



P40K liquid crystal display

User Guide



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Küycon

Product features

P40K display adopts active matrix technology, thin film transistor (TFT), IPS liquid crystal display and KFS-LED backlight.

Display features include:

- (40-inch) viewable area (measured diagonally)
5120 x 2160 (21:9) resolution, 10-bit color depth Support full-screen display function with lower resolution
- New generation IPS panel
- Maximum 1300: 1 contrast ratio
- Maximum refresh rate 120Hz supported
- Color gamut range 99% sRGB 98%DCI-P3
- Global brightness of 400nit
- Digital connection of USB Type-C, HDMI and DisplayPort.
- With use of USB Type-C cable, power can be supplied to compatible notebook computers through USB-PowerDelivery protocol
(maximum 100W), video and data signals can be received simultaneously, and Thunderbolt 3/USB4 is compatible
- High-strength structure of aluminum alloy and sandblasting anodic oxidation process for CNC high-precision machining
- Removable bracket and Video Electronics Standards Association (VESA™) 100 mounting hole
- Equipped with two USB Type-C downlink data expansion ports
- Support HDR function
- Hardware anti-blue light
- ΔE -Delta-E <2

Specification and parameter

Device type and name

LED liquid crystal display

Dimension

40 inches

Aspect ratio

21:9

Panel type

IPS

Resolution

5120x2160

Pixel density

139PPI

Refresh rate

120Hz

Color depth support

10 bit 1.07 billion colors

Color gamut

99%SRGB 98%DCI-P3

Brightness

Typical 400cd/m²

Contrast ratio

1300:1

Response time

GTG 8ms

Screen coating

3H anti-glare matte finish

Operating voltage

AC 100-240V(50/60Hz)

Power consumption

Typical 55Wat Max165Wat

Other features

HDR function USB-HUB expansion

Process and material

Body

Aluminum alloy CNC anodic oxidation

Weight

Panel

Three-side narrow-edge panel

Bracket type

Port connection

DP (maximum resolution of 5120x2160 120Hz)

HDMI (maximum resolution 5120x2160 120Hz)

USB-C (maximum resolution 5120x2160 120Hz)

*Compatible with Thunderbolt™4/USB4

USB-PD 100W fast charging AltMode DP

2xUSB-C (USB2.0 data expansion ports)

*480Mbps Speed

3.5mm-jack (audio output port)

Accessories and cables

1xHDMI cable 1.5m

1xDisplayPort cable 1.8m

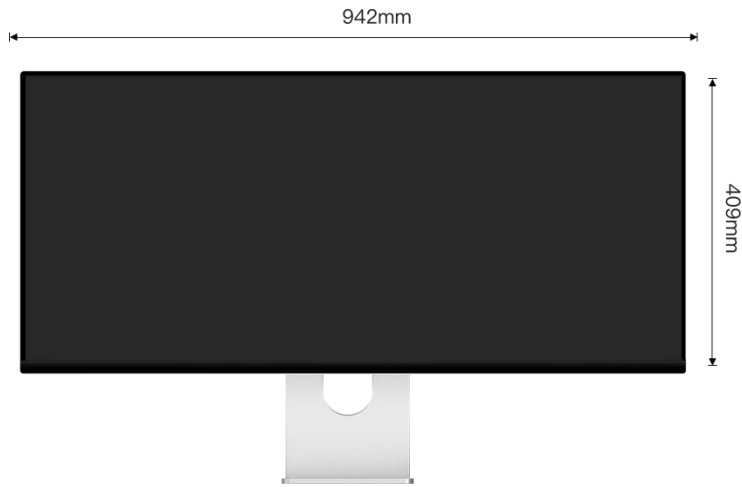
1xUSB-C3.2Gen2 cable 1m

(20Gbps 5A100W cable)

2xUSB-C OTG adapter

Paper User Manual*1

View



Front (side)



Side (face)



Back (side)



Back Side (face)

* Height * width * thickness =942mm*409mm*23.5mm

* Appearance data, measurement or production may be with tolerance

Resolution and specification

Model	P40K
Scope of horizontal scanning	88 kHz to 160 kHz (automatic)
Scope of vertical scanning	24 kHz to 60 kHz (automatic)
Maximum resolution	5120 x 2160 120Hz
Video modes supported by HDMI	480p, 480i, 576p, 576i, 720p, 1080i, 1080p, QHD, UHD 4K
Video modes supported by DP	480p, 480i, 576p, 576i, 720p, 1080i, 1080p, QHD, UHD
Video modes supported by USB-C	480p, 480i, 576p, 576i, 720p, 1080i, 1080p, QHD, UHD

Note: The resolution of 5120 x 2160 120Hz of this display needs to be supported by new GPU via Displayport1.3/1.4.

* It is recommended to use DP or USB-C port to connect the display, compatible with the new Thunderbolt™ 3 (⚡) equipment.

Windows operating system

G1-27 显示器 2: 已连接到 Intel(R) Iris(R) Plus Graphics	
桌面分辨率	5120 × 2880
有源信号分辨率	5120 × 2880
刷新频率(Hz)	59.678 Hz
位深度	8 位
颜色格式	RGB
颜色空间	标准动态范围(SDR)

MacOS operating system

Intel Iris Plus Graphics: 显示器: G1-27:	
分辨率:	5120 x 2880 (5K/UHD+ - 超高清增强版)
UI 看起来类似:	2560 x 1440
帧缓冲深度:	30 位彩色 (ARGB2101010)
显示器序列号:	DX499046S
锁像:	关
联机:	是
旋转:	支持
自动调节亮度:	是
连接类型:	雷雳 / DisplayPort

* Other operating systems require GPU driver from the GPU vendors to support HBR3 video mode output and DSC technology

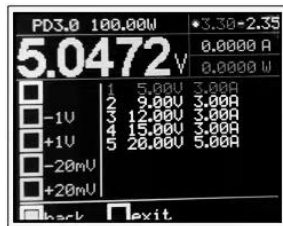
Packaging



Universal interface

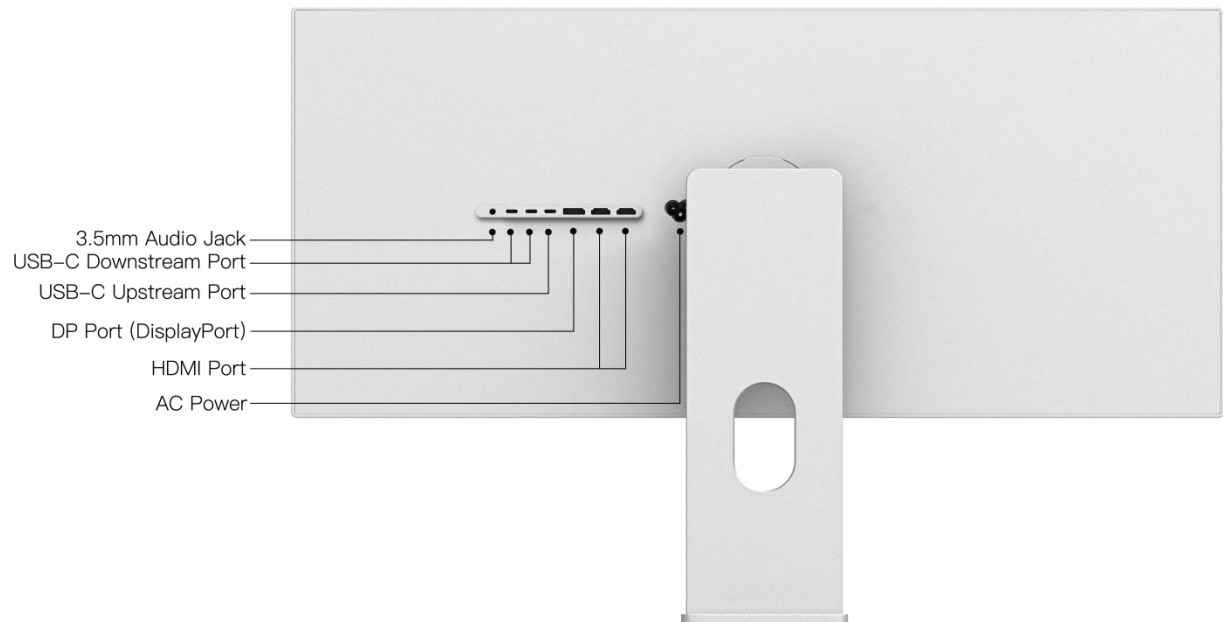
USB-C uplink port x 1 	Maximum supported resolution 5120 x 2160 120Hz HDR Speed 480mbps USB-PD
USB-C downlink port x 2 	USB downlink data expansion USB Speed 480mbps (5V 2.1A power supply capacity)
Displayport x 1 	Maximum supported resolution 5120 x 2160 120Hz HDR HBR3 21.6Gbps (HDCP2.2)
HDMI 2.1 x 2 	Maximum supported resolution 5120 x 2160 120Hz HDR 24Gbps (HDCP2.2)

* Uplink USB-C port USB-PowerDelivery protocol



PDO output gear	5V-3A	9V-3A	12V-3A	15V-3A	20V-5A (with Emark 5A cable)
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1. Connect AC cable for powering on 2. Connect video signal 3. Connect USB expanded peripheral devices

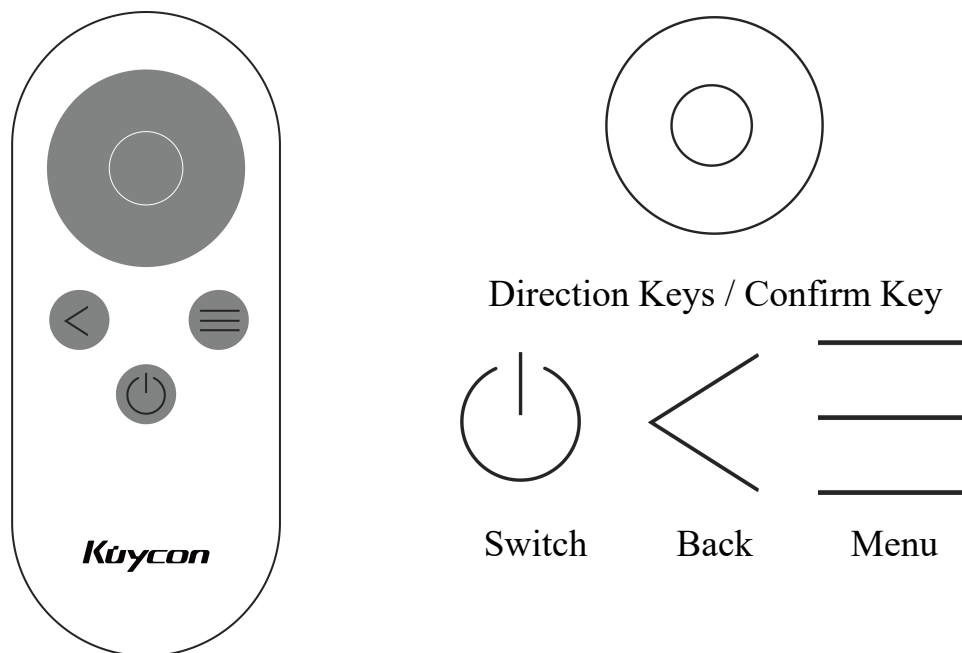


① AC power input	② HDMI	③ DP	④ USB-C uplink
⑤ USB-C downlink	⑥ USB-C downlink		/

Operating instructions (OSD)



Remo



Note: The graphical OSD can be set to transparent. For remote control models, only the power key and status indicator light are retained.

Installation instructions

- Open the packaging box and buffer layer

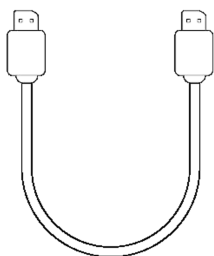


- Take out the vesa corresponding to the bracket for installation

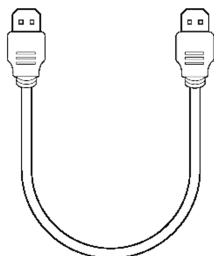


* When the bracket is installed, keep the panel flat. The panel can be placed on a buffered soft object to avoid the panel from being broken due to pressure.

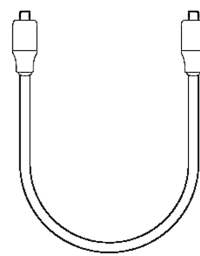
Accessories



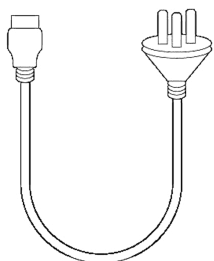
Displayport Cable 1.5m x 1



HDMI Cable 1.5m x 1



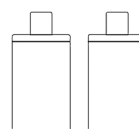
USB-C Cable 1m x 1



AC Power Cord 1.8m x 1



Paper Manual x 1



USB-C OTG Adapter x 2



Safety instructions

I. P40K display is equipped with a built-in power supply, and users shall pay attention to the good ground contact when connecting AC connecting cable to power supply socket.



II. The electronic power devices in P40K display are in contact type, passively dissipated by the body, and the body will be warm during use. In case of PD charging at full power, please pay attention to heat dissipation in surrounding area.



III. The front of the display is made of all-round glass material, please avoid cracking or breakage caused by hard objects bumping and bumping during use.



IV. Please avoid use of highly corrosive solution to clean the coating of display panel during daily maintenance and cleaning.



FAQs

Compatibility of hardware platform

The DP and USB-C interfaces of the display support 5K signal input in DP1.3/1.4 HBR3 mode with one cable, and the maximum resolution of HDMI2.1 only supports 5K. The hardware platform supports 5120x2160 resolution is as follows, and DP1.3/1.4 is required for receiving signals at the display end

Nvidia

Maxwell architecture series GPU	Not supported
Pascal architecture series GPU	Not supported
Turing architecture series GPU	GTX1650-RTX2080TI (direct TYPEC cable connection is available for GPU with USB-C VRlink)
Ampere architecture series GPU	RTX3050-4090

AMD

Polaris architecture series GPU	Not supported
VEGA architecture series APU integrated graphics card and independent graphics card	VEGA8 VEGA56-VEGA Nano
RNDA/RNDA2 architecture series GPU	RedeonR7, RX5500-RX6900XT (direct TYPEC cable connection is available for RNDA2 GPU with USB-C)

Intel

UHD integrated graphics card of the 10 th generation mobile platform	Iris/Iris Pro (direct TYPEC cable connection is available in case of Thunderbolt 3)
Tiger Lake integrated graphics card of the 11 th generation mobile platform	Iris Xe (direct TYPEC cable connection is available in case of Thunderbolt 3)
Tiger Lake integrated graphics card of the 11 th generation desktop platform	Iris Xe (direct TYPEC cable connection is available in case of Thunderbolt 3)
UHD730/750/770 integrated graphics card of the 12 th generation	5K120hz supported (direct TYPEC cable connection is available in case of Thunderbolt 3)

Mac

Apple MAC AMD independent graphics card series	Not supported
Apple MAC Intel integrated graphics card series	Models after 2020 using Intel 10 core supports Thunderbolt 3 one-cable direction connection for 5k
Apple MAC M1/M2 integrated graphics card series	Thunderbolt 3 one-cable connection for 5K is supported by the whole series
Apple iPad Pro series	Thunderbolt 3 one-cable connection for 5K is supported by the whole series
<u>Apple iMac MacMini series</u>	All series with independent graphics card after model 2020 supports

NUC

Intel nuc series host	NUC11- NUC13 and Hades Canyon support 5K
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Phone/Pad

Mobile phone or tablet computer	Nintendo SWITCH, Huawei MATE/P series, Smartisan series and Samsung S/NOTE series support same-screen or PC desktop mode
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Other

Other device	Sony PS4 pro PS5 and Microsoft XBOX support 4K@60HZ HDR with HDMI
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Full-function USB-TYPEC and Thunderbolt 3/4 USB4

The USB-C interface of the display transmits AltMode DP1.4 video protocol, combines USB data and supports PD reverse fast charging. Compatible, but without Thunderbolt 3/4 protocols. When Thunderbolt 3/4 interface is connected, whether the display can support 5K resolution depends on the GPU port of the graphics card connected with the USB-C interface of the computer.

Users need to judge whether their computer USB-C interface supports, on one hand judge that whether the interface supports video output function, and on the other hand, to judge that whether the graphics card supports 5K resolution maximum.

When USB-C cable is connected to transmit 5K video signal, the actual working bandwidth exceeds 28Gbps, which requires the signal transmission quality of cable. It is required to use USB3.1 Gen2 / USB3.2 Gen2 / USB4, and the materials and quality of wires and ports need to be qualified. Users shall pay attention to buying high-quality cables to avoid unnecessary troubles. If the power of 5A 100W is required for reverse power supply, users need to buy 5A cable with Emarker chip.

HDR function compatibility

The HDR function of P40K display is in automatic state by default, and can be turned off optionally. The HDMI interface is compatible with the HDMI2.0 Vesa HDR10 standard specification. The interface between DP and USB-C supports HDR function, is compatible with Vesa HDR10 standard specification, is supported by Windows10 operating system, and needs the support of display card and system version number after 1803. When the HDR function is enabled by a player or a game in the Windows operating system, the display will automatically switch to HDR display mode. During switch of display mode, the display will be black for 1s-2s, it is normal. In accordance with device support, MacOS operating system can turn on the [High Dynamic Range Contrast] option in the system display settings to detect that whether the HDR function is supported. Some Apple Mac series devices may fail to enable the HDR function.

*

When the HDR function is enabled manually in the system display settings, the picture will be different from the normal picture, it is normal.
When HDR function is enabled to display high dynamic picture content, the display backlight will be activated to the maximum working state.
After the played HDR video image or HDR game content is exited, the display will automatically switch to the default setting state.