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As Android and the now-defunct Windows 10 Mobile are mobile operating systems, most manufacturers do not include support for wired video output. Even if support is present, it may not be prominently indicated on a device's specification list.

All iOS devices (*iPhone 4* and later, *iPod touch 4th gen* and later, *iPad 1st gen* and later) support wired video output. iOS devices, which traditionally did not use Micro USB or USB-C, are able to provide wired video output with adapters for the proprietary 30-pin dock connector (Apple 30-pin to VGA Adapter, Apple 30-pin Digital AV HDMI Adapter) and Lightning connector (Lightning to VGA Adapter, Lightning Digital AV HDMI Adapter).

- The *iPhone 4*, *iPad 1st gen*, and *iPod touch 4th gen* (devices with Apple A4 system-on-chip) only display videos, photos, presentations, and slideshows on a secondary display, and cannot mirror the entire screen.
- The *iPhone 4S*, *iPad 2*, *iPad Mini 1st gen*, *iPod touch 5th gen* (devices with Apple A5 system-on-chip) are the first devices that support screen mirroring.
- A teardown revealed that the Lightning Digital AV Adapter contains an ARM system-on-chip (SoC), which decodes the output stream and sends it over HDMI. Currently, the maximum supported resolution is 1600 x 900.
- Currently, the only iOS devices that use a USB-C connector and comply with Alternate Mode are iPad Pro (3rd gen and later), iPad Air (4th gen and later).
 On iOS, major content service providers that allow screen mirroring in their apps include: Netflix, Amazon Prime, Hulu, Disney+, HBO Max, Tubi,
- Pluto TV etc. (as of Jan 2021).
 On iOS, some content service providers (especially paid cable TV subscription companies that also provide a traditional set-top box) explicitly
- **blocked screen mirroring in their apps**. In such cases, DRM restrictions implemented in the app would either block the video from playing, or display a black screen with only audio playing. These apps include: ESPN, Now TV, All 4, My5, UKTV Play etc. (as of Jan 2021).

HTC, Samsung, Huawei have supported DisplayPort on most of their flagship HTC U series, Samsung Galaxy S series, Samsung Galaxy Note series, Huawei P series phones.

LG formerly supported DisplayPort on their LG G series and LG V series phones, but dropped support in the G6, G7, V35, V40 phones. With the December 2018 software update, LG enabled DisplayPort output in G7, V35, V40 phones.

Samsung's DeX mode, Huawei's Easy Projection, and Microsoft's Continuum allow phones to offer a PC-like experience. In addition to regular screen mirroring, they allow apps to be used in multiple windows with a desktop-like interface when connected to an external display with keyboard and mouse.

The gaming-oriented smartphones, ROG Phone and Razer Phone, support DisplayPort. The ROG Phone, when connected to the Mobile Desktop Dock, outputs 4K UHD video through HDMI and DisplayPort. Razer's Project Linda, a work-in-progress concept, allows a docked phone to power a laptop and run apps on a larger screen, with the phone acting as a touchpad or second screen for custom interfaces.

A bug introduced in Android Oreo has resulted in performance issues (unreliable video/audio). This bug affects phones running stock Android (Razer Phone and Essential Phone) that have been updated from Android Nougat to Oreo.

Android 10's first beta, released on 13 March 2019, introduced a native desktop mode, but it is hidden by default in the final release. LG made modifications to improve this desktop mode, and included it the LG V50 ThinQ and LG G8 ThinQ.

In Nov 2019, it was discovered through the Android source code that Google had explicitly blocked the DisplayPort function in the Pixel 4.

On devices with no native DisplayPort support, the DisplayLink Presenter app, when used with adapters and docking stations with DisplayLink chipsets, can provide limited screen mirroring functionality. However, as a third-party solution, **playback of HDCP-encrypted video content might be disabled**.

In May 2020, the Video Electronics Standards Association (VESA) released version 2.0 of DisplayPort Alternate Mode (Alt Mode), which enables up to 16K video output over USB 4 Type-C ports.

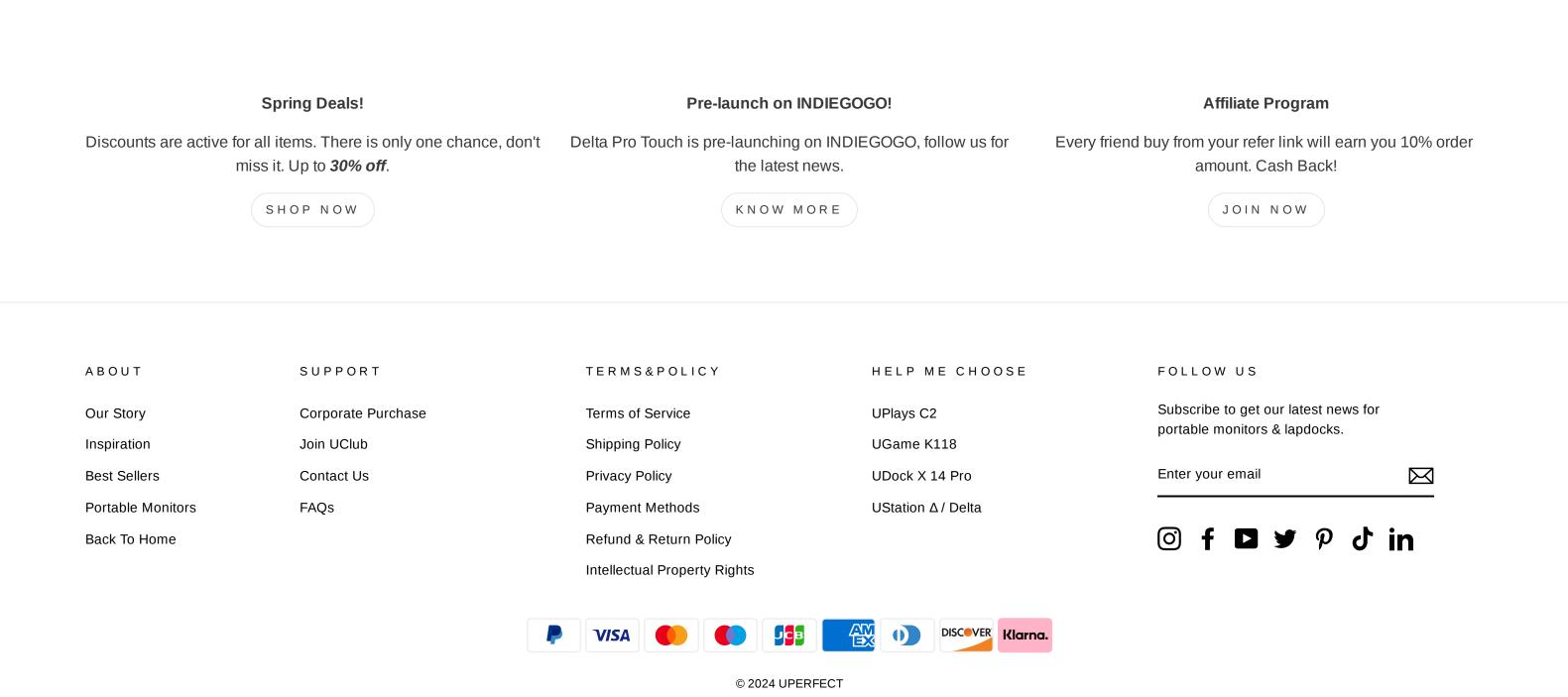
If your phone is not listed below, try this *IOS/Android HDTV cable* for connection. However, this cable can only mirror the screen of your mobile phone. Other additional function like Desktop Mode, Touchscreen or Keyboard will **NOT** work.

	ow, try this <i>IOS/Android HDTV</i> Desktop Mode, Touchscreen o			
Device name Honor Magic V	Desktop Mode	Device type foldable phablet	Operating system Android	Release date
Samsung Galaxy S22 Samsung Galaxy S22+	Samsung DeX	smartphone	Android	2022
Samsung Galaxy S22 Ultra				
Asus ROG Phone 5 Asus ROG Phone 5s	Mobile Desktop Dock, TwinView Dock, WiGig® Dock	smartphone	Android	2021
Fairphone 4	-	smartphone with swappable components	Android	2021
Huawei Mate 40 Pro Huawei Mate X2	Easy Projection Easy Projection	smartphone foldable phablet	Android Android	2021 2021
Huawei P50 Pocket	Easy Projection	foldable phablet	Android	2021
Honor Magic 3, Pro, Pro+ Lenovo Legion 2 Pro	-	smartphone smartphone	Android Android	2021 2021
Lenovo Legion Duel 2	-	smartphone	Android	2021
Microsoft Surface Duo 2 Motorola Edge S (China	-	foldable phablet	Android	2021
variant) Moto G100 (global version for European	Yes	smartphone	Android	2021
market) Motorola Edge 20 Pro	Yes	smartphone	Android	2021
OnePlus 9 OnePlus 9R OnePlus 9 Pro	Note: works on most 720p/1080p displays, crashes on 4K displays	smartphone	Android	2021
Oppo Find X3 Pro	-	smartphone	Android	2021
Samsung Galaxy S21 Samsung Galaxy S21+ Samsung Galaxy S21	Samsung DeX	smartphone	Android	2021
Ultra Samsung Galaxy Z Fold	Samsung DeX	foldable phablet	Android	2021
3 Sony Xperia 1 III	-	smartphone	Android	2021
Sony Xperia 5 III Sony Xperia 10 III	-	smartphone smartphone	Android Android	2021 2021
Sony Xperia Pro	-	smartphone	Android	2021
Sony Xperia Pro-I Xiaomi Black Shark 4	-	smartphone	Android Android	2021 2021
ZTE Nubia Red Magic 6S Pro	_	smartphone	Android	2021
Asus ROG Phone 3	Mobile Desktop Dock, TwinView Dock, WiGig® Dock	smartphone	Android	2020
Huawei Mate 30E Pro (China variant)	Dock Easy Projection	smartphone	Android	2020
Huawei Mate Xs	Easy Projection	foldable phablet	Android	2020
Huawei P40 Huawei P40 Pro	Easy Projection	smartphone	Android	2020
Honor 30 Pro Honor 30 Pro+	-	smartphone	Android	2020
Lenovo Legion Phone Duel	- Yes	smartphone	Android	2020
LG V60 Microsoft Surface Duo	Yes -	smartphone foldable phablet	Android Android	2020 2020
Motorola Edge+ OnePlus 8	Yes	smartphone	Android	2020
OnePlus 8 Pro PINE64 PinePhone	-	smartphone	Android Linux	2020 2020
Purism Librem 5	-	smartphone	Linux	2020
Samsung Galaxy S20 Samsung Galaxy S20+ Samsung Galaxy S20 Ultra	Samsung DeX	smartphone	Android	2020
Ultra Samsung Galaxy Note 20				
20 Samsung Galaxy Note 20 Ultra	Samsung DeX	smartphone	Android	2020
Samsung Galaxy Z Fold 2 Samsung W21 (for	Samsung DeX	foldable phablet	Android	2020
Chinese market) Sharp Aquos R5G	_	smartphone	Android	2020
Sharp Aquos zero5G basic	_	smartphone	Android	2020
Sony Xperia 1 II	-	smartphone	Android	2020
Sony Xperia 5 II Xiaomi Black Shark 3	-	smartphone	Android Android	2020 2020
Asus ROG Phone II	Mobile Desktop Dock, TwinView Dock, WiGig® Dock	smartphone	Android	2019
HTC U19e	-	smartphone	Android	2019
Huawei Mate 30 Huawei Mate 30 Pro Huawei Mate 30 RS	Easy Projection	smartphone	Android	2019
Porsche Design Huawei Mate X	Easy Projection	foldable phablet	Android	2019
Huawei P30 Huawei P30 Pro	Easy Projection	smartphone	Android	2019
LG G8 LG V50	Yes	smartphone	Android Android	2019 2019
OnePlus 7 OnePlus 7 Pro	-	smartphone	Android	2019 2019
Oppo Reno 10x Zoom Oppo Reno 5G	-	smartphone	Android	2019
Samsung Galaxy S10e	Samsung DeX	smartphone	Android	2019
Samsung Galaxy S10+				
Samsung Galaxy Note 10+	Samsung DeX	smartphone	Android	2019
Samsung Galaxy A90 5G Samsung Galaxy Fold	Samsung DeX Samsung DeX	smartphone foldable phablet	Android Android	2019 2019
Sony Xperia 1 Sony Xperia 5	-	smartphone smartphone	Android Android	2019 2019
Xiaomi Black Shark 2	-	smartphone	Android	2019
ZTE Axon 10 Pro	- Mobile Desktop Dock,	smartphone	Android	2019
Asus ROG Phone	TwinView Dock, WiGig® Dock	smartphone	Android	2018
BlackBerry Key2 BQ Aquaris X2	-	smartphone smartphone	Android Android	2018 2018
HTC U12+ HTC Exodus 1	-	smartphone smartphone	Android Android	2018 2018
Huawei Mate 20 Huawei Mate 20 X	- Easy Projection	smartphone	Android	2018
Huawei Mate 20 Pro Huawei P20	Easy Projection	smartphone	Android	2018
Huawei P20 Pro Huawei Honor Note 10	Easy Projection Easy Projection	smartphone	Android	2018 2018
Huawei Honor View 20 LG G7	Easy Projection	smartphone	Android	2018
LG G7+ (with Dec 2018 update)	-	smartphone	Android	2018
LG V35 LG V35+ (with Dec 2018 update)	-	smartphone	Android	2018
LG V40 (with Dec 2018 update)	-	smartphone	Android	2018
OPPO R17 Pro (OPPO RX17 Pro in Europe)	-	smartphone	Android	2018
Razer Phone 2 Samsung Galaxy S9	-	smartphone	Android	2018
Samsung Galaxy S9 Samsung Galaxy S9+ Samsung Galaxy Note 9	Samsung DeX Samsung DeX	smartphone smartphone	Android Android	2018 2018
Smartisan R1	-	smartphone	Android	2018
ZTE Axon 9 Pro Asus ZenFone AR	-	smartphone	Android	2018
Asus ZenFone Ares (rebranded Taiwan variant of ZenFone AR)	-	smartphone	Android	2017
Essential Phone HTC U Ultra	-	smartphone smartphone	Android Android	2017 2017
HTC U11 HTC U11+	-	smanphone	Android	2017 2017
Huawei Mate 10 Huawei Mate 10 Pro	Easy Projection	smartphone	Android	2017
LG G6 LG G6+ (with Dec 2018	-	smartphone	Android	2017
update) LG Q8	-	smartphone	Android	2017
LG V30 LG V30+	-	smartphone	Android	2017
Razer Phone	- Samsung DeX	smartphone	Android	2017
Samsung Galaxy S8+ Samsung Galaxy Note 8	Samsung DeX Samsung DeX	smartphone smartphone	Android Android	2017 2017
Asus ZenFone 3 Ultra	- -	smartphone	Android	2016
HTC 10 LG G5	-	smartphone smartphone	Android Android	2016 2016
LG V20	- Continuum with HP Desk	smartphone	Android	2016
HP Elite x3	Continuum with HP Desk Dock, HP Lap Dock Continuum with Acer	smartphone	Windows 10 Mobile	2016
Acer Liquid Jade Primo Microsoft Lumia 950	Display Dock Continuum with Microsoft	smartphone	Windows 10 Mobile Windows 10 Mobile	2016 2015
Microsoft Lumia 950 XL	Display Dock			

Comparison of Support for DisplayPort Alt Mode by Various Brands

Brand	Initial support	Models	Comments
Apple	2010	all iPhone, iPod touch, iPad models	 Early adopter. Provides consistent support (all flagship models).[27] iPhone 4, iPad 1st gen, iPod touch 4th gen Can only display videos, photos, presentations, and slideshows over the 30-pin dock connector. iPhone 4S, iPad 2 Supports screen mirroring over the 30-pin dock connector. iPhone 5, iPad 4th gen, iPad Mini 1st gen, iPod touch 5th gen and later Supports screen mirroring over the Lightning connector. (all iOS devices released from late 2012 onwards) iPad Pro 3rd gen, iPad Air 4th gen, iPad Mini 6th gen and later Supports screen mirroring over the USB-C connector, complies with Alternate Mode.
HTC	2016	U series	Early adopter. Provides consistent support (at least 3 flagship models).
LG	2016	G series, V series	Early adopter. Dropped support in 2017-2018, but re-enabled support in 2019.
Huawei	2017	Mate series, P series	Provides consistent support (at least 3 flagship models). Has desktop mode.
Samsung	2017	Galaxy S series, Galaxy Note series, Galaxy Z series	Provides consistent support (at least 3 flagship models). Has desktop mode.
Asus	2018	ROG Phone series	Provides consistent support on ROG Phone series (at least 3 flagship models), but little support on other series.
Sony	2019	Xperia 1 series, Xperia 5 series, Xperia 10 series, Xperia Pro series	Late adopter. Provides consistent support on Xperia high-end series (at least 3 flagship models).
OnePlus	2019	OnePlus series	Late adopter. Currently support – 7/7 Pro, 8/8 Pro (as of Aug 2020)
Honor	2020	(see below)	Spin-off brand from Huawei with access to Google Play Services, not affected by US sanctions against Huawei.
Орро	2018	(see below)	Irregular, little to no support for both flagship & non-flagship series.
Xiaomi	-	some Black Shark models	Has not supported any flagship or non-flagship series. (need to verify support for Black Shark series)
Google	-	N/A	The Pixel 4's hardware might/might not support DisplayPort, but the function was disabled in software by Google. [37]
Other brands (irregular support)	-	(see below)	These brands do not release DisplayPort-supported models under a consistent product series and/or release schedule.
Other brands (late adopters)		(see below)	These brands only started releasing DisplayPort-supported models in recent years. Brands with consistent support will be moved to the rows above. 2020 • Lenovo (2020 - present), Motorola (2020 - present), Microsoft (2020 - present) 2021 • Fairphone (2021 - present)

NOTE: This article is repost from everybodywiki.com



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