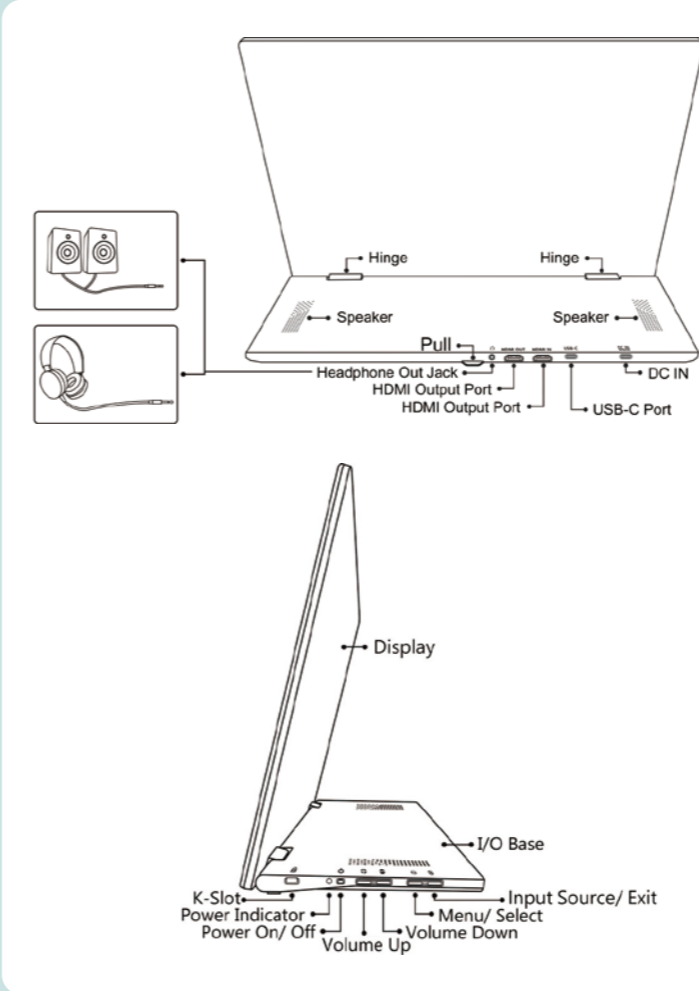## On-Lap M505E
User Manual ▶▶

How-to's
Rev. 2023/4/17

▪ Notices, Cautions & Warranty Exclusions

⚠ Warning! The sign alerts you to potential hazards that can hurt you or damage the product.

⚠ 1. When carrying On-Lap Monitor, please put it into the protective sleeve. Avoid hitting the monitor violently and putting heavy objects on the sleeve bag, these may cause the panel cracked.

⚠ 2. When plugging in/out the cables, do make sure the force exerts in horizontal direction - do not shake the port or plug it in vertical direction. Any damage caused by wrong plugging is excluded from the warranty coverage.

⚠ 3. The power input specification for On-Lap monitor is 5V 2A DC current. If the input voltage is more than 5V, the monitor will become damaged seriously. and this will void the GeChic manufacturer's Warranty. We suggest you to connect both connectors of the USB power cable to your desktop's USB ports or use GeChic 5V-2A charger.

⚠ 4. It is recommended to use the monitor in a well-ventilated environment at room temperature around 5°C to 35°C and humidity around 45% to 85%. The monitor should display continuously changing images rather than displaying the same and a still image for a long time. If you need to use this monitor in an abnormal environment such as high temperature, high humidity, confined space, low atmospheric pressure, etc., please contact Gechic customer service center for further advice on usage environment.

⚠ 5. Cleaning On-Lap Monitor : Unplug the power input before cleaning. Please use soft cloth to clean touch screen. For stubborn stains, please use lightly-dampened cloth to wipe again. Do not use benzene, alcohol, thinner, ammonia, abrasive cleaners, compressed air or other corrosive solvents. These solvents may cause permanent damage on the screen or leave non-removable stain.

⚠ 6. Do not expose the LCD panel to sunlight.

⚠ 7. Please do not use the monitor on a lasting shaky or unstable surface. Do not use the On-Lap Monitor on a moving vehicle.

⚠ 8. The product is not waterproof. Do not use this product in or near water.

⚠ 9. Do not insert any object into the Product's slots or gaps. Do not disassemble the monitor in any way.

⚠ 10. High Volume Warning: High volume can lead to lasting damage to your hearing. Please check the volume settings before reproducing any sound.

11. Overuse of the monitor may result in vision damage. For every 30 minutes with the monitor, give your eyes 10 minutes break. Avoid children under age 2 to watch with the monitor; prevent children over age 2 from watching with the monitor over 1 hour per day.

12. Exclusions from Warranty Service : please read the warranty terms below carefully, and follow the usage guide and precautionary notes. Please keep this manual for future reference. GeChic does not warrant uninterrupted or error-free operation of this Product. The warranty only covers failure /malfunction under normal use conditions during warranty period. The warranty does not apply to the following conditions:

(1)The bar code has been removed or worn down, and cannot be identified.
(2)This product has been modified, disassembled, or refitted.
(3)Display and touch function working normally; only variation in appearance (e.g., ageing, attrition, scratch, color changing and etc.).
(4)Any breakdown caused by power supply. (e.g., inputting power over 5V or unsteady current)
(5)Any damage caused by disoperation or failure to follow this manual. (e.g., Plug or unplug the cable in wrong direction and causing damage on cable or monitor.)
(6)Any damage caused by hitting or cracking monitor accidentally or purposely, or collapsing or overturning monitor.


▪ Parts Description

Hinge — Hinge
Speaker — Speaker
Pull
Headphone Out Jack
HDMI Output Port
HDMI Output Port
DC IN
USB-C Port
Display
I/O Base
K-Slot
Power Indicator
Power On/ Off
Volume Up
Volume Down
Menu/ Select
Input Source/ Exit

▪ Accessories Description

HDMI-A Video Cable (1 M)

USB Type-C Video Cable (1 M)

5V 2A Power Adapter

15-inch Sleeve Bag

USB-C (female) to USB-A (male) Adapter

Optional Accessories	Description
M505 VESA 100 Aluminum Alloy Bracket	Screw M505 monitor to VESA 100 arm or wall mount by the 4 VESA 100 screw holes on the bracket. Refer to <Installation of VESA 100 Arm or Wall Mount> for the installation on the back page.
USB Type-C Video Cable(2m)	One plug is for USB-C(DP Alt) port of PC, the other plug is for M505 to transmit power and video signals.
USB-A to USB-C Power& Touch Signal Cable (1.2m/2.1m)	One plug is USB-A(male) for USB port of PC, power adapter, or power bank; the other plug is USB-C(male) for connecting to On-Lap M505 monitor.
Micro-HDMI to HDMI-A Video Cable (2.1m)	One plug is micro HDMI (male) for connecting to camera or computer; the other plug is HDMI-A (male) for connecting to On-Lap M505 monitor.
mini-HDMI to HDMI-A Video Cable (2.1m)	One plug is mini-HDMI (male) for connecting to camera; the other plug is HDMI-A (male) for connecting to On-Lap M505 monitor.

▪ Set Up the Monitor & Use the Sleeve Bag

◆ Set up M505 Monitor and Adjust the Angle

In the Fig. shown, erect the monitor on the desk. Hold the display by one hand and hold the pull of the I/O base to pull down the I/O base by the other hand. When the base is placed on the desk flat, adjust the screen angle between 40° and 85°.
Do not setup the monitor more than 90°. When angle is more than 90°, the monitor will overturn forward, causing the panel crack. When the display angle is less than 40° degrees, the monitor may fall slowly to 0°.
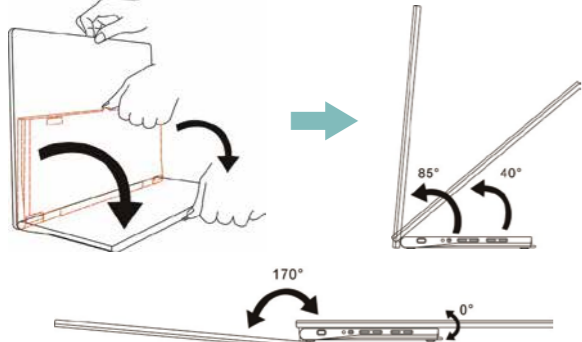
⚠ Warning: The rotation range of the hinge is between 0° to 170°. Please do not rotate it more than 170°, otherwise the monitor may be damaged or cracked.

◆ Notices of Vertical Display

(1) In the Fig. shown, place the monitor with button side upward and pull the I/O base out to a 90° angle with the display. Please place the monitor on a flat desk. Do not touch or shake the monitor, or the screen may be cracked from overturning.
When using vertical display for long time, please adopt M505 VESA 100 Aluminum Alloy Bracket (Optional) and VESA arm for safety. Please refer to Section 7.
(2) The monitor doesn't support automatic rotation. To use in vertical mode, please change the display orientation to "Portrait (flipped)" in the Windows system; For Mac OS, please enter "System Preferences", select "270°" at "Display Rotation".
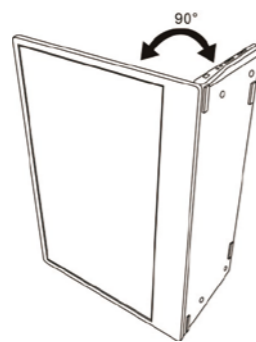
◆ Instructions of Sleeve Bag

In the Fig. shown, open the sleeve bag by one hand, hold the screen bezel (Don't touch the panel part) by the other hand and put the monitor into the sleeve bag.
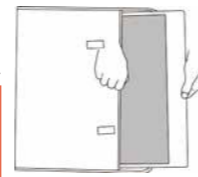
⚠ Warning: When the monitor is in the sleeve bag, please DO NOT put any heavy objects upon the sleeve bag and avoid any collisions, or the monitor may be cracked.

▪ Installation and Connection Instructions

◆ Connect to MacBook Pro/Air®, Laptop or Smartphone by USB Type-C Port

The computer, smartphone, etc. for USB Type-C connection must meet the following conditions:
(1)Supports DisplayPort Alternate Mode (USB Type-C (DP Alt Mode))
(2)Supplies at least 5V 2A power current. If Smartphone or the devices can't supply 5V 2A current to the monitor, please power the monitor by the adapter.

1. Power the Monitor by a Computer
In the Fig. shown, insert USB Type C Video Cable (1m) into the USB Type-C ports on M505 and the computer. The computer will output current and video signals via its USB Type-C port, therefore, there is no more adapter or HDMI cable required.
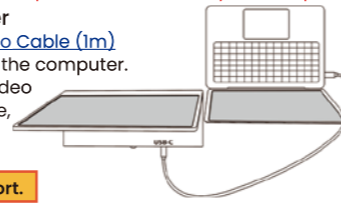

⚠ Caution: Do NOT connect to DC IN port.

2. Power M505E Monitor by the 5V 2A Adapter (Apply to Smartphone)
Please follow the steps below for connection.
①Use 5V 2A Power Adapter and USB-A to USB-C Power & Touch Signal Cable (Optional) to connect to DC IN port on M505E.
②After turning on the smartphone or computer, connect M505 to computer/ smartphone by USB Type-C Video Cable(1m).
③In OSD menu, select "No" for "Charge from NB/PC" in "Input Source". Then the smartphone or computer won't power to M505E monitor.

Input Source
Charge from NB/PC
Yes
No
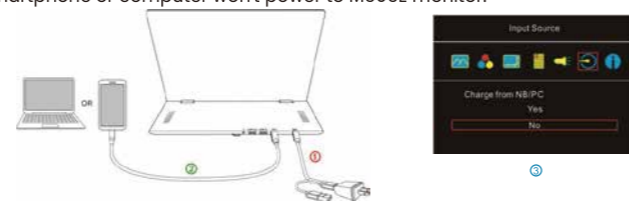
ⓘ Notice
1. The monitor can't charge the smartphone.
2. When the smartphone displays content in portrait, the mirrored image displays in the center part of the monitor. The full-screen display only shows when rotating the smartphone screen to landscape.
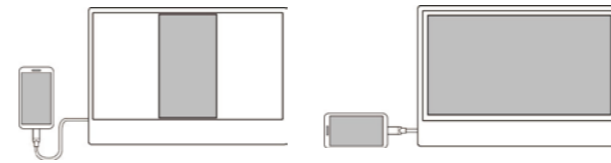
◆ Connect to the Computer by HDMI IN Port

⚠ Notice! Some computers' USB-C (symbol: SS⇄) ports do not support the PD power supply, which means that the USB port cannot provide the required power for the M505E monitor, and may cause the monitor to fail to turn on.

① Convert one plug of USB Type-C Video Cable(1m) to USB-C(Female) to USB-A(Male) Adapter and then insert it into the USB-A port on the PC, and insert the other plug to the DC IN port on M505.
② Use HDMI-A Video Cable(1.2m) to connect the computer to the HDMI IN port on M505 monitor.
③If the USB port of the computer cannot output sufficient power, please convert one plug of USB Type-C Video Cable(1m) to USB-C(Female) to USB-A (Male) Adapter and then insert it into 5V 2A Power Adapter, and insert the other end to the DC IN port on M505.

HDMI OUT HDMI IN USB-C
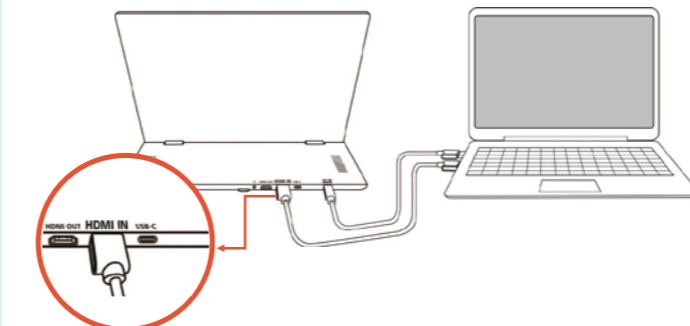
⚠ Caution! Please DO NOT connect to the HDMI OUT port.

◆ Connect to Game Console& Set Up for 2-Player Games by HDMI IN Port

The HDMI OUT port of M505E allows you to display the same image on two monitors. Two players can sit on both sides and watch their own monitors to enjoy a exclusive gaming experience.
In the Fig. shown, convert one plug of USB Type-C Video Cable(1m) to USB-C (Female) to USB-A (Male) Adapter and then insert it into 5V 2A Power Adapter, and insert the other plug into M505 DC IN port.
Use one HDMI-A Video Cable to connect the game console and the HDMI IN port on Monitor①. Next, use the other HDMI-A Video Cable to connect the HDMI OUT port on Monitor① and HDMI IN port on Monitor②.

HDMI IN HDMI IN
HDMI OUT HDMI Loop
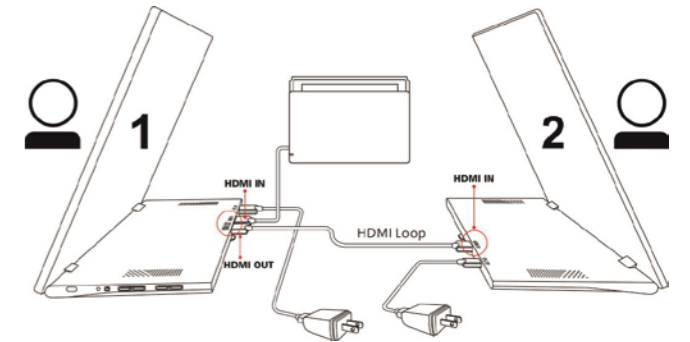
⚠ Notice: It is unable to extend the screens or split the gaming image in two monitors, each displaying half. The two monitors can only display the same image.

◆ Use the HDMI OUT Port

⚠ Notice ! As the image is input by HDMI IN port, the HDMI OUT port can output the same image. The HDMI OUT port can't output the image from USB Type-C port.

ⓘ Notice
While using HDMI OUT ports to connect multiple monitors, all the monitors are able to display the same image only, not different images.

1. Connect to a Projector or Digital Whiteboard
It is able to synchronize the display of M505 with the projector by the HDMI OUT port on M505 monitor. The speaker watches M505E monitor and the audience watches the projector screen.
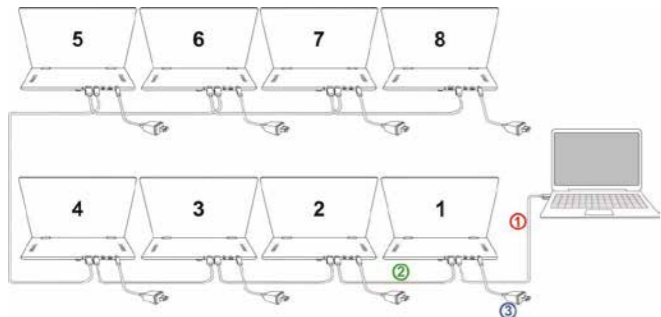
Please follow the steps below for connection.
① Convert one plug of USB Type-C Video Cable(1m) to USB-C（female) to USB-A(male) Adapter and then insert it into 5V 2A Power Adapter, and insert the other plug into M505 DC IN port.
② Use HDMI-A Video Cable(1.2m) to connect the computer and the DC IN port on the monitor.
③ Use the second HDMI-A Video Cable (Optional) to connect the HDMI OUT port on the monitor and HDMI IN port on the projector/ digital whiteboard.
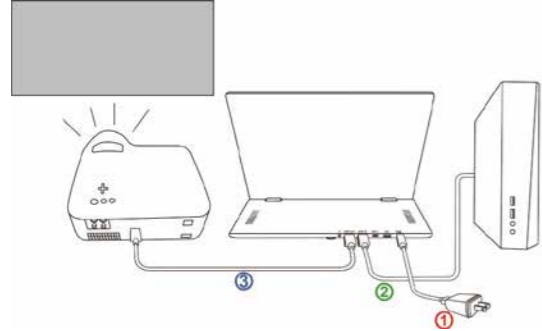
2. Connect Multiple Monitors for Video Conference Room Setup
① Use HDMI-A Video Cable to connect computer to the HDMI IN port on Monitor 1 .
② Use HDMI-A Video Cable to the HDMI OUT port on Monitor 1 and HDMI IN port on Monitor 2 . By analogy, up to 14 monitors can be daisy-chained.
③ Connect USB power cables to adapters and plug the adapter into the power extension socket. As soon as power is on, the monitors turn on automatically.


Press OSD buttons to enter OSD menu and select "Off" for "Auto Power Off". Hereby, the monitor won't turn off automatically when no video signal input.

3. Connect to Live Broadcaster
Please follow the steps below for connection.
① Use mini-HDMI to HDMI-A Video Cable (Optional) to connect a camera or video recorder to the HDMI IN port on M505 monitor.
② Use HDMI-A Video Cable(1.2m) to connect live broadcaster to the HDMI OUT port on M505 monitor.
③ Connect the live broadcaster and smartphone.
④ Convert one plug of USB Type-C Video Cable(1m) to USB-C（female) to USB-A(male) Adapter and then connect to the 5V 2A Power Adapter to power the monitor.
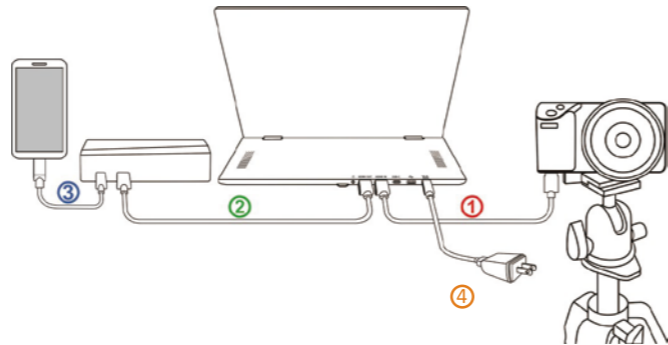
✦ Installation of VESA 100 Arm or Wall Mount
Please follow the steps below for setup.
① Screw the M505 VESA 100 Bracket (Optional) to the I/O base of the monitor by 4 M4 screws.
② Clip the monitor screen and VESA 100 aluminum alloy Bracket together by the two clips to prevent the screen From falling down.
③ Screw M505 VESA 100 Bracket onto a monitor arm or wall mount by 4 M4 screws.
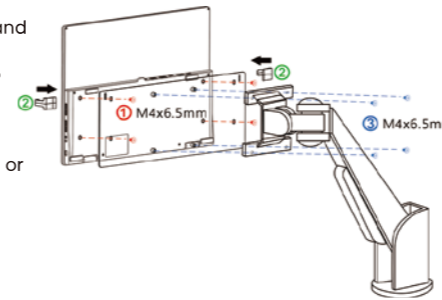
Hot Keys and LED Light Instructions

✦ LED Light Instruction
It shows green light when On-Lap Monitor turns on and shows red light when it stands by. There is no light when the monitor is off.

> ⚠ Do not press any two shortcut keys at the same time, otherwise the buttons may not respond or react incorrectly.

✦ Hot Keys Description

⏻	Power	Press Power Button to power on/off the Monitor.
⮌	Input Source/Exit	Press this button to show <Input Source> and then press ✥ to switch the input sources. When using the OSD menu, press this button to return to previous page.
🗐	Menu/ Select	Press this button to launch OSD panel. When using OSD menu, press this button to select and enter the next page.
✥	Increase Volume/ Next	Press this button to show volume bar. Press and hold this button to increase the volume continuously. In the OSD menu, press this button to move down or to the right.
⊖	Decrease Volume/ Previous	Press this button to show volume bar. Press and hold this button to decrease the volume continuously. In the OSD menu, press this button to move up or to the left.
⮌+⊖	Reset	Press both <Exit> and <Decrease Volume/Previous> at the same time and OSD will be reset as the factory settings.

OSD Menu Instructions

✦ Display Settings
1. ECO Mode: The maximum brightness is at 50 in ECO Mode.
2. Auto Adjust: Launch "Auto Contrast Adjust" and "Auto Brightness Adjust" to adjust brightness and contrast automatically to ensure the highest quality when displaying moving images.

✦ Color Settings
1. Color Effect: If the PC image output format is RGB Limited, it is recommended to select "Standard 1"; if it is RGB Full format, it is recommended to select "Standard 2". Select "Smartphone" mode to make the colors more vivid; select "Movie" mode to display the dark scene more clearly.
2. Blue Light Reduction: Select "On" to reduces the screen's blue light automatically.
3. Color Temperature: Select "Cool" to increase the blue color of the image; Select "Warm" to increase the red color of the image. Select "User" to adjust the RGB color settings manually.

✦ Aspect Ratio
1. Aspect ratio: When select "16:9 Full Screen", the monitor displays a 16:9 image in full screen. When select 4:3, the monitor displays a 4:3 image with left-right side black borders to fill the 16:9 screen. When select "Original", the monitor displays the image in its original size.
2. Overscan: Only available when HDMI video signal input (e.g., 1080P/720P). Enabling this function allows you to calibrate the display area.

✦ OSD Menu
1. Language Select: Change to the other language.
2. H. Position: Move the OSD menu left/right.
3. V. Position: Move the OSD menu up/down
4. OSD Timer (sec): Adjust the idle time before OSD menu disappears.
5. OSD Transparency: Make the OSD menu transparent to show the background.
6. Auto Power Off: Select "On" to launch this function, when no image displayed on the screen, the monitor will enter Standby mode, and power off itself after 2 minutes. Select "Off" to disable this function. The monitor will stay in standby mode and will not power off.
7. Power On/Off Indicator: Select "Off" to turn off the Power On/Off Indicator.
8. Power Button Lock: Select "On" to lock the Power Button.

✦ Audio
1. Adjust the audio volume or turn on the mute mode. When "On" is selected for "Mute", the monitor stop playing audio and can't release the mute mode by pressing volume buttons. After setting " Mute" mode as "Off", the audio can be played.

✦ Input Source
1. Input Source: Select HDMI or USB Type-C for the video signal input.
2. Auto Search: When "On" is selected, the monitor will detect two video input sources in sequence, and the monitor will display the first one read. When "Off" is selected, only the video source selected in Input Source will be displayed. If no such selected video signal inputs, the monitor will show "No signal" warning message, and won't detect other video sources.
3. Charge from NB/PC: Select "Yes", the computer/ smartphone will charge the monitor through the USB-C port. Select "No", this power input will be closed. Before selecting "No", please connect the power adapter to the DC IN port on M505, or the monitor can't work due to no power input.
4. CEC Mode: When "On" is selected, users can turn on/ turn off the monitor by connecting to a device with HDMI CEC function such as DVD player, camera, or PlayStation game console.
✦ Information- Show Frequency of the input image, On-Lap model name, firmware version, etc

General Specification

Panel	Wide screen 15.6-inch (16:9)	Speakers	1.5W(Max.)*2
True Resolution/ Color Depth	1920x1080/ 16.7M Colors	HDCP	Supported
Brightness	250 (cd/m²) (Typ.)	HDMI CEC	Supported
Contrast Ratio	700:1 (Typ.)	Power Consumption	≤ 10W <0.5W (Standby Mode) <0.5W (Off Mode)
Viewing Angle	170°(H)/170°(V)(CR>10)	Rated Voltage	5V ⎓ 2.0A(Typ.)
Response Time	15ms (Typ.)	Environment Conditions	Operation: 0-50°C; Storage :-20-60°C
Video Input	HDMI-A × 1 USB Type-C (DP 1.2)× 1	Dimensions (W × H × D) (mm)	Display top cover : 364 × 250 × 6.9 IO Base : 364 × 135 × 10.7
Video Output	HDMI-A x1(HDMI Loop: up to 14 monitors)	Weight (typical)	1168g
Audio Output	Earphone Jack (3.5mm mini jack) (support analog 3.5mmAUX)	Certification	CE FC CB 🔊 RS3848 RoHS VRoHS K

ⓘ The number of monitor loop depends on different HDMI cable, HDMI video signal and other variable factors. The actual units of the monitor loop may more or less than 14 pcs.

Supported Operating Modes

Resolution	Refresh Rate	Horizontal Frequency (kHz)	Vertical Frequency (Hz)
640x480	60Hz	31.469	59.940
720x480	60Hz	29.855	59.710
800x600	60Hz	37.879	60.317
848x480	60Hz	31.02	60.000
960x600	60Hz	37.212	59.635
1024x768	60Hz	48.363	60.004
1152x864	60Hz	53.783	59.959
1280x600	60Hz	37.377	59.900
1280x720	50Hz	37.500	50.000
1280x720	60Hz	45.000	60.000
	60Hz	44.772	59.855
1280x768	60Hz	47.776	59.870
1280x800	60Hz	49.702	59.810
1280x960	60Hz	60.000	60.000
1280x1024	60Hz	63.981	60.020
1360x768	60Hz	47.712	60.015
1366x768	60Hz	47.712	59.790
1360x1024	60Hz	63.606	59.836
1400x1050	60Hz	65.317	59.978
1440x900	60Hz	55.935	59.887
1600x900	60Hz	55.990	59.946
1600x1024	60Hz	63.675	59.901
1680x1050	60Hz	65.290	59.954
1920x1080	50Hz	56.250	50.000
1920x1080	60Hz	67.500	60.000
	60Hz	66.587	59.934

Supported Video Modes

1920x1080P 50Hz/59.94Hz/60Hz	1280x720P 50Hz/59.94Hz/60Hz
720x480P 59.94/60Hz	640x480P 59.94/60Hz

Troubleshooting

 Scan the QR Code to Find FAQs and Solutions.

LCD Pixel Statement

FCC Compliance Statement

GeChic Corporation

11F-3, No. 138, Zhongming S. Rd., West Dist., Taichung, Taiwan

Customer Service service@gechic.com

Service Hotline +886-4-23198080

Mon.-Fri. 09:00~12:00 & 13:00~18:00(UTC+08:00)