

RealCast PTV Boxes -Superior WiFi Display Quick Installation Guide

Ver 2.2

Thanks for choosing the superior WiFi display adapter - RealCast PTV adapter box/dongle.

This is the universal Quick Installation Guide (QIG) for Visonicom RealCast PTV dongles and boxes to show the basic operations for Android, iOS and Window users.

For more legible Quick Installation Guide, please refer to our online version:

<http://realcastptv.com/manual/RealCast-ptv-quick-installation-guide.pdf>

Users are always invited to visit our portfolio site <http://realcastptv.com> for more product info, demo, upgrading.

According to firmware upgrading and difference in versions, also different versions of your personal device, there may be different appearance in UI to what illustrated in the QIG, however, the operation is similar and the QIG is still of help.

Index

1. Profile	4
2. Product Features	4
3. Physical Connection	4
4. Operation Tutorial	5
4.1 Get connect online.....	5
4.1.1 System Boot Up.....	5
4.1.2 Connect the WiFi display adapter with WiFi.....	6
4.2 Miracast and WiDi.....	7
4.2.1 Miracast in Android.....	7
4.2.2 Miracast in Windows 8.1.....	7
4.2.3 WiDi.....	7
4.3 AirPlay Mirroring.....	8
4.4 DLNA Push.....	8
4.5 More Configurations.....	8
5. More Screen Mirroring/Pushing Standard Support	8
6. Product Specification	9
7. FAQ and Troubleshooting	10

1. Profile:

Visonicom RealCast PTV boxes and dongles are superior WiFi display adapters that support:

- ✓ Miracast: For Android 4.2+, Windows 8.1+ with latest hardware;
- ✓ AirPlay: For iOS6+;
- ✓ DLNA: For Android 4.0+, iOS6.0+, Windows 7+, with DLNA enabled APP/Software such as AirFun, BubbleUPnP, KODI, etc;
- ✓ WiDi: For WiDi-capable Windows PC;
- ✓ MirrorOP: For Android, iOS, Windows, Mac;
- ✓ AirParrot: For Mac OS, Windows, Chrome OS;
- ✓ AirPin: For Windows, Android, iOS

With the universal HDMI WiFi display RealCast PTV box users can easily mirror/push the HD video, photo, game saved locally or online contents from the following devices to HDTV or projector through HDMI port wirelessly.

- ✓ Windows PC/Notebook: Miracast/WiDi/DLNA/MirrorOP/AirParrot/AirPin;
- ✓ Android phones/tablet PCs: Miracast/DLNA/MirrorOP/AirPin;
- ✓ iPad/iPhone: AirPlay/DLNA/AirParrot/MirrorOP/AirPin;
- ✓ Mac PC/Macbook: MirrorOP/AirParrot;
- ✓ Chromebook: AirParrot

2. Product Features:

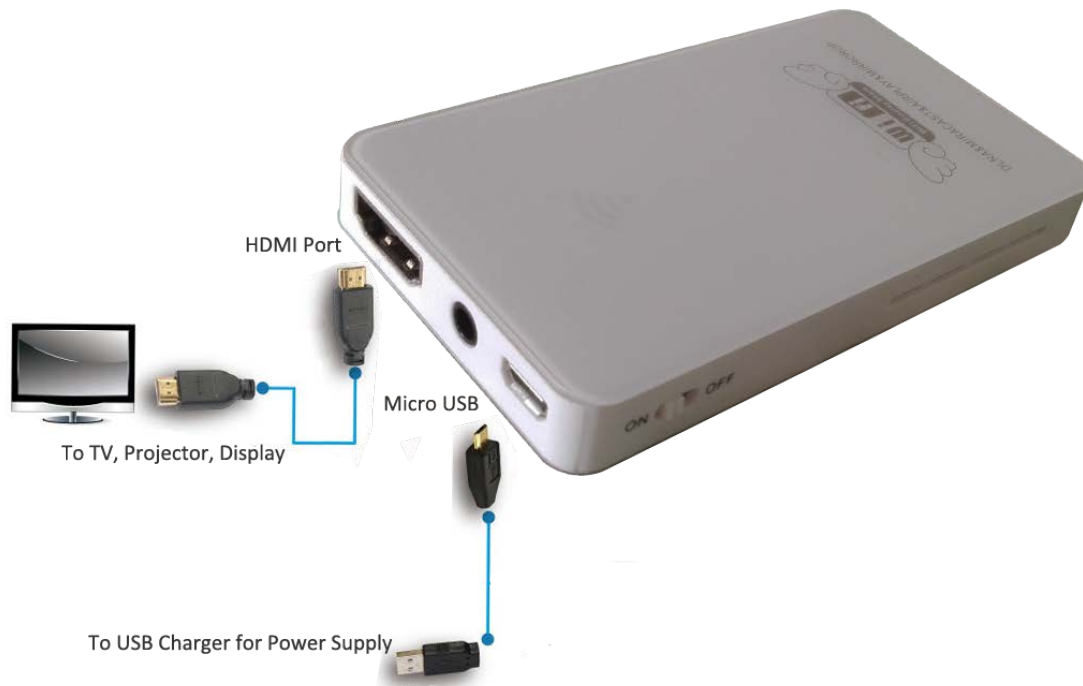
- ✓ Cross Platforms support: iOS, Android, Windows, Mac OS and Chrome OS
- ✓ H.264 1080P full HD video hardware decoder
- ✓ Less than 100ms latency
- ✓ Most Standard Support: Miracast, AirPlay, DLNA, WiDi, MirrorOP, AirParrot, AirPin
- ✓ Large RAM and ROM for low latency and fast connection
- ✓ VRC-PTV15x comes with built-in WiFi support IEEE 801.11 b/g/n up to 150Mbps data transfer rate with WiFi Direct capability, strong anti-jamming capability;
VRD-PTV3xx comes with 2.4G/5G dualband 300Mbps WiFi, even stronger and better WiFi transmission.
- ✓ Simplest to operate
- ✓ LPCM Audio Decode
- ✓ HDMI v1.3 output (Additional CVBS AV port, optional)
- ✓ HDCP 2.x
- ✓ Auto WiFi channel selection with high quality video stream
- ✓ Most powerful and stable among similar products
- ✓ Firmware online upgrading for new function and latest technology support.

3. Physical Connection:

The connection is simple.

Use the HDMI cable accompanied to connect the RealCast PTV box/dongle with your HDTV, or projector.

Use the USB cable accompanied to connect the RealCast PTV box/dongle(Micro USB port) with your USB charger (USB type A end) or TV USB port.



Connection Illustration of RealCast PTV Box/Dongle

Note:

- a. USB charger for power supply required DC5V, min. 500mA(prefer to 1A)
- b. Mode button for online upgrade, Restore Factory Settings or WiFi band switching(for VRD-PTV3xx 2.4/5G dual band series).
- c. For some RealCast PTV box with optional CVBS output, please connect it to the A/V port of your TV/Projectors, in case there's no HDMI port available for your display.

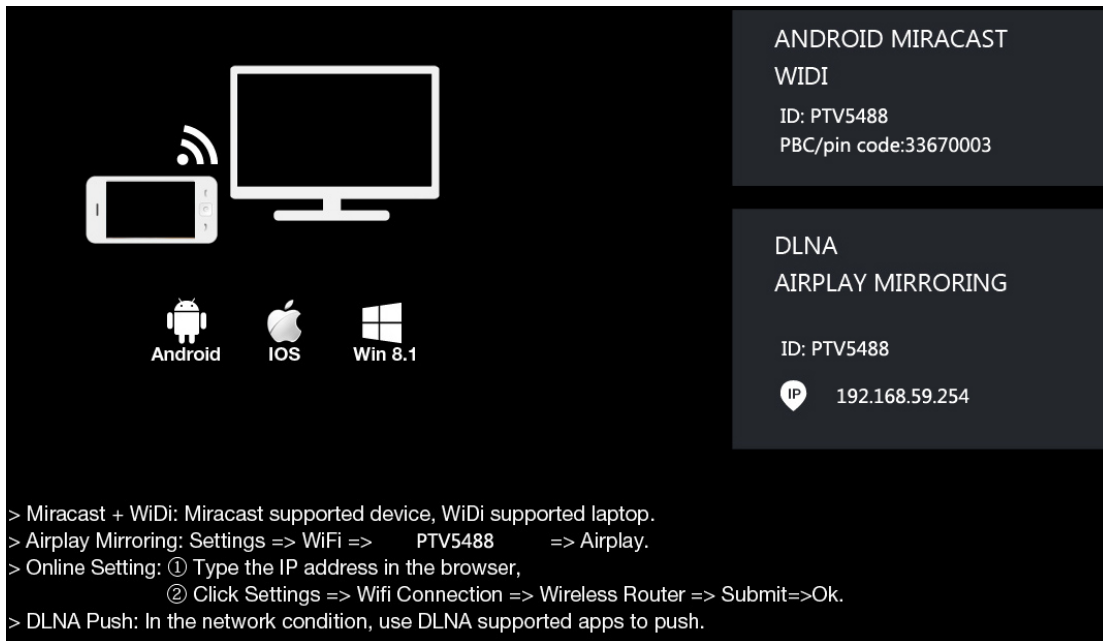
4. Operation Tutorial

4.1 Get connect online

Though for Miracast there's no need for the WiFi display adapter to get online, to have it connected within existing WLAN is necessary for screen pushing(DLNA) and for firmware online upgrading. Please follow the steps below.

4.1.1 System Boot Up

Turn on the RealCast PTV box/dongle, system boots up with or without a short video, and shows basic configuration info and operation guidance. Or the boot up screen may be a picture with similar info.



From the screen we can get the following info:

The product SSID is PTVxxxx(here it is PTV5488)

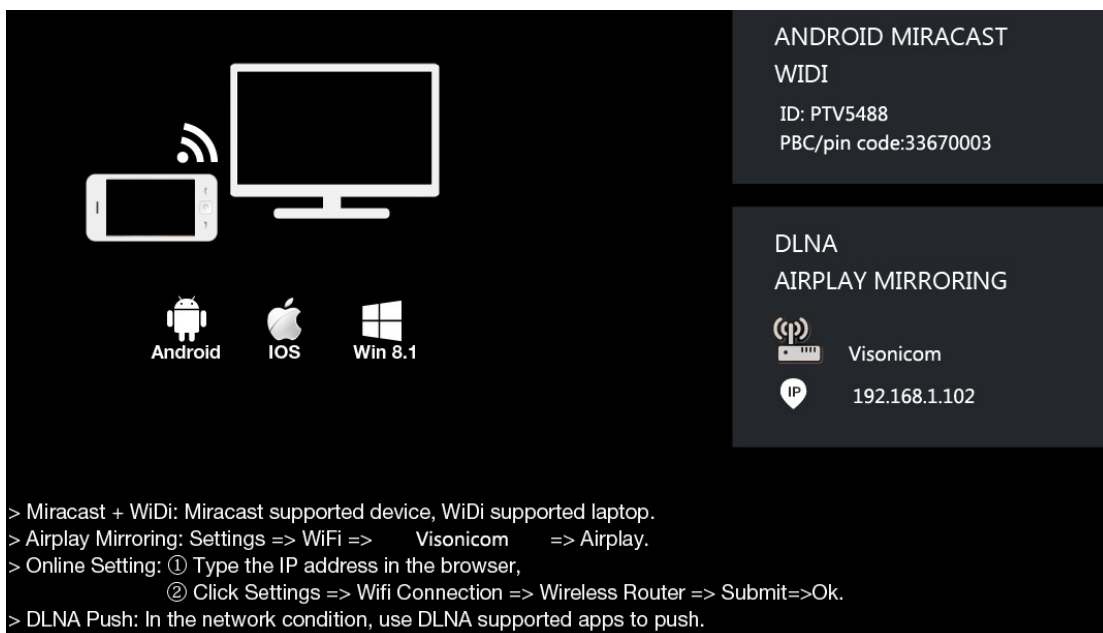
The PBC/pin code (For Miracast in Windows 8.1+ and WiDi, for Android system, user can ignore the code)

The IP address of the RealCast PTV box/dongle is 192.168.59.254

There are guidance lines for quick and basic operation.

4.1.2 Connect the WiFi display adapter with WiFi

- Have your PC or mobile device connect the RealCast PTV dongle through WiFi(SSID:PTVxxxx).
- Type the IP address 192.168.59.254 in browser (or run Airfun) of your phone or PC, go to the tab of [WiFi Connection], and connect to existing wireless router.
- You TV/projector screen may show as following (Here Visonicom is the SSID of the wireless router/AP, 192.168.1.102 is the IP assigned by the router for RealCast PTV box/dongle)



d.) Connect your phone or PC with the same wireless router. Now your phone or PC and the the RealCast PTV adapter are within same WLAN. Anytime you want to configure the RealCast PTV dongle, just enter the IP address(192.168.1.102 as example here) with your browser.

4.2 Miracast and WiDi

4.2.1 Miracast in Android

Enable [WiFi]of your Android smart phone or tablet PC

Enable [WiFi Display] (Or similar options, such as [AllShare], [Screen Mirroring] or [Screen Casting] for Samsung smart phones, or [Miracast], etc)

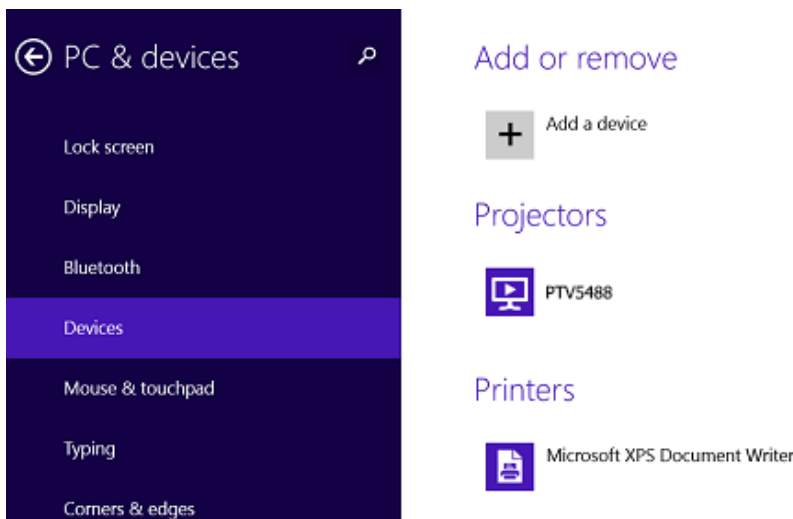


Select PTVxxxx and connect. In seconds, screen mirroring done and you can see your Android screen on TV already.

4.2.2 Miracast in Windows 8.1

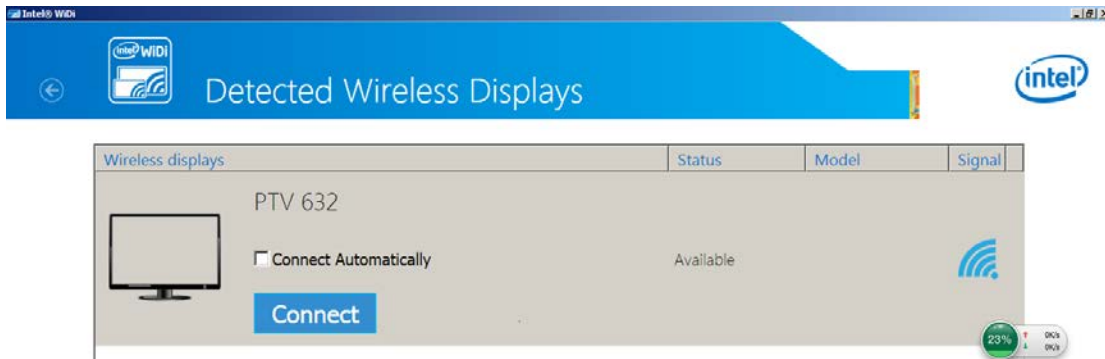
Select [settings] -> [Change PC Settings] -> [PC & Devices] -> [Devices] -> [Add a Device] Click/tap PTVxxx, Enter PIN Code (as shown on your TV screen) if necessary. Done.

We have found out Miracast cannot run perfectly in some Windows 8.1 OS due to hardware cannot meet the requirement of Miracast. For Miracast support info please refer to the requirement here: <http://www.intel.com/support/graphics/sb/CS-034563.htm>.



4.2.3 WiDi

Run WiDi (3.5 or greater version) of your PC within the same WLAN, It will scan the WiDi compatible device, Select PTVxxx and click [Connect] (For some versions there may be requested to input PIN code, type the PIN code as seen on your TV screen, Click [Continue]). Wait for seconds you'll see your PC screen on TV already.



4.3 AirPlay Mirroring

On iOS screen, Go [Settings], enable [WiFi] , select PTVxxxx and get connected
 Run [Airplay], Select PTVxxxx (at the same time slide [Mirroring], and screen mirroring done.



4.4 DLNA Push

- a.) Run any DLNA enabled APP, such as BubbleUPnP, KODI, etc, enable DLNA and select PTVxxxx. Done. If you don't have DLNA enabled APP installed, or not sure whether your player is DLNA enabled, you can use AirFun
- b.) Download AirFun from Google Play Store or Apple APP Store and install, or from our RealCast

PTV (Optional, type the IP address of the RealCast PTV box/dongle, Tap [Download])

Run AirFun, Select PTVxxxx, DLNA connection done. Then you can run Airfun to push local media files to the RealCast PTV box/dongle.

4.5 More Configurations

- a.) You can run browser or AirFun for further configuration of the RealCast PTV adapter, such as Language, Text Encoding, System upgrade, etc in System Menu, WiFi Configuration, Audio and Video configuration etc.
- b.) Press the [Mode] button for 5 seconds for to restore factory default, or 10 seconds for firmware OTA upgrading. For dual band version, press [Mode] button once to switch between 2.4G and 5G mode

5. More Screen Mirroring/Pushing Standard Support

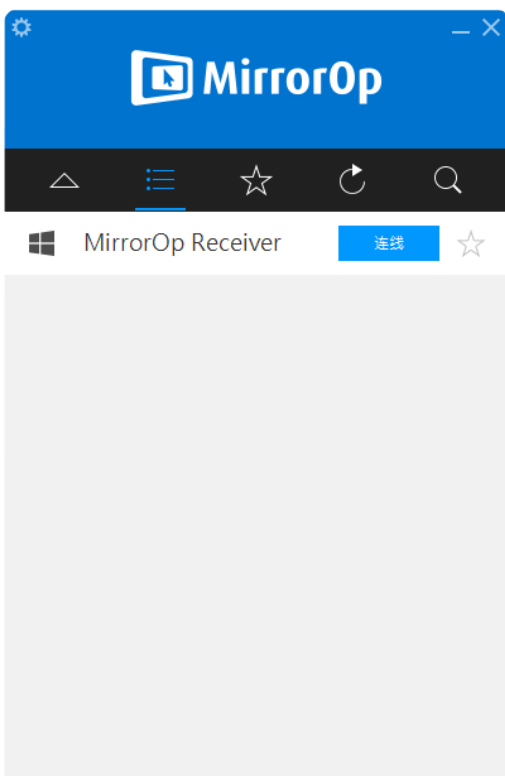
Besides Miracast, AirPlay, WiDi and DLNA, RealCast PTV adapters also support AirPin, MirrorOP, and AirParrot for alternation. e.g. A Windows user may use the freeware AirPin to mirror/pushing the screen when his PC doesn't support Miracast or WiDi.

The screen mirroring/pushing standard support for RealCast PTV is as shown as below.

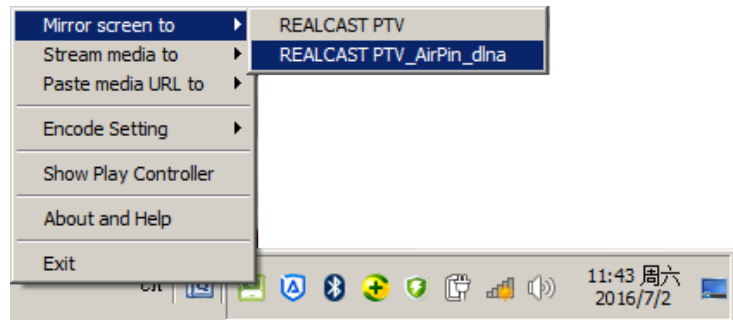
OS	Working Mode	Standard/Protocol Support
Android	Mirroring	Miracast, AirPin, MirrorOP
	Pushing	AirPin, Airfun, KODI, etc

iOS	Mirroring	AirPlay, AirPin, MirrorOP
	Pushing	AirPlay, AirPin, Airfun
Windows	Mirroring	WiDi/Miracast, AirPin, MirrorOP, AirParrot
	Pushing	AirPin, Airfun, KODI
Mac OS	Mirroring	AirParrot, MirrorOP
	Pushing	KODI
Chrome OS	Mirroring	AirParrot
	Pushing	NA

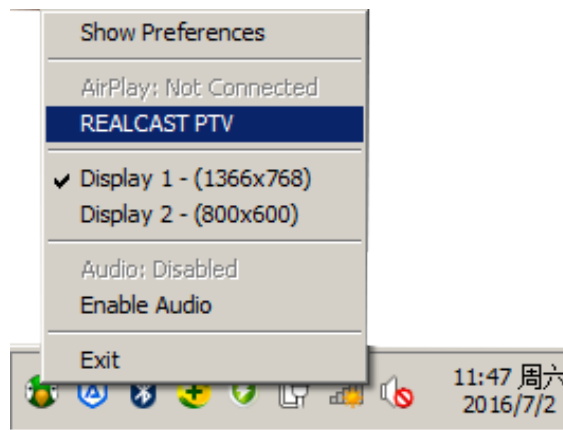
The operation of screen mirroring/pushing with AirPin, MirrorOP and AirParrot is very intuitive and extremely simple.



Mirror with MirrorOP



Mirror with AirPin



Mirror with AirParrot

Download links for AirPin, MirrorOP, AirParrot:

<http://www.waxrain.com>

<http://www.mirrorop.com>

<http://www.airsquirrels.com/airparrot/>

6. Product Specification

General	
Operating system	Linux
Language	English, Chinese,...Multilingual supported

Chipset	Realtek RTD1185
SDRAM	DDR3 2Gb
NOR Flash	2Gb
Transmission Distance	Up to 15m to playback music, photo and pdf files, Up to 10m to playback video files.
WiFi Standard	WiFi 802.11 b/g/n 2.4GHz up to 150Mbps(VRC-PTV15x); 2.4G/5G Dualband 300Mbps(VRC-PTV3xx)
Power Supply	DC 5V, Min 500mA(1A prefer)
Physical Interface	
AV Out-Put	1*HDMI 1.3 A-Type, CVBS AV (optional)
USB	1*Micro USB(For power supply)
Media Support	
Video Resolution	Full HD1920*1080, 1280*720, 720*480
Video Decoder	Support H.264,VP8,RV,WMV,AVS,H.263,MPEG4...etc Video Formats decode with 1080P, Support avi, vob, mkv, ts, m2ts, rm, f4v, flv, mpg/mpeg, mov...etc formats.
Audio Container	Support MP3, WMA, AAC, WAV, OGG, REAL audio, ALAC, etc formats, also support FLAC, APE HD Hi-Fi Audio formats.
Image Format	Support JPEG, BMP, GIF, PNG, TIFF, Support 8000*8000px Resolution of high-definition digital photos
Standard Support	Miracast, DLNA, Airplay, WiDi, MirrorOP, AirParrot, AirPin
Physical and Environmental	
Operation Temperature	-10~40 °C
Storage Temperature	-20~50 °C
Humidity environment	5%-90%(No condensation)
Accessories	
Standard Package: RealCast PTV Box/dongle*1, USB Cable *1, QIG *1, HDMI Cable *1	

7. FAQ and Troubleshooting

Q1. What's the System Requirement for RealCast PTV box/dongles

For Miracast, Android 4.2 or greater is needed, or Windows 8.1 and greater (hardware should be Miracast enabled, see <http://www.intel.com/support/graphics/sb/CS-034563.htm>), or WiDi 3.5 and greater

For AirPlay Mirror, iOS 6 and greater

For DLNA, Android 4.0, iOS 6, and greater version

Q2. My TV screen flickers/ flashes when mirroring/pushing files, why?

The power supply is not stable, try another USB charger/adaptor.

Q3. My RealCast PTV box/dongle can be connected and mirror/push for seconds, then it goes back to home menu, why?

The power supply is not enough, try another one, prefer to 5V DC with 1A or greater output power adaptor/USB charger.