1.1	151
120	258 x 162	1.3	1.3	182
150	323 x 202	1.7	1.7	227
180	388 x 242	2	2	272
200	431 x 269	2.2	2.2	303
250	538 x 337	2.8	2.8	378
302.98	653 x 408	3.4	3.4	458

DX331

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	W (cm) x H (cm)	Max zoom <B>	Min zoom <C>	From base to top of image <D>
30.6	62 x 47		1.2	54
40	81 x 61	1.2	1.6	70
50	102 x 76	1.5	2	88
60	122 x 91	1.8	2.4	105
70	142 x 107	2.1	2.7	123
80	163 x 122	2.4	3.1	140
90	183 x 137	2.7	3.5	158
100	203 x 152	3	3.9	175
150	305 x 229	4.5	5.9	263
180	366 x 274	5.4	7.1	315
200	406 x 305	6	7.8	351
250	508 x 381	7.5	9.8	438
301.78	613 x 460	9.1		529

DW351

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	W (cm) x H (cm)	Max zoom <B>	Min zoom <C>	From base to top of image <D>
30.07	65 x 40		1	45
40	86 x 54	1	1.3	61
50	108 x 67	1.3	1.7	76
60	129 x 81	1.5	2	91
70	151 x 94	1.8	2.3	106
80	172 x 108	2	2.7	121
90	194 x 121	2.3	3	136
100	215 x 135	2.6	3.3	151
150	323 x 202	3.8	5	227
180	388 x 242	4.6	6	272
200	431 x 269	5.1	6.7	303
250	538 x 337	6.4	8.3	378
301.17	649 x 405	7.7		456

DH381 / DH382

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	W (cm) x H (cm)	Max zoom <B>	Min zoom <C>	From base to top of image <D>
30.73	68 x 38		1	44
40	89 x 50	1	1.3	58
50	111 x 62	1.3	1.6	72
60	133 x 75	1.5	2	87
70	155 x 87	1.8	2.3	101
80	177 x 100	2	2.6	116
90	199 x 112	2.3	2.9	130
100	221 x 125	2.5	3.3	144
150	332 x 187	3.8	4.9	217
180	398 x 224	4.5	5.9	260
200	443 x 249	5	6.5	289
250	553 x 311	6.3	8.1	361
303.81	673 x 378	7.6		439

DH385ST

Desired image size		Distance (m)		Top (cm)
Diagonal (inch) <A>	W (cm) x H (cm)	Max zoom <B>	Min zoom <C>	From base to top of image <D>
36.43	81 x 45	0.4	0.4	53
45.00	100 x 56	0.5	0.5	65
60.00	133 x 75	0.7	0.7	87
70.00	155 x 87	0.8	0.8	101
80.00	177 x 100	0.9	0.9	116
91.00	201 x 113	1	1	131
100.00	221 x 125	1.1	1.1	144
120.00	266 x 149	1.3	1.3	173
150.00	332 x 187	1.6	1.6	217
200.00	443 x 249	2.2	2.2	289
250.00	553 x 311	2.7	2.7	361
300.53	665 x 374	3.3	3.3	434

Projector Start Guide

1 Connect Power and Source Devices
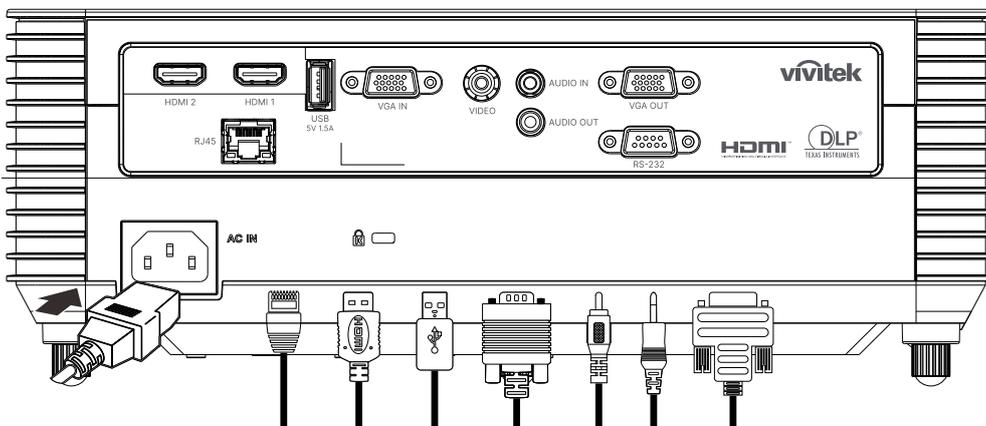
- Securely connect the provided power cord and your Source Devices.
(HDMI, USB, VGA, RJ45...etc.)
When connected, the power led will flash green to solid green.

2 Power ON/OFF

- Turn ON: Press ⏻ on the projector or the remote controller.
The PWR LED will now flash green.
The startup screen will display in approximately 30 seconds.

- The first time you Turn ON the projector, you can select your preferred language. see Setting Language on page 33.

- Turn OFF: Press ⏻ on the projector or the remote controller.
The message "Power Off? /Press Power again" will appears on-Screen
Press the POWER button again to confirm the projector Turn OFF.

3 Adjust Projector Tilt
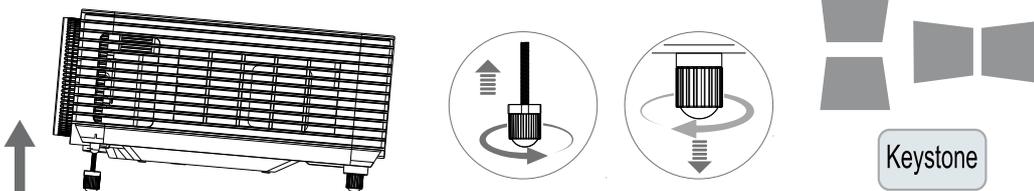
- ● To Raise the Tilt angle, Rotate counter clockwise both Left and Right Tilt foot.
- ● Press KEYSTONE button to adjust the Screen Tilt.
  The Keystone control appears on the display.
  Press ▬ / ▬ for V Keystone correcting image.
  Press ▬ / ▬ for H Keystone correcting image. (Only available DW355ST Model)

> *Caution:* *When setting up the projector*
> *1. The projector table or stand should be level and sturdy.*
> *2. Position the projector so that it is perpendicular to the screen.*
> *3. Ensure the cables are in a safe location. You could trip over them.*

4 Adjust Projector Lens

Use the 3 control rings located on the projector top panel only

ZOOM

1. Rotate the Image-zoom control inner ring to resize the projected image and screen size.

The Lens-zoom range can be adjusted between 25% and -15% of display.

DH380
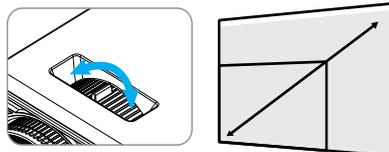
FOCUS

2. Rotate the Image-focus control outer ring to sharpen the projected image.

DH380
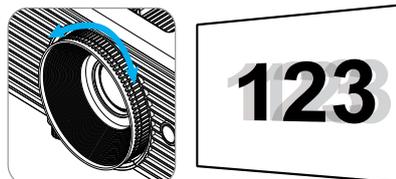
DW355ST
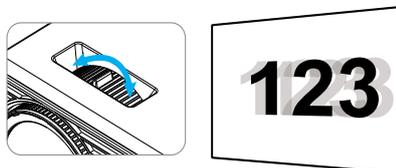
3.On-Screen Display (OSD) Menu Settings

OSD Menu Control

The On-Screen Display (OSD) lets you make image adjustments, change various settings and check the projector's current status.

Navigating the OSD

You can use the remote control or the control buttons on the projector to navigate and make changes to the OSD.
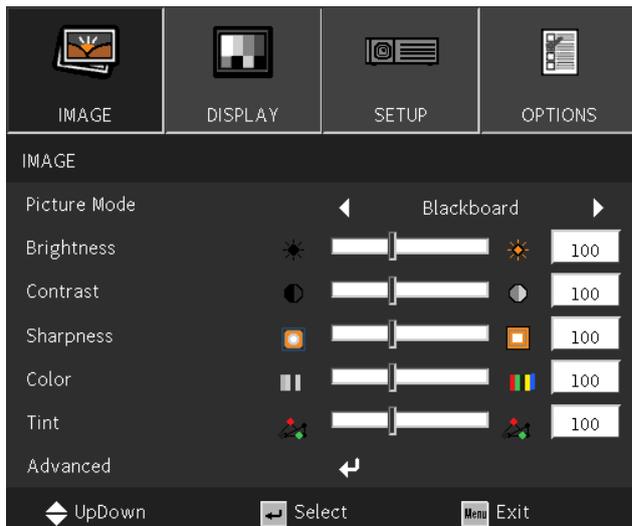
- To enter the OSD, press the MENU button.
- There are four top menus icons. Press ◀ / ▶ buttons to select menus.
- Press ▼/▲ buttons to scroll through the submenus.
- Press ◀ / ▶ buttons to change the submenus settings.
- Press ↵ to enter the advanced submenus settings
- Press the MENU button to close the OSD or leave a submenu.
- Press the EXIT button to return to the previous menu.

Note:
Depending on the video source, not all items in the OSD are available. For example, the Horizontal/Vertical Position items in the Computer menu can only be modified when connected to a PC. Items that are not available cannot be accessed and are grayed out.

IMAGE Menu

Picture Mode	Presentation / Bright / Movie / sRGB / Blackboard / User / 3D

Brightness	-50~50

Contrast	-50~50

Sharpness	1~15

Color*	-50~50

Tint*	-50~50

Advanced	Gamma: Film / Video / Graphics / Standard
	BrilliantColor™: 1~10
	Color Temp.: Warm / Medium / Cold
	Color settings: R/G/B/C/M/Y (Hue / Saturation / Gain) Color settings: W (Red / Green / Blue)
	Color Space: AUTO/RGB/ YUV Color Space**: AUTO / RGB(0~255) / RGB(16~235) / YUV
	Signal***: Automatic / Phase / Frequency / H. Position / V. Position / Exit
	Exit
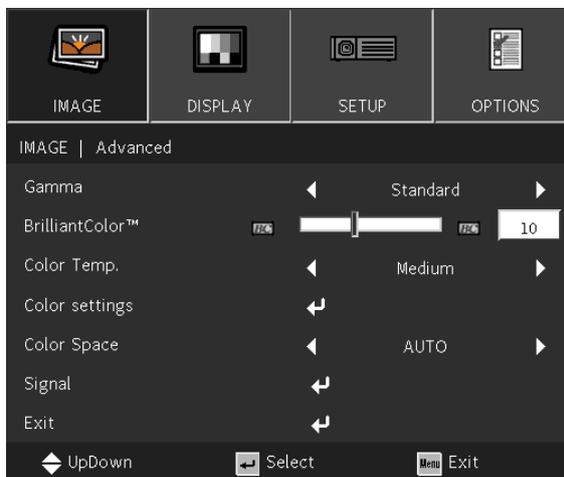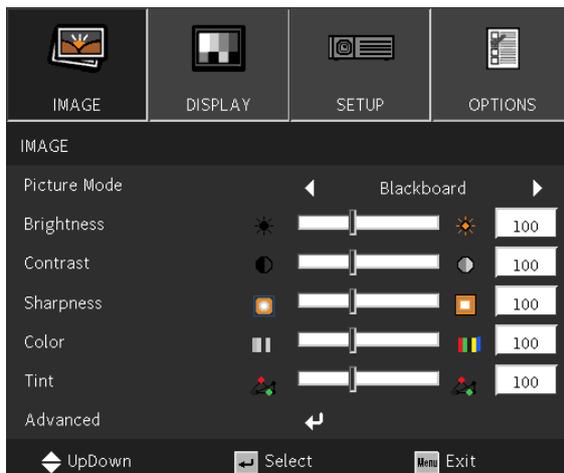
Note :

"" Only supported for Video and YUV sources.*

*"**" Only supported for HDMI source.*

*"***" Only supported for Analog VGA sources.*

Picture Mode

- Use ◀/▶ to select a mode according to personal preference.
- **Presentation:** Suggest to use. The best projection effect for presentation.
- **Bright:** The mode is suitable for the application environment where is needed with highest brightness output.
- **Movie:** To provide good balance of color saturation, contrast and brightness.
  Suggest to use in a dark environment.
- **sRGB:** Optimization RGB colors to reach true-to-life images with limited brightness setting.
- **Blackboard:** This mode should be selected to achieve optimum color settings when projecting onto a blackboard (green).
- **User:** Personalization with preference of Brightness, Contrast, Color.
- **3D:** Recommended setting for when 3D function is enabled.

Brightness

- Press ↵ and use ◀/▶ to increase or decrease the brightness level of the image.

Contrast

- Press ↵ and use ◀/▶ to adjust the contrast level of the image.

Sharpness

- Press ↵ and use ◀/▶ to adjust the sharpness level of the image.

Color

- Press ↵ and use ◀/▶ to adjust the amount of saturation in the image.

Tint

- Press ↵ and use ◀/▶ to adjust the color balance of red and green.

Advanced

- Press ↵ and use ▼/▲ to scroll through submenus.
- **Gamma:** Use ◀/▶ to select the different chrominance of image.
  When the ambient light is so bright that may affect the projection image in the dim area. , you can change the gamma to adjust the chrominance.
  Film: for home theater.
  Video: for video or TV source.
  Graphics: for image source.
  Standard: for PC or computer source.
- **BrilliantColor™:** Use ◀/▶ to adjust the brilliant color of image.
- **Color Temperature:** Use ◀/▶ to select the color temperature.
  Warm: make image reddish white.
  Normal: Normal colorings of white.
  Cold: make image bluish white.

- **Color Settings:** Press ↵ and use ▼/▲ to scroll through submenus.
  Color: To select and adjust the color(Red,Green,Blue,Cyan,Magenta,Yellow).
      Hue: Use ◀/▶ to adjust the Color Hue value.
      Saturation: Use ◀/▶ to adjust the Color Saturation value.
      Gain: Use ◀/▶ to adjust the Color Gain value.

  Color: To select and adjust the color(White).
      Red: Use ◀/▶ to adjust the Color Red value.
      Green: Use ◀/▶ to adjust the Color Green value.
      Blue: Use ◀/▶ to adjust the Color Blue value.
      These three options are used to adjust the range of color input for the entire image.
      If minimal amount of red, green or blue appears in the gray areas, lower the gain of
      the corresponding color accordingly. As gain increases, the contrast of the image will
      become lower.

- **Color Space:** Select an appropriate color matrix type from AUTO, RGB, RGB(0-255)(*),
  RGB(16-235)(*) or YUV.

- **Signal:** Press ↵ and use ▼/▲ to scroll through submenus
  Automatic: Use ◀/▶ to select on/off to lock image sync
  Phase: Use ◀/▶ to adjust the frequency to reduce analog RGB image distortion.
  Frequency: Use ◀/▶ to adjust the horizontal width of the analog RGB image.
  H Position: Use ◀/▶ to adjust the display position in horizontal direction.
  V Position: Use ◀/▶ to adjust the display position in vertical direction.
  Exit: Press ↵ to return to the previous page

- **Exit:** Press ↵ to return to the previous page.

DISPLAY Menu

Format	XGA model: Auto / 4:3 / 16:9 / Native WXGA model: Auto / 4:3 / 16:9 / 16:10 / LBX / Native 1080p model: Auto / 4:3 / 16:9 / LBX / Native
Edge Mask	0~10
Zoom	-5~25
V Keystone	-40~40 -20~20*
Enhanced Gaming	On / Off
3D	3D Mode: Off / DLP-Link
	3D Format**: AUTO / SBS / Top and Bottom / Frame Sequential
	3D Sync. Invert**: On / Off Exit
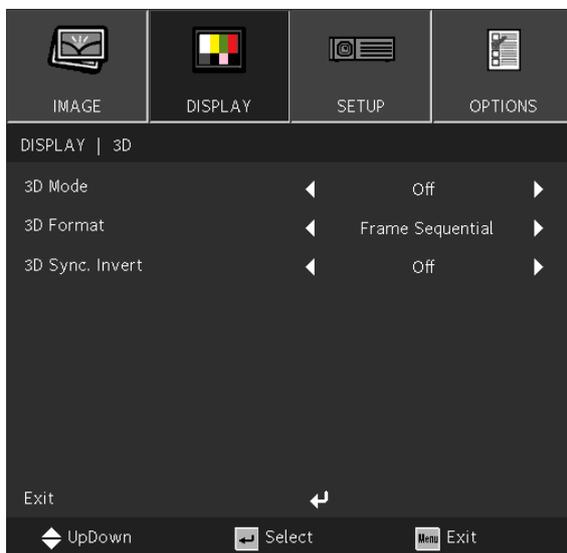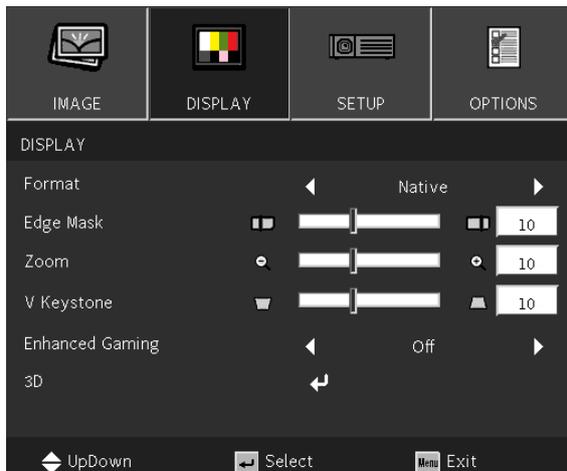
Note :

"" Only available DW355ST Model.*

*"**" Only available when 3D is enabled using DLP Link glasses only.*

Format

● Use ◀/▶ to select the image Format (Auto, 4:3, 16:9, 16:10, LBX, Native)

Edge Mask

● Edge mask function removes the noise in a video image. Edge mask the image to remove video encoding noise on the edge of video sources.

Zoom

● Use ◀/▶ to enlarge the projected image.

V Keystone

- Use ◀/▶ to adjust the value to correct the image Vertical distortion. The adjustable value is ±40

Enhanced Gaming

- **On:** Increase input lag by disabling features that increase the lag such as puremotion and geometric correction
- **Off:** Disable this function

3D

- Press ↵ and use ▼/▲ to set 3D source, sync method and 3D format.
- Before performing 3D setting, make sure that the input signal with 3D sync is connected.
- **3D Mode:** Use ◀/▶ to enable or disable 3D functions.
  Off: disable 3D function.
  DLP-Link: enable internal 3D sync.
- **3D Format:**Use ◀/▶ to select 3D format type :
  Auto, Side By Side, Top and Bottom, Frame Sequential.
- **3D Sync Invert:**Use ◀/▶ to swap the 3D signal L/R or R/L.
  On: enable inverse signal.
  Off: follow received signal sync.
- **Exit:** Press ↵ to return to the previous page.

⚠ *Important:*
People with the following conditions should view 3D image with great care:

Children under six years in age.

People who are sensitive to light or allergic to light, unhealthy and have a history of cardiovascular diseases.

People who are tired or lack of sleep.

People who are under the impact of drugs or alcohol.

Normally, it is safe to watch 3D images. However, some people might feel uncomfortable. Refer to the guidelines that were revised and released by the 3D League on December 10, 2008. It states that those who watch 3D images, need to take a break for at least 5 to 15 minutes every thirty minutes or one hour.

SETUP Menu

Language	Current Language Select Language Screen

Projection	⬛ Front Desktop / ⬛ Rear Desktop / ⬛ Front Ceiling / ⬛ Rear Ceiling

Menu Location	⬛ Center / ⬛ Left-Up / ⬛ Right-Up / ⬛ Left-Down / ⬛ Right-Down

Screen Type*	16:10 / 16:9

Audio Settings	Mute: On / Off
	Volume: 0~10
	Audio Input: Default / AUDIO1

Advanced	Logo: Default / Neutral
	Exit

Note :

"*" Only supported on WXGA models.

IMAGE **DISPLAY** **SETUP** **OPTIONS**

SETUP

Language	◄	English	►
Projection	◄		►
Menu Location	◄		►
Screen Type	◄	16:10	►
Audio Settings		↵	
Advanced		↵	

◆ UpDown   ↵ Select   Menu Exit

IMAGE **DISPLAY** **SETUP** **OPTIONS**

SETUP | Language

English	Norsk	Magyar
Deutsch	Filipino	Čeština
Français	Malay	عربي
Svenska	Romanian	ไทย
Español	繁體中文	Türkçe
Português	简体中文	Dansk
Polski	Suomi	Tiếng Việt
Nederlands	한국어	Bahasa Indonesia
Hindi	Русский	Exit
עברית	Slovenčina	

◆ UpDown   ↵ Select   Menu Exit

IMAGE **DISPLAY** **SETUP** **OPTIONS**

SETUP | Audio Settings

Mute	◄	Off	►
Volume	🔈━━━●━━🔉	100	
Audio Input	◄	Default	►

Exit   ↵

◆ UpDown   ↵ Select   Menu Exit

Language

- Press the MENU button. Press ◀ / ▶ button to navigate to SETUP.
- Press ▼/▲ button to scroll to the **Language** submenu.
- Press ↵ to enter the advanced settings screen.
- Press ▼/▲/◀/▶button to scroll and highlight your language.
- Press the MENU button to exit the advanced Setting Language

Projection

- Use ◀/▶ to select the Projection position
- **Front Desktop:** Install the projector on the desktop and project the image forward.
- **Rear Desktop:** Install the projector on the desktop and project the image from the rear of the screen.
- **Front Ceiling:** Mount the projector on the ceiling and project the image forward.
- **Rear Ceiling:** Mount the projector on the ceiling and project the image from the rear of the screen.

Menu Location

- Use ◀/▶ to select the menu position (Center, Left-Up, Right-Up, Left-Down, Right-Down)

Screen Type

- Use ◀/▶ to select the image aspect ration (16:9 or 16:10)

Audio Settings

- Press ↵ and use ▼/▲ to scroll through submenus
- **Mute:** Use ◀/▶ to turn mute On or Off
- **Volume:** Use ◀/▶ to increase or decrease the projector sound volume
- **Audio Input:**
  Default: Set audio input according to the current input source.
  AUDIO1: Audio In becames the audio source for all video inputs.

Advanced

- Press ↵ and use ▼/▲ to scroll through submenus
- **Logo:** Use this function to set the desired startup screen. If changes are made they will take effect the next time the projector is powered on.
  Default: The default startup screen.
  Neutral: Logo is not displayed on startup screen.

OPTIONS Menu

Input Source	VGA
	Video
	HDMI

Source Lock	On / Off

High Altitude	On / Off

Information Hide	On / Off

Keypad Lock	On / Off

Test Pattern	Grid / White

IR Function	On / Off

Background Color	Black / Red / Blue / Green / White

Advanced	Direct Power On: On / Off
	Signal Power On*: On / Off
	Auto Power Off(min): 0~180
	Sleep Timer(min): 0~990
	Quick Resume: On / Off
	Exit

Lamp Settings	Lamp Hour
	Lamp Reminder: On / Off
	Brightness Mode: Bright / Eco / Dynamic
	Lamp Reset: Yes / No
	Exit
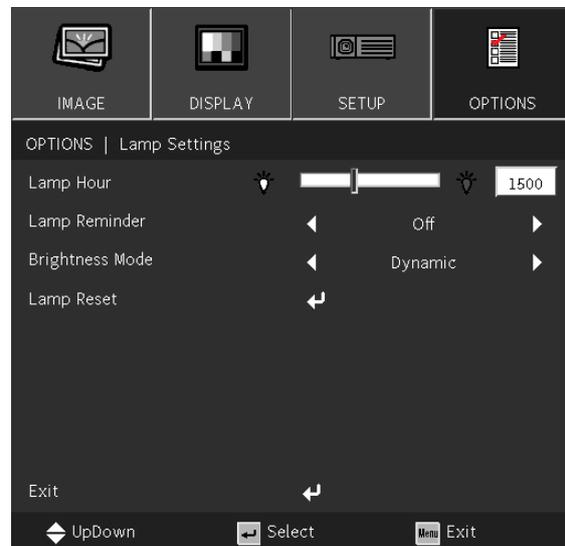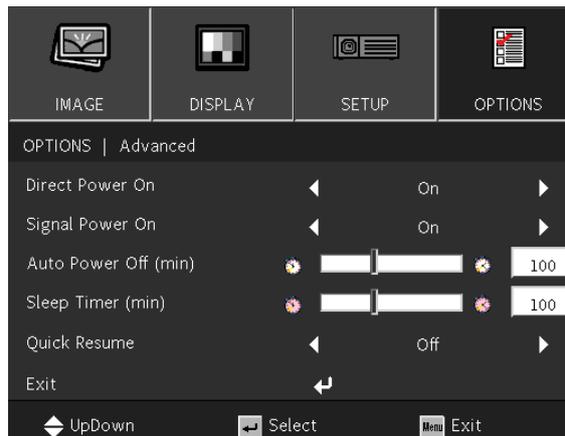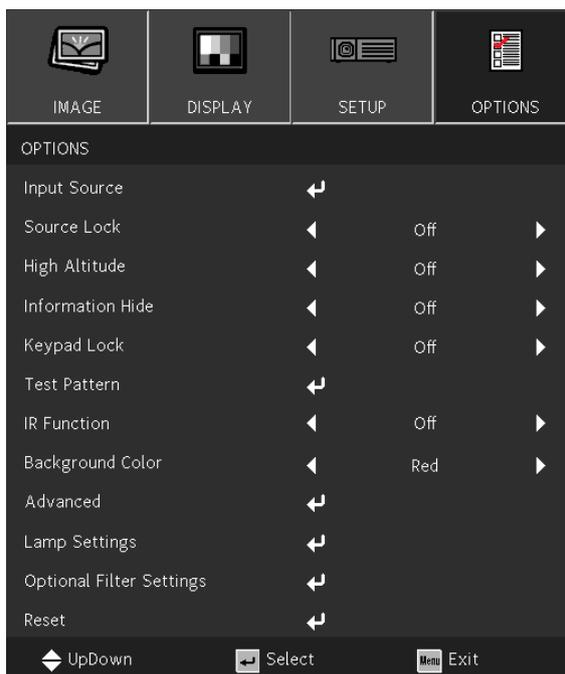
Optional Filter Settings	Optional Filter Installed: Yes / No
	Filter Usage Hours: 0~99999
	Filter Reminder: Off / 300Hr / 500Hr / 800Hr / 1000Hr
	Filter Reset: Yes / No
	Exit

Reset	Yes / No
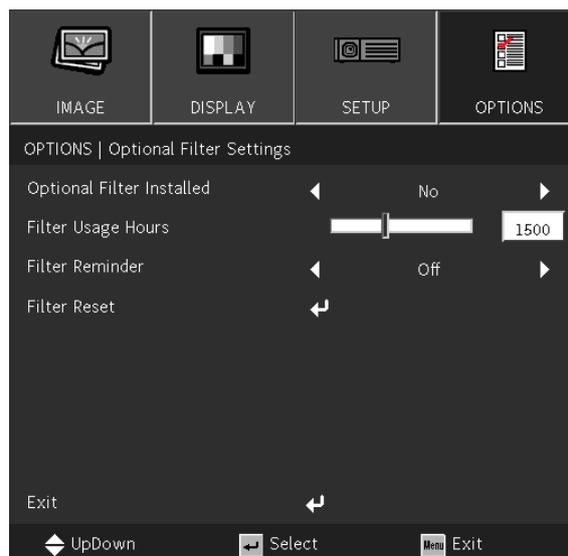
Note :

"*" Only supported on HDMI.

Input Source

- Press ↵ and use ▼/▲ to scroll through submenus.
- Select which sources you require. Press ↵ to finalize the selection.

Source Lock

- **On:** The projector will only search the current input selection.
- **Off:** The projector will search for other signals if the current input signal is lost.

High Altitude

- Use ◄/► to adjust cooling fan speed (On, Off).

Information Hide

- Use ◄/► to On (hide) or Off (show) the source message.

Keypad Lock

- Use ◄/► to to switch On/Off for Keypad lock.

Note :

To unlock by keypad, please press "▼" for 5 sec and then pop-out "keypad unlock".

Test Pattern

- Press ↵ and use ◄/► to select White / Grid, enable the test pattern image.

IR Function

- **On:** The projector can be operated by the remote control.
- **Off:** Will only be able to use the control panel keys.

Blank Screen Color

- Use ◄/► to select screen background color (Black, Red, Green, Blue, White)

Advanced

- Press ↵ and use ▼/▲ to scroll through submenus
- **Direct Power On:** Use ◀/▶ to switch ON/OFF
  This function is set to OFF by default. When it is set to ON, the projector will turn on automatically when the AC power is turned on the next time. You can use this function and the power switch (instead of the remote control) to turn on the projector.
- **Signal Power on:** Use ◀/▶ to set On/ Off to enable or disable auto Power On by input signal.
  On:The projector will automatically power on when HDMI is applied.
  Off: The projector will turn on by pressing the"power"key on the remote or keypad
- **Auto Power Off (mins):** use ◀/▶ to increase or decrease time lapse before automatic Power Off mode to count down under no signal before turning off projector automatically.
- **Sleep Timer (mins):** use ◀/▶ to increase or decrease time lapse before automatic sleep mode
- **Quick Resume:**
  On: If the projector is accidentally turned off, this feature allows he projector to be instantly powered on again, if selected within a period of 100 seconds.
  Off: The fan will start cooling the system immediately when the user turns off the projector.
- **Exit:** Press ↵ to return to the previous page.

Lamp Settings

- Press ↵ and use ▼/▲ to scroll through submenus.
- **Lamp Hour:** Displays the lamp hours of the current lamp.
- **Lamp Reminder:** Use ◀/▶ to show or hide the warning message when the changing lamp message is displayed. The message will appear 30 hours before suggested replacement f the lamp.
- **Brightness Mode:** use ◀/▶ to select the Lamp mode for higher brightness or lower brightness to save Lamp life.
  Bright: The mode is suitable for the application environment where is needed with highest brightness output.
  Eco: Decreases lamp power for less brightness and extended lamp life.
  Dynamic: Increases and decreases lamp power based on the ideo source. Power consumption will vary from maximum to 30%, extending lamp life.
- **Lamp Reset**: Resets the Lamp Hour counter. Should be used after replacing the lamp.
- **Exit:** Press ↵ to return to the previous page.

Optional Filter Settings

- **Optional Filter Installed:**
  Select "Yes" to display warning message after a specified number of hours. Select "No" to turn off warning message.
  The default setting for Filter is "No". After assembling filter, please urn on the projector then press "Menu", go to "OPTIONS → Optional Filter Settings → Optional Filter Installed" and select "Yes".
- **Filter Usage Hours:** Displays the filter hours.
- **Filter Reminder:** Select the number of hours until the filter message is displayed. (Factory default is 500Hr).
- **Filter Reset:** Reset the dust filter counter after replacing or cleaning the dust filter.
- **Exit:** Press ↵ to return to the previous page.

Reset

- Use ▼/▲ to return the display parameters on all menus to the factory default settings.

Note:
Depending on the video source, not all items in the OSD are available. Items that are not available cannot be accessed and are grayed out.

4.Troubleshooting

Common Problems and Solutions

These guidelines provide tips to deal with problems you may encounter while using the projector. If the problem remains unsolved, contact your dealer for assistance.

Often after time spent troubleshooting, the problem is traced to something as simple as a loose connection.

Check the following before proceeding to the problem-specific solutions.

- Use some other electrical device to confirm that the electrical outlet is working.
- Ensure the projector is turned on.
- Ensure all connections are securely attached.
- Ensure the attached device is turned on.
- Ensure a connected PC is not in suspending mode.
- Ensure a connected notebook computer is configured for an external display.

(This is usually done by pressing an Fn-key combination on the notebook.)

Troubleshouting Tips

In each problem-specific section, try the steps in the order suggested. This may help you to solve the problem more quickly.

Try to pin point the problem and thus avoid replacing non-defective parts.

For example, if you replace batteries and the problem remains, put the original batteries back and go to the next step.

Keep a record of the steps you take when troubleshooting: The information may be useful when calling for technical support or for passing on to service personnel.

⚠️ **_Warning:_** _Users are not allowed to replace the light bulb. Please visit a service center or seek assistance from a professional._

LED Indicator Messages

LED Code Messages	Power LED	Temp LED	Lamp LED
Standby State	🔴	⚪	⚪
Power on (Warming)	☀️	⚪	⚪
Lamp lighting	🔵	⚪	⚪
Power off (Cooling)	☀️	⚪	⚪
Error (Over Temp.)	☀️	🔴	⚪
Error (Fan fail)	☀️	☀️	⚪
Error (Lamp fail)	☀️	⚪	🔴

lighted Off ⚪   *Lighted red* 🔴   *Lighted blue* 🔵

Blinking red ☀️   *Blinking blue* ☀️

Note:
In the event of an error, please disconnect the AC power cord and wait for one (1) minute before restarting the projector. If the Power or Light source LEDs are still blinking or the Over Temp LED is lit, contact your service center.

Image Problems Q&A

Q. NO image appears on the screen

- Verify the settings on your notebook or desktop PC.
- Turn off all equipment and power up again in the correct order.

Q. The image is blurred

- Adjust the Focus on the projector.
- Ensure the projector-to-screen distance is within the specified range.
- Check that the projector lens is clean.

Q. The image is reversed

- Check the Projection setting on the **SETUP** menu of the OSD.

Q. The image is streaked

- Set the Phase settings on the **IMAGE** > **Signal** menu of the OSD to the default settings.
- To ensure the problem is not caused by a connected PC's video card, connect to another computer.

Q. The image is flat with no contrast

- Adjust the Contrast setting on the **IMAGE** menu of the OSD.

Q. The colour of the projected image does not match the source image.

- Adjust the Color Temperature and Gamma settings on the **IMAGE** > **Advanced** menu of the OSD.

Light Source Problems

Q. There is no light from the projector
- Check that the power cable is securely connected.
- Ensure the power source is good by testing with another electrical device.
- Restart the projector in the correct order and check that the Power LED is on.

Remote Control Problems

Q. The projector does not respond to the remote control
- Direct the remote control towards remote sensor on the projector.
- Ensure the path between remote and sensor is not obstructed.
- Turn off any fluorescent lights in the room.
- Check the battery polarity.
- Replace the batteries.
- Turn off other Infrared-enabled devices in the vicinity.
- Have the remote control serviced.

Audio Problems

Q. There is no sound
- Adjust the volume on the remote control.
- Adjust the volume of the audio source.
- Check the audio cable connection.
- Test the source audio output with other speakers.
- Have the projector serviced.

Q. The sound is distorted
- Check the audio cable connection.
- Test the source audio output with other speakers.
- Have the projector serviced.

Having the Projector Serviced

If you are unable to solve the problem, you should have the projector serviced. Pack the projector in the original carton. Include a description of the problem and a checklist of the steps you took when trying to fix the problem: The information may be useful to service personnel. For servicing, return the projector to the place you purchased it.

HDMI Q&A

Q. What is the difference between a "Standard" HDMI cable and a "High-Speed" HDMI cable?

Recently, HDMI Licensing, LLC announced that cables would be tested as Standard or High-Speed cables.

Standard (or "category 1") HDMI cables have been tested to perform at speeds of 75Mhz or up to 2.25Gbps, which is the equivalent of a 720p/1080i signal.

High Speed (or "category 2") HDMI cables have been tested to perform at speeds of 340Mhz or up to 10.2Gbps, which is the highest bandwidth currently available over an HDMI cable and can successfully handle 1080p signals including those at increased color depths and/or increased refresh rates from the Source. High-Speed cables are also able to accommodate higher resolution displays, such as WQXGA cinema monitors (resolution of 2560 x 1600).

Q. How do I run HDMI cables longer than 10 meters?

There are many HDMI Adopters working on HDMI solutions that extend a cable's effective distance from the typical 10 meter range to much longer lengths. These companies manufacture a variety of solutions that include active cables (active electronics built into cables that boost and extend the cable's signal), repeaters, amplifiers as well as CAT5/6 and fiber solutions.

Q. How can I tell if a cable is an HDMI certified cable?

All HDMI products are required to be certified by the manufacturer as part of the HDMI Compliance Test Specification. However, there may be instances where cables bearing the HDMI logo are available but have not been properly tested. HDMI Licensing, LLC actively investigates these instances to ensure that the HDMI trademark is properly used in the market. We recommend that consumers buy their cables from a reputable source and a company that is trusted.

5. Specifications

Projector Dimensions

DX330 / DW350 / DH380 / DX331 / DW351 / DH381 / DH382
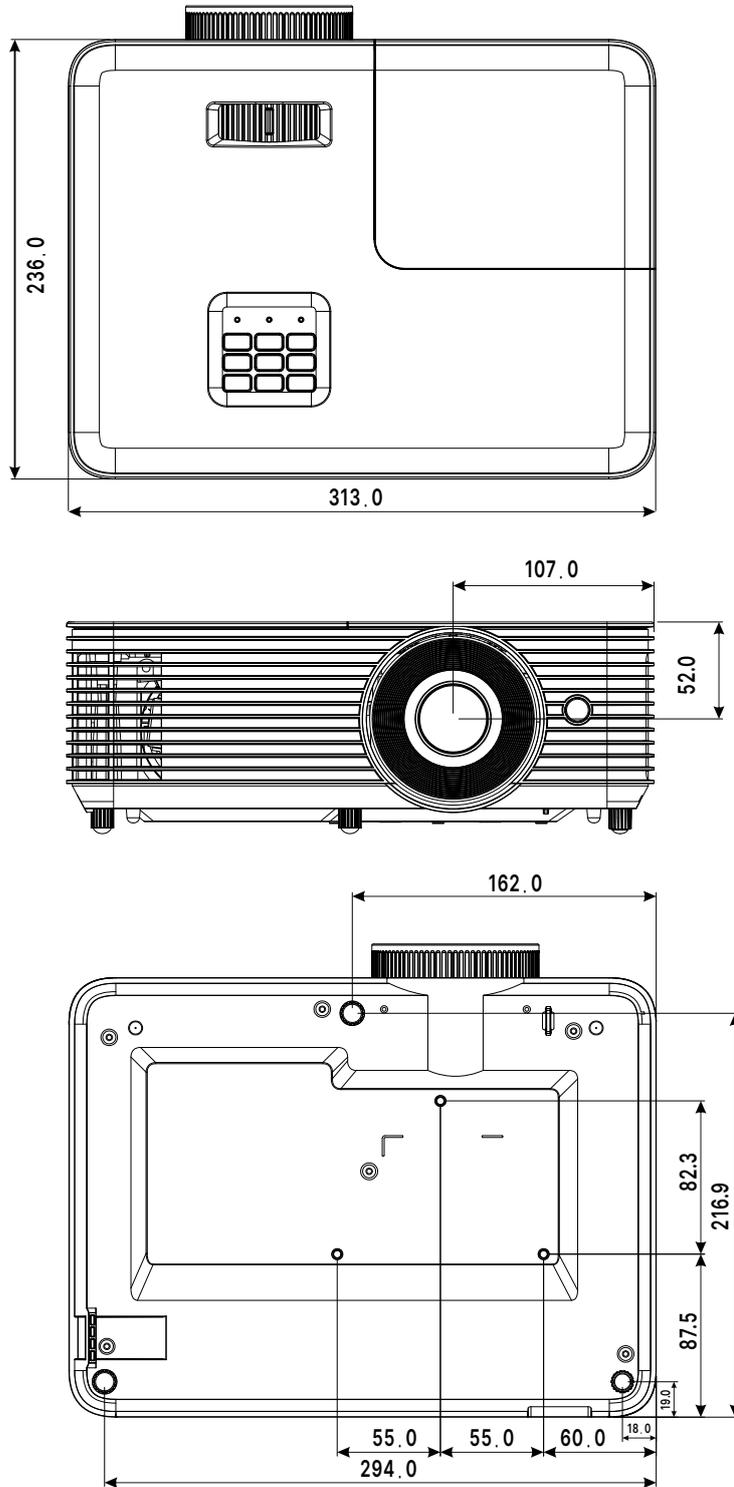
DX335ST / DW355ST / DH385ST
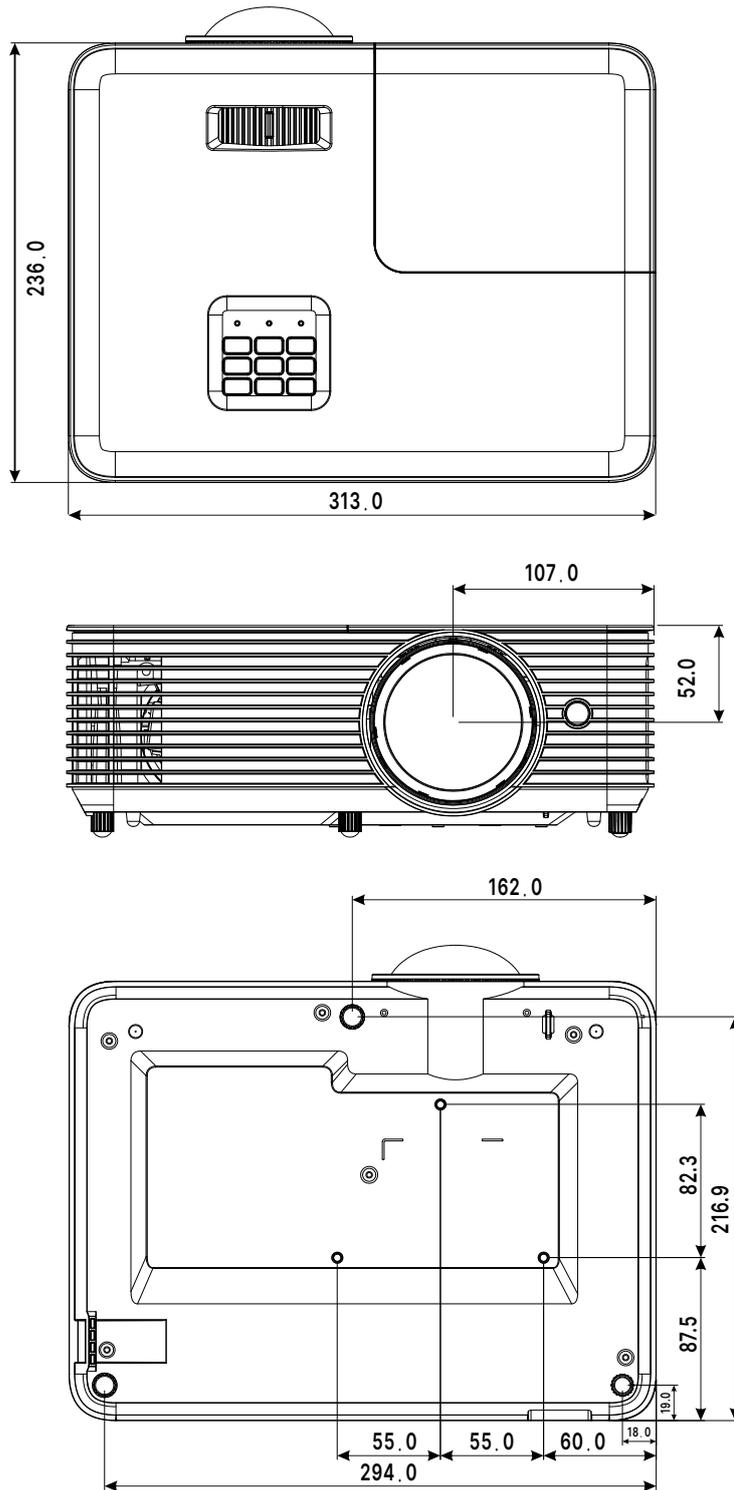
Projector DataSheet

Model Name	DX330	DW350	DH380	DX335ST	DW355ST
Display Type	0.55" DLP	0.65" DLP	0.65" DLP	0.55" DLP	0.65" DLP
Brightness	4,000 Lumens			3,800 Lumens	
Native Resolution	XGA (1024×768)	WXGA (1280×800)	1080p (1920 x 1080)	XGA (1024×768)	WXGA (1280×800)
Maximum Resolution	WUXGA (1,920 x 1,200)				
Contrast Ratio	30,000:1 (Full On/Off)				
Lamp Life/Type	5,000 hrs(Normal) 6,000 hrs (Eco) 10,000 hrs (Long Eco) / 203W				
Throw Ratio	1.94~2.16:1	1.55~1.73	1.48~1.62:1	0.617 Fixed	0.521 Fixed
Image Size (Diagonal)	27.8"~304.4"	29.7"~301.5"	27.9"~305.2"	31.9"~303.1"	35.6"~303.0"
Projection Distance	1.2~12m	1.1~10m	1m~10m	0.4~3.8m	0.4~3.4m
Projection Lens	2.41~2.53	2.41~2.53	2.5~2.67	2.7	2.8
Zoom Ratio	1.1x			Fixed	
Aspect Ratio	4:3	16:10	16:9	4:3	16:10
Offset	115%±5%	112.4%±5%	116%±5%	115%±5%	112.4%±5%
Keystone Correction	Vertical: ±30°			Vertical: ±15°	
Horizontal Frequency	15 -102kHz				
Vertical Frequency	23 - 120Hz				
3D Compatibility	Yes				
Speaker	10W				
Computer Compatibility	VGA (640 x 480) to WUXGA (1920 x 1200)				
Video Compatibility	NTSC, PAL, SECAM / 480i, 480p, 576i, 576p, 720p, 1080i, 1080p				
I/O Connection Ports	HDMI v1.4b (x1), Composite Video, VGA-In (x1), Audio-In (Mini-Jack), Audio-Out (Mini-Jack), RS232, USB 5V/1.5A (and Service)				
Projection Method	Table Top, Ceiling Mount (Front or Rear)				
Security Solutions	Kensington® Security Slot, Keypad Lock				
Dimensions (WxDxH)	313 x 236 x 114mm (12.3" x 9.3" x 4.5")				
Weight	2.7kg (5.9lbs)			2.9kg (6.4lbs)	
Available Colors	White				
Noise Level	33/27 dB (Normal/Eco. Mode)				
Power Supply	AC 100-240V, 50/60Hz				
Power Consumption	240W (Normal Mode), 200W (Eco. Mode), <0.5W (Standby Mode)				
Standard Accessories	AC Power Cord, Remote Control, Documentation Kit				
Optional Accessories	Lamp				

Model Name	DX331	DW351	DH381	DH382	DH385ST
Display Type	0.55" DLP	0.65" DLP	0.65" DLP		
Brightness	4,500 Lumens				4,000 Lumens
Native Resolution	XGA (1024×768)	WXGA (1280×800)	1080p (1920×1080)		
Maximum Resolution	WUXGA (1,920×1,200)				
Contrast Ratio	30,000:1 (Full On/Off)				
Lamp Life/Type	5,000 hrs(Normal) 6,000 hrs (Eco) 10,000 hrs (Long Eco) / 203W				
Throw Ratio	1.484~1.93:1	1.187~1.54	1.13~1.47:1		0.496:1 Fixed
Image Size (Diagonal)	30.6"~301.8"	30.1"~301.2"	30.7" ~ 303.8"		36.4"~300.5"
Projection Distance	1.2m to 9.1m	1.0m to 7.7m	1.0m to 7.6m		0.4m to 3.3m
Projection Lens	2.43~2.78				2.8
Zoom Ratio	1.3x				Fixed
Aspect Ratio	4:3	16:10	16:9		
Offset	115%±5%	112.4%±5%	116%±5%		
Keystone Correction	Vertical: ±30°				Vertical: ±15°
Horizontal Frequency	15 -102kHz				
Vertical Frequency	23 - 120Hz				
3D Compatibility	Yes				
Speaker	10W				
Computer Compatibility	VGA (640 x 480) to WUXGA (1920×1200)				
Video Compatibility	NTSC, PAL, SECAM / 480i, 480p, 576i, 576p, 720p, 1080i, 1080p				
I/O Connection Ports	HDMI v1.4b (x2), Composite Video, VGA-In (x1), VGA-Out(x1), Audio-In (Mini-Jack), Audio-Out (Mini-Jack), RS232, USB 5V/1.5A (and Service)		HDMI v1.4b (x1),HDMI v2.0 (x1), Composite Video, VGA-In (x1), VGA-Out(x1), Audio-In (Mini-Jack), Audio-Out (Mini-Jack), RS232, USB 5V/1.5A (and Service)		
I/O Connection Ports (RJ45)	N/A		RJ45(x1) (10/100Mbps)		N/A
Projection Method	Table Top, Ceiling Mount (Front or Rear)				
Security Solutions	Kensington® Security Slot, Keypad Lock				
Dimensions (WxDxH)	313 x 236 x 114mm (12.3" x 9.3" x 4.5")				
Weight	2.7kg (5.9lbs)				2.9kg (6.4lbs)
Available Colors	White				
Noise Level	36/27 dB (Normal/Eco. Mode)				
Power Supply	AC 100-240V, 50/60Hz				
Power Consumption	295W (Normal Mode), 210W (Eco. Mode), <0.5W (Standby Mode)				
Standard Accessories	AC Power Cord, Remote Control, Documentation Kit				
Optional Accessories	Lamp				

Projector Time Table

Signal	Resolution	H-SYNC (KHz)	V-SYNC (Hz)	Composite Video	Component	VGA/ BNC	HDMI/ DVI/ HDBaseT
NTSC	-	15.734	60	o (FS)	-	-	-
PAL/ SECAM	-	15.625	50	o (FS)	-	-	-
VESA	720×400	31.5	70.0	-	-	o	o
	640×480	31.5	60.0	-	-	o (FS/TB/ SBS)	o (FS/TB/ SBS)
	640×480	34.9	66.6	-	-	MAC13	MAC13
	640×480	37.9	72.0	-	-	o	o
	640×480	37.5	75.0	-	-	o	o
	800×600	35.1	56.0	-	-	o	o
	800×600	37.9	60.0	-	-	o (FS/TB/ SBS)	o (FS/TB/ SBS)
	800×600	48.1	72.0	-	-	o	o
	800×600	46.9	75.0	-	-	o	o
	832×624	48.9	75.0	-	-	MAC16	MAC16
	1024×768	48.4	60.0	-	-	o (FS/TB/ SBS)	o (FS/TB/ SBS)
	1024×768	56.5	70.0	-	-	o	o
	1024×768	60.0	75.0	-	-	MAC19	MAC19
	1280×1024	80.0	75.0	-	-	o	o
	1152×870	67.5	75.0	-	-	MAC21	MAC21
	1024×768	97.551	120.0	-	-	o (FS)	o (FS)
	1280×720	45	60.0	-	-	o (FS/TB/ SBS)	o (FS/TB/ SBS)
	1280×720	90	120.0	-	-	o (FS)	o (FS)
	1280×800	49.7	60.0	-	-	o (FS/TB/ SBS)	o (FS/TB/ SBS)
	1280×1024	64	60.0	-	-	o (FS)	o (FS)
	1440×900	55.9	60.0	-	-	o (FS)	o (FS)
	1600×1200	75	60.0	-	-	o (FS)	o (FS)
	1400×1050	65.3	60.0	-	-	o (FS)	o (FS)
	1680×1050	64.67	60.0	-	-	o	o
	1366×768	47.7	60.0	-	-	o	o
	1920×1080	67.5	60.0	-	-	o (FS)	o (FS)
	1920×1200 (RB)	74.04	60.0	-	-	o	o

O : Supported frequency
 - : Not Supported frequency
FS ⇒ Field Sequential

TB ⇒ Top / Bottom
SBS ⇒ Side-By-Side
FP ⇒ Frame Packing

6. Regulatory Compliance

FCC Warning

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 when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.

Changes or modifications not expressly approved by the parties responsible for compliance could void the user's authority to operate the equipment.

Canada

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

Safety Certifications

FCC-B, cTUVus, CCC, CECP, CEL, CE, KC, CB, RoHS, ICES-003(Canada), BSMI, TGM, PSB, BIS

Disposal and Recycling

This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal Laws. For more information, contact the Electronic Industries Alliance at www.eiae.org.

7. RS-232 Communication

Communication parameter setup

You can use the serial control command to input commands for projector control or retrieve its operational data through Windows client terminal software

ItemItem	Parameter:
Bit per Second	9600 bps
Data Bit	8-bit
Parity	None
Stop Bit	1
Flow Control	None

Note:

The UART terminal timeout is 0.5 sec. Both are available for upper case or lower case

Operation commands

Operation command syntax

An operation command is prefixed by character "op", followed by control commands and settings separated by space blank [SP], and ended by carriage return pair "CR" and "ASCII hex 0D".Syntax of serial control commands:

op[SP]<operation command>[SP]<Setting Value>[CR]

op	A constant indicating this is an operation command.
[SP]	Indicate one blank space.
[CR]	Indicate the command ending carriage return pair "CR" and "ASCII hex 0D".
Setting value	Settings of operation command

Types of setup strings	Characters of settings	Description
Query current setup	?	Question mark "?" indicates querying current setup
Setup	= <settings>	Syntax: Symbol "=" suffixed with setup values
Increase setup order of adjustment items	+	Some settings are changed in steps. Symbol "+" indicates changing one step up
Decrease setup order of adjustment items	-	Some settings are changed in steps. Symbol "-" indicates changing one step down
Execute operation command	None	Certain operation commands execute after input without further setting or regulators.

Examples:		
Control items	Input command row	Projector return message
Execute command	op reset.all[CR]	OP RESET.ALL
Query current brightness	op bright ?[CR]	OP BRIGHT = 50
Set up brightness	op bright = 100[CR]	OP BRIGHT = 100
Brightness value + 1	op bright +[CR]	OP BRIGHT = "new value"
Brightness value - 1	op bright -[CR]	OP BRIGHT = "new value"
Out of range or not support	op bright = 200[CR]	OP BRIGHT = NA
Illegal command	op abright = 100[CR]	*Illegal format#

Note:

When sending the multiple commands, make sure the return message of the last command is received before sending out the next one.

Category	Function	Operation	Set	Get	Inc	Dec	EXE	Values
Input	Auto Source	auto.src	V	V				0 : Off 1 : On
Picture	Picture Mode	pic.mode	V	V				0:Presentation 1:Bright 2:Movie 3:sRGB 4:Blackboard 5:User 6:3D
Picture	Brightness	bright	V	V	V	V		-50 ~ +50
Picture	Contrast	contrast	V	V	V	V		-50 ~ +50
Basic	Aspect Ratio	aspect	V	V				0 = 4:3 1 = 16:9 2 = 16:10 3 = LetterBox 4 = Native 5 = Auto
Geometry	Digital Zoom	zoom	V	V	V	V		-5 ~ +25
Geometry	V Keystone	v.keystone	V	V	V	V		DDP442x Telephoto:-40~-40 Short throw:-20~20 DDP442xHV Telephoto:-30~-30 Short throw:-20~20
Geometry	H Keystone	h.keystone	V	V	V	V		DDP442xHV Telephoto:-30~-30 Short throw:-20~20
Installation	Projection	projection	V	V				0 : Front 1 : Rear 2 : Ceiling 3 : Rear + Ceiling
Installation	Light Mode	light.mode	V	V				0 : Bright 1 : Eco 2 : Dynamic
Control	IR Control	ir.control	V	V				0 : Front + Top IR On 1 : Front IR On 2 : Top IR On 3 : Front + Top IR Off
Control	Volume	volume	V	V	V	V		
Installation	Reset All	reset.all					V	
Basic	Source Info	source.info		V				<string> For example : OP SOURCE.INFO = 1920×1200 60Hz
Basic	Light Hours 1	light1.hours		V				<string> For example : OP LIGHT1.HOURS = 1234
Basic	Software Version	sw.ver		V				<string> For example : OP SW.VER = DX330_ C01_C01

Category	Function	Operation	Set	Get	Inc	Dec	EXE	Values
Basic	Serial Number	ser.no		V				\<string\> For example : OP SER.NO = CDX3303451234
Basic	Light 1 Status	light1.stat		V				0 : Off 1 : On
Basic	Model	model		V				\<string\> For example : OP MODEL = DX330
Basic	Blank	blank	V	V				0 : Off 1 : On
Basic	Power On	power.on					V	
Basic	Power Off	power.off					V	
Basic	Projector Status	status		V				0 : Reset 1 : Standby 2 : Active 3 : cooling 4 : Warming 5 : Failure
Control	Mute	mute	V	V				0 : Off 1 : On
Control	Freeze	freeze	V	V				0 : Off 1 : On
Control	Input Select	input.sel	V	V				0 : VGA 1 : Video 2 : HDMI 1 3 : HDMI 2
Service	Factory Shipment Reset	pri.reset					V	
Service	Firmware Version	fw.ver		V				For example : DDP_C01_MCU_C01_ LAN_C01
Service	Error Code	errcode		V				0 : No Error 1 : FAN Lock 2 : Over Heat 3 : Lamp Fail

8. Service

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The Netherlands
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URL: http://www.vivitek.eu/support/tech-support

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URL: www.vivitekusa.com

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