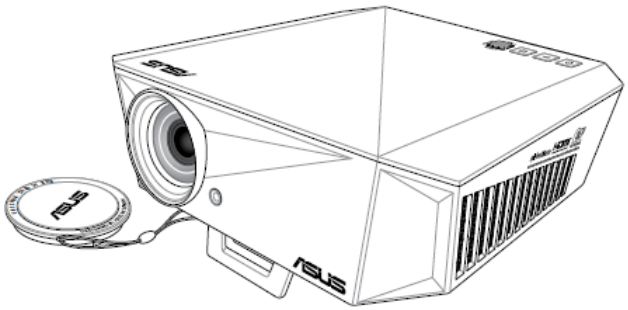
LED projector

E-Manual



F1 Series

E14384 First Edition July 2018

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Table of Contents

About this manual

This manual provides information about the hardware and software features of your LED projector through the following chapters:

Chapter 1: Knowing your LED Projector

This chapter details the parts of your LED projector and its accompanying remote control.

Chapter 2: Setting up

This chapter shows you how to set up your LED projector and use its parts for input device connection.

Chapter 3: Using the onscreen display menu

This chapter talks about the features of your LED projector’s onscreen display menu and how to navigate it using the control panel.

Appendices

This section includes safety notices for your LED projector.

Conventions used in this manual

To highlight key information in this manual, some text are presented as follows:

IMPORTANT! This message contains vital information that must be followed to complete a task.

NOTE: This message contains additional information and tips that can help complete tasks.

WARNING! This message contains important information that must be followed to keep you safe while performing tasks and prevent damage to your LED projector's data and components.

Typography

Bold = This indicates a menu or an item that must be selected. *Italic* = This indicates sections that you can refer to in this manual.

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Safety precautions

Using your LED projector

- Refer to the manual and take note of the safety instructions before operating your LED projector.
- Follow the notes and warnings stated in the user manual.
- Do not place your LED projector on uneven or unstable surfaces.
- Do not use your LED projector in smoky environments. Smoke residue may cause build-up on critical parts and damage the LED projector or decrease its performance.
- Keep the LED projector's plastic packages out of the reach of children.
- Do not block or place anything near the LED projector's ventilation holes. Doing so may cause internal heat build-up that can degrade picture quality and damage the projector.
- Ensure that the operating voltage of your LED projector matches the voltage of your power source.

Servicing and replacement of parts

- Do not disassemble or attempt to service this LED projector by yourself. Contact your local ASUS service center for assistance.
- When replacing parts of your LED projector, purchase items as specified by ASUS and contact your local service center for assistance.

Caring for your LED projector

- Switch off then unplug the LED projector from the power outlet before cleaning it.
- When cleaning the LED projector's housing, use a clean soft cloth dampened with water or a mix of water and neutral detergent. Wipe it dry using a soft dry cloth.
- Ensure that the lens is cool before cleaning it. Gently wipe the lens using a lens cleaning paper. Do not touch the lens with your hands.
- Do not use liquid or aerosol cleaners, benzene, or thinners on your LED projector.
- Never operate this LED projector immediately after moving it from a cold location. When the LED projector is exposed to a drastic change in temperature, moisture may condense on the lens and its other internal parts. To prevent this, use the unit two (2) hours after an extreme or sudden change in temperature occurs.

Proper disposal

Do not throw your LED projector in municipal waste. This product has been designed to enable proper reuse of parts and recycling. The symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment and mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.

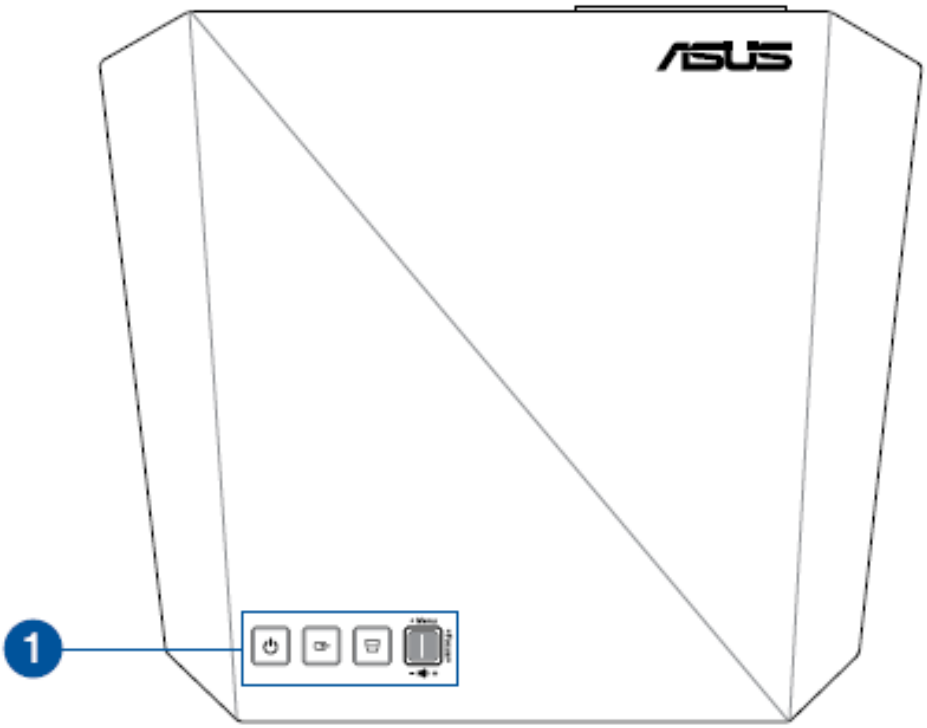
Do not throw the battery in municipal waste. The symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

Chapter 1:

Knowing your LED projector

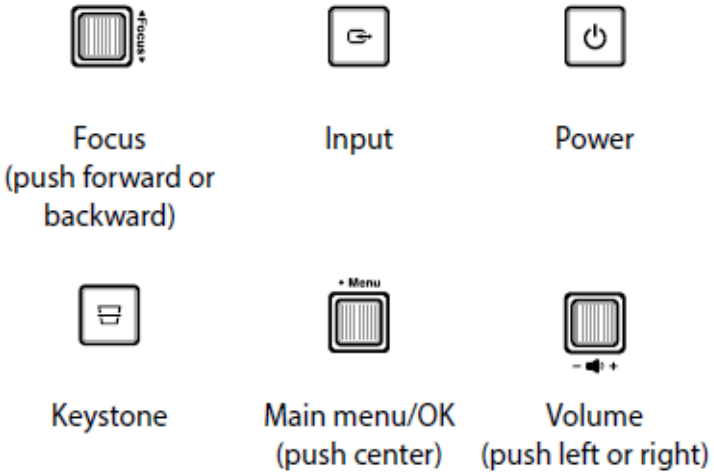
Features

Top view



1 Control panel buttons

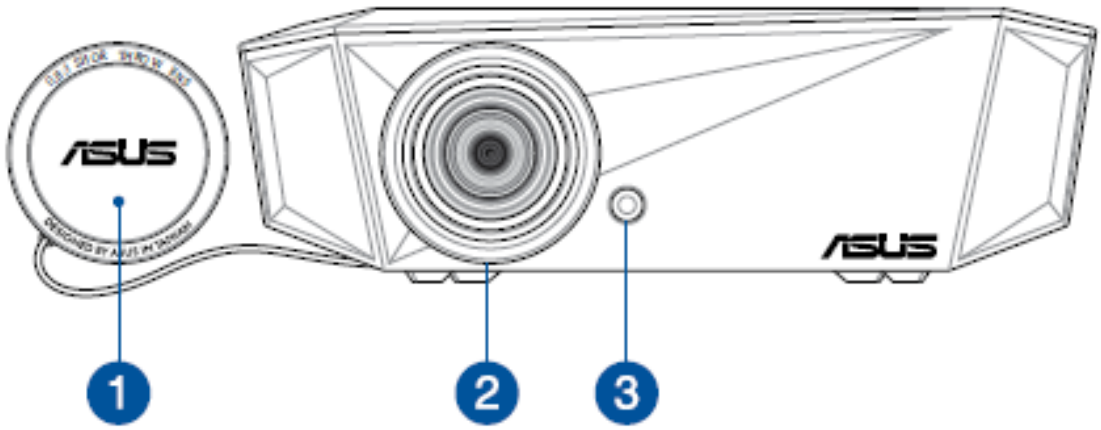
The control panel buttons allow you to navigate the onscreen display menu. Individually, these buttons also correspond to a specific LED projector setting as indicated below.



NOTE:

- For more information on using the control panel buttons to access your LED projector's settings, refer to the *Accessing your LED projector's settings* section in this manual.
- In the event that your LED projector becomes unresponsive, press and hold the power button for at least five (5) seconds until your LED projector shuts down.

Front view



1 Lens cover

The lens cover protects the lens from scratches and possible dirt build-up.

IMPORTANT! Remove the lens cover before using your LED projector.

2 Lens

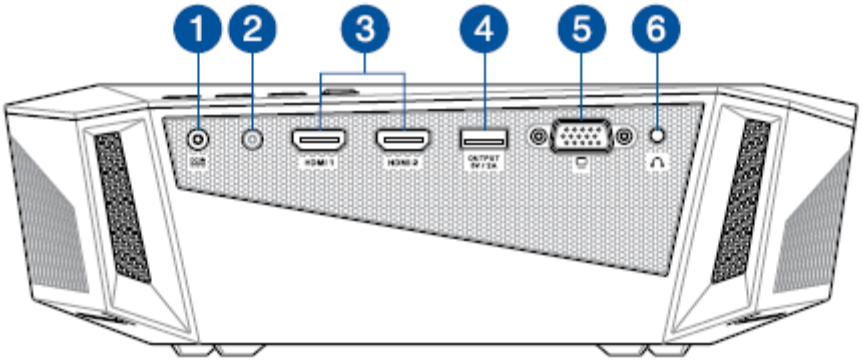
The lens projects video or image files onscreen from your input device.

WARNING! Do not touch the lens using your hands or any sharp object.

3 Remote sensor

The remote sensor detects signal from your LED projector's remote control, allowing you to access the LED projector's control panel from a distance of up to 7 meters and a receiving angle of ±30 degrees.

Rear view



1 Power (DC) input port

Insert the bundled power adapter into this port to charge the battery pack and supply power to your LED projector.

DC voltage

WARNING! The adapter may become warm to hot while in use. Do not cover the adapter and keep it away from your body while it is connected to a power source.

IMPORTANT! Use only the bundled power adapter to charge the battery pack and supply power to your LED projector.

2 Remote sensor

The remote sensor detects signal from your LED projector's remote control, allowing you to access the LED projector's control panel from a distance of up to 7 meters and a receiving angle of ±30degrees.

3 HDMI/MHL ports

These ports are for the HDMI (High-Definition Multimedia Interface) connectors and also support MHL (Mobile HI-Definition Link) compatible devices. These port are HDCP compliant for HD DVD, Blu-ray, and other protected content playback.

4 **Power output port**

This power output port provides up to 5V/2A of output voltage and current. You can connect your mobile device to this port to keep it charged.

NOTE: This port does not provide charging when the system is on, using MHL device, or in Dynamic Mode.

VGA port

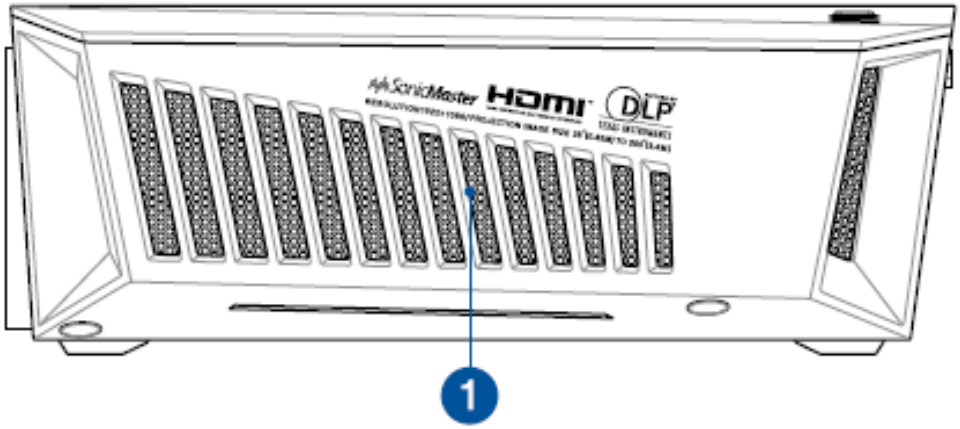
5 This port allows you to connect your LED projector to other VGA-compatible devices.

Audio output jack port

The audio output jack port allows you to connect your LED projector to amplified speakers or headphones.

6

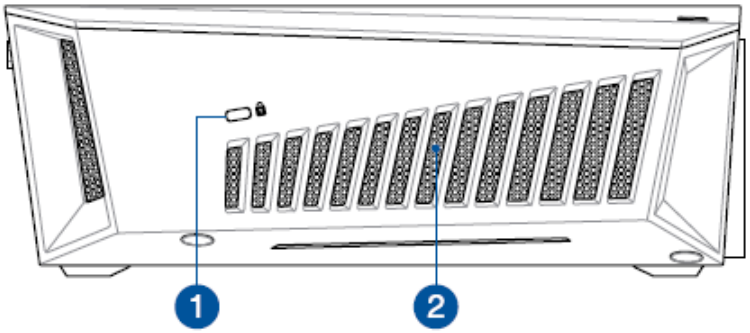
Left side



1 **Air vents**

The air vents allow cool air to enter and warm air to exit your LED projector.

WARNING! Ensure that paper, books, clothing, cables, or other objects do not block any of the air vents or else overheating may occur.



Right side

1 Kensington® security slot

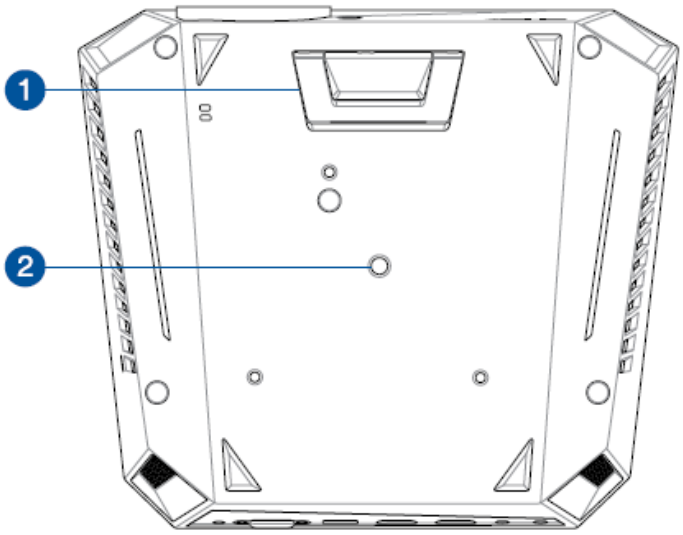
The Kensington® security slot allows you to secure your LED projector using Kensington® compatible LED projector security products.

2 Air vents

The air vents allow cool air to enter and warm air to exit your LED projector.

> **WARNING!** Ensure that paper, books, clothing, cables, or other objects do not block any of the air vents or else overheating may occur.

Bottom view



1 Built-in stand

This LED projector comes with a built-in stand that allows you to adjust the height of the projector by either 5.7 degrees or 9 degrees.

2 Tripod socket

Connect the LED projector to a tripod using this socket.

LED projector remote control

NOTE: Actual appearance may vary depending on model.

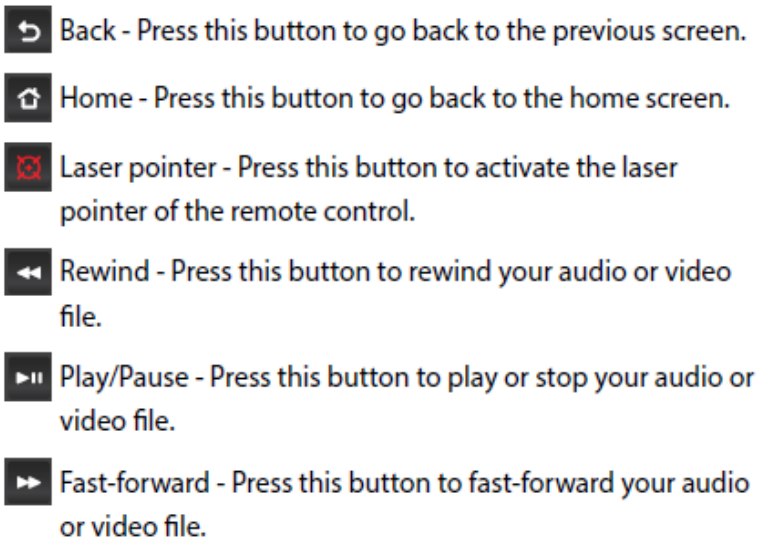
1 Control panel buttons

The control panel buttons allow you to navigate the onscreen display menu. Individually, these buttons also correspond to a specific LED projector setting.

NOTE: For more details on using the control panel buttons, refer to the *Using the onscreen display menu* section in this manual.

2 Remote control buttons

These additional buttons allow you to use the LED projector from a distance of up to 7 meters.



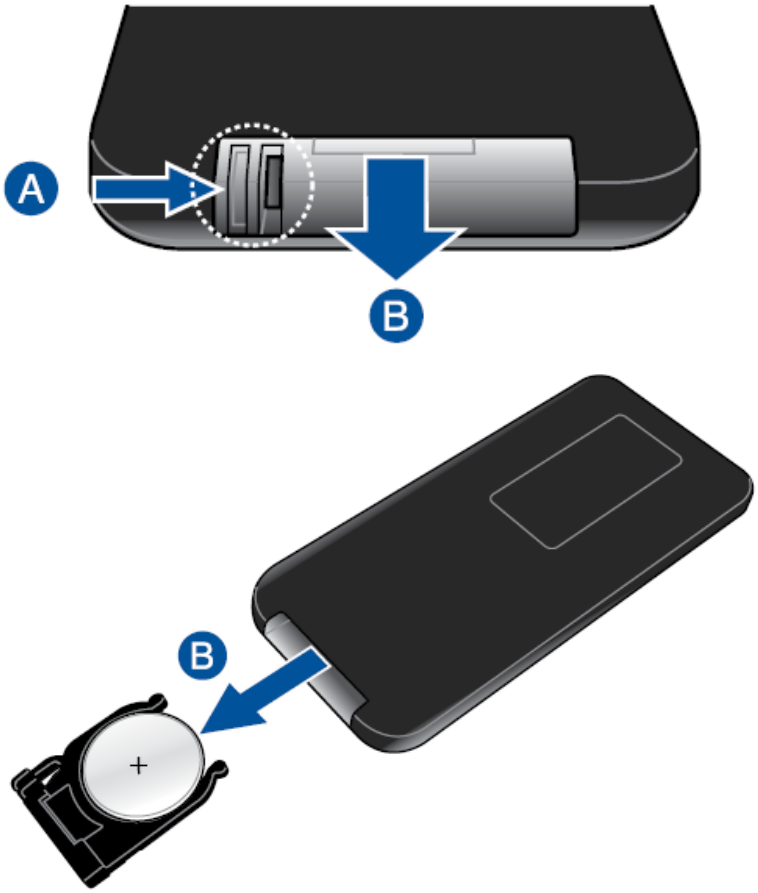
3 Battery compartment

The battery compartment allows you to use a CR2025 lithium coin battery to power your LED projector's remote control.

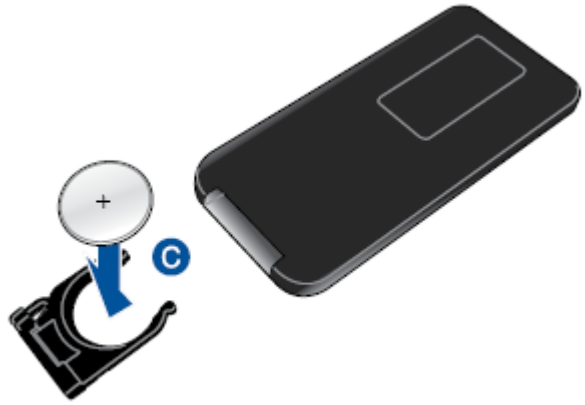
NOTE: For more details on using the battery compartment, refer to the *Replacing the battery* section in this manual.

Replacing the battery

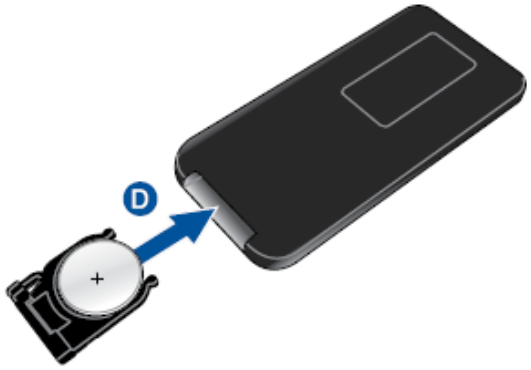
A. Move the battery compartment’s latch to the right to unlock the battery holder.
B. Pull down the battery holder and remove it completely out of the battery compartment.



C. Remove the old battery then insert the new CR2025 lithium coin battery into the battery holder with the positive side (+) facing up.



D. Slide the battery holder back into the battery compartment. Push it all the way in until you hear a soft click, indicating that the battery compartment is locked back in place.



CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

Chapter 2:

Setting up

Operating your LED projector

This portable LED projector allows you to plug and play your devices so you can easily open multimedia files, hear audio straight from its built-in SonicMaster speakers, and experience using Wi-Fi to project onscreen.

For your safety and to maintain the quality of this unit, refer to the following steps when operating your LED projector.

Connect the LED projector to the power adapter

A. Connect the AC/DC power cord to the power adapter.

B. Connect the AC power cord to a power source.

C. Connect the DC power connector to your LED projector.

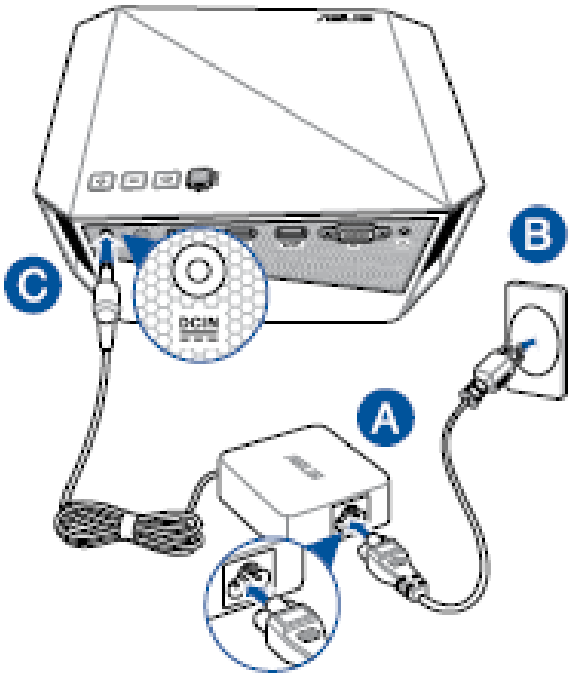
Power adapter information:

Input voltage: 100-240Vac

Input frequency: 50-60Hz

Rating output current: 6.32A max. (120W)

Rating output voltage: 19V



AC power cord requirements

Use the correct AC plug type according to your current location.

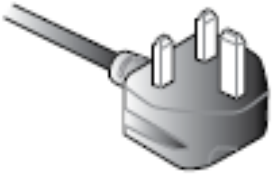
IMPORTANT! Contact your sales dealer if the AC power cord bundled with your LED projector does not match your local power source.

NOTE: We highly recommend that you use a video source device that also uses a grounding type plug to prevent signal interference due to voltage fluctuations.

For Australia and Mainland China

For U.S.A., Canada, and Taiwan

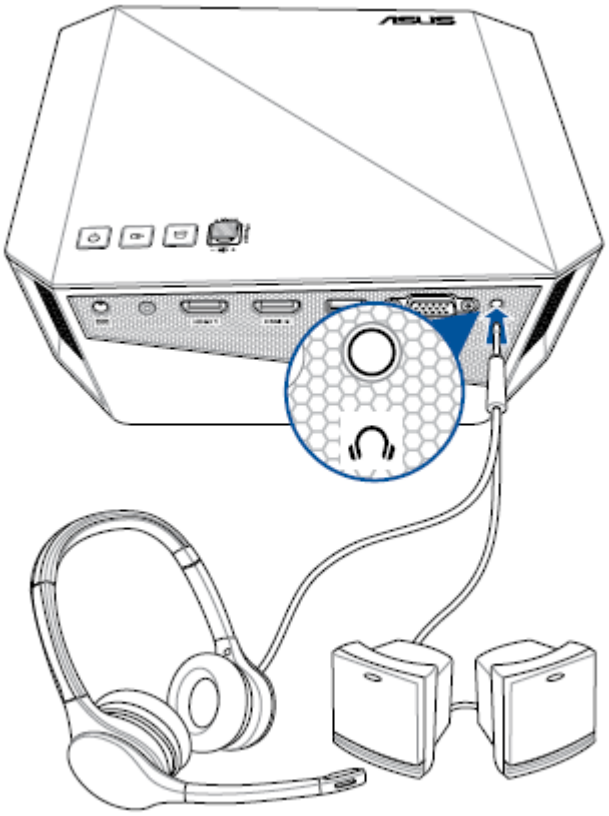
For Continental Europe



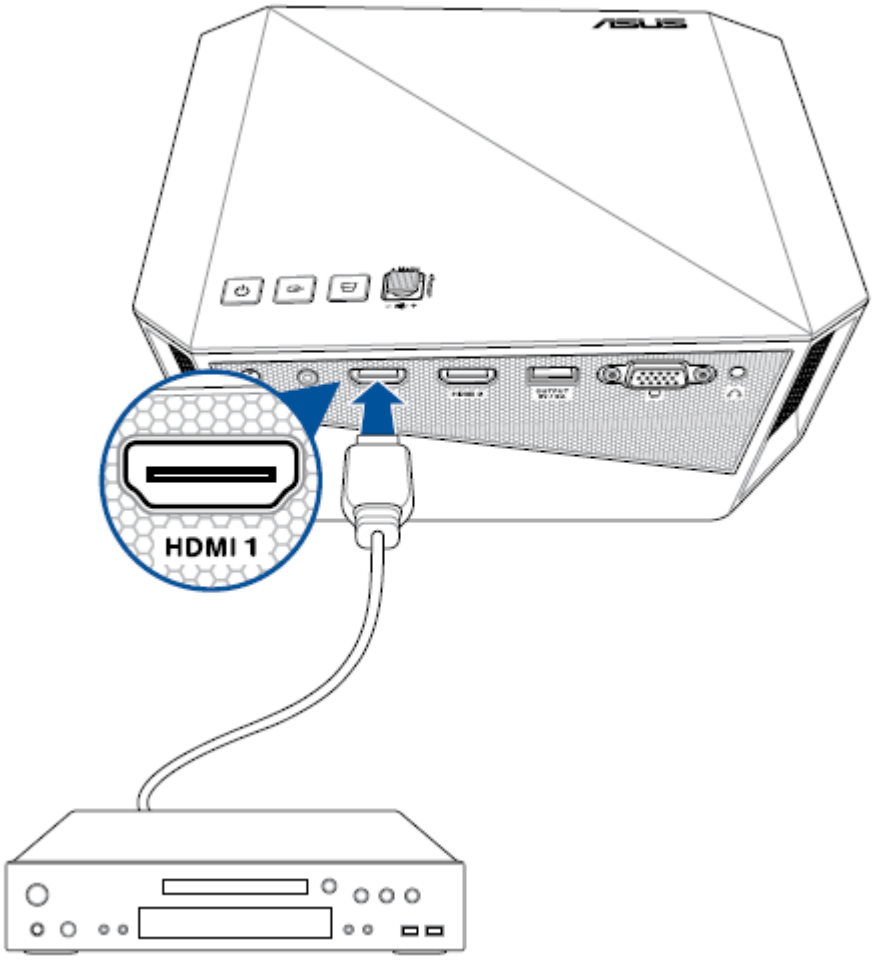
For U.K.

Connect the LED projector to your device

A. Audio output jack

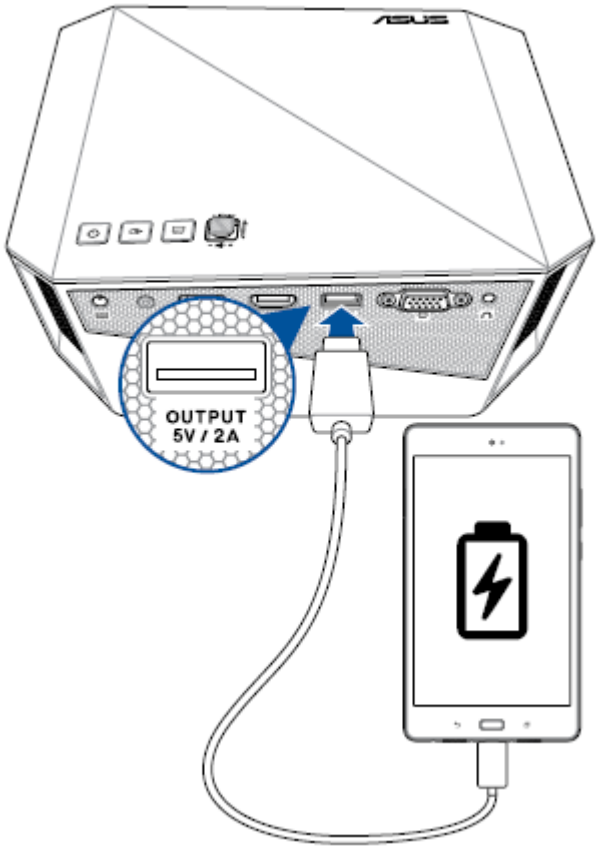


B. HDMI / MHL

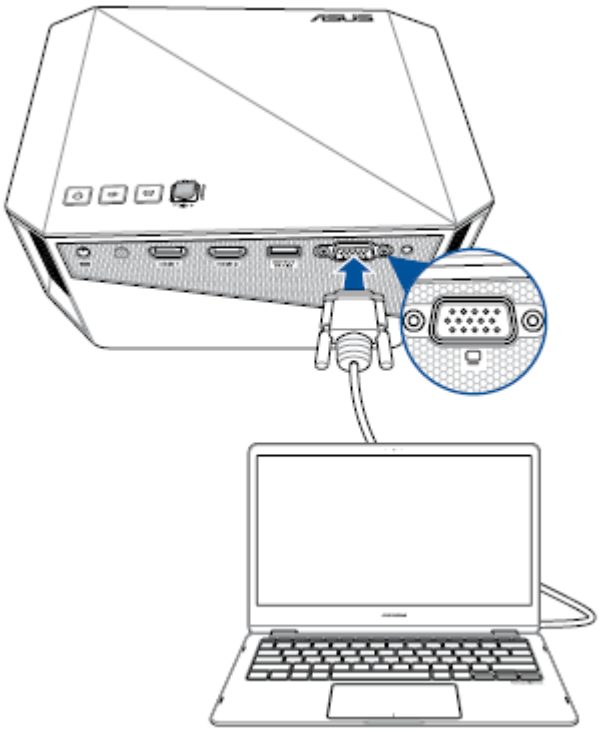


NOTE: Some mobile phone models may require a specific adapter for use with HDMI / MHL ports.

C. Power output (5V/2A)



D． VGA



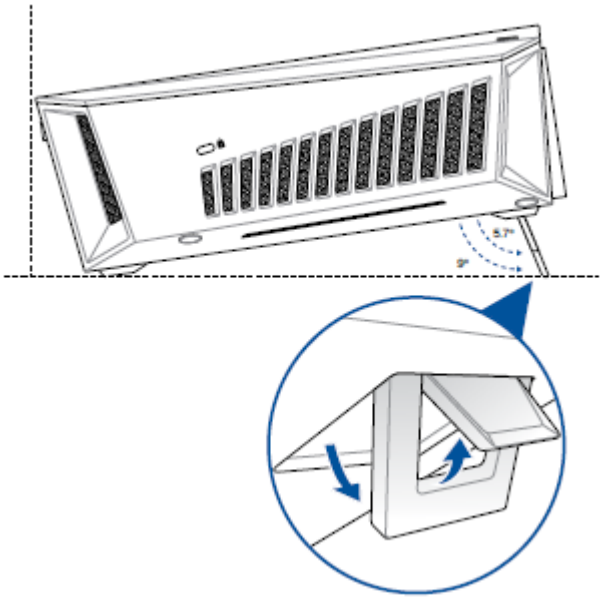
Adjust the height of the LED projector

Your LED projector comes with a built-in stand that helps adjust the image height onscreen.

WARNING! Ensure that the built-in stand is fully retracted before placing the LED projector inside the projector bag.

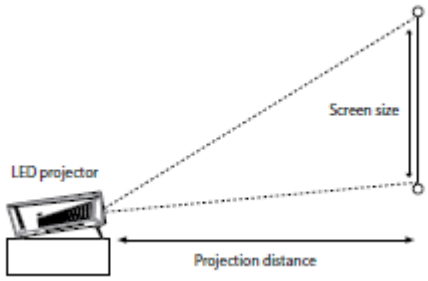
NOTES:

Place the LED projector on a stable flat surface.
Keepaspaceof30cmormorebetweenthesidesoftheLED projector.
Consultyourdealerforspecialinstallationprocedureslike suspending the LED projector from the ceiling.

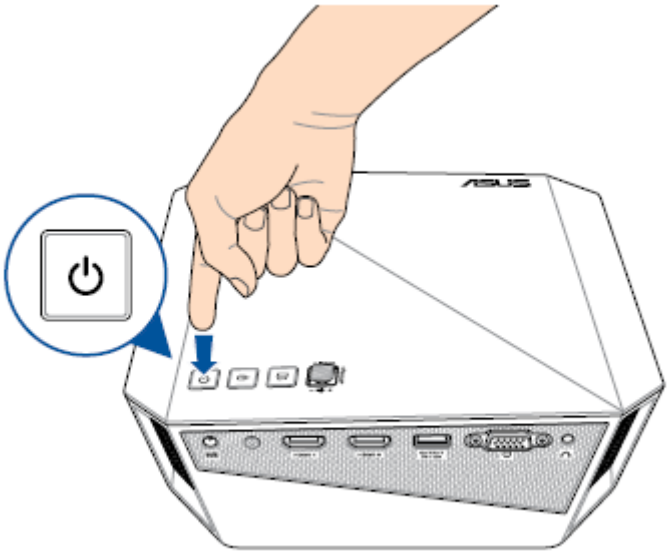


Screen size and projection distance table

Adjust the LED projector's distance from the screen using the table below.



Screen Size						Projection Distance	
Screen Diagonal		Width		Height			
Inch	cm	Inch	cm	Inch	cm	ft	m
30"	76	25.6"	65	15.7"	40	1.71'	0.52
50"	127	42.1"	107	26.4"	67	2.82'	0.86
65"	165	55.1"	140	34.2"	87	3.67'	1.12
80"	202	67.7"	172	42.1"	107	4.53'	1.38
100"	254	84.6"	215	52.7"	134	5.64'	1.72
150"	381	127.2"	323	79.5"	202	8.50'	2.59
200"	508	169.3"	430	105.9"	269	11.28'	3.45

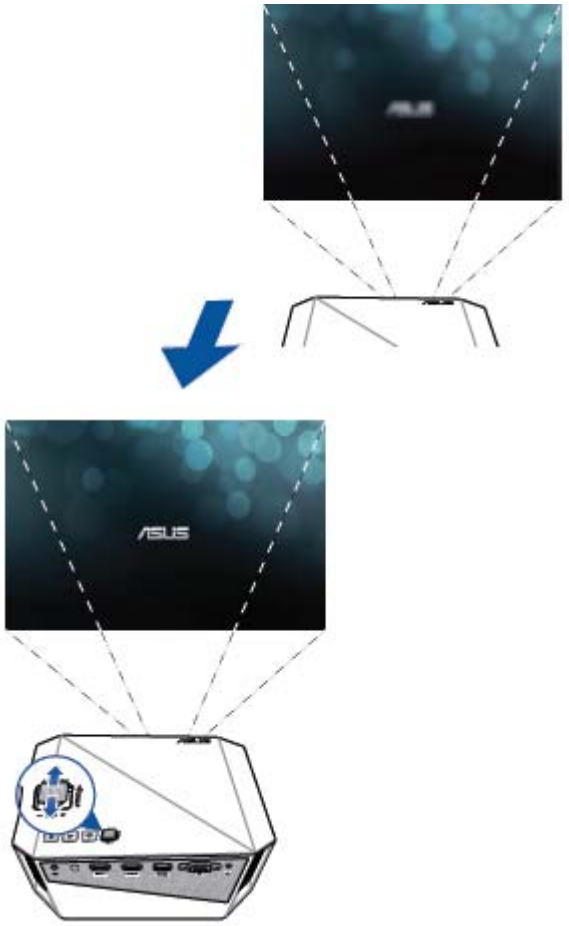


Press the power button

Adjust the image focus

Move the focus ring to the left or to the right to adjust the image focus.

NOTE: Use a still image when adjusting the onscreen display.



Appendices

Federal Communications Commission Statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the Federal Communications Commission (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 distance between the equipment and receiver.
- Connect the equipment to an outlet on a different circuit than that which the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1 This device may not cause harmful interference, and

2 This device must accept any interference that may cause undesired operation.

WARNING

RF exposure

FCC RF Radiation Exposure Statement Caution: To maintain compliance with the FCC‟s RF exposure guidelines, place the product at least 20cm from nearby persons

FCC Caution:
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

FOR CE

For the following equipment
Product name: LED Projector
Model(s): F1xy(x:A~Z; 0~9 or bank； y：A~Z; 0~9 or bank)

Product SW Version: 1.19.20180426

Product HW Version: 9943C

Adaptor model : ADP-120RH B
Input:100-240VAC 50/60Hz, 2A, Output:`19VDC,6.32A,
Manufacturer: DELTA ELECTRONICS, INC.

►CE Frequency Range

Frequency Rang	Max Power
2412MHz~2472MHz	18.78dBm
5150MHz~5350MHz 5470MHz~5725MHz	18.47dBm 18.02dBm

►The antenna of the product, under normal use condition is at least 20 cm away from the body of the user. Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the WLAN easy install sheet. So, this product under normal use is located on electromagnetic far field between the human body

BE	BG	CZ	DK	DE	EE	IE
EL	ES	FR	HR	IT	CY	LV
LT	LU	HU	MT	NL	AT	PL
PT	RO	SI	SK	FI	SE	UK

►For AC/DC Adapter, the socket-outlet shall be installed near the equipment and shall be easily accessible

Compliance Statement of Innovation, Science and Economic Development Canada (ISED)

This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CAN ICES-3(B)/NMB-3(B)

Déclaration de conformité de Innovation, Sciences et Développement économique Canada (ISED)

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3(B)/NMB-3(B)

Regional notice for California

WARNING

Cancer and Reproductive Harm www.P65Warnings.ca.gov

►FOR IC:

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

Toute modification ou modification non expressément approuvée par la partie responsable de la conformité pourrait annuler l'autorisation de l'utilisateur de faire fonctionner l'équipement.

Global Environmental Regulation Compliance and Declaration

ASUS follows the green design concept to design and manufacture our products, and makes sure that each stage of the product life cycle of ASUS product is in line with global environmental regulations. In addition, ASUS disclose the relevant information based on regulation requirements.

Please refer to http://csr.asus.com/english/Compliance.htm for information disclosure based on regulation requirements ASUS is complied with:

Japan JIS-C-0950 Material Declarations

EU REACH SVHC

Korea RoHS

ASUS Recycling/Takeback Services

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components as well as the packaging materials. Please go to http://csr.asus.com/english/Takeback.htm for detailed recycling information in different regions.

Specifications for F1 series LED projector

		F1
Display	Display Technology	0.47″ DLP®
	Light Source	R/G/B LED
	Light Source Life	30,000 hours (Max)
	True Resolution (native)	FHD 1920x1080
	Light Output (Max)	1200 Lumens
	Contrast Ratio	100,000:1 DCR
	Color Saturation (NTSC)	Typical 100%
	Display Colors	16.7 Million Colors
Projection Lens	Throw Ratio	0.8@16:9 (56.5″@1m)
	Projection Distance	0.43 ~ 3.44 m
	Projection/Screen Size	25 ~ 200 inches
	Projection Offset	100 ± 5 %
	Zoom Ratio	Fixed
Video Features	Picture Modes	6 Modes (Standard Mode, Dynamic Mode, sRGB Mode, Scenery Mode, Theater Mode, Game Mode)
	Keystone adjustment	Vertical / Horizontal
	Auto Keystone	Yes (Vertical)
	Aspect Ratio	16:10 /4:3 / Auto
	Projector Placement	Front Table, Rear Table, Front Ceiling, Rear Ceiling
Audio Features	Built-in speakers	2.1 channel speakers

(continued on the next page)

		F1
Signal Frequency	Analog Signal Frequency	Horizontal: 15.37 ~ 91.14 KHz Vertical: 24 ~ 120 Hz (120 Hz for 3D feature)
	Digital Signal Frequency	Horizontal: 15.37 ~ 91.14 KHz Vertical: 24 ~ 120 Hz (120 Hz for 3D feature)
Power	Power On Mode	<120W
	Standby Mode	<0.5W
Noise	Acoustic Noise	Standard mode: 32dBA - 34dBA Theater, sRGB, Scenery mode: 28dBA - 30dBA
Input or Output	PC Signal Input	1 x D-sub 2 x HDMI (HDCP support)
	Audio Out	Earphone out
	USB port	Yes (1 x Type A for 5V/2A charging)
Wireless	Wi-Fi	802.11 a/b/g/n @ 2.4GHz and 5GHz
Mechanical Design	Chassis Colors	Black
	Tripod Socket	Yes
	Supporting Stand	Yes (5.7° and 9°)
	Lens Cover	Yes
Security	Kensington lock	Yes
Dimension	Physical Dimension	250(W)x210(D)x75(H)mm
	Box Dimension	300(W)x270(D)x100(H)mm

(continued on the next page)

		F1
Weight	Net Weight (Esti.)	1.85 Kg
	Gross Weight (Esti.)	2.60 Kg
Operating Temperature		0 ~ 40°C
Operating Humidity		20 ~ 90%
Accessories		Carrying bag, power adapter, power cord, HDMI cable, Quick Start Guide, remote control, WiFi dongle (on selected models), warranty card

* Specifications are subject to change without prior notice.

** Product availability may vary by region.

*** All brand and product names mentioned are trademarks of their respective companies.

*** *The HDMI cable used in the equipment is the cable with two magnetic rings.

Support PC Timings DSUB Input

Resolution	Mode	Refresh rate (Hz)	H-frequency (kHz)	Clock (MHz)
640 x 480	VGA_60	59.94	31.469	25.175
	VGA_75	75	37.5	31.5
800 x 600	SVGA_60	60.317	37.879	40
	SVGA_75	75	46.875	49.5
1024 x 768	XGA_60	60.004	48.363	65
	XGA_75	75.029	60.023	78.75
1280 x 768	1280 x 768_60	59.87	47.776	79.5
1280 x 800	WXGA_60	59.81	49.702	83.5
1280 x 1024	SXGA_60	60.02	63.981	108
	SXGA_75	75.025	79.976	135
1280 x 960	1280 x 960_60	60	60	108
1440 x 900	WXGA+_60	59.887	55.935	106.5
1400X1050	SXGA+_60	59.978	65.317	121.75
1024x768@75Hz	MAC19	74.93	60.241	80
1366x768	HD_60	59.79	47.71	85.50
1680x1050	WSXGA+_60	59.95	62.29	148.50

HDMI (PC)

Resolution	Mode	Refresh rate (Hz)	H-frequency (kHz)	Clock (MHz)
640 x 480	VGA_60	59.94	31.469	25.175
	VGA_75	75	37.5	31.5
800 x 600	SVGA_60	60.317	37.879	40
	SVGA_75	75	46.875	49.5
1024 x 768	XGA_60	60.004	48.363	65
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1680x1050	WSXGA+_60	59.95	62.29	148.50

HDMI (Video), YPbPr (via VGA port)

Timing	Resolution	Vertical frequency (Hz)	H-frequency (kHz)	Dot Clock frequency (MHz)
480i	720(1440) x 480	59.94	15.73	27
480p	720 x 480	59.94	31.47	27
576i	720(1440) x 576	50	15.63	27
576p	720 x 576	50	31.25	27
720/50p	1280 x 720	50	37.5	74.25
720/60p	1280 x 720	60	45	74.25
1080/50i	1920 x 1080	50	28.13	74.25
1080/60i	1920 x 1080	60	33.75	74.25
1080/50P	1920 x 1080	50	56.25	148.5
1080/60P	1920 x 1080	60	67.5	148.5
1080/24P	1920 x 1080	24		